

# AHI EVRAN

*International Conference  
on Scientific Research  
Kırşehir Ahi Evran University*



*"Know how to forgive  
when you are strong and superior  
be gentle when you are angry and  
be generous enough to give to others  
even when you are in need"*

Ahi Evran

**ABSTRACT BOOK**

**EDITOR:**

**Prof. Dr. Ahmet KAZANKAYA**

ISBN: 978-625-7464-54-3



# AHI EVRAN INTERNATIONAL CONFERENCE ON SCIENTIFIC RESEARCH

November 30 - December 1-2, 2021  
Kırşehir Ahi Evran University

## ABSTRACT BOOK

**Editor:**

Prof. Dr. Ahmet KAZANKAYA

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Issued: 08.12.2021

**WWW.AHIEVRANCONFERENCE.ORG**  
**ISBN: 978-625-7464-54-3**

# CONFERENCE ID

## TITLE OF CONFERENCE

AHI EVRAN  
International Conference on Scientific Research

## DATE - PLACE

November 30 - December 1-2, 2021  
Kırşehir Ahi Evran University

## ORGANIZATION

Kırşehir Ahi Evran University  
&  
Institute of Economic Development and Social Researches



## EDITED BY

Prof. Dr. Ahmet KAZANKAYA

## COORDINATOR

Alina AMANZHLOVA

## EVALUATION PROCESS

All applications have undergone a double-blind peer review process

## PARTICIPATING COUNTRIES

Turkey, Azerbaijan, India, Nigeria, Algeria, Pakistan, Morocco, South Africa, Ethiopia, Malaysia, Saudi Arabia, Iran, Iraq, Serbia, Bosnia & Herzegovina, Singapore, Bangladesh, China, France, Indonesia, North Macedonia, United Kingdom, Portugal, Palestine, Bulgaria, Lebanon, Hungary, Belgium, Russia, Oman, Brasil, Canada, Kosovo, USA, Romania, Vietnam, Ukraine, Northern Cyprus, Poland, Mèxico

TOTAL NUMBER OF PAPERS: 515  
THE NUMBER OF PAPERS FROM TURKEY: 255  
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# PHOTO GALLERY





Zoom Meeting

Recording...

Participants (27)

Q. Find a participant

AM	Amina Mumtaz	🔇	📹
AK	Arzu Kan	🔇	📹
AY	Aybüke Yarım	🔇	📹
B	Bekale	🔇	📹
DA	Dr.MALEV ATEŞ	🔇	📹
HI	Hi-Zeliye İrem Gözöl	🔇	📹
HK	HAKAN KIR	🔇	📹
İM	İlke Malahayati	🔇	📹
İ1	İPhone 13	🔇	📹
M	Melih ÇETİN	🔇	📹
Ö	Ömer ZEYİN	🔇	📹
PO	Prof. Dr. Rıfqi YEŞİL	🔇	📹
T	Prof. Dr. Tufan AYTEÇ	🔇	📹
RV	Rector: Vatan KARAKAYA	🔇	📹
SÖ	Sinan Özcan-HİSİ	🔇	📹
Z	Zeynep E.	🔇	📹
BA	Bang Onal	🔇	📹
N	neddetulu	🔇	📹

Mustafa

Unmute Start Video Security Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Support Reactions More End

Zoom Meeting

Recording...

Participants (30)

Q. Find a participant

MA	Misafir Aybüke Yarım	🔇	📹
M	Misafir Melih ÇETİN	🔇	📹
M	Mustafa	🔇	📹
MA	Mustafa ASLANDEREN	🔇	📹
Ö	Ömer ZEYİN	🔇	📹
PO	Prof. Dr. Rıfqi YEŞİL	🔇	📹
T	Prof. Dr. Tufan AYTEÇ	🔇	📹
SA	S1H2 ahmet.sahin	🔇	📹
SA	S1H2 Arzu Kan	🔇	📹
SH	S1H4 HAKAN KIR	🔇	📹
SI	S1H6 İlke Malahayati	🔇	📹
SA	S2H3 a.erkal	🔇	📹
SD	S2H3 Dr.MALEV ATEŞ	🔇	📹
SB	S2H6 Bekale	🔇	📹
SÖ	Sinan Özcan-HİSİ	🔇	📹
T	Tuğçe	🔇	📹
Z	Zeynep E.	🔇	📹

Rector: Vatan KARAKAYA

Unmute Start Video Security Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Support Reactions More End

Zoom Meeting

Recording...

Participants (32)

Find a participant

- MA Mehmet Ali Yellobudak
- M Melih ÇETİN
- M Mustafa
- MA Mustafa ASLANDEREN
- O Ömer ZEYİN
- PO Prof. Dr. Rıfika YEŞİL
- T Prof. Dr. Tufan AYTAC
- EV Rector: Vatan KARAKAYA
- SA SİH2 ahmet.sahin
- SA SİH2 Arzu Kan
- SA SİH2 a.erkal
- SO Sinan Özcan-H151
- Z Zeynep E.
- BA Bang Onal
- N necdet.uslu
- SB Salha Bager
- SC Selahattin Çınar

Unmute Start Video Security Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Support Reactions More End

Kongre Başkanı: AHMET KAZANKAYA

Zoom Meeting

You are viewing Prof. Dr. Tufan Aytac's screen

Recording...

Participants (48)

Find a participant

AN EVALUATION OF TODAY'S MENTORING AND COACHING PRACTICES IN THE CONTEXT OF AHI (AHI EVRAN'S HUMAN TRAINING MODEL) APPROACH

GÜNÜMÜZÜN MENTORLUK VE KOÇLUK UYGULAMALARININ AHI (AHI EVRAN'IN İNSAN YETİŞTİRME MODEL) YAKLAŞIMI BAĞLAMINDA DEĞERLENDİRİLMESİ

AHI EVRAN Uluslararası Bilişsel Araştırmalar Kongresi 30 Kasım - 1-2 Aralık 2021 Keleşir Ahi Evran Üniversitesi

Prof. Dr. Tufan AYTAC  
Eğilim Ahi Evran University  
Faculty of Education

Dear rector, dean and colleagues, I greet you all with respect and sincerely. I would like to welcome the participants from Turkey and various friendly and brotherly countries to the congress. Now, I'm going to present my paper in english. First of all, I want to define Ahilik, mentoring

Unmute Start Video Security Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave

Вы просматриваете экран Session 2 / Hall-5 Abdul-Kahma...

Осталось: 05:59:58

**"EXPERIENCE OF METACOGNITION, INTEGRITY, AND SELF-EFFICACY LEARNING AMONG VOCATIONAL POSTSECONDARY STUDENTS".**

*AHI EVRAN International Conference on Scientific Research  
30 November – 1-2 December 2021  
Kirsehir Ahi Evran University.*

1 не назначенный участник

Включить звук | Включить видео | Участники (15) | Чат | Демонстрация экрана | Пауза/остановить запись | Реакции | Дополнительно | Выйти из зала

coordinator: Alina Amanzholova разговаривает...

Вид

Prof. Dr. Tufan Aytaz	Kongre Başkanı: AHMET KAZAN...	S1H2 Ismail Demir	h4: Dr. Ali MUTI
S1H1 Nail DEMIRER	S3H2 Prof. Dr. Rüştu YEŞİL	S1H6 Inke Malahayati	CIO Assoc Prof Ts DR Madinah...
S1H3 Büğra Solmaz	S1H2 EBRU ŞİRİN	Katarzyna Oblakowska	S1H4 Saadet TULUM
Hall-5: Fitri Mukarromah	Subash Jayasinghe	Atabek Movlyanov	H3- Fatih Seyis

Включить звук | Включить видео | Безопасность | Участники (64) | Чат (2) | Демонстрация экрана | Запись | Реакции | Дополнительно | Выйти

Zoom Meeting - Hall-2

Recording... Remaining: 09:51:39

Kongre Başkanı AHMET KAZANKAYA  
H-2 OBSERVER  
S1H2 EBRU ŞİRİN  
Prof. Dr. Tufan Aytaç  
H2- Tacettin ÇİFTÇİ  
S1H2 Bapar Altıntaş  
S1H2 Selahattin Çınar  
Funda Atık  
S1H2 İker TÜRKAY  
S1H2 İsmail Demir  
Rektor: Vatan KARZKAYA  
H2-Ayşe ÇANDAR  
01.12 s1 h2: Ga...  
S2H2 F. Şüheda...  
S1H2 Arzu Kan  
H2-Sedat BOYACI  
h2: İbrahim ERD...  
01.12 s2 h2: Hak...  
8 unassigned participants  
Leave Room

10°C Bulutlu TUR 10:02 30.11.2021

Zoom Meeting - Hall-2

You are viewing Aslı Akilli Hall 2's screen View Options - Remaining: 07:42:09

Analysis of Chickpea Production Profile in Central Anatolia Region by Fuzzy Clustering Approach

Aslı AKILLI, Hasan Gökhan DOĞAN, Arzu KAN, Mustafa KAN  
Kirsehir Ahi Evran University, Faculty of Agriculture, Department of Agricultural Economics, Kirsehir, Turkey.

AHI EVRAN International Conference on Scientific Research- November 30 - December 1-2, 2021 Kirsehir Ahi Evran University

Aslı Akilli Hall 2  
H-2 OBSERVER  
H2- Tacettin ÇİFTÇİ  
S1H2 Bapar Altıntaş  
Selahattin Çınar

16°C Çok bulutlu TUR 10:12 30.11.2021

Zoom Meeting - Hall-2

Recording... Remaining: 04:55:09 View

H-2 DEMİR H-2 OBSERVER Gökhan SENGÜR Hall 2-Bilge Aslan Altan H2-ELVAN YALÇINKAYA H2-H2 Merve Aydoğdu H2-Tuğba Kafadar Hall 2-Nazhat Güler

Hall-2 Nihat Altı... hall 2-Serdal BA... 9 unassigned participants

Unmute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Aramak için buraya yazın 21°C Güneşli TUR 14:39 30.11.2021

Zoom Meeting - Hall-2

You are viewing H2-Selen Aydöner's screen View Options

Recording... Remaining: 09:09:20 View

**AHİ EVRAN**  
Uluslararası Bilimsel Araştırmalar Kongresi

**Ergoterapi Temelli Bilişsel Rehabilitasyon Müdahalesi Multipl Sklerozlu Bireylerin Bilişsel Becerilerini ve Okupasyonel Performanslarını Nasıl Etkiliyor?**  
How Does Occupational Therapy-based Cognitive Rehabilitation Intervention Affect The Cognitive Skills And Occupational Performance Of Individuals With Multiple Sclerosis?

**Selen AYDÖNER<sup>1</sup>, Gonca BUMİN<sup>2</sup>**

<sup>1</sup> Arş. Gör., İstanbul Gelişim Üniversitesi, Sağlık Bilimleri Fakültesi, Ergoterapi Bölümü, İstanbul, Türkiye.  
<sup>2</sup> Prof. Dr., Hacettepe Üniversitesi, Sağlık Bilimleri Fakültesi, Ergoterapi Bölümü, Ankara, Türkiye.

Windows'u etkinleştir  
Windows'u etkinleştirmek için Ayarlar'a gidin.

H2-Mutlül YAGMUR H-2 OBSERVER H2-Yücel Bilgin H2-Selen Aydöner H2-Ömer Alperen GÜ...

Unmute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Aramak için buraya yazın 19°C Güneşli TUR 16:45 30.11.2021




H-6 Observer | neeraja.sasipriya... | vasanthi | Hall-6, Olubukol... |

Recording... |

### INTRODUCTION

- A **roof garden** is any **garden** on the **roof** of a **building**.
- Besides the decorative benefit, roof plantings may provide food, temperature control, hydrological benefits.
- Also provides architectural enhancement, habitats or corridors for wildlife, recreational opportunities, and in large scale it may even have ecological benefits.



The screenshot shows a Zoom meeting interface. The main window displays a presentation slide with the following text:

AHİ EVRAN  
International Conference on Scientific Research  
November 30- December 1-2, 2021  
Konya Ahi Evran University

STUDY OF THE FREQUENCY OF COMPOSITE BEAMS WITH VARIABLE FIBER VOLUME

Prof. Dr. BERRABAH NAMZA MADID

09/11/2021

Below the slide, it says "Cliquez pour ajouter des commentaires".

On the right side, there is a list of participants:

- H-6 Observer (Co-host, me)
- H6 BERRABAH S Z / H 6
- H6 Hall-7, ZAHAF Samir
- ELMEGUENNI-Session2 hall6
- H6 Amna Cekan
- H6 Hall-6, Gurbaneli Valiyev
- S2 H6 LAOUATI Aissa

At the bottom of the Zoom window, it says "2 unassigned participants".

The screenshot shows a Zoom meeting interface. The main window displays a video feed of a participant wearing a grey hijab. The name "DR MELZI NAIMA" is visible above the video feed.

At the top of the Zoom window, there is a list of participants:

- H7 - Observer
- HALL7, Kratbi Fouad
- DR MELZI NAIMA
- Hall 7, Vagner Aparec...
- Ammi Yamina

At the bottom of the Zoom window, there are controls for "Unmute", "Start Video", "Participants", "Chat", "Share Screen", "Pause/Stop Recording", "Breakout Rooms", "Reactions", and "Leave Room".

On the right side, there is a list of participants:

- H7 - Observer (Co-host, me)
- AN Atfeh Najbi
- AY Ammi Yamina
- DM DR MELZI NAIMA
- DS Dr. Shafaq Mubarak
- HT Hall 7, Vagner Aparecido de Mo...
- HK HALL7, Kratbi Fouad

At the bottom right, there is a "Mute All" button.

Вы просматриваете экран S1 / HALL-5 \_ Moh...

Осталось: 09:46:20

Exponential stability of the solution

5. Exponential decay result–Proof

We differentiate (9), and recall (7) et (10), (11), (12), we obtain

$$\begin{aligned}
 \mathcal{L}'(t) \leq & -[N\beta - c] \int_0^1 u_0^2 dx - \left[\frac{\beta}{2}\right] \int_0^1 y^2 dx \\
 & - \left[\frac{\beta}{2}\right] \int_0^1 y^2 dx - \left[\frac{\beta}{2}\right] \int_0^1 u_0^2 dx - \left[\frac{\beta y_1}{2}\right] \int_0^1 e^2 dx \\
 & - [N\beta - c] \int_0^1 u_0^2 dx - \int_0^1 2bu_0 y dx \\
 & - [N_1 \eta_1] \int_0^1 \int_0^1 \kappa^2(x, \varphi, t) d\varphi dx \\
 & - [N_1 \eta_1 - c] \int_0^1 x^2(x, 1, t) dx \\
 & - [N\eta_1 - N_1 - c] \int_0^1 y^2 dx.
 \end{aligned} \tag{13}$$

Muhammed HOJASNI

Participants: S1 / HALL-5 \_ Mohamed HOJASNI, Observer hall-5, s3 h5: Noor Alam, NS moderator: Dalal maturi, s3 h5: Noor Alam, NS: KARNATI VEERAREDDY, NS: Eheroz Rezaei, bounech zohra, Hayder Hashim, B.Yahyapour, Hall-5, Iman Taha, B.Yahyapour

Вы просматриваете экран h7 asmaa khoula

Осталось: 09:26:19

Definition

The t-product  $\ast_T$  between two tensors  $\mathcal{A} \in \mathbb{R}^{n_1 \times n_2 \times n_3}$  and  $\mathcal{B} \in \mathbb{R}^{n_1 \times n_2 \times n_3}$  is a tensor given by:

$$\mathcal{C} = \mathcal{A} \ast_T \mathcal{B} = \text{fold}(\text{bcirc}(\mathcal{A})\text{unfold}(\mathcal{B})), \tag{14}$$

of size  $n_1 \times n_2 \times n_3$ , where

$$\text{bcirc}(\mathcal{A}) = \begin{bmatrix} A^{(1)} & A^{(n_1)} & A^{(n_1-1)} & \dots & A^{(2)} \\ A^{(2)} & A^{(1)} & A^{(n_1)} & \dots & A^{(3)} \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ A^{(n_1)} & A^{(n_1-1)} & \dots & A^{(2)} & A^{(1)} \end{bmatrix}, \quad \text{unfold}(\mathcal{B}) = \begin{bmatrix} B^{(1)} \\ B^{(2)} \\ \vdots \\ B^{(n_1)} \end{bmatrix}$$

and

$$\text{fold}(\text{unfold}(\mathcal{A})) = \mathcal{A}.$$

H-7, Arif Khan

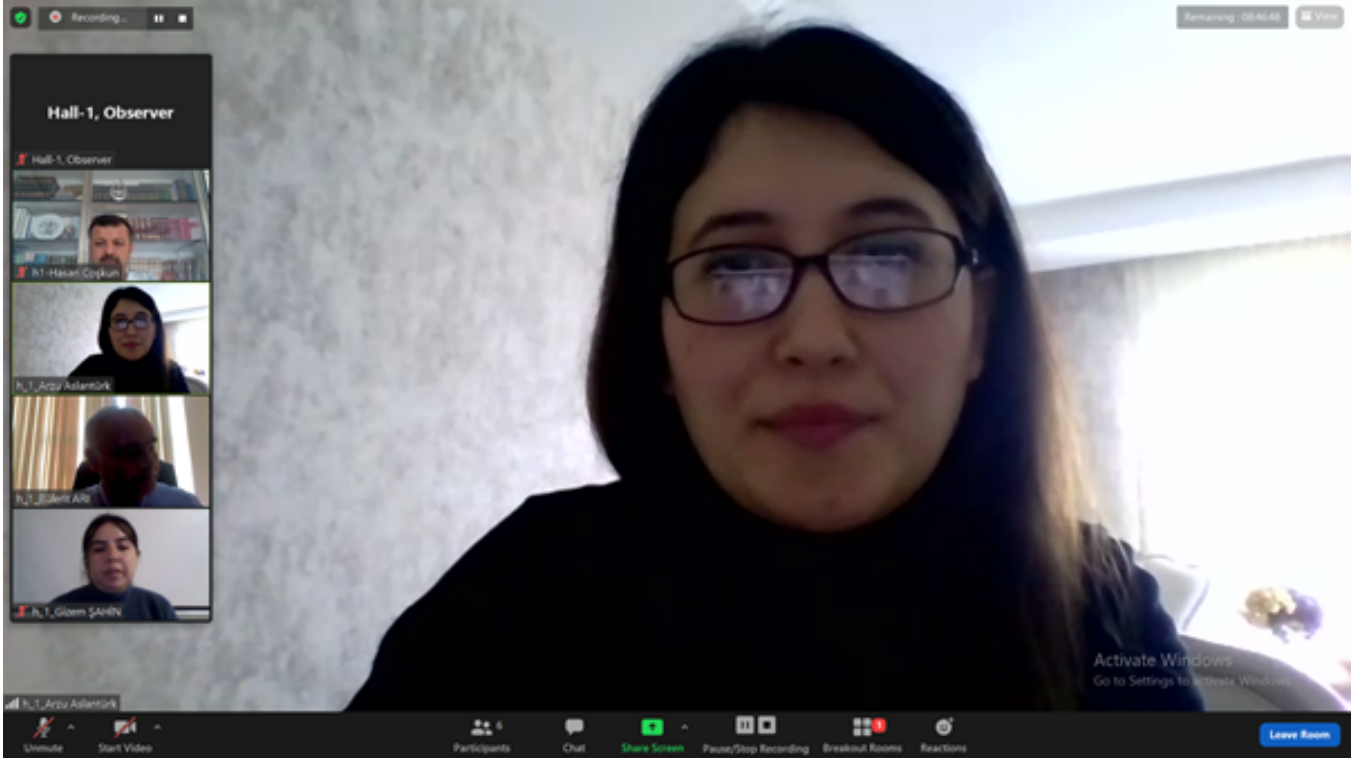
IKSAD Institute of Economic Development and Social Research

Hall-7, Keyvan Asefpoor Vakilian

h7 asmaa khoula

Mehreen Fida






Recording... You are viewing burrahalla (MALLI)'s screen View Options - Remaining: 08:19:30 View

AHI EVRAN INTERNATIONAL CONFERENCE ON SCIENTIFIC RESEARCH

## Teknolojik/Endüstriyel Dönüşümlerin Tarihsel Gelişim Süreci

Endüstri çağı "en çok değişen ve en çok değiştiren çağ" olarak adlandırılmaktadır.



The industrial age is called "the most changing and most changing age".

Hall-1, Observer

Hall-1, Observer

H1\_Ayşe N. Yılmaz

H1\_Molegöl, Rahat Suwki

H1\_Zafer Cankaya

Hall-1, Damla Coer

Hall-1 Mercan Halipoğlu

burrahalla (MALLI)

H1\_Doç. Dr. Yük...

H1\_Deniz Şahin

H1\_Primdo Yönel İLTAŞ

Go to Settings to activate Windows.

Unmute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Zoom Meeting - Hall-2 Recording... Remaining: 06:05:06 View

H2: EBRU ŞİRİN

H2-OBSERVER-JAN

H2-Tuncer Arslan

h2 moderator: Ahmet Şahin

Houana Neddar

H2 Semih AÇIKBAŞ

Bidem SAĞLAM/ Kirazlı

H2-Semih AYKUT

H2-SELMA BOYACI

Çağrı Sarıer

ceylin saner

H2 - Adnan Doğan

h2: Prof. Dr. Meh...

Ertuğrul KUL

Hayrettin Çayro...

ceylin saner

H2 - Prof. Dr. Mehmet SARI

Ertuğrul KUL

Hayrettin Çayroğlu

H2\_Koray KIRIKÇI

H2-Gülfinaz ÖZ...

H2\_Koray KIRIKÇI

H2-Gülfinaz ÖZÖĞÜL

Unmute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Type here to search

6°C Cloudy TUR 11:49 01/12/2021

Zoom Meeting - Hall-2

You are viewing Hall2 Moderator Mustafa KAN's screen

View Options

H2-OBSERVERJAN H2-F. SUHEDA HEFIE S2H3 Houaria Neddar Hall2 Moderator-Mustaf... H2- Yasar ERTURK H2- Alim ARDIN

Recording

Canvel Bilen Sunu - PowerPoint

Remaining : 09:53:36

Doğru Yanlış Ekle Tasarım Geçişler Animasyonlar Slayt Gözetimi Göster Geçir Gözetim

Yapıştır Kopyala Silme Yeni Slayt Ekle Silme

Yazı Tipleri

Metin Yığılması Metin Hizmeti SmartArt'a Dönüştür

Yerleştir Hattı Sökülmesi Slayt Gözetimi

Özellikler Bul Ekleme Değiştir Silme

Uzun süreli

Unmute Start Video

Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions

Leave Room

Type here to search

6°C Cloudy TUR 13:02 01/12/2021

Zoom Meeting - Hall-6

You are viewing Hall-6, Siddhant's screen

View Options

H6-OBSERVERJANI Hall-6, Sidd... Hall-6 DUA Hall-6/Diwale/Dialekan

The shared content is fit to your screen. To see the original size, click "Original size" in the menu.

Remaining : 09:53:19

AVAILABILITY OF EDIBLE MUSHROOMS IN AYODHYADHAM, INDIA

Dr. Siddhant  
Former Assistant Professor,  
Department of Botany,  
Durgesh Khandri Degree

4 unassigned participants

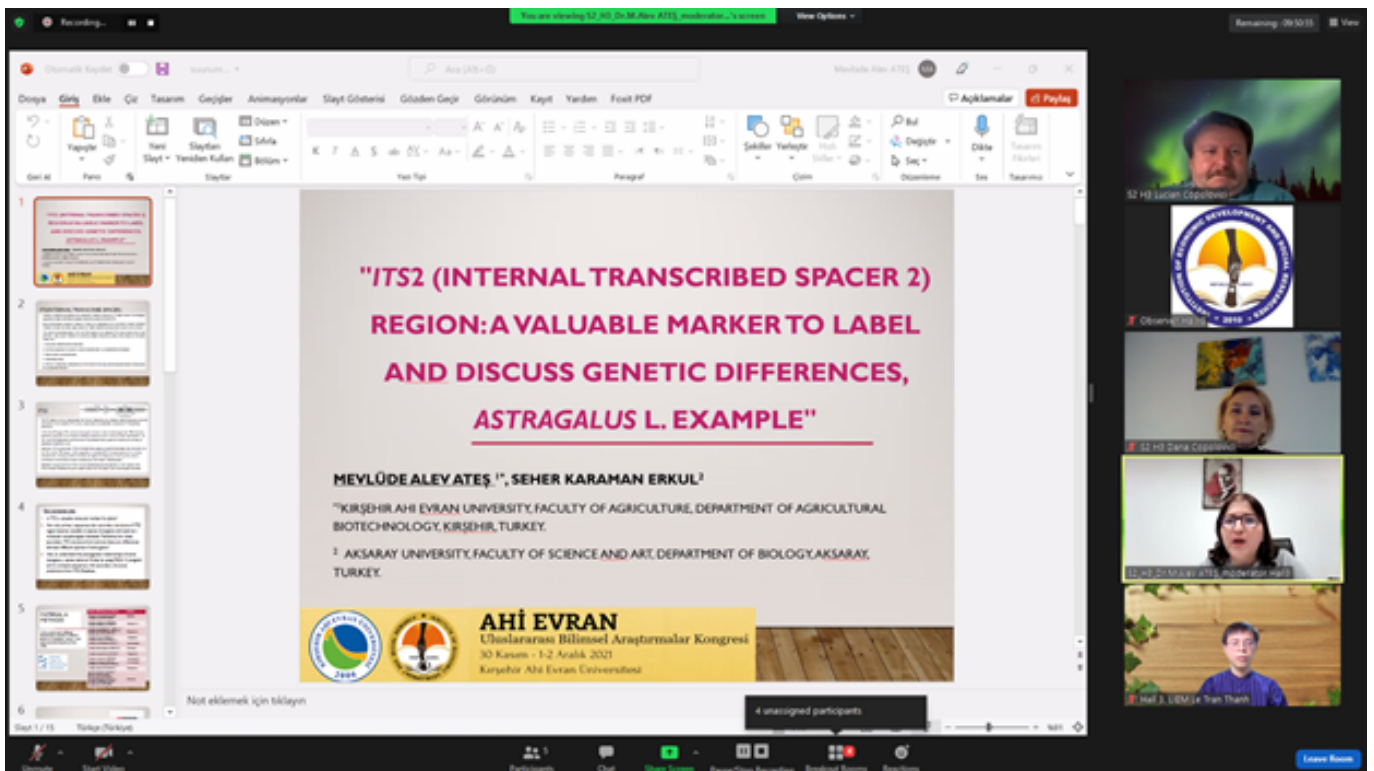
Unmute Stop Video

Participants Chat Share Screen Record Breakout Rooms Reactions

Leave Room

Type here to search

6°C Mostly cloudy TUR 16:02 01/12/2021



Zoom Meeting - Hall-5

Recording...

PREVOLKON MI UMANG (company) - PowerPoint

**A NUMERICAL SOLUTION FOR A COMPETITIVE LOTKA-VOLTERRA SYSTEM WITH TWO DISCRETE DELAYS**

ELDIR GOKMEM, COMMUNICATOR

DEPARTMENT OF MATHEMATICS, MUGLA SITH KOCUM UNIVERSITY

TELEMENTARY MATHEMATICS EDUCATION PROGRAM, MUGLA SITH KOCUM UNIVERSITY

Participants (10)

Observer Hall-5 (Co-host, mod)

HS-Elgin Gokmen

Dr Gopi Prasad hall 5

HS moderator: Cristina Dias

HS UMAR MUHAMMAD ABUBAKAR

HS CUMMINS BENOCHETOU

HS-Ayşe Arif

Majid YusufKhochbati

Noor alan

HS Hall-7, Nave Abbas

HS- Tuğba Yurdakuldemir

HS UMAR MUH...

HS UMAR MUHAMM...

Zoom Meeting - Hall-5

Zoom Meeting - Hall-7

Original Sound: Off

Recording

H7 - Observer

MODERATOR S2...

h7 Oğuzhan Bay...

H7 - Observer

HS27 Felice Di Domen...

H-7 Galih Putri Milan Ne...

MODERATOR S2-h7...

H-7 M.LUMALU...

h7 Oğuzhan Bayrak

ISLAMIC SENIOR HIGH SCHOOL OF NURIL HUDA TARUB - TAWANGHARJO

**DEVELOP CREATIVITY AND LEADERSHIP OF YOUNG PEOPLE FROM THE PANDEMIC**

Dr. Ahmad Fauzi, M.S.I.  
Mukhamad Luthfi Ali, M.Pd.  
Galih Putri Milan Nesty

Participants

Chat

Share Screen

Pause/Stop Recording

Breakout Rooms

Reactions

Leave Room

Zoom Meeting - Hall-7

Zoom Meeting - Hall-7

Original Sound Off | Search to Share Content | Remove Pin | Recording | Remaining: 09:51:30

# AHI EVRAN International Conference on Scientific Research

## 30 November –1-2023 / Kirsehir Ahi Evran University

**Srinivasendraprasad, PhD**  
 Professor of Chemistry  
**JSS College of Commerce & Science (Autonomous)**  
 University of Mysore  
 (Institution with Potential of Excellence)  
 Mysuru, India  
 www.jsscacs.edu.in

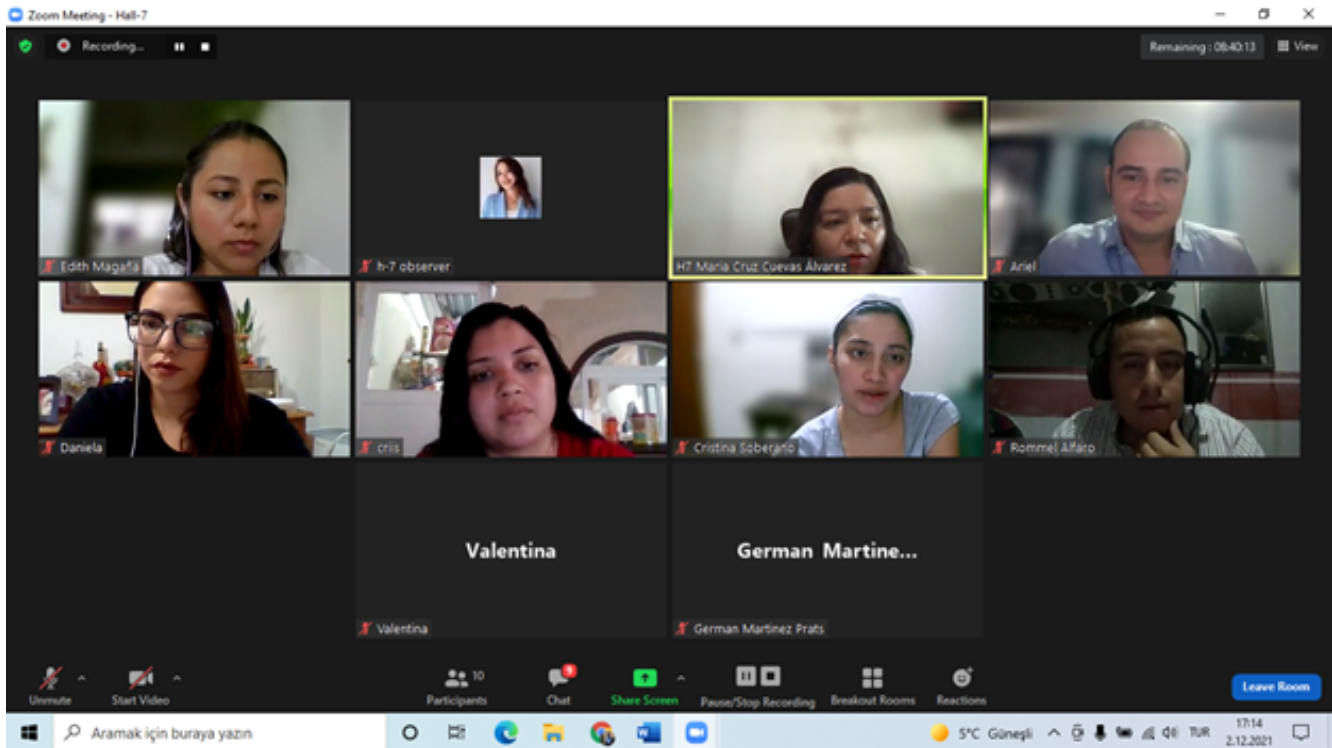
Dr. Srinivasendraprasad

Unmute | Start Video | Participants | Chat | Share Screen | Pause/Stop Recording | Breakout Rooms | Reactions | Leave Room

Find a participant

HO	H-6 Observer (Co-host, me)	🔊	📹
DO	Dr. Oyediran Wasiu Oyetike	🔊	📹
EM	i2N6 Moderator: Prof Abera Melesse	🔊	📹
EA	ENGR ADEGBOLA	🔊	📹
FR	Fasasi Rafiat Bolante hall 6	🔊	📹
HB	H6 Berhanu	🔊	📹
HA	H6 Atolagbe mutiu shola	🔊	📹
HB	H6 Beebjan	🔊	📹
HO	H6Tajana Davidov	🔊	📹
SA	i2N6 Akhila	🔊	📹

2 unsigned participants



Zoom Meeting - Hall-7

You are viewing Cristina Soberano's screen

View Options

Recording...

Remaining: 09:27:57

## Ventajas del comercio electrónico

- Dar a conocer tu marca y tener mayor oportunidad de ventas.
- Contar con un horario comercial las 24 horas del día, los 7 días de la semana sin limitaciones geográficas.
- Personalizar la comunicación con tus clientes y diseñar estrategias de ventas específicas para atender sus necesidades.
- Dar atención a diversos tipos de clientes al mismo tiempo.
- Ofrecer a tus clientes diferentes formas de pago.
- Implementar y diseñar estrategias de marketing enfocadas al tipo de clientes a través de descuentos, cupones, promociones especiales.

Zoom Meeting Controls: Unmute, Start Video, Participants, Chat, Share Screen, Pause/Stop Recording, Breakout Rooms, Reactions, Leave Room

Windows Taskbar: Aramak için buraya yazın, 6°C Güneşli, TUR, 16:26 2.12.2021

Zoom Meeting - Hall-4

You are viewing Hall-4, Macy Spears's screen

View Options

Recording...

Remaining: 09:53:12

## Acoustic Emission Testing

- Utilizes sensors to detect changes in the tested material, which is loaded past its elastic limit to produce acoustic emission
- Assesses material components under realistic environment to identify weaknesses (cracking, corrosion, and fiber breakages)
- Parameters obtained with processed signals
  - Amplitude
  - Total counts
  - Count rate
  - Number of events

Figure 1: Acoustic Emission Testing Principles

Zoom Meeting Controls: Unmute, Start Video, Participants, Chat, Share Screen, Pause/Stop Recording, Breakout Rooms, Reactions, Leave Room

Windows Taskbar: 14°C Güneşli, 16:01 2.12.2021







The image shows a Zoom meeting interface. The main window displays a presentation slide with the following text:

**RESİM SANATINDA LİF, İPLİK VE KUMAŞ ETKİLERİNİN DOKUSAL AKTARIMI**  
**TEXTURE TRANSFER OF FIBER, YARN AND FABRIC EFFECTS IN PAINTING**  
ÖĞR. GÖR. DR. GÜLŞEN ŞEFİKA BERBER  
MANİSA CELAL BAYAR ÜNİVERSİTESİ  
SALİHLİ MESLEK YÜKSEKOKULU

Below the slide, it says "Not eklemek için tıklayın". At the bottom of the slide, it says "Slayt 1 / 27 Türkiye (Türkiye)".

On the right side, there is a vertical list of participants:

- H2- Müge TARHAN
- Observer Hall-2
- H2-Baran TARHAN(Uyak U)
- Marcello Teles H2
- H2-Vania Malaguti (Eğiz)
- h2 moderatör:Deniz Kocak
- Gülşen Şefika Berber

The image shows a Zoom meeting interface. The main window displays a large video of a man with a grey beard and a maroon shirt, identified as "H1 Hasan Maçin-Adyaman".

On the right side, there is a vertical list of participants:

- Hall-1, Observer
- Hall-1, Observer
- H1- Ajlhan Kuscuoglu
- H1 Habibe Akag
- H1, Dr. Mehmet KOC
- Hall-1doc@2020yilim.metu

At the bottom right, there is a watermark: "Activate Windows Go to Settings to activate Windows."

Recording... Remaining: 09:17:41

## 2. CALCULATIONAL DETAILS

- All herein done total energy calculations were carried out using a pseudopotential plane-wave (PP-PW) scheme within density functional theory (DFT) as implemented in the Quantum ESPRESSO package [4].
- The electronic exchange-correlation potential was calculated within the generalized gradient approximation (GGA) in the scheme of Perdew-Burke-Ernzerhof (PBE) [5].
- In all done total energy calculations, ultra-soft pseudopotential [6] was used to treat the potential seen by the valence electrons because of the nucleus and the frozen core electrons.
- The wave functions were expanded in a plane-wave basis set with a kinetic energy cut-off of 50 Ry. The electronic charge density was evaluated up to the kinetic energy cut-off of 500 Ry.
- Billion-atom integrations were performed using 12-12-12 grids. Integration up to the Fermi surface was performed using the smearing technique [7] with smearing parameter 0.02 Ry.

Hall-1, Observer

H1-Yelva Akpinar

H1-Hafize Najehan Khyrdien

H1-Almet MOOR

H1-Cemal Ozlek

H1-Duygu DK

Hall-1 Mustafa...

H1-Emre VURAL

H1-Fatih Demirkale

Activate Windows  
Go to Settings to activate Windows.

Recording... Remaining: 09:22:05

## Introduction

- According to World Health Organization (WHO), Disease outbreak is the number of cases of any disease that increases suddenly and in the same geographic location [1-2].
- Disease Outbreak caused by infection, spread through person to person, animal to person, person to animal or any other medium[2]. Predicting disease outbreaks is a vital issue as it is challenging to know when a disease becomes an outbreak.
- Detecting and Predicting disease outbreak computationally for the disease such as Malaria[4-5], SARS [7], Cholera [9], Dengue [10], Avian Influenza [12] and many more have been studied over the past but lacks in timely detecting and predicting outbreaks.
- Besides Covid-19, the world is facing disease outbreaks in countries and regions such as Ebola virus in Democratic Republic of the Congo, Middle East respiratory syndrome coronavirus (MERS-CoV) in Saudi Arabia and United Arab Emirates and Zika Virus in India [3].
- This research work focuses on the latest data sources and techniques that are currently used to detect and predict disease outbreaks.

Hall-1, Observer

H1-moderator Evrim Erkin Kargali

H1-Observer

H1-Elizaveta Temur

H1-DAHMANI Abdennasser

Session 3, Hall 1, Zahid Raza

Ammi Yamina

SrihA,Dhaloo

Hall-1,Arund Singh Gauram

Hall-1, Bayram Yipso

Seyfou Kanti

imaculada vumi

Activate Windows  
Go to Settings to activate Windows.

Zoom Meeting - Hall-4

Recording... Remaining: 09:43:57

Participants (13)

Q, Find a participant

- coordinator: Alina ... (Co-host, me)
- H-4 moderator Eyup Aboğlu
- S3 H-4: Fatih Çemrek
- Bilge Aksay
- H-4 Ayşe SOY TEMÜR
- H-4 Emre HASTAOĞLU
- H-4 Özgür YANIK
- H-4 Dr. Ali MUTLÜ
- H-4 Ayşe SOY TEMÜR
- Hall-4, Ahmet Gumus
- Hall-4, Manu\_Sankar
- Mevhibe Türkmen
- S3H4 Saadet TULLUM
- S3H4 necdet.uslu

Mute All Reclaim Host

Uemute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

Zoom Meeting - Hall-4

Recording... Remaining: 06:54:21

Participants (9)

Q, Find a participant

- IKSAD Institute of E... (Co-host, me)
- H4 moderator: Dang Hoang Xuan...
- H-4 Derya Eskimen
- Gabriela Gulu
- H-4 Anna Mikhailova
- HALL-4 / EYUP BEZEYEN
- Hall-4 Madinah, USM
- Hall-4, Giovanni Esposito
- Hall-4, Ismail Erbek
- H-4 Anna Mikhailova
- HALL-4 / EYUP BEZEYEN
- Gabriela Gulu

Mute All Reclaim Host

Uemute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room

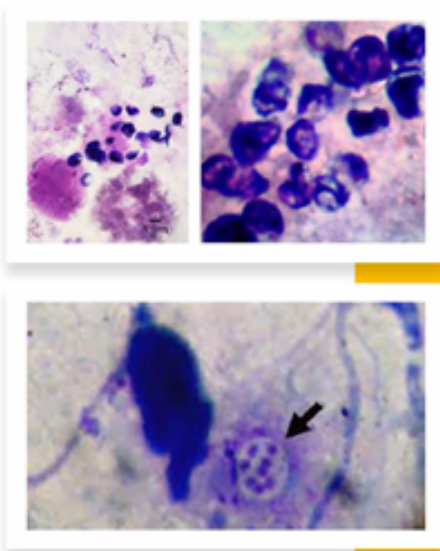
Zoom Meeting

Recording

Remaining: 09:53:32

## P. jirovecii

- Since *P. jirovecii* cannot be cultured in respiratory system samples, staining methods, immunofluorescence techniques and PCR are used in the diagnosis of the agent.
- Among the staining methods, Gram-Weigert, Wright-Giemsa, Giemsa and the methenamine silver stain of Gomori is most used for diagnosis.



Participants (14)

Q. Find a participant

- KSAD Institute of E... (Co-host, me)
- HA Muhammet KARAKAVUK
- HA Duygu Kaba
- HA Fatma ERGON
- HA Rabia Şeker
- HA Yakup USLU
- HA-4 moderator, Mehmet D...
- HA-4, Kamal AL-AAYEDI
- HA-4, Manu Sanjar, Delhi Univer...
- mcjanz
- SH4-Zekiye İrem Gocubol
- Session 3- HA-4 Dr. Ali Seydi AL...
- session 3/ha-4 Justina Benson O...
- SH4-Zekiye İrem Gocubol

Mute All Reclaim Host

Recording

You are viewing the moderator Sara Albani's screen

View Options


Remaining: 28:42:20

## INTRODUCTION

**Emotions** play a **key role** in the success of a competition for the strong impact on human performance.

"An intense affective reaction with acute onset and short duration determined by an environmental stimulus, whose appearance causes a modification at somatic, vegetative and psychic levels."

**Negative emotions** are seen as antagonistic to concentration, particularly anxiety as it can negatively affect performance.



Participants

- HA-4 observer
- HA-4, Sanjay K...
- HA-4, Sanjay K...
- HA-4, Sanjay K...
- HA-4, Sanjay K...
- HA-4, Sanjay K...
- HA-4, Sanjay K...
- HA-4, Sanjay K...
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- HA-4, Sanjay K...
- HA-4, Sanjay K...
- HA-4, Sanjay K...

HA-4, Sanjay K...

HA-4, Sanjay K...

Learn More

Recording... Remaining: 09:25:35

Participants (11)

Q, Find a participant

- hall 4 observer (Co-host, me)
- H4 Faruk KILIÇ
- H4 moderator: hatice aylin karahan...
- H4: Levent Urtekin
- H4-Ahmet İyigör
- H4-Çağrı KILINÇ
- H4-FATİH DEMİRKALE
- Hall 4, Sinem BOZATLI
- Hall-4, Manu Sankar, Delhi Univer...
- S1H4 Zeynep E. Kızıci
- S1-H4Mukaddes Şeval Çetin

h4: Levent Urtekin

H4-Ahmet İyigör

Recording... Remaining: 09:33:01

Participants (12)

Q, Find a participant

- observer hall 4 (Co-host, me)
- H4-Ahmet Hüyyet'in Tuncay
- H4-Deniz GÜLER
- H4 Özge Kink
- H4 Burak Peksoy
- H4 Leyla KUŞÇULAR KURU
- H-4 Mustafa KAYA
- H4 Samet Önlü
- H4- Ümmü gülsüm aşk nur Doğan
- H4-ZHAKUBUZETARK
- H4- 4 Gizem Deniz B BÜYÜKSÖY
- H4-4, Manu\_Sankar, Delhi Unive...

ÇALIŞMANIN AMACI / THE AIM OF THE STUDY

Çalışmanın amacı Covid-19 pandemi döneminde tıbbi dokümantasyonun karar ve tedavi süreçlerine ne şekilde fayda sağladığının tespit edilmesidir.

The aim of the study is to determine how medical documentation benefit the decision and treatment processes during the Covid-19 pandemic period.

Zoom Meeting - Hall-4

You are viewing Meri Ijzika's screen

Recording...

Participants (12)

Find a participant

- observer hall 4 (Co-host, me)
- Meri Ijzika
- H4 SS, Moderator, Dr. B Ghansh...
- MOURAD KEDDAM
- Biljana Bogdanova Popov
- N4 Vesna Karapetkovic - Hristo...
- H4, Manu Sanjar, Delhi University
- H4 SS, Moderator, Dr. B Ghansh...
- H-4, Yusuf HASSAN
- Hall-4, Justina Benson Ogala
- muratimor
- 13-H4 Abubakar Siddiq Salihu

Remaining: 08:53:59

ANI EVRAN International Conference on Scientific Research  
 November 28 - December 1-2, 2021  
 Erzurum Abi İzzar University  
 Anatolia

**"EVALUATION OF CHEMICAL COMPOSITION OF TURKEY'S BREAST MUSCLE FED BY DIFFERENT DIETARY CONCEPTS"**

MERI KRISTESKA TRUNJA KARAPETKOVIKA - HRISTOVA

ORAL PRESENTATION:  
**M. R. MERI KRISTESKA**, MASTER OF FOOD SAFETY AND QUALITY, FACULTY OF BIOTECHNICAL SCIENCES - BUDUA, MACEDONIA

Zoom Meeting - Hall-5

You are viewing Hall-5, Furqan Ahmad Sadiq's screen

Recording...

Participants (9)

Find a participant

- KSAD Institute of E... (Co-host, me)
- Hall-5, Furqan Ahmad Sadd...
- Abubakar Siddiq Salihu
- Comoderator, Hall-5, Yehi Henna...
- HALL 5 - Rodolfo
- Hall-5, Kapka Mancheva
- Hall-5, Sana Azlam
- Moderator- Session 1-H...
- Tajana Davidov


Remaining: 08:56:30

Chemical reaction scheme showing the synthesis of a complex heterocyclic compound (likely a benzothiazine derivative) through multiple steps involving reagents like NaH, MeCN, DMF, and K<sub>2</sub>CO<sub>3</sub>.



**Zoom Meeting - Hall-5** (Recording) Remaining: 09:42:49

# LOCATION of the research:



EMU- faculty of pharmacy

NORTHERN CYPRUS

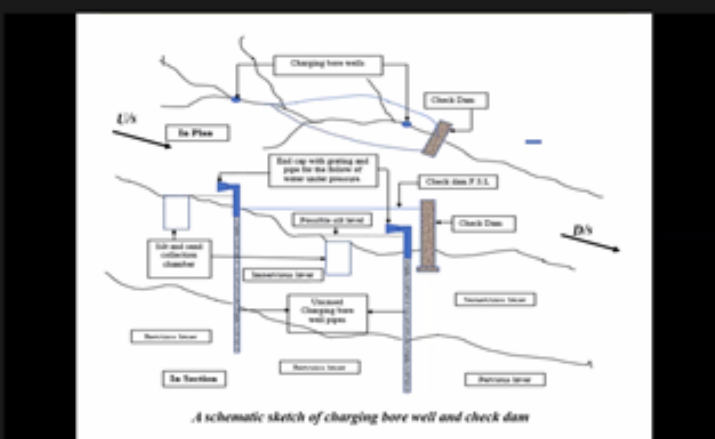
**Participants (18)**

- KSAD Institute of... (Co-host, me)
- HS-5 Seyid Amin Housha...
- Alexandru Vioronechi
- HS- Abubakar Siddiq Salhu
- HS-Cigdem Eke CAN
- HS-Huseyin Ozan Yavuz
- HS-Selim Oguz Akbulut
- HS-Vildan Burgaz-Mo...
- HS-Salm Oguz Akbulut
- HS-Seyid Amin Housh...
- Hall-5 Serval Gencal
- Hall-5, Diana Shepel
- Hall-5, Furqan Ahmad Saddique
- Hall-5, Igor Povar
- Malya Tanha- hall 5
- Noor Alam
- Onana Spinu
- HS-Huseyin Ozan Yavuz

Mute All Reclaim Host

**Zoom Meeting - Hall-5** (Recording) Remaining: 09:13:21

You are viewing **Vithal H. Jadhav's** screen



*A schematic sketch of charging bore well and check dam*

**Participants (6)**

- KSAD Institute of E... (Co-host, me)
- VH Vithal H. Jadhav
- HA HS A U ARUN
- HS- zouzou chaima
- H- Hall-5, Dang Hoang Xuan Huy
- HR Hall-5, Rafai Abdulmajid

**HS A U ARUN**

HS A U ARUN

Mute All Reclaim Host

Unmute Start Video Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions Leave Room



*AHI EVRAN*  
*International Conference on Scientific Research*  
*30 November – 1-2 December, 2021*  
*Kırşehir Ahi Evran University*

*CONFERENCE PROGRAM*

Online (with Video Conference) Presentation



*Meeting ID: 884 8432 4978*  
*Passcode: 000777*



AHI EVRAN International Conference on Scientific Research  
30 November – 1-2 December 2021 / Kırşehir Ahi Evran University

**CONFERENCE PROGRAM**



Meeting ID: 884 8432 4978

Passcode: 000777

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## ÖNEMLİ, DİKKATLE OKUYUNUZ LÜTFEN / IMPORTANT, PLEASE READ CAREFULLY

### Önemli, Dikkatle Okuyunuz Lütfen

- ✓ Kongremizde Yazım Kurallarına uygun gönderilmiş ve bilim kurulundan geçen bildiriler için online (video konferans sistemi üzerinden) sunum imkanı sağlanmıştır.
- ✓ Online sunum yapabilmek için <https://zoom.us/join> sitesi üzerinden giriş yaparak "Meeting ID or Personal Link Name" yerine ID numarasını girerek oturuma katılabilirsiniz.
- ✓ Zoom uygulaması ücretsizdir ve hesap oluşturmaya gerek yoktur.
- ✓ Zoom uygulaması kaydolmadan kullanılabilir.
- ✓ Uygulama tablet, telefon ve PC'lerde çalışıyor.
- ✓ Her oturumdaki sunucular, sunum saatinden 15 dk öncesinde oturuma bağlanmış olmaları gerekmektedir.
- ✓ Tüm kongre katılımcıları canlı bağlanarak tüm oturumları dinleyebilir.
- ✓ Moderatör – oturumdaki sunum ve bilimsel tartışma (soru-cevap) kısmından sorumludur.

### Dikkat Edilmesi Gerekenler- TEKNİK BİLGİLER

- ✓ Bilgisayarınızda mikrofon olduğuna ve çalıştığına emin olun.
- ✓ Zoom'da ekran paylaşma özelliğine kullanabilmelisiniz.
- ✓ Kabul edilen bildiri sahiplerinin mail adreslerine Zoom uygulamasında oluşturduğumuz oturuma ait ID numarası gönderilecektir.
- ✓ Katılım belgeleri kongre sonunda tarafınıza pdf olarak gönderilecektir
- ✓ Kongre programında yer ve saat değişikliği gibi talepler dikkate alınmayacaktır

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- ✓ To be able to attend a meeting online, login via <https://zoom.us/join> site, enter ID "Meeting ID or Personal Link Name" and solidify the session.
- ✓ The Zoom application is free and no need to create an account.
- ✓ The Zoom application can be used without registration.
- ✓ The application works on tablets, phones and PCs.
- ✓ The participant must be connected to the session 15 minutes before the presentation time.
- ✓ All congress participants can connect live and listen to all sessions.
- ✓ Moderator is responsible for the presentation and scientific discussion (question-answer) section of the session.

### Points to Take into Consideration - TECHNICAL INFORMATION

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- ✓ You should be able to use screen sharing feature in Zoom.
- ✓ Attendance certificates will be sent to you as pdf at the end of the congress.
- ✓ Requests such as change of place and time will not be taken into consideration in the congress program.

Before you login to Zoom please indicate your name\_surname and HALL number,  
exp. Hall-1, Awais Khan



Meeting ID: **884 8432 4978**

Passcode: **000777**



## **-OPENING SPEECH-**

**30.11.2021**

**Ankara Local Time: 09:00 – 09:30**

**Dr. Mustafa Latif EMEK**

President of the Institute of Economic Development and Social Research

Honorary Chairman Organizing Committee Chair

**Prof. Dr. Ahmet KAZANKAYA**

Kırşehir Ahi Evran University

Honorary Chairman

**Prof. Dr. Vatan KARAKAYA**

Kırşehir Ahi Evran University Rector

## **-PLENARY SPEECH-**

**30.11.2021**

**Ankara Local Time: 09:30 – 10:00**

**Prof. Dr. Rüştü YEŞİL**

**Mustafa ASLANDEREN**

Sakarya University

“THE REVIEW OF THE APPLICATIONS OF RESPONSIBILITY EDUCATION IN AHI-  
ORDER”

**Prof. Dr. Tufan AYTAÇ**

Kırşehir Ahi Evran University

“AN EVALUATION OF TODAY'S MENTORING AND COACHING PRACTICES IN  
THE CONTEXT OF AHİ (AHİ EVRAN'S HUMAN TRAINING MODEL) APPROACH”



**Session 1 / Hall-1**

**30.11.2021**

**Literature/ Moderator: Prof. Dr. Orhan Küçük**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
CULTURAL FOUNDATIONS OF THE FUNDAMENTAL PRINCIPLES OF AKHISM: A VIEW OF THE QUR'AN	Prof. Dr. Orhan Küçük	Sakarya Uygulamalı Bilimler Üniversitesi
REVIVING FOLKLORE LITERATURE THROUGH PUPPETRY, STORYTELLING AND POETRY DURING HOME-BASED LEARNING ACTIVITIES	Sydney Engelbert Ganggang	Keningau Vocational College, Keningau, Malaysia.
LEXICO-PRAGMATIC TRANSFER IN SELECTED NIGERIAN PLAYS: A SOCIOLINGUISTIC PERSPECTIVE	Dr. SALAMI Amadou	University of Abomey-Calavi (UAC), Benin
THE IMPORTANCE OF CULTURAL HERITAGE AWARENESS IN KIRŞEHİR, THE LAND OF AHI ORDER	Sinan Özcan	Kütahya Dumlupınar University
GENEROSITY IN HACI BEKTASH VELİ'S MAKALAT AND IN THE AHILIK ORGANIZATION	Assist. Prof. Dr. Sümeyra ALAN	Erzurum Technical University
THE ANALYSIS OF JOHN FOWLES' "THE ENIGMA" AS AN ANTI-DETECTIVE NOVEL	Niğmet ÇETİNER	Kastamonu University
AYOT AND BIG BROTHER IN THE CONTEXT OF POWER AND THE SUBJECT IN MICHEL FOUCAULT	Muhammed Nail DEMİRER	Kırşehir Ahi Evran University
ZAIN AL-DIN IBN AL-WARDI'S "MAQAMAT" (D. 749 A.H.) IN AL-FATUWWA : AN ANALYTICAL STUDY	Prof. Dr. Mashour Habazi	Al- Kuds University, Kudüs - Filistin
	Prof. Dr. Seyfullah Korkmaz	Kırşehir Ahi Evran Üniversitesi
THE IDEALIZED LOVER IN A POEM BY MUHİBBİ	İbrahim Tahir KARAKAYALI	Kırşehir Ahi Evran Üniversitesi
ZAHİD KHALİLİN OBRAZES IN CHILDREN'S POEMS	Ayətəxan Ziyad (İsgəndərov)	Azərbaycan Dövlət Pedaqoji Universiteti. Elmi işçi

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**Session 1 / Hall-2**

**30.11.2021**

**Agriculture/ Moderator: Assoc. Prof. Dr. Funda ATİLA**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
THE PAST, PRESENT AND FUTURE OF KIRŞEHİR REGIONAL AGRICULTURE	Ahmet KAZANKAYA	Kırşehir Ahi Evran University
	Funda ATİLA	Kırşehir Ahi Evran University
MYCOREMEDIATION POTENTIAL OF BASIDIOMYCETES MUSHROOMS	Funda ATİLA	Kırşehir Ahi Evran University
	Ahmet KAZANKAYA	Kırşehir Ahi Evran University
AN AHP DECISION MODEL FOR FACILITY LOCATION SELECTION OF CATTLE BREEDING ENTERPRISES: THE CASE OF KIRŞEHİR PROVINCE	Başar ALTUNTAŞ	Kırşehir Ahi Evran University
DEVELOPMENT OF AGRICULTURAL COOPERATIVES AND EVALUATION OF AGRICULTURAL COOPERATIVE POTENTIAL OF KIRŞEHİR PROVINCE WITH SWOT ANALYSIS	Başar ALTUNTAŞ	Kırşehir Ahi Evran University
DETERMINATION OF BIOFILM FORMING CAPACITIES OF SOME PLANT GROWTH PROMOTING BACTERIA	Tacettin ÇİFTÇİ	Kırşehir Ahi Evran University
	İbrahim ERDOĞAN	Kırşehir Ahi Evran University
COMPARISON OF GROWTH AND YIELD PARAMETERS OF DIFFERENT SUNFLOWER (HELİANTHUS ANNUUS L.) CULTIVARS IN DRY FARMING CONDITIONS	Assoc. Prof. Dr. İsmail DEMİR	Kırşehir Ahi Evran University
AN OVERVIEW OF THE METHODS AND TECHNOLOGIES USED TO OBTAIN EXTRACTS FROM MEDICINAL AND AROMATIC PLANTS	Dr. İlker TÜRKAY	Kırşehir Ahi Evran University
A RESEARCH ON THE VEGETATION STRUCTURE OF SOME RANGELAND IN KYRGYZSTAN CUY REGION	Selahattin Çınar	Kırşehir Ahi Evran University
EVALUATION OF RANGELAND IMPROVEMENT AND MANAGEMENT PROJECTS CARRIED OUT WITHIN THE SCOPE OF RANGELAND LAW IN TURKEY	Selahattin ÇINAR	Kırşehir Ahi Evran University
ANALYSIS OF CHICKPEA PRODUCTION PROFILE IN CENTRAL ANATOLIA REGION BY FUZZY CLUSTERING APPROACH	Aslı AKILLI	Kırşehir Ahi Evran University
	Hasan Gökhan DOĞAN	Kırşehir Ahi Evran University
	Arzu KAN	Kırşehir Ahi Evran University
	Mustafa KAN	Kırşehir Ahi Evran University
CHARACTERISTICS OF RISK GROUPS IN CHICKPEA PRODUCERS: CASE STUDY FOR CENTRAL ANATOLIA REGION	Hasan Gökhan DOĞAN	Kırşehir Ahi Evran University
	Aslı AKILLI	Kırşehir Ahi Evran University
	Arzu KAN	Kırşehir Ahi Evran University
	Mustafa KAN	Kırşehir Ahi Evran University

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**Session 1 / Hall-3**

**30.11.2021**

**Microbiology, Nutrition/ Moderator: P.K.S.C.Jayasinghe & Emine Yurteri**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
DEVELOPMENT OF EDIBLE OIL QUALITY IN LEAFY CABBAGE	Emine Yurteri	Recep Tayyip Erdogan University
	Aysel Özcan	Recep Tayyip Erdogan University
	Fatih Seyis	Recep Tayyip Erdogan University
EFFECT OF ORGANIC FERTILIZERS ON TEA ( <i>Camellia sinensis</i> L. Kuntze) YIELD	Emine Yurteri	Recep Tayyip Erdogan University
	Aysel Özcan	Recep Tayyip Erdogan University
	Fatih Seyis	Recep Tayyip Erdogan University
EFFECTS OF FLAXSEED, TURMERIC AND POPPY SEED ON SOME QUALITY CHARACTERISTICS OF CRACKERS	Büşra SOLMAZ	Karamanoğlu Mehmetbey University
	Hacer LEVENT	Karamanoğlu Mehmetbey University
EFFECTS OF BUCKWHEAT, QUINOA AND TRANSGLUTAMINASE ENZYME ON COUSCOUS QUALITY	Büşra SOLMAZ	Karamanoğlu Mehmetbey University
	Hacer LEVENT	Karamanoğlu Mehmetbey University
DEVELOPMENT OF MOBILE-BASED FOOD TRACING SYSTEM FOR SRI LANKA	P.K.S.C.Jayasinghe	Faculty of Technology, University of Ruhuna, Kamburupitiya, Sri Lanka
REVIEW ON FOOD WASTAGE IN SOCIETY	Amala.B	International School of Technology and Sciences for Womens, India
	Janaki.B	International School of Technology and Sciences for Womens, India
	Sowmya.P	International School of Technology and Sciences for Womens, India
	Lavanya.CH	International School of Technology and Sciences for Womens, India
	V Sravani	International School of Technology and Sciences for Womens, India
	K Ravi Kumar	International School of Technology and Sciences for Womens, India
DETERMINATION OF FATTY ACID CONTENT OF FISH OILS OBTAINED FROM FISHMEAL-OIL FACTORY OPERATING IN THE BLACK SEA REGION	Mustafa DURMUŞ	Çukurova University
SYNTHESIS METHODS OF THIAZOLIDIN-4-ONE DERIVATIVES	Sertan Aytaç	Kırşehir Ahi Evran University

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**Session 1 / Hall-4**

**30.11.2021**

**Finance –Management/ Moderator: Dr. Eyup ATİOĞLU**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
THE ROLE OF THE FLAG CARRIER AIRLINE ON EXPORT: TODA-YAMAMOTO CAUSALITY ANALYSIS	Eyup ATİOĞLU	Cappadocia University
INVESTIGATION OF ACADEMIC'S ATTITUDES AND BEHAVIORS ABOUT THE RELIABILITY OF MOBILE AND INTERNET BANKING	Fatih Çemrek	Eskişehir Osmangazi University
COMPARISON OF FINANCIAL PERFORMANCES OF BIST COMMUNICATION ENTERPRISES WITH EDAS AND WASPAS METHOD ON THE BASIS OF CASH FLOW STATEMENT	Saadet TULUM	Kırklareli University
	Ayşe SOY TEMÜR	Düzce University
EXAMPLE OF SUSTAINABLE ENTREPRENEURSHIP: SOUTH ADANA WOMEN ENTREPRENEURS AGRICULTURAL DEVELOPMENT COOPERATIVE	Bilge AKSAY	Adana Alparslan Türkeş Bilim ve Teknoloji Fakültesi, İşletme Fakültesi, Yönetim Bilişim Sistemleri
	Hasan YILDIZHAN	Adana Alparslan Türkeş Bilim ve Teknoloji Fakültesi, Mühendislik Fakültesi, Enerji Sistemleri Mühendisliği
EVALUATION OF THE UNDERSTANDING OF FOLLOWERSHIP IN AKHISM WITHIN THE CONTEXT OF MODERN THEORIES	Oktay YANIK	Yüksek İhtisas University
IS TOXIC LEADERSHIP A HARMFUL LEADERSHIP STYLE?: A LITERATURE RESEARCH	Ph.D. Ahmet GÜMÜŞ	Ağrı İbrahim Çeçen University
RESEARCHING ONLINE FOOD ORDERS BY GEOGRAPHICAL REGIONS: THE YEMEKSEPETİ SAMPLE	Emre HASTAOĞLU	Sivas Cumhuriyet University
A STUDY ON REAL ESTATE VALUATION IN TURKEY THE IMPORTANCE OF REAL ESTATE APPRAISAL IN TURKEY	Ali MUTİ	Dr. Tapu ve Kadastro Genel Müdürlüğü, Yakutiye Tapu Müdürlüğü, Erzurum

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**Session 1 / Hall-5**

**30.11.2021**

**Business/ Moderator: Dragan Đuranović & Slobodan Popović**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
THE DYNAMICS OF INTER-ORGANIZATIONAL COOPERATION IN ECONOMIC INTEREST GROUPINGS: THE CASE OF TARGANINE EIG IN MOROCCO	Affaghrou Wafa	Faculty of Economic and Social Sciences, Morocco
EXCEEDING THE TAX LIMIT: AN ASSESSMENT FROM THE PERSPECTIVE OF OVERLOAD PROBLEMS IN TAXATION	Ahmet ARSLAN	Gaziantep University
	Ayşe AYDIN	Gaziantep University
THE 3 MOST EFFECTIVE CARDS MAKE YOU STOP INSECURE: IMPROVE WORSHIP, INVEST & TAKE CARE OF YOUR HEALTH	Fitri Mukarromah	IAIN Pekalongan, Faculty of Islamic Economics and Business, Department of Islamic Economics
	Hendri Hermawan ADİNUGRAHA	IAIN Pekalongan, Faculty of Islamic Economics and Business, Department of Islamic Economics
ANALYSIS AND REPRESENTATION OF THE GLOBAL PERFORMANCE OF COOPERATIVES	Naoual Mamdouh	University Ibn Zohr, Faculty Of Economics, Legal And Social Sciences, Agadir, Morocco
	Said Ahrouch	University Ibn Zohr, Faculty Of Economics, Legal And Social Sciences, Agadir, Morocco
THE NEXUS BETWEEN ENTREPRENEURSHIP DEVELOPMENT AND SMES PERFORMANCE IN NIGERIA	Adesanya, Abel Olusegun.(PhD)	Lagos State Polytechnic, Ikorodu, Lagos. Nigeria
	Oginni Babalola Oluwayemi	Osun State University , Nigeria
THE IMPORTANCE OF COMPILING FINANCIAL STATEMENTS IN TRANSITION COUNTRIES SUCH AS THE REPUBLIC OF SERBIA	Dragan Đuranović	PIM University Banja Lulka, Bosnia and Herzegovina
	Slobodan Popović	Faculty of Economics and Industrial Management u Novom Sadu, Cvečarska 2, 21000 Novi Sad, Serbia
BUSINESS DECISION-MAKING OF TOP MANAGEMENT IN TRANSITION COUNTRIES ON THE EXAMPLE OF THE REPUBLIC OF SERBIA	Dragan Đuranović	PIM University Banja Lulka, Bosnia and Herzegovina
	Slobodan Popović	Faculty of Economics and Industrial Management u Novom Sadu, Cvečarska 2, 21000 Novi Sad, Serbia
MANAGEMENT DECISIONS OF TOP MANAGEMENT IN ENTERPRISES DEALING WITH FOOD DISTRIBUTION IN A PANDEMIC CONDITION LIKE KOVID	Dragan Đuranović	PIM University Banja Lulka, Bosnia and Herzegovina
	Slobodan Popović	Faculty of Economics and Industrial Management u Novom Sadu, Cvečarska 2, 21000 Novi Sad, Serbia
BUSINESS AND INNOVATION: MUTUAL CONDITIONS	Mircea Udrescu	Artifex University from Bucharest, Bucharest, Romania
	Alina Gheorghe	Artifex University from Bucharest, Bucharest, Romania

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**Session 1 / Hall-6**

**30.11.2021**

**Agriculture/ Moderator: Widya Pintaka Bayu Putra**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
REVIEW ON ROOF GARDENING	Neeraja Sri. D	International School of Technology and Science For Women, India
	Tulasi .E	International School of Technology and Science For Women, India
	Pujitha.G	International School of Technology and Science For Women, India
	Ujwala Jemisri.G	International School of Technology and Science For Women, India
	Sasi Priya. G	International School of Technology and Science For Women, India
REVIEW ON PADDY HARVESTER	Divya.S	International School of Technology and Science For Women, India
	NTVishalakshi.T	International School of Technology and Science For Women, India
	Shalini.T	International School of Technology and Science For Women, India
	Mounika.T	International School of Technology and Science For Women, India
	Kerenpaul.V	International School of Technology and Science For Women, India
	Pravallika.N	International School of Technology and Science For Women, India
FABRICATION OF AUTOMATED VEGETABLE CUTTING MACHINE	Pawani.P	International School of Technology and Science For Women, India
	Vidya Sri. P	International School of Technology and Science For Women, India
	Somaratnam.S	International School of Technology and Science For Women, India
	Sumalatha.P	International School of Technology and Science For Women, India
	Queenie.M	International School of Technology and Science For Women, India
FABRICATION OF SOLAR SEED DRYER	Vineetha.N	International School of Technology and Science For Women, India
	Hari Chandana.S	International School of Technology and Science For Women, India
	Charishma.P	International School of Technology and Science For Women, India



	Vandana.D	International School of Technology and Science For Women, India
	Ramu.P	International School of Technology and Science For Women, India
	Aruna.B	International School of Technology and Science For Women, India
	B.S.Lakshmi.A	International School of Technology and Science For Women, India
PRACTICE OF HYDROGEL TECHNIC IN AGRICULTURE	T. Vasanthi	International School of Technology and Science For Women, India
SIGNIFICANCE OF CAFETERIA FOOD LEFTOVER AS ALTERNATIVE CHEAP FEED RESOURCE IN POULTRY NUTRITION: A VIABLE STRATEGY TO REDUCE ITS POLLUTION IMPACT ON THE ENVIRONMENT	Oliyad Gelan	Agarfa Agricultural Technical and Vocational Educational Training College, Department of Animal Science, Bale-Robe, Ethiopia
	Aberra Melesse	Hawassa University, College of Agriculture, School of Animal and Range Sciences, Hawassa, Ethiopia
DISTRIBUTION AND ANTIBIOTICS SENSITIVITY PATTERN OF VIBRIO SPECIES FROM DOMESTIC WASTEWATERS	Olubukola Olusola-Makinde	Federal University of Technology Akure, School of Life Sciences, Department of Microbiology, Akure, Nigeria
DIVERSITY OF 16s-rRNA (mtDNA) SEQUENCE IN STRIPED TREE FROG ( <i>Polypedates leucomystax</i> ): A META-ANALYSIS STUDY	Widya Pintaka Bayu Putra	Research Center for Biotechnology, Research Organization of Life Science, National Research and Innovation Agency

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**Session 1 / Hall-7**

**30.11.2021**

**Economics/Moderator: Dr.Shariq Mohammed & Assoc. Prof. Dr. Madihah Mohd Saudi**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
IMPACT OF PUBLIC DEBT ON ECONOMIC GROWTH OF LOW-INCOME STATES IN INDIA	Manoj Kumar Agarwal	Department of Economics, University of Lucknow, Lucknow, Uttar Pradesh, India
	Samia Ansari	Department of Economics, University of Lucknow, Lucknow, Uttar Pradesh, India
TARIFFS AND GROWTH PROSPECT IN AFRICAN COUNTRIES	Usman A. Usman	Department of Economics, Ibrahim Badamasi Babangida University Lapai
A STUDY OF ONLINE COURSES OF ACCOUNTING SUBJECTS DURING THE COVID PERIOD	Dr.Shariq Mohammed	Dhofar University, Assistant Professor, Department of Accounting, Salalah, Oman
	Dr.Nadia Sha	Dhofar University, Assistant Professor, Department of Finance and Economics, Salalah, Oman
ECONOMIC GROWTH FROM SELF-EMPLOYMENT IN RURAL AREAS	Prof. asoc. Dr. Jehona Shkodra	University of Prishtina “Hasan Prishtina”, Faculty of Agriculture and Veterinary, Department of Agro-economy, Kosovo
EVALUATION OF GEOTHERMAL RESOURCES IN KIRŞEHİR IN TERMS OF TOURISM	Çağatay KAYA	Kastamonu University
	Muharrem AVCI	Kastamonu University
	Gazi POLAT	Kırşehir Ahi Evran University
REGIONAL INEQUALITY IN INDONESIA, 2000-2017: Do FDI, Fiscal Decentralization, Monetary Policy, and Human Development Matter?	Kuncoro, Mudrajad	Faculty of Economics and Business, Gadjah Mada University, Yogyakarta, Indonesia
THE REALITY OF CHANGE MANAGEMENT AND ITS IMPACT ON THE PERFORMANCE OF WORKER'S IN THE MINISTRY OF LOCAL GOVERNMENTS IN BETHLEHEM	Israa Issa Ayyad	Al-Quds Open University, Applied Human Resources Management, Ramallah, Palestine
SEVEN PHASES OF FREEZING AND REOPENING, AND MECHANISMS OF PUBLIC AID TOWARDS THE AUDITORIUM CULTURE SECTOR DURING THE FIRST YEAR OF THE COVID-19 PANDEMIC IN THE REPUBLIC OF POLAND	Artur Bartoszewicz	Warsaw School of Economics, Poland
	Katarzyna Oblakowska	independent researcher, Warsaw, Poland

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**Session 2 / Hall-1**

**30.11.2021**

**Education/ Moderator: Ebru Burcu ÇİMİLİ GÖK**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
THE DIFFICULTIES OF PRIMARY SCHOOL 4TH GRADE STUDENTS IN REPRESENTING FRACTIONS ON THE NUMBER LINE	Halil Önal	Burdur Mehmet Akif Ersoy University
TEACHERS' ATTITUDES TOWARDS THE INNOVATION CLIMATE IN THEIR SCHOOLS	Assist. Prof. Dr. Serdar ÖZÇETİN	Akdeniz University
	Ebru Burcu ÇİMİLİ GÖK	Öğretmen / Milli Eğitim Bakanlığı, Antalya, Türkiye
	Cemil Gökhan ÜNAL	Öğretmen / Milli Eğitim Bakanlığı, Antalya, Türkiye
THE LONELINESS OF SCHOOL ADMINISTRATORS: A PHENOMENOLOGICAL STUDY	Ebru Burcu ÇİMİLİ GÖK	Teacher, Phd. / Ministry of National Education, Antalya, Turkey
EXAMINATION AND EVALUATION OF 7TH GRADE STUDENTS' OPINIONS ON THE DIMENSION OF DIGITAL SECURITY, FROM THE SUB-DIMENSIONS OF THE DIGITAL CITIZENSHIP CONCEPT	Mustafa Sezer	Nevşehir Hacı Bektaş Veli University
	Assist. Prof. Dr. Recep Kürekli	Nevşehir Hacı Bektaş Veli University
INDIRECT VALUE TRANSFERS OF CULTURE AND HERITAGE LEARNING FIELD OUTCOMES IN SECONDARY SCHOOLS AT SOCIAL STUDIES CURRICULUM	Ömer TOKAT	Nevşehir Hacı Bektaş Veli University
	Recep KÜREKLİ	Nevşehir Hacı Bektaş Veli University
INVESTIGATION OF THE RELATIONSHIP BETWEEN ACADEMIC SELF-EFFICACY AND EMPATHIC TENDENCY OF UNIVERSITY STUDENTS	Ezgi AKINCI DEMİRBAŞ	Kırıkkale University
	Mehmet GÜNEY	Kırıkkale University
THE EFFECT OF DEVELOPED ACTIVITIES ON THE FIELD KNOWLEDGE OF PHYSICS TEACHERS ON PARTICLE PHYSICS	Seher PERVAN	Gazi University
	Pervin ÜNLÜ YAVAŞ	Gazi University
THE PROFILE RESEARCH OF UNIVERSITY CHILD'S STUDIES CENTERS IN TURKEY	Beyza TURAN	Kırşehir Ahi Evran University
	Gökçe DEMİR	Kırşehir Ahi Evran University
INVESTIGATION OF THE RELATIONSHIP BETWEEN COGNITIVE MATURITY AND THINKING SKILLS OF UNIVERSITY STUDENTS	Mehmet GÜNEY	Kırıkkale University
	Ezgi AKINCI DEMİRBAŞ	Kırıkkale University
OPINIONS OF TEACHER CANDIDATE ON THEIR AND THEIR INTERNSHIP PRACTICE TEACHERS' COMPETENCIES	Assist. Prof. Dr. Serdar ÖZÇETİN	Akdeniz University

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**Session 2 / Hall-2**

**30.11.2021**

**Education/ Moderator: Prof. Elvan YALÇINKAYA & Assist. Prof. Dr. Tuğba KAFADAR**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
EXAMINING THE RELATIONSHIP BETWEEN SECONDARY SCHOOL STUDENTS' TURKISH ACADEMIC ACHIEVEMENT AND THE OTHER DISCIPLINES	Selvi DEMİR	Kilis 7 Aralık Universtiy
RESEARCH OF THE RELATIONSHIP BETWEEN SECONDARY SCHOOL 7TH GRADER'S PARENTS ANTICIPATIONS FROM MATHS EDUCATION AND STUDENTS MATH ANXIETY, MATHEMATICAL ATTITUDES, ACADEMIC RESILIENCE	Nezahat GÜLSER	Kırşehir Ahi Evran Universtiy
	Serdal BALTACI	Kırşehir Ahi Evran Universtiy
AKHISM (AHILIK) IN SOCIAL STUDIES AND HISTORY TEXTBOOKS	Prof. Elvan YALÇINKAYA	Erciyes University
	Assist. Prof. Dr. Tuğba KAFADAR	Erciyes University
STUDENTS ACHIEVEMENT IN SCIENCE AND MATHEMATICS AND THEIR CAREER PERSPECTIVES IN STEM FIELDS: HIGHER EDUCATION EXAM RESULTS FOR LAST TEN YEARS	Bilge KAYA	Kilis 7 Aralık University
	Metin AÇIKYILDIZ	Kilis 7 Aralık University
	Nihat ALTINÖZ	Kilis 7 Aralık University
KİMYANIN TƏDRİSİNDƏ İNTERAKTİV TƏLİM METODLARINDAN İSTİFADƏNİN ÜSTÜNLÜKLƏRİ	Arzu Paşayeva	Bakü State University
	Sevinc Hasanova	Bakü State University
IMPROVING OF THE USE OF MODERN TEACHING METHODS IN BIOLOGY LESSONS	Afag GASIMOVA	Ganja State University, Ganja/Azerbaijan
INVESTIGATION OF THE EFFECTIVENESS OF COURAGE-BASED VALUES EDUCATION PRACTICES FOR PRESCHOOL CHILDREN AGED 6 YEARS LIVING IN A SOCIOECONOMICALLY DISADVANTAGED REGION	Gökhan ŞENGÜN	Kırıkkale University
NEW DIGITAL TEACHING COMPETENCIES: OPINIONS OF PRE-SERVICE TEACHERS	Bilge Aslan Altan	Muğla Sıtkı Koçman University

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**Session 2 / Hall-3**

**30.11.2021**

**Public Diplomacy/ Moderator: Assoc. Prof.Dr. Atila Erkal**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
FROM ERBAKAN AND ECEVIT TO KARAMOLLAOĞLU AND KILIÇDAROĞLU NATIONAL OUTLOOK AND CHP RELATIONSHIP	Özgür Bayraktar	Karamanoğlu Mehmetbey University
UNIVERSITY REFORM AND NATION BUILDING IN THE EARLY REPUBLICAN PERIOD	Özgür Bayraktar	Karamanoğlu Mehmetbey University
THE EXCLUSIVE ECONOMIC REGIONAL PROBLEM OF THE EASTERN MEDITERRANEAN AND TURKEY	Rahime Kayacan	Ahi Evran University
POLITICAL APPROACHES OF ERNESTO LACLAU AND CHANTAL MOUFFE: POST-MARXISM AND RADICAL DEMOCRACY	Ayman Kara	Kırıkkale University
MEDIATION IN ADMINISTRATIVE DISPUTES	Assoc. Prof.Dr. Atila Erkal	Sakarya University
A RESEARCH ON COMPULSORY CITIZENSHIP BEHAVIOR	Demet Çakıroğlu	Hacettepe University
OPENING PROCEDURE OF FULL JURISDICTIONS ARISING FROM ADMINISTRATIVE ACTIONS	Lect. İdris KAYDUL	Fatih Sultan Mehmet Vakıf University

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**Session 2 / Hall-4**

**30.11.2021**

**Education/ Moderator: Dang Hoang Xuan Huy**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
CHALLENGES AND SOLUTIONS IN TEACHING LITERATURE TO PRE-SERVICE TEACHERS	Norhanim Abdul Samat	Universiti Teknologi Malaysia
	Ain Suraya Binti Harun	Universiti Teknologi Malaysia
ONLINE EDUCATION AND DIGITAL PLATFORMS IN PANDEMIC ROMANIA: FROM ENTERTAINMENT TOOLS TO LEARNING TOOLS	Georgiana Udrea	National University of Political Studies and Public Administration, Bucharest, Romania
	Gabriela Guiu	National University of Political Studies and Public Administration, Bucharest, Romania
EFFECTS OF VISUAL OCCLUSION TRAINING ON PERCEPTUAL-COGNITIVE SKILLS IN YOUNG FOOTBALL PLAYERS	Giovanni Esposito	University of Salerno, Salerno, Italy
CONGRUENCE OF THE UNIVERSITY BRAND AND THE BRAND OF THE UNIVERSITY TEACHER	Mikhailova Anna	Candidate of Economic Sciences, Head of the Department of Sociology and Personnel Management, North-Eastern Federal University, Yakutsk, Russia
FACING THE NEW NORM WITH SMART UNIVERSITY BLUEPRINT: A CASE STUDY	Assoc. Prof. Dr. Madihah Mohd Saudi	Universiti Sains Islam Malaysia (USIM)
EXAMINATION OF SECONDARY SCHOOL MATHEMATICS TEACHERS' PEDAGOGICAL CONTENT KNOWLEDGE ON THE SUBJECT OF EXPONENTIAL NUMBERS IN THE COMPONENT OF KNOWLEDGE OF TEACHING STRATEGIES	Eyüp BEZEYEN	Kırşehir Ahi Evran University
	Assist. Prof. Dr. Yasemin KIYMAZ	Kırşehir Ahi Evran University
EVALUATION OF KPSS TURKISH LANGUAGE AND LITERATURE TEACHER'S FIELD KNOWLEDGE QUESTIONS IN TERMS OF TURKISH LANGUAGE AND LITERATURE TEACHER'S UNDERGRADUATE PROGRAM AND SPECIAL FIELD COMPETENCIES	İsmail Erbek	Ali Gural High School, Kütahya, Turkey
	Ayşe Derya Eskimen	Kütahya Dumlupınar University

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**Session 2 / Hall-5**

**30.11.2021**

**Education/ Moderator: Nadia Maftouni & Dang Hoang Xuan Huy**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
IMPACT OF CSR INITIATIVES AND DEMOGRAPHIC PROFILE OF THE BENEFICIARIES: A STUDY OF CSR INITIATIVES IN KORBA COALFIELDS OF CHHATTISGARH (INDIA)	Sukanta Chandra Swain	KIIT Deemed to be University, Bhubaneswar
	A S Babu	SECL, Korba
SOME STRATEGIES FOR UTILIZING SOCIAL MEDIA IN TEACHING & LEARNING ENGLISH FOR ACADEMIC PURPOSES IN NIGERIA	Joseph Onyema Ahaotu, PhD	University of Port Harcourt, Nigeria
	Nkechi Frances Ann Asiegbu	University of Port Harcourt, Nigeria
THE DEGREE OF THE PRACTICE OF THE PRINCIPALS OF PUBLIC SCHOOLS IN JERUSALEM GOVERNORATE TO THE STANDERS OF PERSONAL QUALITY FROM THE PERSPECTIVE OF TEACHERS	Dr. Ibrahim Slaibi	Alquds university-educational collage-based educatinal department-alquds-palestine
THE AVAILABILITY OF LEADERSHIP SKILLS AMONG THE EDUCATIONAL SUPERVISORS IN HEBRON GOVERNMENT FROM THE POINT OF VIEW OF TEACHERS AND PRINCIPLES	Dr. Omer Slaibi	Alquds university-managment collage-alquds-palestine
PASSION OF A DISTANT FOOTBALL FAN: A QUALITATIVE ENQUIRY	Darrel TEO	Temasek Polytechnic, Business School, Singapore
EXPERIENCE OF METACOGNITION, INTEGRITY, AND SELF-EFFICACY LEARNING AMONG VOCATIONAL POST-SECONDARY STUDENTS	Abdul-Rahman Balogun Muhammed-Shittu	Khazar University, Baku, Azerbaijan
EXPLORING VIETNAMESE WOMEN RURAL MIGRANT' LIFE EXPERIENCE UNDER THE LENS OF GENDER	Ly Huynh	Can Tho University - College of Economics, Can Tho City - Vietnam
SUPPORTING ENTREPRENEURSHIP AND INNOVATION IN HIGHER EDUCATION INSTITUTIONS FROM THE REPUBLIC OF MOLDOVA	GARBUZ Veronica	Alecu Russo State University, Faculty of Real, Economic and Environmental Sciences, Department of Economic Sciences
	PETELCA Oleg	Alexandru Ioan Cuza University, Doctoral School of Economics and Business Administration, Iași România
	BEȘLIU Iurie	Alecu Russo State University, Faculty of Real, Economic and Environmental Sciences, Department of Economic Sciences
THE AVAILABILITY OF DIMENSIONS OF ADMINISTRATIVE EMPOWERMENT AMONG GOVERNMENT SCHOOL PRINCIPALS IN THE BETHLEHEM GOVERNORATE	Nariman Youssef	Educational College - Al-Quds University



AHI EVRAN International Conference on Scientific Research  
30 November – 1-2 December 2021 / Kırşehir Ahi Evran University

## CONFERENCE PROGRAM

PEDAGOGY VIS-À-VIS ARTWORKS	Nadia Maftouni	University of Tehran, Faculty of Theology and Islamic Studies, Department of Philosophy and Islamic Kalam, Tehran, Iran
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**Session 2 / Hall-6**

**30.11.2021**

**Engineering/ Moderator: Samir Zahaf & Dang Hoang Xuan Huy**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
STUDY OF THE FREQUENCY OF COMPOSITE BEAMS WITH VARIABLE FIBER VOLUME	BERRABAH HAMZA MADJID	Relizane University, Algeria
EFFECT OF PRE-DIFFUSER HEIGHT ON THE PERFORMANCE OF CENTRIFUGE PUMP	Aidin Salimi Sofla	University of Tabriz, East Azerbaijan, Iran
EFFECT OF MAGNETIC FIELD AND VIBRATION ON GROUNDWATER REMEDIATION USING STEAM INJECTION	A.A. Adegbola	Ladoke Akintola University of Technology, Ogbomosho, Oyo State.
	A.A. Dare	University of Ibadan, Ibadan.
CITY LIVABILITY AND ACTIVE TRANSPORTATION IN LAGOS METROPOLIS, NIGERIA	Ayobami Ademola AKANMU	Federal University of Technology, Akure, Nigeria
	Kolawole Taofeek GBADAMOSI	Federal University of Technology, Akure, Nigeria
	Felix Kayode OMOLE	Federal University of Technology, Akure, Nigeria
ON SOME PARTICULARITIES OF THE FLUID PROPERTIES ON THE WAVE AXISYMMETRIC WAVE DISPERSION IN THE HOLLOW CYLINDER WITH INHOMOGENEOUS INITIAL STRESSES CONTAINING THIS FLUID	Gurbanali J. VALIYEV	Baku State University, Department of Theoretical and Continuum Mechanics, Baku, Azerbaijan
NUMERICAL VALIDATION OF THE 3D MODEL OF THE L4-L5 LUMBAR SEGMENT FUNCTIONAL UNIT BY THE FINITE ELEMENT METHOD	Samir Zahaf	University of Djilali Bounaama-Khamis Meliana
	Amar Chemmami	National Polytechnic School of Oran - MA, BP 1523 ElMnaour, Oran, Algeria.
	Mouloud Dahmane	Faculty of Mechanical Engineering, USTO-MB, BP 1055 El Menaour, Oran 31000, Algeria
	Azzeddine Belaziz	University campus of châab erssas, Constantine, 25017, Algeria.
THE DUCTILITY AND F AGILITY OF HDPE PIPES: EXPERIMENTAL STUDY	Azzeddine Belaziz	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
	Mohamed Bouamama	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
	Samir Zahaf	University of Djilali Bounaama-Khamis Meliana
EFFECT OF MACHINING PARAMETERS ON TOOL WEAR AND SURFACE ROUGHNESS IN DRY TURNING OF GRAY CAST IRON	Aissa Laouissi	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
	Imane Elmequenni	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
	Riad Brahami	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
	Abdelwahab Zerrouki	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
	Mohamed Mossaab BLAQUI	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
	Mourad Nouioua	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
A COMPUTATIONAL FRAMEWORK ON STRESS INTENSITY FACTOR IN FSW WELDING JOINT ZONES BASED ON XFEM METHOD	Imane Elmequenni	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
	Aissa Laouissi	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.



	Riad Brahami	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
	Mourad Nouioua	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.
	Mossaab blaoui	Mechanics Research Centre. Po, Box 73B, 25000 CONSTANTINE, ALGERIA.

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**Session 2 / Hall-7**

**30.11.2021**

**Moderator: Yamina Ammi**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

Title	Author(s)	Affiliation
COMPUTATIONAL TOOLS: MATHEMATICS' REPOSITORY IN THE ENGINEERING UNDERGRADUATE COURSES	Vagner Aparecido de Moura	São Paulo State's Virtual University (UNIVESP)
	Paulo Samir Silva Ferreira dos Santos	São Paulo State's Virtual University (UNIVESP)
	Cleber Costa Santana	São Paulo State's Virtual University (UNIVESP)
	Edson Cezário de Oliveira	São Paulo State's Virtual University (UNIVESP)
	Mateus Lima Bonfim	São Paulo State's Virtual University (UNIVESP)
LINEAR INTEGRATED CIRCUITS WITHIN THE FRAMEWORK OF THEORETICAL-PRACTICAL TRAINING DURING PANDEMIC OF COVID-19	Saeed Olyae	Shahid Rajae Teacher Training University (SRTTU), Iran
	Atefeh Najibi	Shahid Rajae Teacher Training University (SRTTU), Tehran, Iran
HUMAN ACTION RECOGNITION IN VIDEOS USING 3D CONVOLUTIONAL NEURAL NETWORKS AND OPTICAL FLOW MAPS	Abelmalek Khebli	Université de Boumerdès Algérie
	Hocine Meglouli	Université de Boumerdès Algérie
	Salah Aguib	Université de Boumerdès Algérie
	Wisse Dilmi	Université de Boumerdès Algérie
QSPR-NEURAL NETWORKS MODEL FOR THE PREDICTION OF THE REJECTION OF ANTI- INFLAMMATORY DRUGS BY MEMBRANES (poster)	Yamina Ammi	University of Médéa, 26000, Algeria
	Cherif Si-Moussa	University of Médéa, 26000, Algeria
	Hanini Salah	University of Médéa, 26000, Algeria
PREDICTION OF THE ORGANIC COMPOUNDS PASSAGE BY MEMBRANES USING NEURAL NETWORKS (poster)	Kratbi Fouad	University of Médéa, 26000, Algeria
	Yamina Ammi	University of Médéa, 26000, Algeria
	Hanini Salah	University of Médéa, 26000, Algeria
QSPR LINEAR MODEL FOR THE PREDICTION OF THE REJECTION OF ANTI-INFLAMMATORY DRUGS BY REVERSE OSMOSIS MEMBRANES (poster)	Yamina Ammi	University of Médéa, 26000, Algeria
	Cherif Si-Moussa	University of Médéa, 26000, Algeria
	Hanini Salah	University of Médéa, 26000, Algeria
NEURAL PREDICTION OF DIFFUSION COEFFICIENT FOR POLAR BINARY GAS	Naima Melzi	University of Médéa, 26000, Algeria
	Yamina ammi	University of Médéa, 26000, Algeria
	Salah Hanini	University of Médéa, 26000, Algeria
	Maamar Laidi	University of Médéa, 26000, Algeria

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**Session 3 / Hall-1**

**30.11.2021**

**Health/ Moderator: Assist. Prof. Dr. Yasemin CEYHAN**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
THE EFFICACY OF AEROBIC AND ANAEROBIC EXERCISE ON SARCOPENIA	Eda Ağaşcıoğlu	Lokman Hekim University
HEART RATE TURBULENCE AND HEART RATE VARIABILITY IN PATIENTS WITH FAMILY MEDITERRANEAN FEVER	Uzm. Dr. Nuran Günay	Health Sciences University
MASSIVE INTRACRANIAL HEMORRHAGE MIMICKING ST-ELEVATION MYOCARDIAL INFARCTION IN AN ELDERLY PATIENT	Çaşıt Olgun ÇELİK	Başkent University Konya, Turkey
AN EXAMINATION ON NURSES IN MENTAL HEALTH LITERACY	Asist. Prof. Dr. Hilal SEKİ ÖZ	Kırşehir Ahi Evran University
	Gamze ANNAK	Kırşehir Ahi Evran University
NURSE CARE FROM THE PERSPECTIVE OF THE CHILD AND FAMILY	Yasemin CEYHAN	Kırşehir Ahi Evran University
	Enes Saygın MERCİMEK	Kırşehir Ahi Evran University
CHILDHOOD OBESITY AND HEALTH PROBLEMS	Yasemin CEYHAN	Kırşehir Ahi Evran University
	Nagihan Merve SÖYLEMEZ	Kırşehir Ahi Evran University
HOW DID THE COVID-19 PANDEMIC AFFECT SOLID ORGAN TRANSPLANTATION ACTIVITIES?	Zeliha ÖZDEMİR KÖKEN	Hacettepe University
A PROMISING NEW APPROACH IN CANCER TREATMENT: PHOTODYNAMIC THERAPY	Nuriye Tuna Subaşı	Kırşehir Ahi Evran University
THE IMPORTANCE OF THE NURSING PROCESS IN DISEASES OF THE RESPIRATORY SYSTEM	Yasemin CEYHAN	Kırşehir Ahi Evran University
	Buse AYDIN	Kırşehir Ahi Evran University

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**Session 3 / Hall-2**

**30.11.2021**

**Health/ Moderator: Ömer Alperen GÜRSES & Ferdi BAŞKURT**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
COMPARISON OF PHYSICAL FITNESS AND ATTENTION LEVELS OF ATHLETES AND SEDENTARY CHILDREN	Ece KUMLU	Kırşehir Ahi Evran University
	Mehmet CANLI	Kırşehir Ahi Evran University
	Mehmet Hanifi KAYA	Kırşehir Ahi Evran University
INVESTIGATION OF THE RELATIONSHIP BETWEEN MUSCULOSKELETAL SYSTEM PROBLEMS AND JOB PERFORMANCE IN FEMALE OFFICE WORKERS	Ömer Alperen GÜRSES	Kırşehir Ahi Evran University
	Ferdi BAŞKURT	Suleyman Demirel University
PREVELANCE OF APPLICATION OF CLEAN INTERMITTENT CATHETERIZATION OF PATIENTS WITH PARAPLEGIA IN PHYSICAL THERAPY SERVICE IN THE LAST 10 YEARS	Muteber Yağmuroğlu	Kırşehir Ahi Evran University
	Ayla Ünsal	Kırşehir Ahi Evran University
INVESTIGATION OF THE RELATIONSHIP BETWEEN SEVERITY OF SYMPTOMS, PAIN, QUALITY OF LIFE, AND PSYCHOLOGICAL STATUS IN PATIENTS WITH TEMPOROMANDIBULAR JOINT DISORDER	Nazım Tolgahan YILDIZ	Hacettepe University
	Hikmet KOCAMAN	Karamanoğlu Mehmetbey University
	Zafer ERDEN	Hacettepe University
HOW DOES OCCUPATIONAL THERAPY-BASED COGNITIVE REHABILITATION INTERVENTION AFFECT THE COGNITIVE SKILLS AND OCCUPATIONAL PERFORMANCE OF INDIVIDUALS WITH MULTIPLE SCLEROSIS?	Selen AYDÖNER	İstanbul Gelişim University
	Gonca BUMİN	Hacettepe University
RELATIONSHIPS BETWEEN SENSORY PROCESSING SKILLS AND OCCUPATIONAL PERFORMANCE OF PEOPLE WITH MULTIPLE SCLEROSIS	Selen AYDÖNER	İstanbul Gelişim University
	Gonca BUMİN	Hacettepe University
KINEMATIC EVALUATION OF THE RESULTS OF FEMORAL DEROTATION OSTEOTOMY APPLIED TO PATIENTS WITH CEREBRAL PALSY	Yücel BİLGİN	İstanbul University
	Mehmet EKİNCİ	İstanbul University
	Fuat BİLGİLİ	İstanbul University
	Ekin AKALN	İstanbul University
	Yener TEMELLİ	İstanbul University
INVESTIGATION OF MAGNESIUM OXIDE, ZINC OXIDE AND NİCEL OXIDE SYNTHESIS, CHARACTERIZATION AND POTENTIALS TO BE A CATALYST IN ADVANCED OXIDATION PROCESSES IN A DEEP EUTECTIC SOLVENTING MEDIUM	Selda Doğan Çalhan	Mersin University
PARKINSON AND ATRAUMATIC STERNUM FRACTURE: A CASE REPORT	Özlem ORHAN	MD. Harran University
	Funda CANSUN	MD. Sanliurfa Research and Training Hospital

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**Session 3 / Hall-3**

**30.11.2021**

**Health/ Moderator: Assist. Prof. Dr. Arif KOL**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
NEWBORN HEARING SCREENINGS IN TURKEY	Berkant Oral	Yıldırım Beyazıt University
	Bushra Bilani	Yıldırım Beyazıt University
	Assist. Prof. Dr. Nimetcan Mehmet	Yıldırım Beyazıt University
	Assoc. Prof. Dr. Dilek Öztaş	Yıldırım Beyazıt University
MENOPAUSE AND RELATED CANCERS	Bushra Bilani	Yıldırım Beyazıt University
	Berkant Oral	Yıldırım Beyazıt University
	Assist. Prof. Dr. Nimetcan Mehmet	Yıldırım Beyazıt University
	Assoc. Prof. Dr. Dilek Öztaş	Yıldırım Beyazıt University
OPINIONS OF MOTHERS WORKING IN A HEALTH ORGANIZATION ON BREASTFEEDING RELATED TO PARTITION AND MILK LEFT	Ertuğrul DAĞLI	Ahi Evran University
	Ayla ÜNSAL	Ahi Evran University
THE EFFECT OF ANTICOAGULANT USE ON COMPLICATIONS IN PATIENTS PERFORMED TRANSRECTAL PROSTATE BIOPSY	Assist. Prof. Dr. Arif KOL	Aydın Adnan Menderes University
	Assoc. Prof. Dr. Erhan Ateş	Aydın Adnan Menderes University
POTENTIAL FETAL EFFECTS IN PRENATAL DRUG USE AND NURSING CARE	Emine ASLANDEREN	Kırşehir Ahi Evran University
	Nurdan AYMELEK ÇAKIL	Kırşehir Ahi Evran University
DETERMINATION OF ANXIETY LEVELS AND CAUSES OF ANXIETY OF PATIENTS WHO HAVE TO UNDERGO SURGERY DURING THE COVID-19 PANDEMIC PROCESS	Dr. Nurs. Kadriye ACAR	Izmir Katip Celebi University
	Prof. Dr. Kemal Erdinç KAMER	Health Sciences University
	Assoc. Prof. Dr. Gülay OYUR ÇELİK	Izmir Katip Celebi University
	Ress. Assist. Büşra DALFİDAN	Izmir Katip Celebi University
	Ress. Assist. Nagehan EVKAYA	Izmir Katip Celebi University
ARE LIFE SATISFACTION AND DEPRESSION LEVELS OF WORKING WOMEN AFFECTED DURING THE PANDEMIC?: A CROSS-SECTIONAL STUDY	Nurdan AYMELEK ÇAKIL	Kırşehir Ahi Evran University
	Erdem ÇAKIL	Kırşehir Ahi Evran University
EXAMINATION OF GRADUATE THESES ON NURSING EDUCATION IN TURKEY	Nazike Duruk	Osmangazi Üniversitesi, Hemşirelik Esasları Anabilim Dalı, Eskişehir
	Derya Işık	Eskişehir Şehir Hastanesi, Eskişehir
HISTOPATHOLOGICAL ANALYSIS OF GASTRIC BIOPSIES	Özlem Ceren Günizi	Alaaddin Keykubat University
HISTOPATHOLOGICAL ANALYSIS OF ADULT TONSILLECTOMY MATERIALS IN OUR CLINIC	Hüseyin Günizi	Alaaddin Keykubat University

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**Session 3 / Hall-4**

**30.11.2021**

**Health/ Moderator: Assist. Prof. Dr. Mehmet DOĞAN**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
INVESTIGATION OF <i>P. JIROVECI</i> FREQUENCY IN RESPIRATORY SYSTEM SAMPLES BY REAL-TIME PCR OF PATIENTS APPLYING TO EGE UNIVERSITY FACULTY OF MEDICINE MOLECULAR PARASITOLOGY LABORATORY IN 2009-2019	Muhammet Karakavuk	Ege University
	Hüseyin Can	Ege University
	Aysu Degirmenci Döşkaya	Ege University
	Adnan Yüksel Gürüz	Ege University
	Mert Döşkaya	Ege University
COMPARISON OF FUNCTIONAL WALKING, BALANCE AND FUNCTIONAL INDEPENDENCE IN CHILDREN WITH DIPLEGIC AND HEMIPLEGIC CEREBRAL PALSY	Kamal AL-AAYEDİ	Kırşehir Ahi Evran University
	Assist. Prof. Dr. Anıl ÖZÜDOĞRU	Kırşehir Ahi Evran University
MEDIATOR ROLE OF INNOVATION ON THE RELATIONSHIP BETWEEN COUNTRIES' SOCIAL PROGRESS LEVEL AND HAPPINESS	Zekiye İrem GÖZÜBOL	Bezmiâlem Vakıf University
	Ayşenur BAYSAL	Bezmiâlem Vakıf University
	Kerem TOKER	Bezmiâlem Vakıf University
CROWD ANALYSIS OF THE EMERGENCY SERVICE: EXAMPLE OF AKSARAY PROVINCE	Yakup Uslu	Aksaray University
VITAMIN D LEVELS IN MIGRAIN PATIENTS	Rabia Şeker	SBÜ Dr. Sami Ulus Kadın Doğum Çocuk Sağlığı ve Hastalıkları Eğitim ve Araştırma Hastanesi
EVALUATION OF UNIVERSITY STUDENTS' LEVEL OF KNOWLEDGE ABOUT COVID-19 AND THEIR ATTITUDES TO VACCINE	Ali Seydi ALPAY	Alanya Alaaddin Keykubat University
	Haluk ERDOĞAN	Alanya Alaaddin Keykubat University
ANTIOXIDANT CAPACITY OF RIBWORT PLANTAIN ( <i>PLANTAGO LANCEOLATA L.</i> ) COLLECTED FROM KIRŞEHİR REGION	Fatma ERGÜN	Kırşehir Ahi Evran University
COMORBIDITY OF ATTENTION DEFICIT AND HYPERACTIVITY DISORDER IN A PATIENT DIAGNOSED WITH DNA LIGASE IV SYNDROME	Duygu KABA	Başkent University, School of Medicine, Ankara Turkey
TURKEY'S SINGLE EMERGENCY CALL NUMBER, 112	Mehmet DOĞAN	Assist. Prof. Dr., University of Erciyes
WHY IS FIRST AID IMPORTANT?	Mehmet DOĞAN	Assist. Prof. Dr., University of Erciyes

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**Session 3 / Hall-5**

**30.11.2021**

**Microbiology/ Moderator: Boban Stanković & Cristian Moisa**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
CONTRIBUTION TO THE KNOWLEDGE OF THE MYRMECOFAUNA (HYMENOPTERA: FORMICIDAE) OF POMORIE, BULGARIA	Boban Stanković	Department of Environmental Protection, City of Jagodina, Serbia
NEST SITE PREFERENCES OF RED-BACKED SHRIKE (LANIUS COLLURIO) IN VICINITY OF JAGODINA (SERBIA)	Boban Stanković	Department of Environmental Protection, City of Jagodina, Serbia
THE HERPETOFAUNA OF JAGODINA REGION (SERBIA)	Boban Stanković	Department of Environmental Protection, City of Jagodina, Serbia
THERMODYNAMIC PREDICTION OF PRECIPITATION CONDITIONS IN THE MIXTURE OF ANIONIC AND AMPHOTERIC SURFACTANTS	Igor Povar	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
	Oxana Spinu	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
	Petru Spataru	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
	Diana Shepel	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
	Boris Pintilie	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
	Alexandru Visnevschi	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
THERMODYNAMIC STUDY OF THE PRECIPITATION PROCESSES OF ANIONIC SURFACTANTS BY CALCIUM AND MAGNESIUM IONS	Igor Povar	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
	Oxana Spinu	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
	Petru Spataru	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
	Diana Shepel	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
	Boris Pintilie	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
	Alexandru Visnevschi	Institute of Chemistry, Department of Physicochemical Methods of Research and Analysis
COMPARATIVE STUDY OF OIL ADSORBENTS USING CORN CHAFF AND COCONUT FIBRE	Manase Auta	Federal University of Technology, Nigeria



OPTIMIZATION AND CHARACTERISATION OF BIOLUBRICANT FROM NEEM SEED OIL ( <i>Azadirachta Indica</i> )	Isah Abubakar Garba	Federal University of Technology, Minna, Nigeria.
	Alhassan Mohammed	Federal University of Technology, Minna, Nigeria.
	Usman Baro Abdullahi	Federal University of Technology, Minna, Nigeria.
DISTILLED BIOMASS, A SUSTAINABLE RESOURCE FOR EXTRACTING BIOACTIVE COMPOUNDS FOR GREEN SYNTHESIS	Cristian Moisa	"Aurel Vlaicu" University, Romania.
	Andreea Lupitu	
	Lucian Copolovici	
	Dana Copolovici	
LITHOLOGY AND RESERVOIR PROPERTIES OF THE MAYKOPIAN ROCKS THE MIDDLE KURA BASIN OF AZERBAIJAN	Safarli Kamala Huseyn g.	SOCAR "Oil gas scientific research project" Institute

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**Session 3 / Hall-6**

**30.11.2021**

**Health- Well Being/ Moderator: Elsa Vitale & Sara Aliberti**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
THE MODERATING ROLE OF GRATITUDE IN DETERMINING PSYCHOLOGICAL WELL-BEING THROUGH MARITAL SATISFACTION AMONG COUPLES IN KHYBER PAKHTUNKHWA	Dr. Saima Arzeen	University of Peshawar
	Dr. Naeema Arzeen	University of Peshawar
THE MINDFULNESS AND THE EMOTIONAL REGULATION SKILLS IN ITALIAN NURSES DURING THE COVID-19 PANDEMIC	Elsa Vitale	Department of Mental Health, Local Healthcare Company Bari, Italy
SOME PSYCHOLOGICAL FACTORS AS PREDICTOR OF STUDENTS' ATTITUDE TOWARDS MATHEMATICS IN TECHNICAL AND VOCATIONAL INSTITUTIONS IN IBADAN, OYO STATE, NIGERIA	Appah Ogechukwu Rose	Department of Basic Science and General Studies, Federal College of Forestry, Ibadan, Forestry Research Institute of Nigeria
	Tunde-Francis Abuekin Anne	Department of Basic Science and General Studies, Federal College of Forestry, Ibadan, Forestry Research Institute of Nigeria
GAMIFICATION AS A MEANS OF SOFT SKILLS DEVELOPMENT IN THE PROCESS OF EDUCATING HIGHER SCHOOL STUDENTS IN THE ONLINE MODE	Oksana Zhukova	V.N. Karazin Kharkiv National University, Faculty of Psychology, Department of Pedagogy, Kharkiv, Ukraine
RELATIONSHIP BETWEEN ANXIETY, DEMOGRAPHIC CHARACTERISTICS AND RANKING IN DANCESPORT	Sara Aliberti	University Of Salerno, Department Of Human, Philosophical And Education Sciences, Fisciano, Salerno, Italy
A MEDIATED MODERATION OF AFFECTIVE COMMITMENT AND PERSONALITY TEMPERAMENT WITHIN FRAMEWORK OF JD-R MODEL	Ume Laila	GIFT University, Gujranwala, Pakistan
	Dr. Rubina Hanif	National institute of psychology Quaid-e-Azam University Islamabad Pakistan
	Sana Rehman	University of Sargodha Gujranwala Campus, Gujranwala Pakaistan
DEVELOPMENT AND VALIDATION OF STABILITY-INDICATING HPLC METHOD FOR ESTIMATION OF DULOXETINE HCL IN BULK AND TABLETS: APPROACH TO PREDICT PHARMACOKINETIC, THERAPEUTIC AND TOXICOLOGICAL PROFILING OF ITS DEGRADATION PRODUCTS	Sandeep S. Sonawane	MET's Institute of Pharmacy, Bhujbal Knowledge City, Nashik, INDIA
	Santosh S. Chhajed	MET's Institute of Pharmacy, Bhujbal Knowledge City, Nashik, INDIA
	Sanjay J. Kshirsagar	MET's Institute of Pharmacy, Bhujbal Knowledge City, Nashik, INDIA
STUDY OF PHYSICAL, CHEMICAL AND PHARMACOTECHNOLOGICAL PROPERTIES OF CORN COLUMNS WITH STIGMAS FOR THE PURPOSE TO OBTAIN A DRY EXTRACT	Konovalenko I.	National University of Pharmacy, Kharkiv, Ukraine
	Kutsevol E.	National University of Pharmacy, Kharkiv, Ukraine
THE STATE OF UKRAINE'S READINESS FOR ESTABLISHMENT OBSERVATORIES FOR	Tatiana Bezverkhniuk	State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine", Odesa, Ukraine



SUSTAINABLE DEVELOPMENT OF RESORT DESTINATIONS	Khrystyna Koieva	State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine", Odesa, Ukraine
	Alexander Plakida	State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine", Odesa, Ukraine

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**Session 3 / Hall-7**

**30.11.2021**

**Engineering/ Moderator: V Thiyagarajan & Dr. Nazeer Ahmad Anjum**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
USER ASSISTED MULTIPLE SEGMENTATION OF COLOR IMAGES VIA ROBUST HYPOTHESIS TESTING	Hüseyin Afşer	Adana Alparslan Türkeş Science and Technology University
	Shahin Mammadov	Adana Alparslan Türkeş Science and Technology University
SENSORLESS CONTROL FOR MULTIPHASE INDUCTION MOTOR DRIVES BASED ON EXTENDED KALMAN FILTER OBSERVER	Hadji chaabane	Department of the Electrical Engineering, M'sila. Algeria.
A NEW CONTROL STRATEGY FOR HYBRID ENERGY STORAGE SYSTEMS IN STANDALONE MICROGRIDS	Hocine Guentri	GE Laboratory Saida University, Algeria
	Tayeb Allaoui	University of TIARET, Tiaret, Algeria
	Ahmed Allali	University of Sciences and Technology of Oran Med Boudiaf, Algeria
	Mouloud Denai	University of Hertfordshire, Hatfield, UK
FAULT TOLERANT CONTROL BASED ON SLIDING MODE CONTROLLER FOR DOUBLE FED INDUCTION GENERATOR	Oussama DJAIDJA	University Mohamed Boudiaf of M'Sila
	Hemza MEKKI	University Mohamed Boudiaf of M'Sila
	Samir ZEGHLACHE	University Mohamed Boudiaf of M'Sila
	Ali DJERIOUI	University Mohamed Boudiaf of M'Sila
ANALYSIS OF BUCKLING STABILITY BEHAVIOR OF ELCTRO-MAGNETORHEOLOGICAL ELASTOMER PLATE	Kobzili Lallia	Dynamic of Engines and Vibroacoustic Laboratory (LDMV), Algeria
	Aguib Salah	Dynamic of Engines and Vibroacoustic Laboratory (LDMV) , Algeria
	Khebli Abdemalek	University of Boumerdes 35000, Algeria
	Djedid Toufik	M.B. Boumerdes University, Boumerdes 35000, Algeria
PERFORMANCE ANALYSIS OF HIGH GAIN DC-DC CONVERTERS FOR SOLAR PHOTOVOLTAIC SYSTEMS	V Thiyagarajan	Department of Electrical and Electronics Engineering, Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, Chennai, Tamil Nadu, INDIA
INVESTIGATION OF STRESS CORROSION CRACKING IN TITANIUM ALLOY (Ti6Al4V) WITH AND WITHOUT CADMIUM COATING	Fawad Yousaf Malik	University of Engineering and Technology, Taxila, Pakistan
	Dr. Nazeer Ahmad Anjum	University of Engineering and Technology, Taxila, Pakistan
	Dr. Rubeena Kousar	University of Engineering and Technology, Taxila, Pakistan
	Ghulam Murtaza	University of Engineering and Technology, Taxila, Pakistan
	Shoaib Ahmed	University of Engineering and Technology, Taxila, Pakistan
SWOT ANALYSIS OF WASTEWATER-TO-HYDROGEN ENERGY TECHNOLOGIES	Elanur ADAR	Artvin Coruh University, Turkey
LaNdB6 ALLOY: RARE EARTH METAL HEXABORIDES	Cengiz Bozada	Gaziantep University
	Mikail Aslan	Gaziantep University

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**Session 1 / Hall-1**

**01.12.2021**

**AKHI ORDERS/ Moderator: Prof. Dr. Bülent ARI**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
AHI-ORDER IN TURKISH SOCIETY AND TOLERANCE IN AHI-ORDER	Prof. Dr. Bülent ARI	HMKÜ
AHI MAHMUD VELI (KEÇECİ BABA) ONE OF TOKAT'S SPIRITUAL LEADERS	Assoc. Prof. Dr. Hasan COŞKUN	Tokat Gaziosmanpaşa University
THE SHIELD OF CAPITALISM IN THE OTTOMAN CITIES: THE AHILIK MENTALITY AND THE GUILDS	Arzu YILMAZ ASLANTÜRK	Aksaray University
AHI EVRAN AND AHI-ORDER IN TEXTBOOKS AND TEACHING PROGRAMS	Assoc. Prof. Dr. Ahmet ÇOBAN	Dicle University
	Uzm. Orhan KORKMAZ	Dicle University
A RESEARCH ON POSTGRADUATE THESIS STUDIES IN THE FIELD OF AHI EVRAN AND AHI-ORDER	Assoc. Prof. Dr. Ahmet ÇOBAN	Dicle University
	Uzm. Orhan KORKMAZ	Dicle University
ON THE HERITAGE (LEGACY OF WISDOM) OF TURKISH CULTURE- THE AKHILIC UNION	Assoc. Prof. Dr. Vesile ŞEMŞEK	Ahi Evran University
A VIEW OF AKHISM THROUGH VOCATIONAL EDUCATION AND WORK ETHICS	Gizem ŞAHİN	İzmir Kavram Meslek Yüksekokulu, İnsan Kaynakları Yönetimi Programı

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**Session 1 / Hall-2**

**01.12.2021**

**Botany- Environment/ Moderator: Prof. Dr. Ahmet KAZANKAYA**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
DETERMINATION OF POMOLOGICAL PROPERTIES OF NATURALLY GROWING ROSEHIP (Rosa Canina L.) FRUITS IN KIRŞEHİR REGION	Ebru ŞİRİN	Kırşehir Ahi Evran University
	Ahmet KAZANKAYA	Kırşehir Ahi Evran University
BLACK CHOKEBERRY (ARONIA MELANOCARPA L.) GROWING IN KIRŞEHİR	Selma BOYACI	Kırşehir Ahi Evran University
THE LIVESTOCK POTENTIAL OF KIRŞEHİR PROVINCE AND THE NEED FOR AHI EVRAN VELİ'S LEATHER CRAFT	Ahmet Şahin	Kırşehir Ahi Evran University
	Mehmet Sarı	Kırşehir Ahi Evran University
	Hayrettin Çayıroğlu	Kırşehir Ahi Evran University
	Hüseyin Çayan	Kırşehir Ahi Evran University
DETERMINATION OF PRIMING APPLICATION TIME WITH SILICON IN COMMON GRASSPEA (Lathyrus sativus L.)	Semih AÇIKBAŞ	Siirt University
	Mehmet Arif ÖZYAZICI	Siirt University
DETERMINATION OF ADAPTATION CAPABILITIES OF SOME STANDARD PEAR VARIETIES TO THE MUŞ REGION	Semih AYKUT	Yüzüncü Yıl University
	Adnan DOĞAN	Yüzüncü Yıl University
WILD GRAPE POTENTIAL IN HAKKARI REGION	Tuncer ARSLAN	Van Yüzüncü Yıl University
	Adnan DOĞAN	Van Yüzüncü Yıl University
WINE GRAPE PRODUCTION IN TURKEY, EVALUATION OF DEVELOPMENTS IN THE WINE SECTOR, AND FORECASTS	Gamze SANER	Ege University
	Duran GÜLER	Ege University
	Zekiye ŞENGÜL	Ege University
	Ceylin SANER	Ege University

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**Session 1 / Hall-3**

**01.12.2021**

**Energy/ Moderator: Assoc. Prof. Dr. Ferdağ KAHRAMAN AKSOYAK**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
BASIN GEOMETRY FEATURES OF THE YESILDERE AND CAGLAYAN STREAM BASINS HAVING CAUSED FLOOD AND OVERFLOW IN FINDIKLI (RIZE)	Vedat AVCI	Bingöl University
INVESTIGATION OF THE CAUSAL RELATIONSHIP BETWEEN CO2 EMISSIONS, ENERGY CONSUMPTION AND ECONOMIC GROWTH: THE EXAMPLE OF TURKEY	Fatih Çemrek	Eskişehir Osmangazi University
NUMERICAL INVESTIGATION OF FLOW PROPERTIES OF GENERATOR CABINETS	Barbaros MAZLUMCU	Marmara University
	Prof. Dr Mustafa Atmaca	Marmara University
ON GAUSS MAP OF TENSOR PRODUCT SURFACES VIA GENERALIZED BICOMPLEX NUMBERS	Ferdağ KAHRAMAN AKSOYAK	Kırşehir Ahi Evran University
SOLUTIONS OF LINEAR FREDHOLM INTEGRAL EQUATIONS WITH THE THREE-STEP ITERATION METHOD	Asst. Prof. Dr. Lale CONA	Gumushane University
	Kadir ŞENGÜL	Gumushane University
FIXED POINT APPROACH TO FRACTIONAL INTEGRO-DIFFERENTIAL EQUATION	Asst. Prof. Dr. Lale CONA	Gumushane University
	Esmahan BAL	Gumushane University

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**Session 1 / Hall-4**

**01.12.2021**

**Engineering / Moderator: Asst. Prof. Hatice Aylin KARAHAN TOPRAKCI**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
HYBRID NANOCOMPOSITES AND THEIR STRESS SENSING BEHAVIOUR	Asst. Prof. Hatice Aylin KARAHAN TOPRAKCI	Yalova University
	Mukaddes Sevval CETIN	Yalova University
	Asst. Prof. Ozan TOPRAKCI	Yalova University
FABRICATION OF NANOCOMPOSITES FROM SINGLE AND HYBRID FILLERS AND THEIR APPLICATION FOR DETERMINATION APPLIED FORCE	Mukaddes Sevval CETIN	Yalova University
	Asst. Prof. Ozan TOPRAKCI	Yalova University
	Asst. Prof. Hatice Aylin KARAHAN TOPRAKCI	Yalova University
DETERMINATION OF KINETICS OF DRYING OF MANDARIN (CITRUS RETICULATA) PEEL AND ENERGY ANALYSIS	Faruk KILIÇ	Gazi University
ON THE FORCED VIBRATION OF A HYDROELASTIC SYSTEM CONSISTING OF ORTHOTROPIC / PIEZOELECTRIC PLATE, INVISCID FLUID AND RIGID WALL	Zeynep EKİCİOĞLU KÜZECİ	Kırşehir Ahi Evran University
	Tarana V. HUSEYNOVA	Ganja State University
THEORETICAL INVESTIGATION OF HYDROGEN STORAGE AND PHYSICAL PROPERTIES OF Be(BH <sub>4</sub> ) <sub>2</sub> COMPOUND	Fatih DEMİRKALE	Kırşehir Ahi Evran University
	Osman ÖRNEK	Kırşehir Ahi Evran University
CONSTRUCTION OF BLOCKS USING MULTIPLE REFERENCE BLOCKS IN VIDEO CODING	Çağrı KILINÇ	Eskisehir Osmangazi University
	Erol SEKE	Eskisehir Osmangazi University
INVESTIGATION OF EROSION CORROSION OF DIFFERENT BIOMATERIALS BY FINITE ELEMENT ANALYSIS	Levent Urtekin	Kırşehir Ahi Evran University
	Deniz Ada	Kütahya Dumlupınar University
	Kadir Gök	İzmir Bakırçay University
MICROSTRUCTURE ANALYSIS AND CHARACTERIZATION OF AZ91 BIOMATERIALS PRODUCED BY DIE CASTING	Levent Urtekin	Kırşehir Ahi Evran University
	Kadir Gök	İzmir Bakırçay University
RAILWAY LINE CAPACITY CALCULATION USING UIC CODE 406: APPLICATION FOR MALATYANARLI LINE	Sinem BOZATLI	Yıldız Technical University
	İsmail ŞAHİN	Yıldız Technical University

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**Session 1 / Hall-5**

**01.12.2021**

**Mathematics & Engineering/ Moderator: Prof. Dr. Dalal Adnan**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

Title	Author(s)	Affiliation
EXPONENTIAL STABILITY FOR A DELAY POROUS THERMOELASTIC SYSTEM WITH SECOND SOUND	Mohamed HOUASNI	Université Djilali Bounaâma Khemis Miliana, Algérie
	Salah ZITOUNI	Department of Mathematics and Informatics, Souk Ahras Univ, P.O. Box 1553, Souk Ahras, 41000, Algeria
A NEW METHOD OF DYNAMICAL STABILITY IN FRACTIONAL SYSTEMS	Shiva Eshaghi	Shahrekord University, P.O.Box 115, Shahrekord, Iran
ADOMIAN DECOMPOSITION METHOD FOR SOLVING NONLINEAR ODES EQUATION USING MAPLE	Dalal Adnan Amer Maturi	King Abdulaziz University, Jeddah, Saudi Arabia
USING THE DISCRETE LOGARITHM PROBLEM TO IMPROVE THE SECURITY OF A PUBLIC KEY CRYPTOSYSTEM	Hayder Raheem Hashim	University of Kufa, Iraq
DERIVATIONS ON LIE AND JORDAN ON SEMIPRIME RINGS	TAHA I.	Universiti Pendidikan Sultan Idris, 35900 Tanjong Malim, Perak
	MASRI R.	Universiti Pendidikan Sultan Idris, 35900 Tanjong Malim, Perak
	TARMIZI R.	Universiti Pendidikan Sultan Idris, 35900 Tanjong Malim, Perak
UNSTEADY FREE CONVECTION MOTION OF CASSON LIQUID PAST A SEMI-INFINITE VERTICAL POROUS PLATE ON NUMERICAL SOLUTION OF MHD, SORET, DUFOUR AND THERMAL RADIATION CONTRIBUTIONS	K. VEERA REDDY	Koneru Lakshmaiah Education Foundation, Vaddeswaram, India-522 502
	G.VENKATA RAMANA REDDY	Koneru Lakshmaiah Education Foundation, Vaddeswaram, India-522 502
FLOW OF MHD CASSON FLUID OVER A VERTICAL POROUS SURFACE IN THE PRESENCE OF CHEMICAL REACTION AND RADIATION EFFECTS	A.Sandhya	Department of Mathematics, VRSEC, Kanur, Vijayawada-520007
	G.Venkata Ramana Reddy	Department of Mathematics, KLEF, Vaddeswaram, AP-522502
	G.V.S.R.Deekshitulu	Department of Mathematics, JNTUK Kakinada, AP-533003
GENERAL AND OPTIMAL DECAY FOR A NONLINEAR VISCOELASTIC EQUATION	Tikialine Belgacem	University of El-Oued, P.O.Box789, El Oued39000.
	Tedjani Hadj Ammar	University of El-Oued, P.O.Box789, El Oued39000.
	Abdelkarim Kelleche	Université Djilali Bounâama, Algeria.
TUNABLE THREE-DIMENSIONAL TERAJET CONTAINING DIRAC SEMIMETAL	Babak Yahyapour	Department of Condensed Mater Physics, Faculty of Physics, University of Tabriz, Tabriz, Iran
	Behrooz Rezaei	Department of Condensed Mater Physics, Faculty of Physics, University of Tabriz, Tabriz, Iran



PARAMETERIZED CONTROL OF NATURAL AND FORCED CONVECTION IN A THREE- DIMENSIONAL ENCLOSURE	Zakaria LAFDAILI	National School of Applied Sciences, University Ibn Zohr, Agadir, Morocco
	Mohamed El Hattab	National School of Applied Sciences, University Ibn Zohr, Agadir, Morocco
	Lahoucine Belarche	National School of Applied Sciences, University Ibn Zohr, Agadir, Morocco
	Sakina El-Hamdani	National School of Applied Sciences, University Ibn Zohr, Agadir, Morocco

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**Session 1 / Hall-6**

**01.12.2021**

**Management/ Moderator: Ayşenur Erdil**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
OCCUPATIONAL HEALTH AND SAFETY APPLICATIONS, RISK ANALYSIS AND SOLUTION SUGGESTIONS IN METAL DOOR MANUFACTURING	Servet SOYGÜDER	Ankara Yıldırım Beyazıt University
	Çağla ŞAHİN	Ankara Yıldırım Beyazıt University
REPRODUCTIVE HEALTHCARE SERVICES AMONG COMMUNITY CLINICS IN RURAL BANGLADESH: SERVICES, SERVICE SATISFACTION AND SERVICE GAPS	Nargis Fatema	Institute of Social Welfare and Research, University of Dhaka, Dhaka-1205, Bangladesh
THE IMPACTS OF THE GREAT FINANCIAL CRISIS ON THE BANKING SECTOR OF A SMALL TRANSITION COUNTRY ON THE EXAMPLE OF BOSNIA AND HERZEGOVINA	Sonja Tomas-Miskin	School of Economics Banja Luka, Kralja Alfonsa XIII, Banja Luka 78000, Bosnia & Herzegovina
	Jelena Vitomir	Megatrend University in Belgrade. Maršala Tolbuhina 8, 11000 Beograd, Serbia
	Slobodan Popović	Faculty of Economics and Industrial Management u Novom Sadu, Cvečarska 2, 21000 Novi Sad, Serbia
DEVELOPMENT OF SOFTWARE APPLICATIONS IN TRANSITION COUNTRIES AT THE REQUEST OF TOP MANAGEMENT OF LARGE COMPANIES	Ivan Arnautović	High School of Entrepreneurship, Majke Jevrosime 15, 11000 Beograd, Serbia
	Tatjana Davidov	Infostan Tehnologije d.o.o. Beograd, 1, Danijelova 33, 11010 Beograd, Serbia,
	Jelena Vitomir	Megatrend University in Belgrade, Serbia
	Sanda Nastić	Faculty of Economics and Industrial Management u Novom Sadu, Cvečarska 2, 21000 Novi Sad, Serbia
	Slobodan Popović	Faculty of Economics and Industrial Management u Novom Sadu, Cvečarska 2, 21000 Novi Sad, Serbia
THE IMPORTANCE OF CONNECTING THE WORK OF INTERNAL CONTROL AND INTERNAL AUDIT IN THE OPERATIONS OF ENTERPRISES IN TRANSITION COUNTRIES LIKE THE EXPERIENCES OF THE ECONOMY OF THE REPUBLIC OF SERBIA	Dragan Đuranović	PIM University, Bosnia and Herzegovina
	Slobodan Popović	Faculty of Economics and Industrial Management u Novom Sadu, Cvečarska 2, 21000 Novi Sad, Serbia
IMPLEMENTATION OF INTERNAL AUDIT IN LARGE ENTERPRISES WITH INFORMATION SYSTEM IN ALL SECTORS	Dragan Đuranović	PIM University Banja Luka, Bosnia and Herzegovina
	Slobodan Popović	Faculty of Economics and Industrial Management u Novom Sadu, Cvečarska 2, 21000 Novi Sad, Serbia



SOFTWARE METHODOLOGIES IN THE DEVELOPMENT OF SOFTWARE SOLUTIONS	Ivan Arnautović	High School of Entrepreneurship, Majke Jevrosime 15, 11000 Beograd, Serbia
	Tatjana Davidov	Infostan Tehnologije d.o.o. Beograd, 1, Danijelova 33, 11010 Beograd, Serbia,
	Goran Vitomir	Nova Banka A.D. Banja Luka, Republika Srpska, Bosna i Hercegovina
	Sanda Nastić	Faculty of Economics and Industrial Management u Novom Sadu, Cvečarska 2, 21000 Novi Sad, Serbia
	Slobodan Popović	Faculty of Economics and Industrial Management u Novom Sadu, Cvečarska 2, 21000 Novi Sad, Serbia
THE EFFECTS OF ERGONOMIC CONDITIONS IN THE WORK ENVIRONMENT ON WORK PERFORMANCE AND PRODUCTIVITY	Ayşenur Erdil	İstanbul Medeniyet University
A CRITICAL LOOK AT A SYSTEMIC PROBLEM IN ACHIEVEMENT OF QUALITY IN HIGHER EDUCATION: REAPPOINTMENT OBLIGATION IN EVERY ACADEMIC PROMOTION	Nalan Sabır Taştan	Ordu Üniversitesi Sosyal Bilimle MYO
	Kürşat Taştan	Ordu Üniversitesi Genel Sekreterlik

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**Session 1 / Hall-7**

**01.12.2021**

**Microbiology/ Moderator: Amina Mumtaz**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
APPLICATION OF MAGNETIZED ORANGE PEELS FOR THE REMOVAL OF ORGANOCHLORINE PESTICIDES (CHLORPYRIFOS AND PENDIMETHALIN) FROM AQUEOUS RESOURCES	Bilal Ashraf	PCSIR, Lahore.Pakistan
	Shafaq Mubarak	PCSIR, Lahore.Pakistan
	Amina Asghar	PCSIR, Lahore.Pakistan
INFLUENCE OF pH ON ADSORPTION ONTO ZnO NANOPARTICLES SURFACE	Denis Melehov	Tomsk Polytechnic University
	Anna Godymchuk	Tomsk Polytechnic University
BIOLOGICAL EVALUATION OF SCHIFF BASE TRANSITION METAL COMPLEXES DERIVED FROM SULPHA DRUG	Amina Mumtaz	PCSIR Laboratories Complex, Ferozpur Road, Lahore-Pakistan
NOVEL PVC MEMBRANE POTENTIOMETRIC SENSOR FOR HIGHLY SELECTIVE DETERMINATION OF FEXOPHENADINE IN PHARMACEUTICALS AND SPIKED HUMAN URINE	N. Rajendraprasad	JSS College of Arts, Commerce and Science (A research Centre Recognized by University of Mysore), B N Road, Mysuru, Karnataka, India
	C. Siddaraju	JSS College of Arts, Commerce and Science (A research Centre Recognized by University of Mysore), B N Road, Mysuru, Karnataka, India
THE ANTIMICROBIAL ACTIVITY OF LEAF EXTRACTS FROM EUCALYPTUS	Muneer Kamel	Peoples' Friendship University of Russia, Moscow, Russia
POLYMERS-BASED LUMINOL: SYNTHESIS, CHARACTERIZATION AND APPLICATION	Hamad Atallah Aljayzani	Chemistry Department King Abdulaziz University - Jeddah - Saudi Arabia
QSPR-NEURAL NETWORKS MODEL FOR THE PREDICTION OF THE REJECTION OF ANTI-INFLAMMATORY DRUGS BY MEMBRANES	Yamina AMMI	University of Médéa, Medea, Algeria.
	Cherif Si-Moussa	University of Médéa, Algeria.
	Salah HANINI	University of Médéa, Algeria.
GROWTH KINETICS OF FEB AND FE2B LAYERS ON AIS 316 STEEL BY THE INTEGRAL METHOD	Zouzou chaima	Laboratoire de Technologie des Matériaux, Faculté de Génie Mécanique et Génie des Procédés
	Keddam mourad	Laboratoire de Technologie des Matériaux, Faculté de Génie Mécanique et Génie des Procédés
IS CATECHOL O-METHYLTRANSFERASE A MORPHEEIN PROTEIN?	Aminu Usman	Umaru Musa Yar'adua University, Katsina-Nigeria

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**Session 2 / Hall-1**

**01.12.2021**

**AKHISM: Moderator: Assoc. Prof. Dr. Ertugrul Guresci**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
AN EVALUATION ON THE TRANSITION METHODS AND TECHNIQUES OF AHI ORDER FROM THEORY TO PRACTICE	Dr. Hatice Dülber	Ahi Evran University
SOCIAL COMPLEX OF AHI EVRAN AND VISITING CULTURE	Dr. Seyit GEZER	Kırşehir
AKHISM AND AHI EVRAN FROM SUSTAINABLE HUMAN RESOURCES MANAGEMENT PERSPECTIVE	Safa ACAR	Siirt University
THE PSYCHOSOCIAL MORAL FUNCTION OF FAITH ACCORDING TO AHI EVRAN	Dr. Osman Oral	Bozok University
EXAMINATION OF UNIVERSITY STUDENTS' OPINIONS ABOUT AHI EVRAN	Süleyman DOĞAN	Yıldız Teknik University
	Lütfullah ÇELİKTEKİN	İstanbul Ayvansaray University
AHHISM AND COOPERATIVE THOUGHT	Ertugrul Guresci	Kırşehir Ahi Evran University

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**Session 2 / Hall-2**

**01.12.2021**

**Biology/ Moderator: Assoc. Prof. Dr. Mustafa KAN**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
LOCAL DEVELOPMENT WITH LOCAL VALUES: CEMELE PEPPER (CEMELE BIBERI)	Assoc. Prof. Dr. Arzu KAN	Kırşehir Ahi Evran University
	Assoc. Prof. Dr. Mustafa KAN	Kırşehir Ahi Evran University
	Assist. Prof. Dr. Serdar GENÇ	Kırşehir Ahi Evran University
DETERMINATION OF THE EFFICIENCY OF DIFFERENT PGPR COMBINATIONS AT REDUCED FERTILIZER RATE IN PAZAR-20 TEA CLONE	Yaşar ERTÜRK	Kırşehir Ahi Evran University
	Ramazan ÇAKMAKÇI	Çanakkale 18 Mart University
FRUIT CHARACTERISTICS AND SEED YIELD OF IN NAKED SEED PUMPKIN (CUCURBITA PEPO VAR. STYRİCA) LINES	Alim AYDIN	Kırşehir Ahi Evran University
	Halit YETİŞİR	Erciyes University
	Hakan BAŞAK	Kırşehir Ahi Evran University
	Ayşe Nur ÇETİN	Kırşehir Ahi Evran University
DEVELOPMENT OF ETTRAPLOİD BOTTLE GOURD (LAGENARIA SICERARIA) GENOTYPE BY THE APPLICATION OF COLCHICINE	Alim AYDIN	Kırşehir Ahi Evran University
	Halit YETİŞİR	Erciyes University
	Ramazan GÜNGÖR	Kırşehir Ahi Evran University
	Metin TUNA	Tekirdağ Namık Kemal University
EFFECTS OF HOLDING TIME AND DIFFERENT IBA DOSES ON ROOTING OF LAVANDULA ANGUSTIFOLIA “SEVTOPOLIS” CUTTINGS	Bahadır ALTUN	Kırşehir Ahi Evran University
	Ramazan GÜNGÖR	Kırşehir Ahi Evran University
	Ayşe Nur ÇETİN	Kırşehir Ahi Evran University
	Ayşe BAŞPINAR	Kırşehir Ahi Evran University
	Zuhal ÖZKAN	Kırşehir Ahi Evran University
BIOLOGICAL FERTILIZERS AND THEIR IMPORTANCE IN SUSTAINABLE AGRICULTURE	Fevziye Şüheda Hepşen Türkay	Kırşehir Ahi Evran University
RESEARCH OF FACTORS AFFECTING AQUACULTURE DEVELOPMENT KHANH HOA PROVINCE, VIETNAM	Vo Hoan Hai Dang Hoang Xuan Huy	Department of Education and Training of Khanh Hoa province Faculty of Economics - Nha Trang University
AN ALTERNATIVE TO NON-BENEFICIAL FLYING INSECTS IN AGRICULTURE	Neddar Lahouaria Flazi Samır	Abdelhamid Ibn Badis University Mohamed Boudiaf University, Oran, Algeria

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**Session 2 / Hall-3**

**01.12.2021**

**Biology/ Moderator: Assist. Prof. Dr. Mevlüde Alev ATEŞ**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

Title	Author(s)	Affiliation
MAPPING OF NEWLY DEVELOPED GENOMIC SIMPLE SEQUENCE REPEAT MARKERS TO THE LENTIL ( <i>Lens culinaris</i> Medik.) GENOME	Brian Wakımwayı Koboyı	Erciyes University
	Melike Bakır	Erciyes University
ITS2 (INTERNAL TRANSCRIBED SPACER 2) REGION: A VALUABLE MARKER TO LABEL AND DISCUSS GENETIC DIFFERENCES, <i>ASTRAGALUS L.</i> EXAMPLE	Assist. Prof. Dr. Mevlüde Alev ATEŞ	Kırşehir Ahi Evran University
	Seher KARAMAN ERKUL	Aksaray University
INVESTIGATION OF GENETIC DIVERGENCE IN LOCAL SUNFLOWER HYBRIDS AND INBRED LINES BY APPLYING MORPHOLOGICAL MARKERS	Uzma Ayaz	University of Poonch Rawalakot, Pakistan
THE VOLATILE ORGANIC COMPOUNDS EMISSION FROM PLANTS IN THE FUTURE CLIMATE	Lucian Copolovici	“Aurel Vlaicu” University, Arad, Romania
	Andreea Lupitu	“Aurel Vlaicu” University, Arad, Romania.
	Cristian Moisa	Aurel Vlaicu” University
	Virgiliu Ciutina	“Aurel Vlaicu” University, Arad, Romania
	Dana Copolovici	“Aurel Vlaicu” University, Arad, Romania
PLANT EXTRACTS AND THEIR BIOMOLECULES	Dana Maria Copolovici	“Aurel Vlaicu” University, Arad, Romania
	Andreea Lupitu	“Aurel Vlaicu” University, Arad, Romania
	Cristian Moisa	Aurel Vlaicu” University
	Lucian Copolovici	“Aurel Vlaicu” University
THE SITUATION AND SOLUTIONS FOR SUSTAINABLE POVERTY REDUCTION UNDER THE MULTIDIMENSIONAL APPROACH IN VIETNAMESE MEKONG DELTA RURAL AREA – A CASE STUDY IN A COMMUNE OF HAU GIANG PROVINCE	Le Tran Thanh Liem	Can Tho University, Vietnam
	Pham Van Trong Tinh	Can Tho University, Vietnam
	Nguyen Thi Bach Kim	Can Tho University, Vietnam
SYNTHESIS AND APPLICATIONS OF BIOCHAR-BASED CATALYSTS FOR EFFICIENT REMEDIATION OF EMERGING CONTAMINANTS	Solomon Abesa	Federal University of Agriculture Makurdi, Nigeria
	Aderemi Timothy Adeleye	Chinese Academy of Sciences (CAS), Dalian, China
	Omoniyi Ahmed Olalekan	Veritas University, Abuja, Nigeria
	Dr. Oludare O. Osiboye	Tai Solarin College of Education, Omu-Ijebu, Ogun State, Nigeria
	Dr. Babatope Oluseun Odusina	Tai Solarin University of Education, Ijagun, Ijebu Ode, Ogun State, Nigeria

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**Session 2 / Hall-4**

**01.12.2021**

**Public Helath/ Moderator: Assist. Prof. Dr. Deniz GÜLER**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
THE RELATIONSHIP BETWEEN UNIVERSITY STUDENTS' E-HEALTH LITERACY LEVELS AND HEALTHY LIFESTYLE BEHAVIORS	Aysun KANDEMİR TÜRE	Kırıkkale University
	Ahmet KAR	Kırıkkale University
	Ali YILLMAZ	Kırıkkale University
	Mustafa KAYA	Kırıkkale University
THE SOCIAL VULNERABILITY AS A DEEPENING FACTOR OF COVID-19'S IMPACTS ON HEALTH	Gizem Deniz BÜYÜKSOY	Kırşehir Ahi Evran University
	Aslıhan ÇATIKER	Ordu University
	Kamuran ÖZDİL	Nevşehir Hacı Bektaş Veli University
THE IMPORTANCE OF MEDICAL DOCUMENTATION DURING THE PANDEMIC PERIOD	Ahmet Hayrettin TUNCAY	Süleyman Demirel University
CHILD ABUSE: CHILD ABUSE WITH EMOTIONAL ASPECTS	Leyla KUŞÇULAR KURU	Bandırma Onyedi Eylül University
	Zeynep ACA	Bandırma Onyedi Eylül University
CALCULATION OF FULL ENERGY PEAK EFFICIENCY OF CSI(TL) DETECTOR FOR POINT AND DISK GAMMA SOURCES BY FLUKA CODE	Zehra Nur KULUÖZTÜRK	Bitlis Eren University
A SOCIOLOGICAL STUDY ON THE PERCEPTIONS OF MASCULINITY OF MARRIED MEN AND MARRIED WOMEN	Samet ÜNLÜ	Sivas Cumhuriyet University
	Sevda MUTLU	Assoc. Prof. Dr., Sivas Cumhuriyet University
A SOCIOLOGICAL LOOK AT THE CAUSES OF CHILD BRIDE MARRIAGES: "THEY EVEN TAKEN MONEY FROM MY MOTHER FOR THE MILK I SUCK"	Ümmü Gülsüm Aslı Nur DOĞAN	Sivas Cumhuriyet University
	Sevda MUTLU	Assoc. Prof. Dr., Sivas Cumhuriyet University
DEVELOPMENT OF MEDICAL KNOWLEDGE IN A MEDIEVAL INSTITUTION	Sabri Burak PEKSOY	Kırıkkale University
EFFECT OF A COGNITIVE-BASED EMOTIONAL INTELLIGENCE PSYCHO-EDUCATIONAL PROGRAM ON SUBMISSIVE BEHAVIOR, SELF-ESTEEM, SOCIAL SKILLS AND SCHOOL ADJUSTMENT LEVELS OF MIDDLE SCHOOL STUDENTS	Özge KINIK	Söğütlü Primary School, Trabzon, Turkey
	Hatice ODACI	Karadeniz Technical University, Faculty of Literature, Psychology, Trabzon, Turkey.
CAN MEANING IN LIFE AND HOPE MAKE US PSYCHOLOGICALLY MORE FLEXIBLE? A RELATIONAL ANALYSIS	Deniz GÜLER	Anadolu Üniversitesi, Eğitim Fakültesi, Eğitim Bilimleri Bölümü, Rehberlik ve Psikolojik Danışmanlık ABD, Eskişehir TÜRKİYE

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**Session 2 / Hall-5**

**01.12.2021**

**Agriculture/ Moderator: Assist. Prof. Dr. C.S.N.PRANAVI & Teodora Mihova**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
APPLICATION OF BIO-EXTRACT ON THE GOWTH AND YIELD OF TWO VARIETIES YARDLONG BEAN	Darwin H. Pangaribuan	University of Lampung, Indonesia
	Septi Nurul Aini	University of Lampung, Indonesia
	Anisa Ayuningtyas	University of Lampung, Indonesia
	Aisyah Dwi Raphita	University of Lampung, Indonesia
REVIEW ON IMPACT OF COVID 19 ON AGRICULTURE SECTOR AND FOOD SUPPLY CHAIN	Shainy Kodali	International School of Technology & Sciences for Women, India
DESIGN AND FABRICATION OF MULTIPURPOSE AGRICULTURE VEHICLE	K.Ravi Kumar	ISTS Women's Engineering College, Andhra Pradesh, INDIA
	B.Sri Harshini	ISTS Women's Engineering College, Andhra Pradesh, INDIA
	Y.Dhana Lakshmi	ISTS Women's Engineering College, Andhra Pradesh, INDIA
	M.Harshitha	ISTS Women's Engineering College, Andhra Pradesh, INDIA
	K.Harsitha	ISTS Women's Engineering College, Andhra Pradesh, INDIA
EFFECTS OF DIETARY INCLUSION OF PROCESSED AND RAW SWEET LUPIN SEED (LUPINS ANGUSTIFOILUS) ON GROWTH AND CARCASS PERFORMANCES OF BROILER CHICKENS	Alem Dida	Selale University, Ethiopia
	Tegene Negesse	Hawassa University, Hawassa, Ethiopia
	Aberra Melesse	Hawassa University, Hawassa, Ethiopia
APPLICATION OF MULTIVARIATE ANALYSIS TO DIFFERENTIATE THE HARARGHE HIGHLAND GOAT POPULATIONS REARED IN THREE AGROECOLOGIES OF WEST HARARGHE ZONE, ETHIOPIA	Alefe Takele	Oda Bultum University, Ethiopia
	Aberra Melesse	Hawassa University, Hawassa, Ethiopia
	Mestawet Taye	Hawassa University, Hawassa, Ethiopia
IMPLEMENTATION OF AI (ARTIFICIAL INTELLIGENCE) IN DRIP IRRIGATION SYSTEM USING SOLAR ENERGY IN AGRICULTURE FIELDS	Raganjali K.S	ISTS Women's Engineering College, Andhra Pradesh, INDIA
	Lakshmi keerthi B	ISTS Women's Engineering College, Andhra Pradesh, INDIA
	Naga Jhansi M	ISTS Women's Engineering College, Andhra Pradesh, INDIA
	Jyothsna Priya G	ISTS Women's Engineering College, Andhra Pradesh, INDIA
	Gayatri Lakshmi D	ISTS Women's Engineering College, Andhra Pradesh, INDIA
	Vijaya Kumar CH	ISTS Women's Engineering College, Andhra Pradesh, INDIA
PERSPECTIVE GENOTYPES FROM CHAENOMELES SP. LINDL FOR FRUIT PRODUCTION	Teodora Mihova	Research Institute of Mountain Stockbreeding and Agriculture, Troyan, Bulgaria



DEVELOPMENT OF AUTOMATIC  
AND SEMI-AUTOMATIC ONION  
TRANSPLANTER

Gopalam Sharmila

ISTS Women's Engineering College,  
Andhra Pradesh, INDIA

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**Session 2 / Hall-6**

**01.12.2021**

**Agriculture/ Moderator: Chaudhary Muhammad Ayyub & Aberra Melesse**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
ROLE OF INSTRUCTIONAL MATERIALS IN AGRICULTURE EXTENSION SERVICES FOR THE RURAL WOMEN IN NIGERIA	Fasasi Rafiat Bolanle	Federal University of Agriculture, Abeokuta, Ogun State, Nigeria
IMPACT OF AGRICULTURAL EXTENSION EDUCATION ON NIGERIANS FOOD SECURITY	Oyediran, Wasiu Oyeleke (Ph.D.)	Federal University of Agriculture, Abeokuta, Ogun State, Nigeria
EFFECT OF BIO STIMULANTS ON THE GROWTH OF EGGPLANT (SOLANUM MELONGENA L.) GROWN UNDER NACL INDUCED SALINITY	Chaudhary Muhammad Ayyub	University of Agriculture, Pakistan
	Mazhar Abbas	University of Agriculture, Pakistan
	Muhammad Nouman Akram	University of Agriculture, Pakistan
	Mujahid Ali	Water Management Research Farm, Renala Khurd-56150, Okara, Pakistan
	Saqib Ayyub	University of Agriculture, Pakistan
REVIEW ON FARMING AGRICULTURE ROBOTS	M. Chandini	International School of Technology and Science For Women, India
	B. Sirisha	International School of Technology and Science For Women, India
	B. Mounika	International School of Technology and Science For Women, India
	B. Akhila	International School of Technology and Science For Women, India
	CH. Beula Rani	International School of Technology and Science For Women, India
	K. Ravi Kumar	International School of Technology and Science For Women, India
EFFECT OF FERTILIZER APPLICATION ON FUNAABOR 1 IN THE INLAND VALLEY DURING THE DRY SEASON	ATOLAGBE, MUTIU SHOLA	Federal University of Agriculture, Abeokuta, Ogun State, Nigeria
REVIEW ON SOLAR WEEDER CUM SPRAYER	S. Beebjan	International School of Technology and Science For Women, India
	V.B.V. Ramani	International School of Technology and Science For Women, India
	K.S. Latha	International School of Technology and Science For Women, India
	M.G. Ratnam	International School of Technology and Science For Women, India
	N. Rajasri	International School of Technology and Science For Women, India
	P. Sirisha	International School of Technology and Science For Women, India
	K. Meriba	International School of Technology and Science For Women, India



FERTILITY, HATCHABILITY, AND GROWTH PERFORMANCE OF INDIGENOUS, SASSO AND INDIGENOUS*SASSO CROSS CHICKEN GENOTYPES IN SIDAMA REGION, ETHIOPIA	Berhanu Bekele	Hawassa University, Hawassa, Ethiopia
	Wondmeh Esatu	International Livestck Research Institute (ILRI), Addis Ababa, Ethiopia
	Tadelle Dessie	International Livestck Research Institute (ILRI), Addis Ababa, Ethiopia
	Aberra Melesse	Hawassa University, Ethiopia
CHARACTERIZATION OF INDIGENOUS CHICKENS REARED IN THREE AGRO-ECOLOGIES OF HADIYA ZONE OF ETHIOPIA BASED ON THEIR MORPHOMETRIC TRAITS USING A MULTIVARIATE ANALYSIS APPROACH	Berhanu Bekele	Hawassa University, Hawassa, Ethiopia
	Wondmeh Esatu	International Livestck Research Institute (ILRI), Addis Ababa, Ethiopia
	Tadelle Dessie	International Livestck Research Institute (ILRI), Addis Ababa, Ethiopia
	Aberra Melesse	Hawassa University, Hawassa, Ethiopia

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**Session 2 / Hall-7**

**01.12.2021**

**ART & SPORTS / Moderator: Thi Thanh Ha DAO & Naghmeh Hachempour**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
A NEW THEORY FOR VISUALIZING MUSIC	Naghmeh Hachempour	Georgia Southern University, Statesboro, GA, United States
RECOMMENDATIONS FOR PHYSICAL ACTIVITY IN PERIODS OF SOCIAL DISTANCING DUE TO COVID-19 PANDEMIC	Thi Thanh Ha DAO	University of Danang, Vietnam
EXPLORING NATURAL ADVANTAGES TO DEVELOP SPORT TOURISM PRODUCTS IN QUANG BINH PROVINCE	Thi Thanh Ha DAO	University of Danang, Danang, Vietnam
CORRELATION BETWEEN PERCEIVED EFFORT AND INTERNAL TRAINING LOAD	Felice Di Domenico	University of Salerno, Salerno, Italy
DEVELOP CREATIVITY AND LEADERSHIP OF YOUNG PEOPLE FROM THE PANDEMIC	Dr. Ahmad Fauzi	MA Nuril Huda Jl. Madukoro No. 08 Tarub, Tawangharjo, Grobogan, Jawa Tengah, Indonesia.
	Mukhamad Luthfi Ali	MA Nuril Huda Jl. Madukoro No. 08 Tarub, Tawangharjo, Grobogan, Jawa Tengah, Indonesia.
	Galih Putri Milan Nesty	MA Nuril Huda Jl. Madukoro No. 08 Tarub, Tawangharjo, Grobogan, Jawa Tengah, Indonesia.
REPRESENTATIONS OF RICH-POOR UNIVERSITY STUDENTS IN TURKISH TV SERIES: THE EXAMPLE OF "SOL YANIM" TV SERIES	Oğuzhan Bayrak	Ordu University

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**Session 3 / Hall-1**

**01.12.2021**

**Management/ Moderator: Assoc. Prof. Dr. Bahar SUVACI**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
ESTIMATING THE BETA COEFFICIENTS BY QUANTILE REGRESSION: A STUDY ON MSCI-ISLAMIC STOCK INDICES	Assoc. Prof. Dr. Mercan HATİPOĞLU	Çankırı Karatekin University
	Assoc. Prof. Dr. Taner SEKMEN	Eskişehir Osmangazi University
TRANSITIONING FROM BIG DATA TO SMALL DATA: MAKING SENSE OF CONSUMER BEHAVIOR	Derya ŞAHİN	İstanbul Aydın University
CAN THE EMERGENCE OF THE CORONA VIRUS OUTBREAK AS A HUMANITARIAN CRISIS STOP THE ABUSE IN HUMAN RESOURCES MANAGEMENT?	Hüseyin Çiçek	Burdur Mehmet Akif Ersoy University
	Zafer Çankaya	Burdur Mehmet Akif Ersoy University
A COMPARATIVE ANALYSIS OF EFFECTS OF FINANCAL RATIOS ON PROFITABILITY: AN EMPIRICAL ANALYSIS ON BIST LISTED FABRICATED METAL PRODUCTS MANUFACTURING FIRMS	Damla Özer	Ahi Evran University
	Assoc. Prof. Yüksel İltaş	Kırşehir Ahi Evran University
CORPORATE SOCIAL RESPONSIBILITY PRACTICES OF MUNICIPALITIES: GEMLIK MUNICIPALITY CASE	Çağlar KALKAN	Gemlik Municipality Bursa, Turkey
	Assoc. Prof. Dr. Ayla TOPUZ SAVAŞ	Anadolu University
DETERMINING THE RELATIONSHIP BETWEEN LEADERSHIP STYLES OF MANAGERS AND EMPLOYEES' JOB SATISFACTION	Assoc. Prof. Dr. Bahar SUVACI	Anadolu University
	Lütfi Emirsoy	Anadolu University
FROM THE PLAK COMPANY TO THE MUSIC MARKET: A CASE STUDY IN THE CONTEXT OF BUSINESS HISTORY	Ayşe Nurefşan YÜKSEL	Ahi Evran University
THE EFFECTS OF TECHNOLOGICAL DEVELOPMENTS ON YOUTH UNEMPLOYMENT	Hilmi ETCİ	Muğla Sıtkı Koçman University
	Büşra HALİS ÖZTÜRK	Muğla Sıtkı Koçman University
DETERMINING THE IMPORTANCE LEVEL OF JOB SATISFACTION AND PERFORMANCE FACTORS	Prof. Dr. Orhan KÜÇÜK Ali BRIDAN Khelid BENSHINIA	Sakarya University of Applied Sciences Applied Sciences Faculty, Sakarya/TURKIYE Kastamonu University

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**Session 3 / Hall-2**

**01.12.2021**

**Learning/ Moderator: Assist. Prof. Dr. Gizem Köşker**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
COMPARING VARIOUS TASK DESIGNS IN SPEAKING TESTS	Murat POLAT	Anadolu University
FULFILLMENT LEVELS OF THE EXPECTATIONS OF UNIVERSITY STUDENTS FROM THEIR FOREIGN STUDENT PEERS IN MULTICULTURAL EDUCATIONAL SETTINGS	Rüştü Yeşil	Sakarya University
FACE-TO-FACE EDUCATION AFTER DISTANCE EDUCATION DURING THE PANDEMIC PERIOD: TEACHER OPINIONS	Güler GÖÇEN KABARAN	Muğla Sıtkı Koçman University
IS BILINGUALISM AN ADVANTAGE IN EDUCATIONAL PROCESS?	Assist. Prof. Dr. Gizem Köşker	Anadolu University
EXAMINATION OF SECONDARY EDUCATION TEACHERS' VIEWS ON ORGANIZATIONAL SILENCE IN TERMS OF DIFFERENT VARIABLES	Gözde SEZEN-GÜLTEKİN	Sakarya University
	Gizem YAMAN	Sakarya University
INVESTIGATION OF PARENTS' VIEWS ON DISTANCE EDUCATION DURING THE PANDEMIC PERIOD	Sedat ALTINTAŞ	Muğla Sıtkı Koçman University
	Sabri SİDEKLİ	Muğla Sıtkı Koçman University
TRENDS IN TRANSITION TO INDEPENDENT LIVING AND CAREER DEVELOPMENT OF INDIVIDUALS WITH SPECIAL NEEDS	Caner KASAP	Karamanoğlu Mehmetbey University
THE EFFECTS OF ONLINE CONCEPT TEACHING MATERIAL INTEGRATED TEACHING METHODS ON MOTIVATION	Emre YILMAZ	Bursa Uludağ University
	Fikret KORUR	Burdur Mehmet Akif Ersoy University

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**Session 3/ Hall-3**

**01.12.2021**

**Philosophy/ Moderator: Prof. Dr. Aslı YAZICI**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
NIETZSCHE'S IMAGE OF THE SUPERMAN AND THE IDEA OF MAN OF THE NOOSPHERE REALITY OF V. VERNADSKY	Prof. Dr. Oleksandr Pavlov	Odessa National Technological University, Odessa, Ukraine
NARRATIVE OF INDIGENOUS COMMUNITY IN CANADA	Ananda Majumdar	The University of Alberta
SCIENTIFIC TOPICS IN MODERN UNIVERSAL MASS MEDIA	Kosiuk Oksana	Associate Professor, Lesya Ukrainka Volyn National University
A CRITICAL LOOK AT THE CONCEPT OF "SUPERSTITION" IN TERMS OF THE PROBLEMATIC OF DEFINITION	Assist. Prof. Dr. Hasan PEKER	Adıyaman University
THOMAS AQUINAS' THEORY OF VIRTUE	Prof. Dr. Aslı YAZICI	Bartın University
HUME'S THEORY OF EMOTIONS	Prof. Dr. Aslı YAZICI	Bartın University
EDUCATION, TEACHING AND TEACHER IN THOMAS AQUINAS' REALIST PHILOSOPHY OF EDUCATION	Prof. Dr. Sedat YAZICI	Bartın University
	Prof. Dr. Aslı YAZICI	Bartın University
THE ETHICS OF AMBIGUITY AND CHARACTER TRAITS IN EXISTENTIAL MORAL PHILOSOPHY	Prof. Dr. Sedat YAZICI	Bartın University
	Prof. Dr. Aslı YAZICI	Bartın University
THE NEED TO RETHINK PHILOSOPHY AND ETHICS IN THE INFORMATION AGE	Dr. Nesibe Kantar	

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**Session 3 / Hall-4**

**01.12.2021**

**Chemistry/ Moderator: Dr. Ghanshyam Barman**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
SYNTHESIS AND CHARACTERIZATION OF NOVEL POLYSTYRENE AND POLYTERTBUTYLACRYLATE MACROINITIATORS VIA ATOM TRANSFER RADICAL POLYMERIZATION	Murat Mısıır	Kırşehir Ahi Evran University, Kırşehir, Turkey
PCL-b-PLLA BLOCK COPOLYMER BEARING TRIFLUOROBENZYLOXY UNITS VIA RING-OPENING POLYMERIZATION: SYNTHESIS AND CHARACTERIZATION	Murat Mısıır	Kırşehir Ahi Evran University, Kırşehir, Turkey
PERVAPORATION: AN EFFICIENT SEPARATION PROCESS	Dr. Ghanshyam Barman	C G P I T, Uka Tarsadia University, Chemical Engineering, Bardoli, Gujarat, India
EFFECT OF THERMAL RADIATION AND CHEMICAL REACTION ON MHD FLOW OF BLOOD IN STRETCHING PERMEABLE VESSEL	Dr. Binyam Zigta	Wachemo University College of Natural and Computational Science, ETHIOPIA
EFFECT OF THERMAL RADIATION AND CHEMICAL REACTION ON MHD FLOW OF BLOOD IN STRETCHING PERMEABLE VESSEL	Dr. Binyam Zigta	Wachemo University College of Natural and Computational Science
BORIDING KINETICS OF AISI T1 STEEL BASED ON THE MEAN DIFFUSION COEFFICIENT METHOD	M. Keddam	Laboratoire de Technologie des Matériaux, Algeria
	Z. Nait Abdellah	Université Mouloud Mammeri, 15000 Tizi-Ouzou, Algeria
	B. Boumaali	Laboratoire de Technologie des Matériaux, Algeria
HONEYBEE PRODUCTS AS MONITORS FOR HEAVY METAL POLLUTION IN SELECTED AREAS IN R. N. MACEDONIA	Biljana Bogdanova Popov	University of Niš, Bulevar Višegradska 33, Niš, Serbia
	Vesna Karapetkovska - Hristova	University "St. Kliment Ohridski", North Macedonia
	Syed Khalid Mustafa	University of Tabuk, Kingdom of Saudi Arabia
	Daniel Ingo Hefft	University Centre Reaseheath, Reaseheath College, United Kingdom
EVALUATION OF CHEMICAL COMPOSITION OF TURKEY'S BREAST MUSCLE FED BY DIFFERENT DIETARY CONCEPTS	Meri Krsteska	University "St. Kliment Ohridski", North Macedonia
	Vesna Karapetkovska - Hristova	University "St. Kliment Ohridski", North Macedonia
ANTIBACTERIAL POTENTIAL OF BENZYL ALCOHOLS	Mamman Sulaiman	Umaru Musa Yar'adua University, , Nigeria
	Yusuf Hassan	Umaru Musa Yar'adua University, Nigeria
	Tugba Taskin-Tok	Gaziantep University, Turkey
	Xavier Siwe-Noundou	Rhodes University, South Africa



EXPLORATION OF ANTIFUNGAL POTENTIAL OF BENZYL ALCOHOL DERIVATIVES	Justina Benson Ogala	Umaru Musa Yar'adua University, Katsina, Nigeria
	Yusuf Hassan	Umaru Musa Yar'adua University, Faculty of Natural and Applied Sciences, Department of Chemistry, Katsina, Nigeria
	Murtala Isah Bindawa	Umaru Musa Yar'adua University, Katsina, Nigeria
	Abdullahi Samaila	Umaru Musa Yar'adua University, Nigeria
	Tugba Taskin-Tok	Gaziantep University, Gaziantep, Turkey

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**Session 3 / Hall-5**

**01.12.2021**

**Science& Technology/ Moderator: Cristina Dias**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
ADAPTABILITY AND STABILITY ANALYSIS OF WHEAT GENOTYPES	Cristina Dias	New University of Lisbon, Portugal
	Carla Santos	New University of Lisbon, Portugal
“BERTRAND BOX” AND “MONTY HALL” PROBLEMS AS LECTURE TOOLS	Carla Santos	Polytechnic Institute of Beja, Portugal
	Cristina Dias	Polytechnic Institute of Portalegre, Portugal
ACCELERATED TENSORIAL DOUBLE PROXIMAL GRADIENT METHOD FOR TOTAL VARIATION REGULARIZATION TECHNIQUE	Benchettou oumama	ULCO/UCA, France/Morocco
	Bentbib Abdeslem Hafid	UCA Morocco
	Bouhamidi abderrahman	ULCO France
FIXED POINT THEOREMS IN RELATIONAL METRIC SPACES WITH AN APPLICATION TO BOUNDARY VALUE PROBLEM	Gopi Prasad	HNB Garhwal University, Srinagar Garhwal, India
A NEW ANT COLONY OPTIMIZATION FOR TRAVELING SALESMAN PROBLEM	Payam Basiri	Payame Noor University, Tehran, Iran
	Majid Yousefikhoshbakht	Bu-Ali Sina University, Hamedan, Iran
EXTENDED UNIFIED MITTAG-LEFFLER FUNCTION AND ITS PROPERTIES	Umar Muhammad Abubakar	Kano University of Science and Technology, Kano State, Nigeria
	Salim Rabi'u Kabara	Kano University of Science and Technology, Kano State, Nigeria
	AmeerAbdullahi Hassan	Kano University of Science and Technology, Wudil, Kano State, Nigeria
	Faisa Adam Idris	Sa'adatu Rimi College of Education, Kumbotso, Kano State, Nigeria
APPROXIMATION FOR MAX-PRODUCT OPERATORS VIA STATISTICAL CONVERGENCE WITH RESPECT TO POWER SERIES METHOD	Asiye Arif	Bilecik Şeyh Edebali University, Turkey
	Tuğba Yurdakadim	Bilecik Şeyh Edebali University, Turkey
A NUMERICAL SOLUTION FOR A COMPETITIVE LOTKA-VOLTERRA SYSTEM WITH TWO DISCRETE DELAYS	Elçin Gökmen	Muğla Sıtkı Koçman University
	Osman Raşit Işık	Muğla Sıtkı Koçman University
NECESSARY OPTIMALITY CONDITIONS FOR A BILEVEL MULTIOBJECTIVE PROGRAMMING PROBLEM VIA A PSI-REFORMULATION	Lafhim Lahoussine	Sidi Mohammed Ben Abdellah University
RECENT TECHNOLOGY IN SOLAR ABSORPTION COOLING SYSTEM: A REVIEW	Dr. Noor Alam	Nawab Shah Alam Khan College of Engineering and Technology
	Dr. Zahir Hasan	Nawab Shah Alam Khan College of Engineering and Technology

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**Session 3 / Hall-6**

**01.12.2021**

**Biology/ Moderator: Assist. Prof. Dr. Samer Mudalal**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
AVAILABILITY OF EDIBLE MUSHROOMS IN AYODHYADHAM, INDIA	Siddhant	Durgesh Nandini Degree College, India
	Mahesh Kumar	Independent Researcher, Ayodhyadham
	Shalini Mishra	UG Student, SPSP PG College, Ayodhyadham, India
THE IMPACT OF COMMERCIAL DISTRIBUTION CHAIN CONDITIONS ON THE SHELF LIFE OF CHICKEN CARCASSES MARKETED IN PALESTINE	Samer Mudalal	An-Najah National, University, P.O. Box 7, Nablus, Palestine
	Ahmed Zaazaa	An-Najah National University, P.O. Box 7, Nablus, Palestine
PARASITE FAUNA OF FISH FROM RESERVOIR STREZHEVO (N. MACEDONIA)	Dijana Blazhekovicj - Dimovska	University "St. Kliment Ohridski", N. Macedonia
	Stojmir Stojanovski	Hidrobiological Institute, 6000 Ohrid, N. Macedonia
EXPLORING THE STRUCTURAL AND RHEOLOGICAL CHARACTERISTICS OF MAIZE BRAN CELL WALL	Muzzamal Hussain	Government College University, Faisalaabd, Pakistan.
	Farhan Saeed	Government College University, Faisalaabd, Pakistan.
	Muhammad Afzaal	Government College University, Faisalaabd, Pakistan.
GENETIC DIVERSITY FOR YIELD AND YIELD TRAITS OF BAMBARA GROUNDNUT ( <i>Vigna subterranea</i> (L.) Verdc) UNDER TWO AGRO-ECOSYSTEMS	OLALEKAN O. J.	Forestry Research Institute of Nigeria
	ELUMALERO G. O.	Forestry Research Institute of Nigeria
	OGUNBELA A. A.	Forestry Research Institute of Nigeria
	APENAH M. O.	Forestry Research Institute of Nigeria
	AGBOOLA J. O.	Forestry Research Institute of Nigeria
	ONASANYA A. K.	Forestry Research Institute of Nigeria
	AJAYI O. K.	Forestry Research Institute of Nigeria
A REVIEW OF SOME EFFECTS OF AQUEOUS EXTRACT OF CYMBOPOGON CITRATUS LEAF ON STOMACH	OLALEKAN O. J.	Forestry Research Institute of Nigeria
	OLALEKAN O. A	Ladoke Akintola University of Science and Technology, Ogbomosho, Nigeria
	ADEBANJO F. A	Ladoke Akintola University of Science and Technology, Ogbomosho, Nigeria
	ADEBANJO M. T	Ogun State College of Health Technology, Ilese-Ijebu, Nigeria
	ELUMALERO G. O	Ladoke Akintola University of Science and Technology, Ogbomosho, Nigeria
	APENAH M. O	Ladoke Akintola University of Science and Technology, Ogbomosho, Nigeria
INVESTIGATING THE ROLE/IMPACT OF EARTHWORM IN SOIL CONDITIONING (VERMICASTING)	ADEBANJO M. T	Ogun State College of Health Technology, Ilese-Ijebu, Nigeria
	ADEBANJO F. A	Ladoke Akintola University of Science and Technology, Ogbomosho, Nigeria
	OLALEKAN O. J.	Forestry Research Institute of Nigeria
	OLALEKAN O. A	Ladoke Akintola University of Science and Technology, Ogbomosho, Nigeria





EFFECTS OF PLANT EXTRACTS ON THE MANAGEMENT OF SEED-BORNE PATHOGENS OF COOTON (Gossypium spp)	ADEBANJO F. A	Ladoke Akintola University of Science and Technology, Ogbomosho, Nigeria
	ADEBANJO M. T	Ogun State College of Health Technology, Ilese-Ijebu, Nigeria
	OLALEKAN O. J.	Forestry Research Institute of Nigeria
	OLALEKAN O. A	Ladoke Akintola University of Science and Technology, Ogbomosho, Nigeria
STUDY BY ASSAYING THE VARIATION OF THE CONTENT OF ASCORBIC ACID IN (ORANGE JUICE, LEMON JUICE, PARSLEY AND CELERY)	Affaf TABTI	University of Relizane Ahmed Zabana, Algeria
	Souhila Djalout	University of Relizane Ahmed Zabana, Algeria
	Khiera BOURAS	University of Relizane Ahmed Zabana , Algeria

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**Session 3/ Hall-7**

**01.12.2021**

**Artificial Intelligence/ Moderator: Assoc. Prof. Dr. Yassine YAKHELEF**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
NEURAL NETWORK INTEGRATED WITH ACTIVE CONTOUR MODEL FOR SEGMENTATION OF MEDICAL IMAGES	Mehreen Fida	University of Engineering and Technology Peshawar, Peshawar, Pakistan
	Dr. Noor Badshah	University of Engineering and Technology Peshawar, Peshawar, Pakistan.
	Asif Ahmad	Cecos University of IT and Emerging Sciences
	Dr. ABDUL HAFEEZ	University of Engineering and Technology Peshawar, Peshawar, Pakistan.
	Arif Ulla	University of Engineering and Technology Peshawar, Peshawar, Pakistan.
	Yalin Zheng	Department of Eye and Vision Science
DEEP LEARNING APPROACHE FOR SEGMENTATION OF MEDICAL IMAGES	Arif Ullah	University of Engineering and Technology Peshawar, Peshawar, Pakistan.
	Dr. Noor Badshah	University of Engineering and Technology Peshawar, Peshawar, Pakistan.
	Asif Ahmad	Cecos University of IT and Emerging Sciences
	Dr. Abdul Hafeez	University of Engineering and Technology Peshawar, Peshawar, Pakistan.
	Mehreen Fida	University of Engineering and Technology Peshawar, Peshawar, Pakistan.
A SYSTEMATIC REVIEW ON DURABLE SECURITY SOLUTIONS FOR SECURITY-CRITICAL WEB-APPLICATIONS	Alka Agrawal	Department of Information Technology, Babasaheb Bhimrao Ambedkar University Lucknow, 226025, Uttar Pradesh, India
	Raees Ahmad Khan	Department of Information Technology, Babasaheb Bhimrao Ambedkar University Lucknow, 226025, Uttar Pradesh, India
	Md Tarique Jamal Ansari	Department of Information Technology, Babasaheb Bhimrao Ambedkar University Lucknow, 226025, Uttar Pradesh, India
TENSOR PRODUCTS WITH APPLICATION TO FACE RECOGNITION	Asmaa Khouia	University of Littoral Cote d'Opale-LMPA-France
COMPARISON STUDY OF MODULAR MULTILEVEL CONVERTER BASED SOLAR MICROGRID CONVERSION	Yassine YAKHELEF	Associate Professor at University of Boumerdes, Algeria
	Billel SMAANI	Assistant Professor at University of Boumerdes, Algeria



SYSTEM WHEN USING NEURAL NETWORK MPPT CONTROL	Fares NAFA	Assistant Professor at University of Bumerdes, Algeria
	Messaoud BOULOUH	Full Professor at University of Guelma, Algeria
	Ali BOUHEDDA	Assistant Professor at University of Bouira, Algeria
AN INTELLIGENT ENVIRONMENTAL BIOSENSOR BASED ON THE FUZZY INFERENCE SYSTEM	KEYVAN ASEFPOUR VAKILIAN	Gorgan University, Gorgan, Iran
A COMPARISON OF OPTIMIZATION METHODS IN IMAGE PROCESSING-BASED AGRICULTURAL YIELD ESTIMATION	KEYVAN ASEFPOUR VAKILIAN	Gorgan University, Gorgan, Iran

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**Session 1 / Hall-1**

**02.12.2021**

**Religion & Ethics/ Moderator: Assist. Prof. Dr. Mehmet KOÇ**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
BASED on FATWAS and COURT DECISIONS TRUST (VEDIA) CONTRACT in OTTOMAN LAW	Assist. Prof. Dr. Mehmet KOÇ	Niğde Ömer Halisdemir University
THE OPINIONS OF THE STUDENTS OF THE FACULTY OF ISLAMIC SCIENCES ON THE RELIGIOUS MUSIC COURSE	Duygu TURAN	Tokat Gaziosmanpaşa University
INTUITION TO INSIGHT: Error, Doubt and Belief	Habibe Aldağ	Çukurova University, Adana, Turkey.
THE ROLE OF MOTHERS AND FATHERS IN THE FORMATION OF ETHICAL ATTITUDES OF CHILDREN IN PRIMARY SCHOOL PERIOD	Muhyettin ÖZEN	Van Yüzüncü Yıl University
THE EMOTION WALK: EXPLORING RELIGIOUS AND HISTORICAL SPACES THROUGH PSYCHOGEOGRAPHY	Aslıhan KUŞÇUOĞLU	Tokat Gaziosmanpaşa University
	Hüseyin MERTOL	Tokat Gaziosmapaşa University
THE SCIENTIFIC PROGRESS IN RELIGIOUS EDUCATION: GRADUATE THESIS	Aslıhan KUŞÇUOĞLU	Tokat Gaziosmapaşa University
ISLAM AND HUMAN RIGHTS IN THE CONTEXT OF SLAVERY	Hasan MAÇİN	Adıyaman University

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**Session 1 / Hall-2**

**02.12.2021**

**Agriculture/ Moderator: Assoc. Prof. Dr. Serap KILIÇ ALTUN**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
INTERACTION VARIANCES OF MOSQUITOES' GENERA	Dr. Olubunmi T. OLORUNPOMI	Nigeria Police Academy, Wudil Kano State, Nigeria
	Dr. Rabi S. DUWA	Nigeria Police Academy, Faculty of Science, Department of Biological Sciences, Nigeria Police Academy, Wudil, Kano, Nigeria
AGE AND GROWTH CHARACTERISTICS OF GREATER FORKBEARD ( PHYCIS BLENNOIDES ) CAUGHT FROM NORTHEASTERN MEDITERRANEAN	Hülya GİRĞİN	Dokuz Eylül University, Faculty of Veterinary, Department of Animal Science, Izmir, TURKEY
	Nuri BAŞUSTA	Fırat University, Faculty of Fisheries, Department of Fisheries Basic Sciences, Elazig, TURKEY
EXPERIMENTAL AND STATISTICAL STUDY OF THE PHYSICAL, CHEMICAL, AND MECHANICAL CHARACTERISTICS OF THE NORMAL AND TORREFIED PELLETS OF THE USED HORSE BEDDING	Bahman Ghiasi Gholamreza Asadollahfardi Mohsen Asadi	UBC, Faculty of Science, Department of Chemical and Biological Engineering, Vancouver, Canada Kharazmi University, Tehran, Iran University of Saskatchewan, Canada
ANALYSIS OF SOME TRACE AND TOXIC ELEMENT CONCENTRATIONS OF SHEEP MILK BY USING AN INDUCTIVELY COUPLED PLASMA OPTICAL EMISSION SPECTROMETER	Assoc. Prof. Dr. Serap KILIÇ ALTUN	Harran University, Veterinary Faculty
	Assist. Prof. Dr. Nilgün PAKSOY	Harran University, Veterinary Faculty
DETERMINATION OF SOME TRACE ELEMENTS IN EWE MILK YOGURT ANALYZED BY ICP-OES	Assoc. Prof. Dr. Serap KILIÇ ALTUN	Harran University, Veterinary Faculty
SOME CHARACTERISTICS OF GOAT MEAT	Füsun Coşkun	Kırşehir Ahi Evran Üniversitesi, Ziraat Fakültesi, Zootekni Bölümü, Kırşehir , Türkiye
A RESEARCH ON THE RELATIONSHIP BETWEEN AGRICULTURAL INCOME AND TRACTORIZATION IN TURKEY AS OF 2020	Asst. Prof. Dr. Gülfinaz ÖZOĞUL	Yozgat Bozok University

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**Session 1 / Hall-3**

**02.12.2021**

**Health/ Moderator: Aycan DAL DÖNERTAŞ**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
TREATMENT APPROACHES FOR DENTAL TRAUMA IN CHILDREN: CASE SERIES	Aycan DAL DÖNERTAŞ	Niğde Ömer Halisdemir University
FREE GINGIVAL GRAFT APPLICATIONS IN ATTACHED GINGIVAL INSUFFICIENCY: CASE SERIES	Şafak Necati DÖNERTAŞ	Niğde Ömer Halisdemir University
NORTH CAROLINA MACULAR DYSTROPHY:CASE REPORT	Ali ŞİMŞEK	Harran University
	Çağrı MUTAF	Harran University
	Eren HÜZMELİ	Harran University
	Ekrem Can ARABACI	Harran University
AN INCIDENTAL STRAATSMA SYNDROME DETECTED IN THE INVESTIGATION OF CATARACT ETIOLOGY	Ali ŞİMŞEK	Harran University
	Çağrı MUTAF	Harran University
	Eren HÜZMELİ	Harran University
	Ekrem Can ARABACI	Harran University
CURRENT EVALUATION OF PULPOTOMY TREATMENT IN YOUNG PERMANENT TEETH	Melike Kurt	Zonguldak Bulent Ecevit University
	Ebru Hazar Bodrumlu	Zonguldak Bulent Ecevit University
PHOTON INTERACTION PERFORMANCE OF DENTAL COMPOSITES	Mehmet Fatih TURHAN	Afyonkarahisar Health Sciences University
HYBRID METAHEURISTICS APPROACH FOR CLINICAL DATABASE WITH SPECIAL REFERENCE TO DIABETES	Gunasekar Thangarasu Kayalvizhi Subramanian	MAHSA University, Malaysia MAHSA University, Malaysia
HEALTH COMES FROM APITHERAPY	Gizem KEZER Özlem AYDIN	Kırşehir Ahi Evran University

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**Session 1 / Hall-4**

**02.12.2021**

**Cultivation/ Moderator: Prof. Dr. Ahmet Kazankaya**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
A RESEARCH ON THE DETERMINATION OF THE AMPELOGRAPHIC CHARACTERISTICS OF GRAPE VARIETIES GROWN IN ŞEMDİNLİ (HAKKARI) REGION	Mustafa Aktaş	Ziraat Mühendisi, Tarım İl Müdürlüğü – Hakkari-TÜRKİYE
	Ahmet Kazankaya	Kırşehir Ahi Evran University
	Adnan Doğan	Kırşehir Ahi Evran University
DETERMINATION OF CHLOROPHYL AMOUNT, STOMA DENSITY AND NUTRITIONAL STATUS IN CHICKENS CULTIVATED IN ADILCEVAZ (BITLİS) REGION	Ebrar Tunalı	Ziraat Mühendisi, Tarım İl Müdürlüğü – Bitlis-TÜRKİYE
	Ahmet Kazankaya	Kırşehir Ahi Evran University
	Adnan Doğan	Kırşehir Ahi Evran University
EFFECTS ON HAY YIELD AND QUALITY OF DIFFERENT GRASSPEA (LATHYRUS SATIVUS L.) AND OAT (AVENA SATIVA L.) MIXTURES RATIO IN KIRŞEHİR CONDITIONS	Assist. Prof. Dr. Hakan KIR	Kırşehir Ahi Evran University
	Assoc. Prof. Dr. Tamer YAVUZ	Kırşehir Ahi Evran University
	Lect. Veysel GÜL	Kırşehir Ahi Evran University
EVALUATION OF THE EFFECT OF NATURAL VENTILATION AND EVAPORATIVE COOLING APPLICATIONS ON INDOOR VAPOR PRESSURE DEFICIT IN HIGH TUNNELS	Sedat BOYACI	Kırşehir Ahi Evran University
THE EFFECT OF INCREASING CONCENTRATIONS OF IRON ON IRON NUTRITIONAL PROPERTIES OF SOME SUNFLOWER LINES GROWN IN SAND CULTURE	Prof. Dr. Ahmet KORKMAZ	Ondokuz Mayıs University
	Güney AKINOĞLU	Ondokuz Mayıs University
	Elif Boz	General Directorate of Turkish Coal Enterprises, Ankara, TURKEY
	İlkay ÇOKA	Mersin University
DETERMINATION OF THE ENERGY POTENTIAL OF TOMATO AND PEPPER RESIDUES GROWN IN THE GREENHOUSE	Ayşe BAŞPINAR	Kırşehir Ahi Evran University
	Hakan BAŞAK	Kırşehir Ahi Evran University
	Ayşe Nur ÇETİN	Kırşehir Ahi Evran University
	Alim AYDIN	Kırşehir Ahi Evran University
EFFECT OF MYCORRHIZA INOCULATION ON DIFFERENT SUBSTRATES ON CUCUMBER (CUCUMIS SATIVUS L.) PLANT DEVELOPMENT, YIELD AND FRUIT QUALITY	Ayşe Nur ÇETİN	Kırşehir Ahi Evran University
	Hakan BAŞAK	Kırşehir Ahi Evran University
	Alim AYDIN	Kırşehir Ahi Evran University
	Ayşe BAŞPINAR	Kırşehir Ahi Evran University
DETERMINATION OF THE EFFICACY OF TAGETES PATULA L. (ASTERALES: ASTERACEAE) SILVER AND GOLD NANOPARTICLES WATER EXTRACT AGAINST SITOPHILUS GRANARIUS (L.) (COLEOPTERA: CURCULIONIDAE) IN LABORATORY CONDITIONS.	Hayriye Didem SAĞLAM ALTINKÖY	Kırşehir Ahi Evran University

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**Session 1 / Hall-5**

**02.12.2021**

**Health/ Moderator: Assist. Prof. Dr. Nivine H. Abbas & Yetti Hernaningsih**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
UPPER AND LOWER BRANCHES OF CENTRAL RETINAL ARTERY	Tetiana Orlova	Kharkiv National Medical University, Kharkiv, Ukraine
METABOLIC SYNDROME IN PREGNANT WOMEN: THE ROLE OF BODY COMPOSITION	Alexander Plakida	Odessa National Medical University, Odessa, Ukraine
THE STATE OF UKRAINE'S READINESS FOR ESTABLISHMENT OBSERVATORIES FOR SUSTAINABLE DEVELOPMENT OF RESORT DESTINATIONS	Tatiana Bezverkhiuk	State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine", Odesa, Ukraine
	Khrystyna Koieva	State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine", Odesa, Ukraine
	Alexander Plakida	State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine", Odesa, Ukraine
ISOLATION OF MESENCHYMAL STEM CELLS FROM HUMAN TESTICULAR TISSUE	Maryam Hassan Nasab	Islamic Azad University, Ashkezar, Yazd, Iran
	Rahim Ahmadi	Avicenna International College, Budapest, Hungary
AN UPDATE OF THE POSSIBLE APPLICATIONS OF MAGNETIC RESONANCE IMAGING (MRI) IN DENTISTRY: A LITERATURE REVIEW	Rodolfo Reda	Sapienza University of Rome, 00161 Rome, Italy
	Alessio Zanza	Sapienza University of Rome, 00161 Rome, Italy
	Alessandro Mazzoni	Sapienza University of Rome, 00161 Rome, Italy
	Andrea Cicconetti	Sapienza University of Rome, 00161 Rome, Italy
	Luca Testarelli	Sapienza University of Rome, 00161 Rome, Italy
	Dario Di Nardo	Sapienza University of Rome, 00161 Rome, Italy
KOI HERPESVIRUS AND PROBIOTICS APPLIED IN AQUACULTURE TO DECREASE DAMAGES CAUSED BY THE DISEASE	Kapka Mancheva	Bulgarian Academy of Sciences; Bulgaria
	Svetla Danova	Bulgarian Academy of Sciences; Bulgaria
	Neli Vilhelmova-Ilieva	Bulgarian Academy of Sciences; Bulgaria
	Lora Simeonova	Bulgarian Academy of Sciences; Bulgaria
	Lili Dobreva	Bulgarian Academy of Sciences; Bulgaria
	Georgi Atanasov	Bulgarian Academy of Sciences; Bulgaria





THE PROFILE OF CD4+, CD8+, AND CD4+/CD8+ T CELLS RATIO IN ADULT ACUTE LEUKEMIA	Yetti Hernaningsih	Universitas Airlangga, Indonesia
	Yulia Nadar Indrasari	Universitas Airlangga, Indonesia
	Ami Ashariati	Universitas Airlangga, Indonesia

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**Session 1 / Hall-6**

**02.12.2021**

**Moderator: Assoc. Prof. Dr. Shikha Saxena & Assoc. Prof. Dr. Priyanka Singh**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 10:00 – 12:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
KNOWLEDGE, FEAR, AND PREVENTIVE COVID-19 BEHAVIOR IN PREGNANT WOMEN IN INDONESIA	INKE MALAHAYATI	Medan Health Polytechnic of Ministry of Health, Department of Midwifery, Medan, Indonesia
	ZURAIDAH	Medan Health Polytechnic of Ministry of Health, Department of Midwifery, Medan, Indonesia
MORPHOGENESIS OF THE LYMPHOID TISSUE OF THE THYROID GLAND AT AN EARLY AGE UNDER CONDITIONS OF EXPERIMENTAL PRENATAL ANTIGENIC LOAD	Olha Fedosieieva	Zaporizhzhia State Medical University, Ukraine
«MORPHOFUNCTIONAL FEATURES OF OLFACTOR EPITHELIUM IN COVID-19 INFECTION»	Hanna Sakal	Kharkiv National Medical University
	Oleksandr Stepanenko	Kharkiv National Medical University
	Nataliia Maryenko	Kharkiv National Medical University
	Nadiia Nikandrova	Kharkiv National Medical University
IMPROVING THE DIGITAL LESSON IN MEDICAL SCHOOL	Kyuchukova Silviya	Trakia University, Bulgaria
INFLUENCE OF SOME MINERAL NATURAL WATERS OF THE BLACK SEA REGION OF UKRAINE ON THE EXPERIMENTAL GASTRIT	Sergey Gushcha	State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine", Odesa, Ukraine
	Boris Nasibullin	State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine", Odesa, Ukraine
	Michael Arabaji	State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine", Odesa, Ukraine
	Alexander Plakida	State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine", Odesa, Ukraine
RECENT DIAGNOSTIC AIDS IN ORAL CANCER DETECTION	Dr. Shikha Saxena	RUHS College of Dental Sciences, Jaipur, Rajasthan, India
	Dr. Priyanka Singh	King George's Medical University, Lucknow (UP), India
CLIMATIC FACTORS AND HOME ENVIRONMENT WITH DENGUE CASES IN THE SEASON ZONE IN FIVE CITIES/DISTRICTS IN EAST JAVA	Ririh Yudhastuti	Environmental Health Department, Faculty of Public Health, Universitas Airlangga, Surabaya, Indonesia
	Aldio Yudhatrisandy	Master Student of Environmental Health Department, Faculty of Public Health, Universitas Airlangga Surabaya Indonesia
	M.Azmi Maruf	Master Student of Environmental Health Department, Faculty of Public Health, Universitas Airlangga Surabaya Indonesia



	Hari Basuki N	Biostatistics and Demography Department, Faculty of Public Health, Universitas Airlangga, Surabaya, Indonesia
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**Session 2 / Hall-1**

**02.12.2021**

**Moderator: Hafize Nagehan Köysüren**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
STUDY OF PHOTOCATALYTIC ACTIVITIES OF BORON DOPED SIC	Hafize Nagehan Köysüren	Kırşehir Ahi Evran University
ANTIDEPRESSANT DRUG FLUOXETINE-SELECTIVE POTENTIOMETRIC MICROSENSOR	Murat YOLCU	Giresun University
	Duygu OK	Giresun University
INVESTIGATIONS OF PHYSICAL PROPERTIES OF BINCA3 ANTIPEROVSKITE COMPOUND: FIRST PRINCIPLES METHOD	Ahmet İYİĞÖR	Kırşehir Ahi Evran University
	Nihat ARIKAN	Osmaniye Korkut Ata University
	Osman ÖRNEK	Kırşehir Ahi Evran University
	Mustafa ÖZDURAN	Kırşehir Ahi Evran University
INVESTIGATIONS OF PHYSICAL PROPERTIES OF BiNca3 ANTIPEROVSKITE COMPOUND: FIRST PRINCIPLES METHOD	Ahmet İYİĞÖR	Kırşehir Ahi Evran University
	Nihat ARIKAN	Osmaniye Korkut Ata University
	Osman ÖRNEK	Kırşehir Ahi Evran University
	Mustafa ÖZDURAN	Kırşehir Ahi Evran University
INSIGHT INTO STRUCTURAL, ELECTRONIC, THERMODYNAMIC, AND MECHANICAL PROPERTIES OF LI2MGBI HEUSLER ALLOYS	Osman ÖRNEK	Kırşehir Ahi Evran University
	Mustafa ÖZDURAN	Kırşehir Ahi Evran University
	Nihat ARIKAN	Osmaniye Korkut Ata University
	Ahmet İYİĞÖR	Kırşehir Ahi Evran University
AB-INITIO INVESTIGATION OF STRUCTURAL, MECHANICAL, ELECTRONIC, AND THERMODYNAMIC PROPERTIES OF HALF-HEUSLER ALLOY MgLiBi	Osman ÖRNEK	Kırşehir Ahi Evran University
	Mustafa ÖZDURAN	Kırşehir Ahi Evran University
	Nihat ARIKAN	Osmaniye Korkut Ata University
	Ahmet İYİĞÖR	Kırşehir Ahi Evran University
CRYSTAL STRUCTURE, MECHANICAL AND THERMODYNAMICALLY PROPERTIES OF Os2CuAl COMPOUND: A FIRST-PRINCIPLES INVESTIGATION	Mustafa ÖZDURAN	Kırşehir Ahi Evran University
	Osman ÖRNEK	Kırşehir Ahi Evran University
	Ahmet İYİĞÖR	Kırşehir Ahi Evran University
	Nihat ARIKAN	Osmaniye Korkut Ata University
AB-INITIO CALCULATIONS OF ELASTIC CONSTANTS, ELECTRONIC, VIBRATIONAL, AND THERMODYNAMIC PROPERTIES OF VO <sub>2</sub> Ga HEUSLER COMPOUND	Mustafa ÖZDURAN	Kırşehir Ahi Evran University
	Osman ÖRNEK	Kırşehir Ahi Evran University
	Ahmet İYİĞÖR	Kırşehir Ahi Evran University
	Nihat ARIKAN	Osmaniye Korkut Ata University
PREPARATION AND CHARACTERIZATION GOLD-MAGNETIC NANOCOMPOSITE BY USAGE GREEN CHEMISTRY	Yeliz Akpınar	Kırşehir Ahi Evran University
	Eda Akın	Middle East Technical University

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**Session 2 / Hall-2**

**02.12.2021**

**Art & Handcraft/ Moderator: Assist. Prof. Dr. Derya KONUK**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
CORAL UNIFESP: THE SCENIC CHOIR AS A FIELD FOR MUSIC-PEDAGOGICAL EXPERIENCES	Marcello Teles Vania Malagutti	Universidade Estadual de Maringá, Maringá, Paraná, Brasil
INVESTIGATION OF THE USE OF OLIGOCLEASE INSTEAD OF ALBITE IN WALL TILE ENGOBE FRITS	Müge TARHAN	Uşak University, Uşak, Türkiye
	Baran TARHAN	Uşak University, Uşak, Türkiye
THE EFFECT OF ALKALINE/EARTH-ALKALINE RATIO ON THE TECHNICAL PROPERTIES OF CERAMIC WALL TILE ENGOBES	Baran TARHAN	Uşak University, Uşak, Türkiye
	Müge TARHAN	Uşak University, Uşak, Türkiye
ACCESSORIES MADE OF KIRKITLI WEAVING IN MUT REGION	Derya KONUK	Karamanoğlu Mehmetbey University
AN EXAMPLE OF CARPET WEAVING CAMPUS LIVING ON THE SKIRT OF AKSARAY HASANDAĞI "AKÇAKENT TOWN"	Semra KILIÇ KARATAY	Aksaray University
TEXTURE TRANSFER OF FIBER, YARN AND FABRIC EFFECTS IN PAINTING	Lect. Dr. Gülşen Şefika BERBER	Manisa Celal Bayar Üniversitesi, Salihli Meslek Yüksekokulu
FORMATION OF SENIOR STUDENTS' VITAL SKILLS IN CREATIVE ORGANIZATION OF INTEGRATION OF FINE ARTS INTO MUSIC	Ayshah RASULOVA	Ganja State University, Ganja/Azerbaijan
LOOKING AT THE FILM OF THE SYNECDOCHE NEW YORK FROM JEAN BAUDRILLARD'S PERSPECTIVE OF SIMULATION	Gönül Cengiz	Gaziantep University

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**Session 2 / Hall-3**

**02.12.2021**

**Moderator: Dr. Müjdat Öztürk**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
INVESTIGATION OF THE RELATIONSHIP BETWEEN L-TYPE AND N-TYPE SCHMIDT HAMMER HARDNESS VALUES OF ROCKS AND THE EFFECT OF SCHMIDT HAMMER TYPE ON THE PREDICTION OF UNIAXIAL COMPRESSIVE STRENGTH	Deniz AKBAY	Çanakkale Onsekiz Mart University, Çanakkale, Türkiye
	Gökhan EKİNCİOĞLU	Ahi Evran University, Kırşehir, Türkiye
TELEWORK'S POTENTIAL TO REDUCE ANKARA TRAFFIC LOAD	Tolga HORUZ	Gazi University, Turkey
	Ali İbrahim ATILGAN	Gazi University, Turkey
THE EFFECT OF THE HEIGHT SETTING OF THE CUTTING TOOL ON CUTTING FORCES IN TURNING OPERATIONS	Yunus KAYIR	Gazi University, Turkey
	Ercan DEMİRER	Gazi University, Turkey.
DIRECT USE OF DC ENERGY PRODUCED BY PHOTOVOLTAIC MODULE IN INDOOR LIGHTING AND ECONOMIC ANALYSIS OF THE SYSTEM	Müjdat Öztürk	Ahi Evran University, Kırşehir, Turkey
	Ramazan Kayabaşı	Kayseri University, Kayseri, Turkey
ESTIMATION OF ROOFTOP SOLAR ENERGY POTENTIAL WITH IMAGE SEGMENTATION USING SATELLITE IMAGES	L. Enes GÖĞSEN	Düzce University, Düzce, Türkiye
	Prof. Dr. Ali ÖZTURK	Düzce University, Düzce, Türkiye

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**Session 2 / Hall-4**

**02.12.2021**

**Agriculture/ Moderator: Assoc. Prof. Dr. A.U.ARUN & Assist. Prof. D. Gayathri**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
A PRELIMINARY TOXICITY STUDY ON THE LARVICIDAL POTENTIAL OF SPECIFIC SHAMPOOS	Reemy Sara Mathai	Mar Thoma college for Women, Perumbavoor, Kerala, India
	Dr. A. U. Arun	St. Peter's Collge, Kolenchery, Kerala, India
RESPIRATORY STRESS OF UJALA DETERGENT ON OREOCHROMIS NILOTICUS	Mrs.SHALU SOMAN	Nirmala College, Muvattupuzha, Kerala, India.
	Dr.A.U.ARUN	St.Peter's College, Kolenchery, Kerala, India.
LARVICIDAL ACTIVITY OF CERTAIN HERBAL MOSQUITOREPELLENTS: AN APPRAISAL	Revathy R	Nirmala College, Kerala, India
	A. U. Arun	St. Peters College, Kolenchery, Kerala, India
SOIL-INHABITING INSECTS AND PRODUCTIVITY IN ALFALFA-COCKSFOOT MIXED CROPPING SYSTEMS	Ivelina Nikolova	Institute of Forage Crops – Pleven, Bulgaria
	Viliana Vasileva	Institute of Forage Crops – Pleven, Bulgaria
THE MOST COMMON DISEASES OF HONEYBEES IN THE BELGRADE AREA	Ivan Pavlovic	Scientific Veterinary Institute of Serbia
	Milan Stevanovic	Academy of Beekeeping and Apitherapy of Serbia
	Oliver Radanovic	Scientific Veterinary Institute of Serbia
NUTRITIVE VALUE OF TRASH FISHES OF ASHTAMUDI LAKE OVER DELICACIES	Assistant Professor Mrs. BLESSY V RAJAN	St Xavier's College, Vaikom, Kerala, India
	Associate Professor Dr. A.U.ARUN	St Xavier's College, Vaikom, Kerala, India
AN INSIGHT INTO EVOLUTION OF AUTISM SPECTRUM DISORDER ON A WORLD WIDE SCENARIO	D. Gayathri	National College, Trichy -01
GROWTH REGULATORY AND FITNESS COST STUDIES IN AEDES AEGYPTI ON EXPOSURE TO DIFLUBENZURON, AN INSECT GROWTH REGULATOR	Manu Sankar	Acharya Narendra Dev College, Department Of Zoology, University Of Delhi, New Delhi, India
	Sarita Kumar	Acharya Narendra Dev College, Department Of Zoology, University Of Delhi, New Delhi, India
ABOVEGROUND AND ROOT BIOMASS PARAMETERS AND RATIOS IN ALFALFA SOWN UNDER COVER OF SORGHUM SSP	Viliana Vasileva	Institute of Forage Crops – Pleven, Bulgaria
	Plamen Marinov-Serafimov	Institute of Forage Crops – Pleven, Bulgaria
	Irena Golubinova	Institute of Forage Crops – Pleven, Bulgaria
IMPLEMENTATION OF THE CONCEPT OF COGNITIVE APPRENTICESHIP TO THE POLICE TRAINING	Ruslan Valieiev	Dnipropetrovsk State University of Internal Affairs, Ukraine

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**Session 2 / Hall-5**

**02.12.2021**

**Chemistry/ Moderator: Assist. Prof. Dr. E. Vildan BURGAZ**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
INVESTIGATION OF MICROSTRUCTURE AND BIODEGRADABLE PROPERTIES OF ZN-MG EUTECTIC ALLOY SOLIDIFIED UNDER STATIC ELECTRIC FIELDS APPLIED WITH DIFFERENT MAGNITUDES AND DIRECTIONS	Çiğdem Ece CAN	Yıldız Technical University, Istanbul, Turkey
	Salim Oğuz AKBULUT	Yıldız Technical University, Istanbul, Turkey
	Hüseyin Ozan YAVUZ	Yıldız Technical University, Istanbul, Turkey
	Assist. Prof. Sercan BASİT	Kırşehir Ahi Evran University, Kırşehir, Turkey
	Prof. Dr. Necmettin MARAŞLI	İstanbul Aydın University, İstanbul, Turkey
SYNTHESIS AND CHARACTERIZATION OF NOVEL 1,5-BIS(4-FLUOROPHENYL)PENTA-1,4-DIEN-3-ONE O-BENZOYL OXIME	Assist. Prof. Dr. E. Vildan BURGAZ	Eastern Mediterranean University, Famagusta, North Cyprus
	Seyed Armin Houshmand Kia	Eastern Mediterranean University, Famagusta, North Cyprus
	Mahya Tanha	Eastern Mediterranean University, Famagusta, North Cyprus
COMPARISON OF MICROWAVE ASSISTED AND CHEMICAL PRE-TREATMENTS AND ENZYMATIC HYDROLYSIS OF THREE AGRICULTURAL WASTES FOR BIOETHANOL PRODUCTION	Ahmed Salisu	Umaru Musa Yar'adua University Katsina, PMB 2218, Nigeria
	Aisha Mannir Rawayau	Umaru Musa Yar'adua University Katsina, PMB 2218, Nigeria
	Aminu Musa	Umaru Musa Yar'adua University Katsina, PMB 2218, Nigeria
	Abubakar Siddiq Salihu	Umaru Musa Yar'adua University Katsina, PMB 2218, Nigeria
EVALUATION OF LARVICIDAL AND CYTOTOXIC ACTIVITY OF EUPORBIA POISSONII EXTRACTS	Abubakar Siddiq Salihu	Umaru Musa Yar'adua University, Nigeria
	Omar Al-moubarak Adoum	Bayero University, Nigeria
THERMODYNAMIC MODEL FOR THE DETERMINATION OF THE AREAS OF PHASE STABILITY IN MIXTURES OF ANIONIC AND CATIONIC SURFACTANTS	Igor Povar	Institute of Chemistry
	Oxana Spinu	Institute of Chemistry
	Petru Spataru	Institute of Chemistry
	Diana Shepel	Institute of Chemistry
	Boris Pintilie	Institute of Chemistry
	Alexandru Visnevschi	Institute of Chemistry
LEACHING OF MUNICIPAL SOLID WASTE FROM THE MOSTAGANEM DISTRICT IN ALGERIA (poster)	Bourechch Zohra	University of Mostaganem. 27000 Mostaganem, Algeria
PRELIMINARY PHYTOCHEMICAL STUDY OF HELIOPSIS HELIANTHOIDES (L.) SWEET., CELOSIA PLUMOSA (VOSS) BURV. AND CELOSIA CRISTATA L.	Viktoriia Protska	National University of Pharmacy, Kharkiv, Ukraine
	Iryna Zhuravel	National University of Pharmacy, Kharkiv, Ukraine
1,2-BENZOTHAZINE DERIVATIVES: SYNTHESIS, MOLECULAR DOCKING AND $\alpha$ -GLUCOSIDASE INHIBITIONS	Furqan Ahmad Saddique	Government College University, Faisalabad, Pakistan.
	Sana Aslam	Government College Women University, Faisalabad, Pakistan.
	Matloob Ahmad	





		Government College University, Faisalabad, Pakistan.
	Usman Ali Ashfaq	Government College University, Faisalabad, Pakistan
ELECTRONIC, ELASTIC, THERMODYNAMIC PROPERTIES OF MG3ZN COMPOUND: INSIGHTS FROM DFT-BASED COMPUTER SIMULATION	Nihat ARIKAN	Osmaniye Korkut Ata University
	Ahmet İYİĞÖR	Kırşehir Ahi Evran University
	Mustafa ÖZDURAN	Kırşehir Ahi Evran University
	Osman ÖRNEK	Kırşehir Ahi Evran University
AB INITIO CALCULATION OF MECHANICAL AND THERMODYNAMIC PROPERTIES OF NbOsSi COMPOUND IN C1b PHASE	Nihat ARIKAN	Osmaniye Korkut Ata University
	Ahmet İYİĞÖR	Kırşehir Ahi Evran University
	Mustafa ÖZDURAN	Kırşehir Ahi Evran University
	Osman ÖRNEK	Kırşehir Ahi Evran University

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**Session 2 / Hall-6**

**02.12.2021**

**Law/ Moderator: Ph.D. Maja Vizjak**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 13:00 – 15:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
LEGAL AND ECOLOGICAL SYSTEM OF THE REPUBLIC OF CROATIA	Ph.D. Maja Vizjak, M.Sc. Art	Faculty of Economics and Tourism Dr. Mijo Mirković
PROSTITUTION HANDLING STRATEGIES IN HIV/AIDS PREVENTION BASED ON LOCAL WISDOM: BANYUWANGI REGENT REGULATION NO. 45 YEAR 2015	Dr. (Chand). Hary Priyanto, S.T, M.Si Dr. Nana Noviana, S.ST, M.Kes	17 August 1945 University, Banyuwangi, East Java. Indonesia ID Scopus: 57220027441 Researcher at Regional Research and Development Agency, South Kalimantan Province, Indonesia
CLAIMING HISTORY: WOMEN'S MEMOIRS OF STRUGGLES AGAINST MARCOS MARTIAL LAW	Dirb Boy O. Sebrero	University of the Philippines Cebu
WOMEN'S ENTREPRENEURSHIP AND THE SOCIO-ECONOMIC DEVELOPMENT	Gordana Gasmi Mina Zirojevic	Institute od Comparative Law
PAKISTAN'S JUDICIAL INDEPENDENCE ORIGIN AND INVOLVEMENT IN NATION-BUILDING: A HISTORICAL PERSPECTIVE DETAILING JUDICIAL DILEMMAS	Rida Zulfiqar Dr. Attila Badó Antal Tamás Róbert	University of Szeged, Szeged, Hungary
EARTHQUAKES ECONOMIC COSTS THROUGH RANK-SIZE LAWS	Valerio Ficcadenti	London South Bank University, Business School, London, United Kingdom
	Roy Cerqueti	Sapienza University of Rome, Department of Social and Economic Sciences, Rome, Italy

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**Session 3 / Hall-1**

**02.12.2021**

**Moderator: Evrim Ersin Kangal & Dr. Olubunmi T. OLORUNPOMI**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
FACE RECOGNITION BASED POLLING SYSTEM	Günay TEMÜR	Düzce University
	Nurgül KURT	Düzce University
COMPARISON OF BINARY LOGISTICS REGRESSION, KNN, CART AND NAIVE BAYES METHODS OF CLASSIFICATION METHODS	Bayram YAPICI	Gazi University, Ankara, TÜRKİYE
	Hülya OLMUŞ	Gazi University, Ankara, TÜRKİYE
EVALUATING THE RECENT COSMOLOGICAL DATA VIA DEEP LEARNING ANALYSIS	Evrin Ersin Kangal	Mersin University, Mersin, Turkey
DISEASE OUTBREAK PREDICTION: DATA SOURCES AND TECHNIQUES	Avneet Singh Gautam	Jawaharlal Nehru University, Delhi, India.
	Dr. Zahid Raza	Jawaharlal Nehru University, Delhi, India.
PREDICTION OF THE SIMPLE COMPRESSIVE STRENGTH OF LIME STABILIZED CLAYEY SOILS USING ARTIFICIAL NEURAL NETWORKS	KELLOUCHE Yasmina	Department of Earth Science and Univers, University Djilali Bounaama, 44225 Khemis-Miliana, Algeria
	Kanté Seydou	Department of Earth Science and Univers, University Djilali Bounaama, 44225 Khemis-Miliana, Algeria
	Vumi Quilulo Nunes Alvaro	Department of Earth Science and Univers, University Djilali Bounaama, 44225 Khemis-Miliana, Algeria
	Ahmed Bilal Sari	Geomaterials Laboratory, University Hassiba Benbouali, 02000 Chlef, Algeria
CYBER FORENSICS: RELEVANCE OF DIGITAL EVIDENCE IN INDIA	Sneha Dhillon	Asian Law College, Noida (Delhi NCR) India
THE OPTIMIZED ARTIFICIAL NEURAL NETWORK MODEL WITH LEVENBERG-MARQUARDT ALGORITHM FOR GLOBAL SOLAR RADIATION ESTIMATION IN OUARGLA CITY OF ALGERAI	Dahmani Abdennasser	University of Médéa, 26000, Algeria
	Ammi Yamina	University of Médéa, 26000, Algeria
	Hanini Salah	University of Médéa, 26000, Algeria
PREDICTION HOURLY SOLAR RADIATION USING ARTIFICIAL NEURAL NETWORK TECHNIQUE OF BENI SLIMANE, ALGERIA (poster)	Dahmani Abdennasser	University of Médéa, 26000, Algeria
	Ammi Yamina	University of Médéa, 26000, Algeria
	Hanini Salah	University of Médéa, 26000, Algeria

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**Session 3 / Hall-2**

**02.12.2021**

**International Realtions / Moderator: Assist. Prof. Dr. A.Kutalmış YALÇIN**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
YUNUS EMRE INSTITUTE AS A CULTURAL DIPLOMACY INSTITUTION: ITS STRUCTURE, FUNCTIONING AND HISTORY	Assist. Prof. Dr. A.Kutalmış YALÇIN	Düzce University
ANALYSIS THE PROXY WAR OF THE COLD WAR IN THE MIDDLE EAST OF THE ISLAMIC REPUBLIC OF IRAN AGAINST THE UNITED STATES (A CASE STUDY OF THE AFGHANISTAN CRISIS)	Vorya Shabrandi	Guilan of University, Rasht, Iran
INTERNAL FUNDAMENTAL FACTORS LIMITING THE RISE OF IRANIN INTERNATIONAL POLITICAL ECONOMY	Vorya Shabrandi	Guilan of University, Rasht, Iran
LOOK AT THE FLOW OF SOCIAL AND ECONOMIC REFORMS IN CONTEMPORARY IRANIAN HISTORY	Vorya Shabrandi	Guilan of University, Rasht, Iran
AUTHORITY: A CONCEPT BETWEEN THE GUARANTEE OF ORDER AND STABILITY, AND THE ENMITY OF FREEDOM AND DEMOCRACY	Fatma ODABAŞI	Marmara University
TRUST AND ARMED CONFLICT IN SOLID WASTE MANAGEMENT: A CASE STUDY OF THE AL-FAYHAA UNION, LEBANON	Nivine H. Abbas	University of Balamand, Lebanon
	Manale N. Abou Dagher	American University of Beirut, Lebanon
	Manal R. Nader	University of Balamand, Lebanon.
	Jon C. Lovett	School of Geography, University of Leeds, UK
A. CHALMERS' INTERPRETATION OF RADICAL INSTRUMENTALISM OR PLURALISTIC REALISM FOR INTERNATIONAL RELATIONS	Fatma AKKAN GÜNGÖR	KTÜ-İİBF-Uluslararası İlişkiler-Trabzon, Türkiye

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**Session 3 / Hall-3**

**02.12.2021**

**Engineering/ Moderator: Assoc. Prof. Dr. Çiğdem Belgin DİKMEN**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
INVESTIGATION OF MICROSTRUCTURAL AND MECHANICAL PROPERTIES FOR WELDED JOINTS OF PROTAC-500, PROTAC-600 AND MARS-300 ARMOR STEELS	Ali Batuhan VURAL	Gazi University, Faculty of Technology, Department of Manufacturing Engineering, Ankara, Turkey
	Prof.Dr.Mahmut İZCİLER	Gazi University, Faculty of Technology, Department of Manufacturing Engineering, Ankara, Turkey
THE EFFECT OF NATURAL STONE FROM TRADITIONAL BUILDING MATERIALS IN KAYSERİ TALAS ON HOUSING ARCHITECTURE IN TIME	Güler Çimen	Ahi Evran Üniversitesi
	Assist. Prof. Dr. Arzu Çağlar	Ahi Evran Üniversitesi
	Assist. Prof. Dr. Hakan Çağlar	Ahi Evran Üniversitesi
STRATEGIES FOR USE OF WOOD FROM TRADITIONAL BUILDING MATERIALS IN EXTERIOR (KAYSERİ / TALAS / TABLAKAYA, KICIKOY NEIGHBORHOODS SAMPLE)	Güler Çimen	Ahi Evran Üniversitesi
	Assist. Prof. Dr. Arzu Çağlar	Ahi Evran Üniversitesi
	Assist. Prof. Dr. Hakan Çağlar	Ahi Evran Üniversitesi
THE EVALUATION OF URBAN FITTING ELEMENTS WITHIN THE SCOPE OF USAGE: THE CASE OF KIRŞEHİR GÜZLER PARK	Assist. Prof. Dr. Olcay Türkan YURDUGÜZEL	Yozgat Bozok University
EVALUATION OF THE DESIGN OF URBAN FURNITURE USED IN URBAN OPEN AREAS: THE CASE OF KIRŞEHİR KENT PARK	Assoc. Prof. Dr. Çiğdem Belgin DİKMEN	Yozgat Bozok University
CONTACT PROBLEM OF A RIGID CYLINDRICAL INDENTER ON FUNCTIONALLY GRADED ISOTROPIC LAYER AND HOMOGENEOUS ORTHOTROPIC LAYER	Erdal ÖNER	Bayburt University

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**Session 3 / Hall-4**

**02.12.2021**

**Material Engineering/ Moderator: Mohd Khairul Idlan Muhammad**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
CONSTRUCTION DELAY IMPACT ANALYSIS & DIGITALIZED PROJECT MONITORING	Rehan Khan	University of Mumbai, India
	Fauwaz Parkar	University of Mumbai, India
	Rajendra Magar	University of Mumbai, India
SUSTAINABLE SOIL STABILIZATION USING ECO-FRIENDLY BY-PRODUCTS: A STUDY FOR UTILIZATION OF WASTE MATERIALS	Esha Rehman	Pakistan Institute of Engineering & Technology, Pakistan
	Syyed Adnan Raheel Shah	Pakistan Institute of Engineering & Technology, Pakistan
	Muneeb Hassan	Pakistan Institute of Engineering & Technology, Pakistan
	Gulab Ali	Pakistan Institute of Engineering & Technology, Pakistan
	Ahsan Rehman Khan	Ghent University, Department of Civil Engineering, Belgium
A REVIEW OF NON-DESTRUCTIVE TESTING METHODS ON CONCRETE STRUCTURES	Macy Spears	Georgia Southern University, United States
	Dr. Saman Hedjazi	Georgia Southern University, United States
CHANGE IN SPATIAL EXTENTS OF HEATWAVES OVER TIME IN PENINSULAR MALAYSIA	Mohd Khairul Idlan Muhammad	Universiti Teknologi Malaysia (UTM)
	Sobri Harun	Universiti Teknologi Malaysia (UTM)
	Shamsuddin Shahid	Universiti Teknologi Malaysia (UTM)
	Tarmizi Ismail	Universiti Teknologi Malaysia (UTM)
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	Rahmouni Zine-El-Abidine	M'sila University, M'sila, Algeria
	tebbal nadia	M'sila University, M'sila (28000), Algeria
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	Dr. Saman Hedjazi	Georgia Southern University, Statesboro, GA, United States
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	ZAATAR NASSIMA	University Mostefa Ben Boulaid, Batna, Algeria
	OUNIS ABDELHAFID	University Mohamed Khider, Biskra, Algeria
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	Anna Godymchuk	Tomsk Polytechnic University
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**Session 3 / Hall-5**

**02.12.2021**

**Environment/ Moderator: Vithal H. Jadhav & Olga Derendyaeva**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
UN INTERNATIONAL POLICY ON SUSTAINABLE DEVELOPMENT IN THE CONTEXT OF CLIMATE CHANGE	Olga Derendyaeva	All-Russian Research Institute for Civil Defense and Emergencies EMERCOM of Russia
THE NAME OF AN ANCIENT FORTRESS IN THE FOLK PERCEPTION. ENISALA OR HERACLEA?	Associate Prof. Maria Butucea	Technical University of Civil Engineering, Romania
	Vasile Moise	Vice-President, Cultural Association INISLA, Romania
LOCAL PERCEPTION OF CLIMATE CHANGE INDICATORS IN KURFI LOCAL GOVERNMENT AREA, KATSINA STATE, NIGERIA	Rufai Abdulmajid	Isa Kaita College of Education, Dutsin-Ma, Katsina State, Nigeria
MICRO LEVEL FLOOD CONTROL TECHNIQUES: A CASE STUDY ON BENNI HALLA (STREAM) IN NORTH KARNATAKA OF INDIA	Vithal H. Jadhav	Research Scholar, V.T.U. Belagavi, Karnatak State, India and Prof. School of Civil Engineering K.L.E. Technological University Hubballi India
EVALUATION OF ENVIRONMENTAL IMPACT ON THE CITY PROSPERITY INDEX – CASE STUDY IN DANANG CITY - VIETNAM	Tran Thi An	Thu Dau Mot University, Vietnam
	Truong Van Canh	The University of Danang, Vietnam
	Le Ngoc Hanh	The University of Danang, Vietnam
ROLE OF INDIAN JUDICIARY IN MITIGATION OF CLIMATE CHANGE: AN IDEALISTIC APPROACH	A. U. Arun	Cochin University of Science and Technology, INDIA
	Usha K.	Cochin University of Science and Technology, INDIA
	Aneesh V. Pillai	Cochin University of Science and Technology, INDIA
TOURISM IN INDIAN CONTEXT	C.S.N.PRANAVI	ISTS Women's Engineering College, Andhra Pradesh, INDIA
EVALUATION OF INPUT EFFICIENCY FOR FISHING VESSEL IN COASTAL AREAS OF VIETNAM	Nguyen Trong Luong	Nha Trang University – Vietnam
	Dang Hoang Xuan Huy	Nha Trang University – Vietnam

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**Session 3 / Hall-6**

**02.12.2021**

**Moderator: Fadime Eroglu**

**Biology/ Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
INVESTIGATION OF THE EFFECTS OF COLD STRESS AND OBESITY ON ANGIOGENIC FACTORS IN RATS	Muhittin YÜREKLİ	İnönü University
	Meral DAĞ	İnönü University
	Filiz ÇOBAN	İnönü University
EFFECT OF HEAVY METALS ON PIGMENT PRODUCTION and ANTIOXIDANT SYSTEM in PSEUDOMONAS AERUGINOSA	Muhittin YÜREKLİ	İnönü University
	Duygu GÜÇLÜ	İnönü University
THE EFFECTS OF HERBAL ESSENTIAL OILS ON BLASTOCYSTOSIS	Fadime Eroglu	Aksaray University
CORRELATION OF NUTRIENT ELEMENTS WITH THE ANTIBACTERIAL ACTIVITY OF BLACK CABBAGE	Muazzez Gürkan Eser	Tekirdağ Namık Kemal University
	Sevinç Adiloğlu	Tekirdağ Namık Kemal University
MOLECULAR DETECTION OF PLASMID-MEDIATED QUINOLONE RESISTANCE GENES IN CLINICAL ESCHERICHIA COLI ISOLATES	Ahmed Mohsin Saleh AL-AZZAWI	Ahi Evran University
	Fatma Filiz ARI	Ahi Evran University
	Elif SEVİM	Ahi Evran University
	Fikriye MİLLETLİ-SEZGİN	Amasya University
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	Assoc. Prof. Dr. Rövşen GULİYEV	Ardahan University
	Dr. Ömer SADAK	Ardahan University
	Dr. Yusuf ESEN	Ardahan University
COMPARATIVE STUDY OF OIL ADSORBENTS USING CORN CHAFF AND COCONUT FIBRE	M. Auta	Federal University of Technology Minna, Niger State, Nigeria
	K.S. Obayomi	College of Engineering, Landmark University Omu-Aran Kwara State, Nigeria
	A.A. Faruq	Federal University of Technology Minna, Niger State, Nigeria

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**Session 3 / Hall-7**

**02.12.2021**

**Moderator: German Martinez Prats & Maria Cruz Cuevas Alvarez**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
BARRERAS ARANCELARIAS Y BARRERAS NO ARENCELARIAS	Cristhell Guadalupe Tellaheche Gómez	Ujat, Dacea, Mèxico
	Dr. Miguel Àngel Vite Pèrez	Ujat, Dacea, Mèxico
	Dra. Fabiola de Jesùs Mapen Franco	Ujat, Dacea, Mèxico
HERRAMIENTAS ALTERNATIVAS PARA LA VALORACIÓN DE OPERACIONES ENTRE PARTES VINCULADAS	Ariel Arturo Arias Muñoz	Ujat, Dacea, Mèxico
	Jose María Nieto Contreras	Ujat, Dacea, Mèxico
	Atilano del Jesus Guerra Lizcano	Ujat, Dacea, Mèxico
E-COMMERCE EN MÉXICO, ANÁLISIS ACTUAL DESDE LA PERSPECTIVA DEL CONSUMIDOR	Rommel Shazam Alfaro Mantilla	Ujat, Dacea, Mèxico
	Dra. Aransazú Ávalos Díaz	Ujat, Dacea, Mèxico
	Dr. Germán Martínez Prats	Ujat, Dacea, Mèxico
LA AUDITORIA ADMINISTRATIVA, COMO HERRAMIENTA DE CONTROL INTERNO	Erika Marín Sánchez	Ujat, Dacea, Mèxico
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	Carlos Mauricio Tosca Vidal	Ujat, Dacea, Mèxico
IMPACTO DEL COVID-19 AL COMERCIO EN MÉXICO	Edith Lorena Magaña Pérez	Ujat, Dacea, Mèxico
	Francisca Silva Hernandez	Ujat, Dacea, Mèxico
	Dr. Germán Martínez Prats	Ujat, Dacea, Mèxico
EL CONTROL INTERNO EN LA EFICIENCIA DEL PERSONAL DE UNA EMPRESA	Daniela Valencia Acosta	Ujat, Dacea, Mèxico
	Aída Beatriz Armenta Ramirez	Ujat, Dacea, Mèxico
	José Félix García Rodríguez	Ujat, Dacea, Mèxico

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**Session 3 / Hall-8**

**02.12.2021**

**Moderator: Marcos Perez Mendoza & Francisca Silva Hernandez**

**Meeting ID: 884 8432 4978 / Passcode: 000777**

**Ankara Local Time: 16:00 – 18:30**

<b>Title</b>	<b>Author(s)</b>	<b>Affiliation</b>
TRATADOS INTERNACIONALES COMERCIALES DE MEXICO	Abenamar Jimenez Martinez	Ujat, Dacea, Mèxico
	Tomas francisco Morales Cardenas	Ujat, Dacea, Mèxico
	Candelaria Guzman Fernandez	Ujat, Dacea, Mèxico
BARRERAS NO ARANCELARIAS: LAS RESTRICCIONES AL TRATADO DE LIBRE COMERCIO	Lcp. Edrei Del Carmen Izquierdo Alejandro	Ujat, Dacea, Mèxico
	Dra. Candelaria Guzman Fernandez	Ujat, Dacea, Mèxico
	Dr. Germán Martínez Prats	Ujat, Dacea, Mèxico
EL ACCESO A LA INFORMACIÓN COMO UN DERECHO HUMANO	Elia Méndez Díaz	Ujat, Dacea, Mèxico
	Dr. Gregorio Romero Tequextle	Ujat, Dacea, Mèxico
	Dr. Jesús Antonio Piña Gutiérrez	Ujat, Dacea, Mèxico
EL DERECHO A LA VIVIENDA Y LA CARENCIA DE SERVICIOS BÁSICOS	Mtro. Saúl Horacio Rodríguez de la Cerda	Ujat, Dacea, Mèxico
	Dra. Eglá Cornelio Landero	Ujat, Dacea, Mèxico
	Dr. Armando Gutiérrez López	Ujat, Dacea, Mèxico
LA LENGUA COMO VEHÍCULO PARA UNA VIDA DIGNA	Mtra. Marilyn Sarai Avalos Huesca	Ujat, Dacea, Mèxico
	Dr. Alfredo Islas Colín	Ujat, Dacea, Mèxico
	Dr. Freddy Alberto Priego Álvarez	Ujat, Dacea, Mèxico
LA MEDIACIÓN EN LOS JUICIOS POR HERENCIA EN TABASCO	Mtra. Bertha Velázquez Jiménez	Ujat, Dacea, Mèxico
	Dra. Francisca Silva Hernández	Ujat, Dacea, Mèxico
	Dr. Jesús Antonio Piña Gutiérrez	Ujat, Dacea, Mèxico
NIÑOS MIGRANTES Y LAS GARANTÍAS MÍNIMAS DEL DERECHO AL DEBIDO PROCESO	Mtro. Oscar Eduardo Cornelio Landero	Ujat, Dacea, Mèxico
	Dra. Guadalupe Vautravers Tosca	Ujat, Dacea, Mèxico
	Dr. Jorge Luis Capdepoont Ballina	Ujat, Dacea, Mèxico

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## 7AHİLİK SİSTEMİNDE SORUMLULUK EĞİTİMİ UYGULAMALARININ DEĞERLENDİRİLMESİ

THE REVIEW OF THE APPLICATIONS OF RESPONSIBILITY EDUCATION IN AHİ-ORDER

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### ÖZET

Günümüzde yaşanan çok yönlü sorunların temel nedenlerinden birinin, bireylerdeki sorumluluk bilinç ve duyarlılığı konusunda yaşanan sorunlar olduğu söylenebilir. Zira bilim insanları, sorumluluğu bir “tohum sorun” alanı olarak niteleyip farklı sorunların ortaya çıkışını sorumlulukların bilinmesi, benimsenmesi ve yerine getirilmesi konularında yaşanan sorunlarla ilişkili olarak değerlendirmektedirler. Başka bir ifade ile bireylere sorumluluk bilinç ve duyarlılığının yeterli düzeyde kazandırılması, bireysel, sosyal, siyasal, ekonomik vb. sorunların henüz soruna dönüşmeden önüne geçilmiş olacağı düşünülmektedir. Buna göre sorumluluk bilinç, duyarlılık ve becerilerinin bireylere sağlıklı ve yeterli düzeyde kazandırılabilmenin önemli bir sorun alanı olarak kabul edilmesi gerektiği; bu kapsamda uygulanabilir sorumluluk eğitimi modeli oluşturmanın günümüzde öncelikli bir ihtiyaç alanı haline geldiği söylenebilir. Bu çerçevede iki temel farklı yaklaşım sergilenebilir. Birincisi, dünyada ve Türkiye’de sorumluluk eğitimi odaklı yeni uygulamalar incelenerek bir model kurgulanmaya çalışılması olarak özetlenebilir. İkinci yaklaşım ise, tarihsel süreç içerisinde uygulanmış ve başarısı gözlenmiş model ve stratejilerin incelenerek günümüze uyarlanması şeklinde ifade edilebilir. Başarılı bir insan yetiştirme (eğitim) düzeninin bulunduğu konusunda bilim insanlarının hemfikir oldukları Ahilik sisteminin eğitim yaklaşımı, ilkeleri, model ve uygulamalarında sorumluluk eğitiminin ne şekilde yapılandırıldığına ilişkin tespitlerde bulunmak, bu çalışmanın temel amacını oluşturmaktadır. Böylelikle, uygulamaları ile başarısı tescillenmiş Ahilik eğitim sistemine ilişkin milli birikimimizden yola çıkarak günümüzde sorumluluk eğitimi konusunda yaşanan sorunların çözümüne ilişkin modelleme çalışmalarına katkı sunmak amaçlanmıştır. Araştırma, alanyazın taramasına dayalı olarak yapılmış betimsel ve nitel bir çalışma özelliği taşımaktadır. Bu çerçevede Ahilik sisteminin sorumluluk eğitimi odaklı model ve uygulamaları kapsamında alanyazın incelemesi yapılmış; günümüzde yaşanan sorumluluk eğitimi sorunlarının çözümüne yönelik tespit ve çıkarımlarda bulunulmaya çalışılmıştır. Çalışma sonunda Ahilik eğitim sistemi kapsamında; (1) sorumluluk değerinin dini, toplumsal ve mesleki bir temel üzerine oturtulduğu, (2) Hak ve sorumluluk eğitiminde sorumluluk değerinin öncelendiği ve hak eğitiminin sorumluluk eğitimine dayandırıldığı; (3) Sorumluluk eğitimine, meslek için eğitim yerine meslek aracılığıyla eğitim anlayışı kapsamında yer verildiği (4) Sorumluluk değerinin Ahilik eğitim modelinin her bileşeninde kendisini belirgin şekilde hissettirdiği, (5) Sivil toplum kuruluşu olması yönüyle sivil eğitim anlayışına dayalı olarak iç odaklı ve toplum yönelişli eğitim yaklaşım ve uygulamalarının benimsendiği belirlenmiştir. Bu bulgu ve sonuçlardan yola çıkarak günümüz sorumluluk eğitimi uygulamalarına ilişkin önerilerde bulunulmuştur.

**Anahtar kelimeler:** Ahilik eğitimi, sorumluluk eğitimi, eğitim modeli, sivil toplum kuruluşu

### ABSTRACT

One of the root causes of miscellaneous troubles faced today can be mentioned as problems about people’s consciousness and susceptibility of responsibility. Because scientists -by identifying responsibility as a “seed trouble”- relate the emergence of different troubles with the problems on knowing, adopting and fulfilling responsibilities. In other words, it is thought that personal, social, political and economic problems will have been prevented before they become real issues by bringing people in consciousness and susceptibility of



responsibility sufficiently. According to this, it can be said that accepting the importance of bringing people in consciousness, susceptibility and skills of responsibility sufficiently is needed and in this context; creating an executable educational model for responsibility is now a prior requirement field. Within this framework, two different approaches can be shown. First one can be summarized as trying to build a model by examining new applications focused on responsibility teaching in the world and Turkey itself. Second approach can be described as adopting past models and strategies which have been applied and found successful by examining them. The main purpose of this study is to make observations and confirmations about how Ahi-Order system, which scientists are agreed on its successful educational structure, structured responsibility education on its educational approach, principles, models and applications. Thus, it is aimed to contribute to the works related to the solutions of problems about responsibility education today based on the national background of the Ahi-Order educational system which has proven successful with its applications. The study is qualitative and descriptive one based on literature review. In this context, the literature has been reviewed for the Ahi-Order system's responsibility education-focused applications and models; findings and inferences on today's problems about responsibility education and their possible solutions have been tried to find out. In the end of the study within the Ahi-Order educational system, these findings have been designated: (1) the value of responsibility is placed on religious, social and vocational basis. (2) between rights and responsibility education, the value of responsibility is being prioritized and the rights education is based on responsibility education. (3) responsibility education is given a place not for profession but via profession. (4) the value of responsibility evokes itself signally on every component of Ahi-Order educational model. (5) because the aspect of being a non-governmental organisation and depend on civilian educative approach, internally focused and community oriented educational approaches and applications are adopted. Based on these findings and the results, there have been suggestions on today's applications of the responsibility education.

**Keywords:** Ahi-Order education, responsibility education, educational model, non-governmental organisation

## **GÜNÜMÜZÜN MENTORLUK VE KOÇLUK UYGULAMALARININ AHİLİK (AHİ EVRAN'IN İNSAN YETİŞTİRME MODELİ) YAKLAŞIMI BAĞLAMINDA DEĞERLENDİRİLMESİ**

**AN EVALUATION OF TODAY'S MENTORING AND COACHING PRACTICES IN THE CONTEXT OF AHİ (AHİ EVRAN'S HUMAN TRAINING MODEL) APPROACH**

**Tufan AYTAC**

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### **ÖZET**

Bireylere mesleki bilgi ve beceri kazandırma yanında bu becerilerin geliştirilmesinde kullanılan mentorluk ve koçluk uygulamalarının ilk örneklerine Türk tarihinde Ahilik teşkilatlarında rastlanmaktadır. Ahilik eğitim sisteminde; ahlaklı, faziletli ve terbiyeli insan ve meslek erbabı yetiştirmek amaçlanmaktadır. Ahilik sisteminde geleneksel usta, çırak ve kalfa yetiştirme sürecinden öte çalışanları ahlaki, dini ve sosyal yönlerden de geliştirmek ön plandadır. Bu çalışmanın amacı; günümüzün mentorluk ve koçluk uygulamalarını Ahilik (Ahi Evran'ın İnsan Yetiştirme Modeli) yaklaşımı bağlamında analiz etmek ve değerlendirmektir. Bu çalışmada nitel araştırma desenlerinden olan biri olan doküman analizi kullanılmıştır. Bu çalışmada, Ahilik eğitimi ve süreci ile günümüzde işletmelerde uygulanan mentorluk ve koçluk uygulamaları arasında benzerlikler olduğu görülmüştür. Ahilik ve mentorluk/koçluk uygulamalarında yakın ve güçlü bir usta-çırak ilişkisi olduğu görülmektedir. Günümüzde özellikle bilişsel çıraklık bağlamında usta-çırak ilişkisi, Ahilikte iş dışında çıkararak bütüncül bir insan yetiştirme modeli olarak karşımıza çıkmaktadır. Geleneksel mentorluk/koçluk uygulamalarında iş odaklı çalışanın performansı ve mesleki gelişimi ön planda iken Ahilikte ahlaki, dini ve toplumsal yönlerden de işgörenleri geliştirme faaliyetleri sözkonusudur. Ahilikte meslek eğitimi ve ahlak eğitimi bir bütünlük içerisinde ön planda iken mentorluk/koçluk eğitiminde mesleki eğitim ve etiği daha ön plana çıkmaktadır. Ahilik ve mentorluk/koçluk uygulamalarında deneyimli bir kişi, usta ya da uzmanın daha az deneyimli işgörenlerle deneyimlerini paylaştığı bir süreç söz konusudur. Ancak mentorluk/koçluktan farklı olarak Ahilik insan yetiştirme modelinde çıraklara bir disiplin, değerler sistemi ve birlikte olma gibi sosyal, dini ve ahlaki formal ve informal eğitim verilmektedir. Bu süreçte meslek ya da uzmanlaşma bunun temel referans kaynağı olmaktadır. Amaç burada verimlik, performans ve nicelikten öte sabır, erdemli olma, güven, nitelikli iş yapma ve kendisine ve çevresine faydalı olma bağlamında iyi insan yetiştirmektir. Bu anlamda Ahilik sisteminin mentorluk ve koçluk uygulamaları gibi bir iş, görev ya da alanda uzmanlaşmadan öte iyi ve topluma faydalı insan yetiştirme misyonuyla daha kapsayıcı bir model olduğu görülmektedir.

**Anahtar kelimeler:** Ahilik, Ahi Evran, Mentor, Koç.

### **ABSTRACT**

In addition to providing individuals with professional knowledge and skills, the first examples of mentoring and coaching practices used in the development of these skills are encountered in Ahi organization in Turkish history. In the Ahi education system; it is aimed to raise moral, virtuous and well-behaved people and professionals. In the Ahi system, beyond the traditional process of raising masters, apprentices and journeymen, it is also important to develop employees in moral, religious and social aspects. The aim of this study is to analyze and evaluate today's mentoring and coaching practices in the context of Ahilik (Ahi Evran's Human Cultivation Model). In this study, document analysis, one of the qualitative research designs, was used. In this study, it has been observed that there are similarities between the Ahilik education and process and the mentoring and coaching practices applied in businesses today. It is seen that there is a close and strong master-apprentice relationship in Ahilik and mentoring/coaching practices. Today, especially in the context of cognitive apprenticeship, the master-apprentice relationship emerges as a holistic human training model in Ahilik. While the performance and professional development of the work-oriented employee are at the forefront in traditional mentoring/coaching practices, there are also activities to develop the employees in moral, religious and social aspects in Ahilik. While vocational education and moral education are at the



forefront in a unity in Ahi community, vocational education and ethics come to the fore in mentoring/coaching education. In Ahilik and mentoring/coaching practices, there is a process where an experienced person, master or expert shares their experiences with less experienced employees. However, unlike mentoring/coaching, apprentices are given social, religious and moral formal and informal education, such as a discipline, a system of values, and being together, in the Ahilik human training model. In this process, profession or specialization is the main reference source for this. The aim here is to raise good people in the context of patience, virtue, trust, quality work and being beneficial to themselves and their environment, beyond efficiency, performance and quantity. In this sense, it is seen that the Ahi system is a more inclusive model with the mission of raising good and beneficial people to the society rather than specializing in a job, task or field such as mentoring and coaching practices.

**Keywords:** Ahilik, Ahi Evran, Mentor, Coach.

**AHİLİĞİN ANA İLKELERİNİN KÜLTÜREL TEMELLERİ: KUR'AN BAKIŞI**  
**CULTURAL FOUNDATIONS OF THE FUNDAMENTAL PRINCIPLES OF AKHISM: A VIEW OF**  
**THE QUR'AN**

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**ÖZET**

Ahi Evran-ı Veli tarafından kurulan esnaf dayanışma teşkilâtı olan Ahilik, Anadolu insanının sanat, ticaret hasılı bütün olarak ekonomi alanında yetişmelerini sağlamıştır. Ahilik, çeşitli meslek alanlarında insanları geliştirip meslek sahibi yapmanın yanı sıra hem de ahlaki yönden yetiştiren, iş hayatını insanlığın ortak değerleri denebilecek esasları dikkate alarak düzenleyen bir örgütlenmedir.

Çeşitli meslek kollarına ilişkin fütüvvetnamelerin hazırlandığı Ahilik Teşkilatı, böylece hem o mesleğin gerektirdiği eğitim ve becerinin, sahip olunması gereken niteliklerin hem de ahlak anlamında manevi olarak sanat erbabının yetişmesini sağlayan iki kanatlı bir okul idi.

Ahilik Teşkilatı bünyesinde hazırlanan ve meslek esaslarını ortaya koyan fütüvvetnamelerde genel olarak ahi teşkilatı mensuplarının, özelde de fütüvvetnamenin ait olduğu ilgili meslek erbabının taşımaları gereken nitelikler, ahiliğin ilkeleri yer almaktaydı. Bu ilkelere ve meslek erbabının niteliklerine bakıldığında temel dayanağın kültürel derinliklerimiz olduğu, sanatın, ticaretin, üretimin Ahilik Teşkilatı ile birlikte mana köklerimize dayandırıldığı görülmektedir.

Bu çalışmanın amacı; bir mesleki eğitim kuruluşu olarak Ahilik Teşkilatında meslek esasları denebilecek ilkelerin ve meslek erbabının taşınması beklenen çalışma, dürüstlük, yardımlaşma gibi niteliklerin kültürel temellerini Kur'an öğretisi çerçevesinde tespit etmektir. Böylece mesleklerin ahlak ile temellendirilmesi halinde iktisadi başarının elde edilebileceğine, İslâm dini temelli kültürel değerlerimizin cihan hakimiyeti sağlayacak bir iktisadi gelişmeye ne kadar müsait tavsiye, telkin ve öğütler içerdiğinin ortaya çıkarılmasına katkı sağlanması beklenmektedir.

**Anahtar kelimeler:** Ahilik, Ahi Teşkilatı, Mesleki eğitim, fütüvvet, Ahiliğin ilkeleri, Kur'an'da Ahilik

**ABSTRACT**

Ahilik, the artisan solidarity organization founded by Ahi Evran-ı Veli, has enabled Anatolian people to grow up in the field of economy as a whole, as a result of art and commerce. Akhism is an organization that not only develops people in various professions and makes them professional, but also educates them morally and organizes business life by taking into account the principles that can be called the common values of humanity.

The Ahi-Order Organization, in which futuwvetnames related to various professions were prepared, was thus a two-winged school that provided both the education and skills required by that profession, the qualifications to be possessed, and the morality of the art connoisseurs.

In the futuwvetnames prepared within the body of the Ahi Organization and revealing the principles of the profession, the qualifications that the members of the ahi organization in general, and the relevant professionals to whom the futuwvetname belongs in particular, were included. When these principles and the qualifications of the professionals are examined, it is seen that the basic foundation is our cultural depths, and that art, trade and production are based on our spiritual roots together with the Ahilik Organization.

The aim of this study; As a vocational training institution, it is to determine the cultural basis of the principles that can be called professional principles and the qualities such as work, honesty and cooperation, which can be called professional principles in the Ahi Organization, within the framework of the teaching of the Qur'an. Thus, it is expected that economic success can be achieved if professions are based on morality, and it is



expected to contribute to revealing how suitable our Islamic religious-based cultural values are for an economic development that will ensure world domination.

**Keywords:** Ahilik, Ahi Organization, Vocational education, futuwwa, principles of Akhism, Ahilik in the Qur'an



**REVIVING FOLKLORE LITERATURE THROUGH PUPPETRY, STORYTELING AND POETRY  
DURING HOME-BASED LEARNING ACTIVITIES**

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**ABSTRACT**

This project was intended to provide students a meaningful experience in learning English through literary and performing arts during national school closure resulting from the COVID 19 pandemic. There were 16 students who participated in this project and they were assigned with three different tasks: poetry performance, storytelling and puppetry. During the school closure, teachers had to find alternatives to virtual lessons since many students had limited access to the internet. Thus, this project was developed in the effort of offering language learning experience that the students could do at home independently without fully relying on the internet. Based on the students' responses during an open-ended interview session, the project helped them to improve their language learning particularly in vocabulary, grammar and pronunciation. They were also able to fully understand the literary texts that they performed and acquired additional skills in filming and video editing. It could be deduced that this approach can be an effective method in honing students' talents and potential in performing arts, improving their reading skills as well as offering them a meaningful and engaging language learning experience.

**Keywords:** Poetry, Storytelling, Puppetry, Literary Arts, Performing Arts



**LEXICO-PRAGMATIC TRANSFER IN SELECTED NIGERIAN PLAYS:  
A SOCIOLINGUISTIC PERSPECTIVE**

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**ABSTRACT**

This study has been based on the analyses drawn from some linguistic characteristics. It aims at examining the linguistic and cultural influence of Yoruba language on some selected Nigerian plays. Using mixed method, the data analyses presented in this research work show the language variety in Okedokun Ayoade's *MOPELOLA*, Ola Rotimi's *The Gods Are Not to Blame*, Tade Adegbindin's *The Dark Forest* and Wole Soyinka's *Death and the King's Horseman*". Attitudes towards language or language behavior implicate social meanings relative to social norms in a given speech community. Indeed, language attitude study is not only a way of understanding how language is used, for instance, as a symbol of identity or in-group membership, it also helps to illuminate the social importance of a given code or language use. Language variation study has been proved very important to linguistics because it could help to explain language maintenance and shift, which is apparently influenced by whether the change or maintenance is favoured or disfavoured by members of the speech community. Thus, Okedokun Ayoade, Ola Rotimi, Tade Adegbindin and Wole Soyinka have shown in their plays how language varies in Nigeria and particularly in Yoruba societies.

**Keywords:** texture, cohesion, coherence, Systemic Functional Linguistics



## AHİLİK DİYARI KIRŞEHİR'DE KÜLTÜREL MİRAS BİLİNCİNİN ÖNEMİ

THE IMPORTANCE OF CULTURAL HERITAGE AWARENESS IN KIRŞEHİR, THE LAND OF AHI ORDER

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### ÖZET

İnsanlığın var oluşundan itibaren insanoğlunun hayatta kalma ve varlığını sürdürebilme başarısı kültür sayesinde olmuştur. Bu başarı, yaşayarak öğrendiklerini kültüründe saklayıp yeni kuşaklara aktarma yeteneği ve becerisine bağlıdır. İnsanoğlu bir müddet sonra biyolojik uyum gücü ile değil, kültürü ile dünyaya egemen olmuştur. Örneğin ateş yakmayı ve alet yapmayı öğrenen insan, bu deneyimini sonraki kuşaklara iletebildiği için ateşi veya aleti çeşitli amaçlarla daha yaygın bir şekilde kullanmaya başlamıştır. Bu süreç günümüze kadar gelişerek somut ve somut olmayan kültürel değerleri oluşturmuştur.

Anadolu'nun bereketli toprakları ve geniş kültürel yelpazesi, yüzyıllardır süre gelen yaşamda en önemli durak noktalarından birisini oluşturmuştur. Bu bağlamda günümüze kadar gelebilen somut ve somut olmayan kültürel miras öğeleri ile kültürel dünya tarihine öncülük etmektedir. Bu öncülüğün merkezlerinden biri sayılan Kırşehir'de de, somut ve soyut kültürel değerler kuşkusuz önemli bir doku oluşturmuştur. Antik dönemde Kapadokya Bölgesi'nde yer alan bu topraklar, Kırşehir Merkez Kalehöyük, Kaman Kalehöyük, Yassıhöyük, Büyükteflek Roma Hamamı, yer altı şehirleri gibi pekçok somut kültürel değerleri ile Kalkolitik Dönem'den günümüze değin yoğun bir şekilde iskâna uğramıştır. Ortaçağa gelindiğinde kültürel ve siyasi boyutlarıyla Cacabey, Ahi Evran-ı Velî, Âşık Paşa, Süleyman Türkmanî, Şeyh Edebalî gibi şahsiyetleri bünyesinde barındıran Kırşehir, şüphesiz yakın çağda ve milli mücadele döneminde de kendine özgü değerlere ev sahipliği yapan önemli kentlerden birisi olmuştur. Toplumun hemen her alanında görülen, dinamik bir yapıya sahip olan Ahilik, yöreye özgü sosyal kültür öğeleri açısından ve somut olmayan kültürel miras değerlerini bünyesinde barındırması bakımından Kırşehir için gelecek kuşaklara aktarması kaçınılmaz bir gerçek olarak karşımıza çıkmaktadır. Kırşehir'in önemli bir kültürel değeri olan Ahilik sistemi incelendiğinde, modern zamanın felsefe, ilahiyat (özellikle tasavvuf), işletme ve ekonomi alanlarını kapsayan çok-boyutlu bir oluşum olduğu görülür. Bu açıdan Ahilik; siyasi, sosyal, iktisadi, dini, ahlaki birçok yönü bulunan bir kurumu ifade etmektedir. Aynı zamanda Ahilik sisteminin temelinde "eğitim" çok önemli bir yer tutmaktadır.

Bahsi geçen kültürel değerlerin yaşatılması ve gelecek kuşaklara aktarılması, Ahiliğin de temel prensiplerinden birisi olan eğitim ile uygulanmaktaydı. Bu eğitimler orta öğretimden, üniversitelerde verilen derslere kadar yansımalıdır. Bunun yanı sıra oluşturulacak pilot alanlarda uygulamalı ve görsel destekleyici şekilde sağlanıp, kültürel değerlerimizi yaşatacak olan gelecek nesillere aktarılmalıdır.

**Anahtar kelimeler:** Ahilik, Kırşehir, Kültürel Miras, Tarih, Arkeoloji.

### ABSTRACT

Since the existence of humanity, the success of human beings to survive and survive has been thanks to culture. This success depends on his ability and ability to preserve what he has learned by living in his culture and transfer it to new generations. After a while, human beings dominated the world not with their biological adaptation power, but with their culture. For example, people who learned how to make fire and make tools started to use fire or tools more widely for various purposes because they could transmit this experience to the next generations. This process has developed until today and has created tangible and intangible cultural values.

The fertile lands and wide cultural spectrum of Anatolia have formed one of the most important stopping points in the life that has been going on for centuries. In this context, it leads the cultural world history with its tangible and intangible cultural heritage elements that have survived to the present day. Concrete and intangible cultural values undoubtedly created an important texture in Kırşehir, which is considered one of the centers of this pioneering. These lands, which were located in the Cappadocia Region in the ancient period, have been heavily inhabited since the Chalcolithic Period, with many tangible cultural values such as Kırşehir Merkez Kalehöyük, Kaman Kalehöyük, Yassıhöyük, Büyüktefle Roman Bath, and underground cities. When it comes to the Middle Ages, Kırşehir, which includes personalities such as Cacabey, Ahi Evran-ı Veli, Âşık Paşa, Süleyman Türkmani, Şeyh Edebalı with its cultural and political dimensions, has undoubtedly been one of the important cities that hosted its own unique values in the recent era and during the national struggle. Akhism, which is seen in almost every area of society and has a dynamic structure, is an inevitable fact for Kırşehir to transfer to future generations in terms of social cultural elements specific to the region and incorporating intangible cultural heritage values. When the Akhism system, which is an important cultural value of Kırşehir, is examined, it is seen that modern time is a multi-dimensional formation covering the fields of philosophy, theology (especially mysticism), business and economy. In this respect, Akhism; It refers to an institution with many political, social, economic, religious and moral aspects. At the same time, "education" has a very important place in the foundation of the Ahi-order system.

Keeping the aforementioned cultural values alive and transferring them to future generations was implemented through education, which is one of the basic principles of Akhism. These trainings should be reflected from secondary education to the courses given in universities. In addition, the pilot areas to be created should be provided in an applied and visual support manner and transferred to future generations who will keep our cultural values alive.

**Keywords:** Akhism, Kırşehir, Cultural Heritage, History, Archeology.

**HACI BEKTAŞ VELİ'NİN MAKALAT ADLI ESERİNDE VE AHİLİK TEŞKİLATI'NDA  
CÖMERTLİK**

GENEROSITY IN HACI BEKTASH VELI'S MAKALAT AND IN THE AHILIK ORGANIZATION

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**ÖZET**

Hayat felsefesi edeb üzerine kurulu olan Hacı Bektaş Veli, XIII yüzyılda Anadolu'da Babailer İsyanı'nın bastırılmasında, XIV. yüzyılda Yeniçeri Ocağı'nın kuruluşunda, XVI. yüzyılda Bektaşilik tarikatının oluşumunda önemli rol oynamıştır. Bektaşilik tarikatının kurulmasının ardından Bektaşiler, Ahilik teşkilâtının kurucusu ve 1826'ya kadar Osmanlı Devleti'nin en gözde ordusu Yeniçeri Ocakları'nın manevî liderleri olmuşlardır. Ahi Evran tarafından dostu Hacı Bektaş-ı Veli'nin tavsiyesiyle kurulan esnaf dayanışma teşkilatı olan Ahilik Teşkilatı'nın günümüz esnaf odalarına benzer bir işlevi bulunmaktadır. Aynı zamanda iyi ahlâk, doğruluk, kardeşlik, yardım severlik gibi değerlerin ön plana çıkarıldığı bir sosyo-ekonomik düzen olup; Anadolu'daki sosyal yaşantının gelişmesine çok önemli katkılarda bulunmuştur. Hümanist esaslı bir öğretisi olan Bektaşiliğin kurucusu Hacı Bektaş Veli'nin XIII. yyda İslam dininin genel kaidelerini anlattığı, dört kapı ve kırk makamdan bahsettiği *Makalat* adlı eserinde marifet makamlarının altıncısı cömertlik olarak açıklanırken; Ahilik'te de kahramanlık, yiğitlik ve cömertlik mefkûresi önemli bir yere sahipti. Çalışmamızda tasavvufî bir tarikat olan Bektaşilik ile bir esnaf teşkilatı olan Ahilik Teşkilatı'nda cömertlik konusu ele alınacaktır.

**Anahtar kelimeler:** Ahilik, Bektaşilik, Hacı Bektaş Veli, *Makalat*, cömertlik

**ABSTRACT**

Hacı Bektash Veli, whose life philosophy is based on good manners, suppressed the Babailer Rebellion in Anatolia in the 13th century at the establishment of the Janissary Corps in the 14th century, he played an important role in the formation of the Bektashism order in the 16th century. After the establishment of the Bektashism order, the Bektashis became the founders of the Ahi community and the spiritual leaders of the Janissaries, the most favorite army of the Ottoman Empire, until 1826. Ahi community, which was founded by Ahi Evran with the advice of his friend Hacı Bektash Veli, has a function similar to today's chambers of tradesmen. At the same time, it is a socio-economic order in which values such as good morals, righteousness, brotherhood and helpfulness are emphasized; He made very important contributions to the development of social life in Anatolia. The founder of Bektashism, which is a humanist-based doctrine, was written by Hacı Bektash Veli in the 13th century. In his work called *Makalat*, in which he describes the general principles of the religion of Islam in the 19th century and mentions four gates and forty modes, the sixth of the ingenuity modes is described as generosity; The ideal of heroism, bravery and generosity had an important place in the Ahi community. In our study, the subject of generosity will be discussed in Bektashism, which is a mystical sect, and Ahilik Organization, which is a tradesman organization.

**Key words:** Ahi community, Bektashism, Hacı Bektash Veli, *Makalat*, generosity

## THE ANALYSIS OF JOHN FOWLES' "THE ENIGMA" AS AN ANTI-DETECTIVE NOVEL

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### ABSTRACT

Anti-detective novel or postmodern detective fiction is the subverted version of the classical detective fiction (also termed as "whodunit") which is best epitomized by Sir Arthur Conan Doyle's Sherlock Holmes series and Agatha Christie's oeuvre. Its origin lies with the mystery stories written by Edgar Allan Poe who is also considered as the father of detective genre. Some critics define anti-detective stories as a sub-genre of the classical detective fiction while the others regard it as an extension of it. However, it is certain that it does not follow the pattern and the convention of classical detective fiction. This kind of detective fiction problematizes detectives as reassuring figures as they were represented in the classical detective stories. The detective's inability to detect the truth about the crime, about the identity of the culprit or the presence of crime itself are major reasons for his being a character far from a reassuring and reliable one. John Robert Fowles is an English novelist who wrote novels and short stories with a special interest in and emphasis on social and philosophical issues. His long short story "The Enigma" centers around the disappearance of John Marcus Fielding, a highly-respectable and socially accepted man. However, the story proves to be an anti-detective novel because of certain characteristics that subvert a classical detective story. Through this story, Fowles introduces the readers a story that incorporates two distinct genres in itself, detective story and romance. While the text has suspense until the end, it does not offer clues about the perpetrator nor does it present a definitive ending contrary to a classical detective fiction. The ending is left to the imagination of the reader and it leaves room for multiple endings. In the light of this information, the aim of this paper is to shed light on the aspects that make John Fowles' "The Enigma" an anti-detective novel.

**Keywords:** Postmodern detective fiction, Agatha Christie, Edgar Allan Poe, John Fowles, anti-detective novel, Sherlock Holmes.

## MICHEL FOUCAULT’NUN İKTİDAR VE ÖZNE’Sİ BAĞLAMINDA AYOT VE BÜYÜK BİRADER

AYOT AND BIG BROTHER IN THE CONTEXT OF POWER AND THE SUBJECT IN MICHEL FOUCAULT

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### ÖZET

Bu çalışmada, Melih Cevdet Anday’ın Gizli Emir adlı romanı ve George Orwell’in 1984 adlı romanı; Michel Foucault’nun iktidar ve öznenin arasındaki ayrılmayan ilişkisi çözümlenmiştir. Yazıldığı dönem göz önünde bulundurulduğunda Melih Cevdet Anday’ın Gizli Emir adlı romanı bir “olağanüstü hal” romanıyken, George Orwell’in 1984 adlı romanı geleceğe dair bir toplumsal eleştiri ve baskı altında kaleme alınan bir romandır. Her iki romanda da iktidarı ve dolaylı olarak da gücü elinde tutan otorite temsili özneler ve bu öznelerin kararlarına, yaptırımlarına, toplumsal işleyişi düzenlemelerine uyan/uymak zorunda kalan özneler yer alır. Söz konusu özneler ise Foucault’ya göre iktidar eliyle biçim verilen, toplumsal ilişkiler çerçevesinde varlık kazanır. Bir ülkenin ortak hafızasına kazınan olaylar; iktidarın elinde tuttuğu ve her ne kadar tek vücut olarak görülse de nihayetinde özel bir zümrenin aldığı kararlar, yürürlüğe koyduğu kanunlar ve yaşamın her alanına etki eden ortak yaşantılar dâhilinde toplumsal ilişkileri şekillendirir. Her iki roman da ortak hafızanın verdiği etkiyle hareket eden özneler ile iktidar kavramının özne ve toplumsal ilişkiler açısından yansımalarını içeren örnekleri barındırır. Gizli Emir’in yayımlandığı dönemde (1969) Türkiye’nin sıkıyönetim içinde bulunduğu bilinir. Hiçbir çıkışın bulunmadığı, kaotik bir ortama sahip kent, garip ve anlaşılamayan bürokratik güçlerin yönettiği Asayiş Yerleştirme Olağanüstü Teşkilatı (AYOT) tarafından ele geçirilir. Kentin her bir noktasında gerçekleşen sergileri basma, insanları tartaklama veya daha da fazlası olan öldürme eylemlerinde bulunan çeşitli karşıt grupları (Yengeçler, Atmacalar, Baykuşlar) kontrol etmeye çalışan Asayiş Yerleştirme Olağanüstü Teşkilatı bu görevlerini kendi üstünde bir güç tanımaksızın yerine getirir. AYOT, bunları gerçekleştirirken bir sıkıyönetim iktidarı modeli ile devam eder. 1984 romanında ise iktidar kimsenin bilemediği bir zamandan bu yana, rakiplerinin birer birer eleyip halk düşmanı ilan eden Büyük Birader ve onun için çalışan ismi ile zıt bakanlıkların (Gerçek Bakanlığı, Barış Bakanlığı, Sevgi Bakanlığı, Varlık Bakanlığı) kontrolü altındadır. Bu iki benzer model; delilik, suç ve cinsellik gibi öznellik deneyimleri ve bu deneyimlerin ilişkili olduğu iktidar sistemleri, denetim, disiplin, hiyerarşik gözlem gibi normalizasyon süreçleri ve bilgi-iktidar ilişkisi, Foucault’nun çözümlenmeleri bağlamında incelenecektir.

**Anahtar kelimeler:** iktidar, özne, otorite, birey, toplum, Gizli Emir, 1984.

### ABSTRACT

In this study, Melih Cevdet Anday's novel The Secret Order and George Orwell's 1984; Michel Foucault's inseparable relationship between power and subject has been analyzed. Considering the period in which it was written, while Melih Cevdet Anday's novel "The Secret Order" is a "state of emergency" novel, George Orwell's 1984 is a novel about the future written under social criticism and pressure. In both novels, there are subjects who represent authority, who hold power and indirectly power, and subjects who obey/have to comply with the decisions, sanctions and social functioning regulations of these subjects. The subjects in question, on the other hand, come into existence within the framework of social relations shaped by power, according to Foucault. Events engraved in the collective memory of a country; Although it is seen as a single body, it shapes social relations within the decisions taken by a special group, the laws it enacts and the common experiences that affect all areas of life. Both novels contain examples of subjects acting under the influence of common memory and reflections of the concept of power in terms of subject and social relations. It is known that at the time the Secret Order was published (1969), Turkey was under martial law. The city, which has a chaotic



environment with no exits, is taken over by the Extraordinary Organization of Public Security (AYOT) directed by strange and incomprehensible bureaucratic forces. Trying to control various opposing groups (Crabs, Hawks, Owls) that engage in acts of raiding exhibitions in every part of the city, beating people or, even more so, killing people, the Public Security Establishment Extraordinary Organization fulfills these duties without any power above itself. While realizing these, AYOT continues with a model of martial law. In the novel 1984, power has been under the control of Big Brother, who has eliminated his opponents one by one and declared them public enemies, and the ministries working for him (Ministry of Truth, Ministry of Peace, Ministry of Love, Ministry of Wealth) since a time no one knows. These two similar models; Subjectivity experiences such as madness, crime and sexuality and the power systems associated with these experiences, normalization processes such as control, discipline, hierarchical observation, and the knowledge-power relationship will be examined in the context of Foucault's analyses.

**Keywords:** power, subject, authority, individual, society, Secret Order, 1984.

**ZAIN AL-DIN IBN AL-WARDI'S MAQAMAT (D. 749 A.H.) IN AL-FATUWWA: AN ANALYTICAL STUDY**

ZEYNEDDIN İBN VERDÎ (ÖL:749 H.)'NİN FÜTÜVVETE DAİR "MAKAMAT" İSİMLİ RİSALESİ:  
TAHLİLİ BİR ARAŞTIRMA

مقامة زين الدين ابن الوردی (ت749 هـ) في الفتوة: دراسة تحليلية.  
أ.د. مشهور الحبازي كلية الآداب-جامعة القدس-القدس-فلسطين.

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**ABSTRACT**

After the Abbasid Caliph Al-Nasir Li-Din Allah re-established the fattwa system, and established new laws and regulations for it, he sent to sultans, kings, and princes of the Islamic world asking them to enter into the new fatwa system, and to spread this system in their kingdoms and emirates, and the fatwa spread widely The time of the Turkish sultans, especially the time of Sultan Baybars al-Binqdari, and the sultans of Al Qalawun, and the fatwa had an important role in eliminating the remnants of the Crusaders, defeating the Mongols in the Battle of Ain Jalut in the year (658 AH), and even prompting them at a later period to enter Islam.

In the middle of the eighth century AH, the fatwa had spread to the city of Aleppo and its surroundings, but some individuals abused it by carrying out acts that violate the laws of the fatwa and its regulations that had been established by the Abbasid Caliph, the writer and jurist Ibn al-Mimar al-Baghdadi (d. 642 AH) in a book entitled: "The Fattwa." These people were known as "Al-Ahdath" who corrupted the city and its surroundings. This misguided group, the writer, poet and historian Zain Al-Din Ibn Al-Wardi, addressed him, so he wrote a book composed of four and a half pages entitled: "Infatuation and the blame of the youth of time", which is in manuscript in the Egyptian Book House in Cairo under No. (7073 literature), and I got a copy of it.

In this research, I will be known as Ibn al-Wardi, his maqam, and study his maqam "The Infatuation, and the Blame of the Youth of Time" an analytical study, and explain the reasons that made Ibn al-Wardi write this maqam, and the works that the group of young men were doing in Aleppo, their various groups, and their role in the lives of the people of Aleppo in The first half of the eighth century AH.

**Keywords:** İbn Al- Wardi, Ahi-order, Al-Futuwwa, Moral

**ملخص البحث**

بعد أن أعاد الخليفة العباسي الناصر لدين الله تأسيس نظام الفتوة، ووضع لها قوانين وأنظمة جديدة، أرسل إلى سلاطين، وملوك، وأمراء العالم الإسلامي يطلب منهم الدخول في نظام الفتوة الجديد، وأن يقوموا بنشر هذا النظام في ممالكهم، وإماراتهم، وقد انتشرت الفتوة بشكل واسع زمن السلاطين الأتراك، وبخاصة زمن السلطان بيبرس البندقداري، وسلاطين آل قلاوون، وكان للفتوة دور مهم في القضاء على بقايا الصليبيين، ودحر المغول في معركة عين جالوت سنة (658 هـ)، بل ودفعهم في فترة لاحقة إلى دخول الإسلام الحنيف.

في أواسط القرن الثامن الهجري كانت الفتوة قد عمّت مدينة حلب ونواحيها، ولكن بعض الأفراد أساؤوا لها من خلال قيامهم بأفعال مخالفة لقوانين الفتوة، وأنظمتها التي كان قد وضعها للخليفة العباسي الأديب والفقير ابن المعمار البغدادي (ت642 هـ) في كتابه بعنوان: "الفتوة"، وعرف هؤلاء باسم "الأحداث"، الذين أفسدوا في المدينة وجوارها، وقد تصدّى لهذه الفئة الضالة الأديب والشاعر والمؤرخ زين الدين ابن الوردی، فكتب مقامة في أربع صفحات ونصف بعنوان: "الافتتان وملامة فتیان الزمان"، وهي مخطوطة في دار الكتب المصرية بالقاهرة تحت رقم (7073 أدب)، وقد حصلت على صورة منها.



في هذا البحث سأعرف بابن الوردي، ومقاماته، وأدرس مقامته "الافتتان، وملامة فتيان الزمان" دراسة تحليلية، وأبين الأسباب التي جعلت ابن الوردي يكتب هذه المقامة، والأعمال التي كان يقوم بها جماعة الفتيان في حلب، وجماعاتهم المختلفة، ودورهم في حياة أهل حلب في النصف الأول من القرن الثامن الهجري.

**الكلمات المفتاحية :** ابن وردى ، الأخوة ، الفتوة ، الأخلاق



**MUHİBBİ’NİN BİR ŞİRİNDE İDEALİZE EDİLMİŞ SEVGİLİ**  
THE IDEALIZED LOVER IN A POEM BY MUHİBBİ

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**ÖZET**

Divan şiirinde sevgili hemen hemen tüm şairler tarafından övgüye layık görülmüştür. Şiirlerde daha çok fiziki özellikleri göze çarpmaktadır. Ancak asıl önemli olan şiirin mana derinliklerine saklanan sevgili tipidir. Bu tip bazen bir padişah olup bir ülkeye hükmederken bazen de güneş olup dünyayı aydınlatmaktadır. Geleneğin bir ürünü olan ve altı asır süren bu edebiyat temel olarak sevgili üzerine inşa edildiği söylenebilir. Bu sevgiliden kastedilen ise güzel kavramını açıklamaktadır. Bu güzellik bazen yüce yaratıcı bazen de bedensel olarak bir varlığı kastetmektedir. Nitekim temel problemde burada meydana gelmektedir. Araştırmacılar, Divan şiirindeki sevgili idealize(başkalaştırma) ederken dar bir kalıba sokma gereksiniminde bulunmaktadır. Okuyucu tarafından, Divan şiirinde tasavvur(anlatılan) edilen sevgilinin ilahi veya beşerî olması gerektiği savunulur. Bu durum artık bir ihtiyaç haline almaktadır. Birçok Divan şiiri araştırmacısı bu ayrımı yapmaya çalışır. Öyle ki henüz şiir okunmamışken, bu bakış açısıyla yaklaşım görülmektedir. Bu yaklaşımda birtakım yanlışlıkları beraberinde getirmektedir. Bu çalışma, Divan şiirindeki sevgili tipinin idealize edilirken, dar bir kalıba sokmak yerine her iki kullanımı da bir bütün halinde değerlendirmeyi amaçlamaktadır.

**Anahtar kelimeler:** *Divan Şiiri, İdealize, İlahi ve Beşerî, Muhibbi, Sevgili.*

**ABSTRACT**

It was praised by almost all poets in Divan poetry. More physical features stand out in poems. However, he is the beloved type who hides deep in his poetry. While this type is sometimes a sultan and ruling within a border, it becomes the sun and illuminates the world. Standing for six centuries, this literature is a product of tradition and basically it can be said to find lovers. It is beautiful if the lover is exposed outdoors. This beauty sometimes means a great creator and sometimes a physical mistake. As a matter of fact, it occurs in the main problem. Researchers need to put it in a narrow mold when it is necessary to idealize (metamorphos) the beloved in Divan poetry. It is defended by the reader as well as whether the lover envisioned (narrated) in the Divan poem is divine or human. This is now a need for tea. Many Divan poetry researchers maintain this distinction. So much so that the poem has not been read yet, from this point of view. This brings some wrong mistakes. In this study, while idealizing the lover type in Divan poetry, it aims to evaluate both uses as a whole instead of putting it in a narrow form.

**Keywords:** *Divan Poetry, Idealize, Divine and Human, Muhibbi, Dear.*

ZAHİD XƏLİLİN UŞAQ ŞEİRLƏRİNDƏ OBRAZLAR  
ZAHİD KHALİLİN ÇOCUK ŞİİRLERİNDE OBRAZLAR  
ZAHİD KHALİLİN OBRAZES IN CHILDREN'S POEMS

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**XÜLASƏ**

Məqalədə öncə “obraz” və “surət” anlayışlarının oxşar və fərqli cəhətlərinə aydınlıq gətirilir. Qeyd olunur ki, “obraz” və “surət” anlayışları qoşa qanad kimi həmişə yanaşı işlənib, ancaq müqayisədə “obraz” anlayışı “surət” anlayışından daha geniş məzmunadər. O mənada ki, təbiətə, heyvanlara, hər hansı əşyaya aid predmetlər, başqa sözlə, dağ, yamac, ceyran, cüyür, hansı isə çiçək növü də yazıçı tərəfindən obrazlaşdırıla bilər, insan da. Ancaq dağ, yamac, ceyran, cüyür, çiçək heç vədə surət ola bilməz. Surət anlayışı yalnız insana şamil oluna bilər, bədii əsərdə surət olaraq ancaq insan ədəbi qəhrəman simasında təqdim oluna bilər. Ədəbiyyatçınas Nizaməddin Şəmsizadə bu qənaətdədir. Ancaq N.Şəmsizadəyə qədər bütün ədəbiyyatçınaslar obraz anlayışı haqqında eyni fikirdə olublar.

Belə ki, “Azərbaycan dilinin izahlı lüğəti”ndə ədəbiyyat termini olaraq “obraz” istilahnın - “surət”, “obrazlı” (sifət) və obrazlılıq (isim) kimi mənaları olduğu diqqətə çatdırılır.

Əziz Mirəhmədova görə, “Bədii surət (obraz) sənətin varlığa münasibətləri haqqında, sənətin daxili qanunları haqqında təsəvvürlərlə, idrak problemi ilə bağlı olan mürəkkəb, çoxcəhətli bir anlayışdır”;

Leonid İvanoviç Timofeyevə görə, “bədii obraz bədii ədəbiyyatın köməyi ilə yaradılan və estetik əhəmiyyətə malik olan konkret və eyni zamanda, insan həyatının ümumiləşdirilmiş mənzərəsidir”;

Maksim Qorkinin fikrincə isə, “Bədii obraz, demək olar ki, həmişə fikirdən daha geniş və daha dərinidir; insanı mənəvi həyatının bütün müxtəlifliyi ilə, hiss və düşüncələrinin bütün ziddiyyətləri ilə aparır”;

Nafiz Qəhrəmanlı obrazı “Ədəbiyyatın məğzində dayanan əsas anlayışlardan biri, bəlkə də birincisi” qismində qəbul edir. Tədqiqatçıya görə, “bədii obraz yaradıcılığın təbiətini, forma və funksiyasını təyin edir. Bədii obrazın mərkəzində isə ilk növbədə ümumiləşdirilmiş insan həyatının, insan səciyyəsinin təsviri dayanır”;

Mir Cəlil və Pənah Xəlilov da həmmüəllif olduqları “Ədəbiyyatşünaslığın əsasları” dərslində eyni qənaətdədirlər: “Bədii əsər surətlər aləmidir - ictimai varlığın yüksək səviyyədə canlandırılmasıdır. Hər bir əsərdə üç növ surət ola bilər: Birincisi, insan və kollektiv surəti - tip, ya xarakterlər, personajlar heyəti; İkincisi: duyğu, əhvali-ruhiyyə surəti - lirika, qəhrəmanlıq, romantika; Üçüncüsü: təbiət və əşya surəti - peyzaj, mənzərə, lövhə” ... “Hər hansı bir əsərin, surətin təsir gücü, bədii qüdrəti həyatı, varlığı dürüst, həqiqi, təsirli əks etdirməsindədir”;

Rafiq Yusifoğlu bütün bu qənaətləri təkrarlayaraq ümumi nəticə çıxarır: “Surətə belə tərif vermək olar: Müəyyən insan qruplarının bir fərdin üzərində ümumiləşdirilməsinə surət deyilir”.

Göründüyü kimi, müxtəlif ifadə tərzində olan, ancaq nəzəri cəhətdən bir-birini təkrarlayan bu fikirlər bir ümumi mərkəzdə birləşmişdir: insan da daxil olmaqla bütün predmetlər surətdir.

Fərqli mövqe yalnız Nizaməddin Şəmsizadənin araşdırmasındadır: “Atın surəti, itin surəti, qağayının, yaxud dənizin surəti demək olmaz. Bunlara at obrazı, dəniz obrazı demək daha düzgündür”.

Qeyd olunan bütün fikirlərə ehtiramımızı bildirərək biz də N.Şəmsizadənin nəzəri mülahizəsi ilə razılışır və demək istəyirik ki, yazıçı əsərində, məsələn, dağ obrazını canlandırma bilər, ancaq bu “dağ” yalnız coğrafi termin olaraq obrazlaşdırılmışdır, surət deyil.

Surətlə obrazı eyni təbiətdə qəbul etməsinə baxmayaraq, R.Yusifov başqa bir məqamda özü də hiss etmədən N.Şəmsizadəyə fikrini əsaslandırmaq üçün “ipucu” verir: “Bədii əsərlərdə müxtəlif predmetlər, heyvanlar,

təbiət lövhələri obrazlaşdırılsa da, ədəbiyyatın əsas obrazı insandır. Digər obrazlar yardımçı xarakter daşıyır və son nəticədə, insanın bədii obrazının mükəmməl yaradılmasına kömək edir”.

Rus ədəbiyyatşünası L.İ.Timofeyevin də bu məzmununda mülahizəsi R.Yusifovun fikri ilə səsleşir. L.İ.Timofeyev yazır ki, əgər hər hansı bir rəsmdə kresloda, stol arxasında əyləşən insan təsvir olunursa, bu, heç də o demək deyil ki, burada bərabər hüquqlu obrazlar: stol, insan və kreslo təsvir edilib. Stol və kreslonun təsviri insanın təsviri qədər vacib olsa da, ancaq bu onların bərabər hüquqlu olması demək deyildir, stol və kreslo yalnız və yalnız insanın obrazını tam əks etdirmək vasitəsidir.

Əsas məsələ də elə bundadır: insandan qeyri obrazların yardımçı, surətin isə aparıcı rol oynamasında, digər obrazların yalnız insanın obrazını tam əks etdirmək üçün vasitə olmasında.

Mövqeyinin şərhinə “öncə obraz haqqında bizim nəzəriyyəçilərin bir neçə qənaətinə nəzər salaq” cümlələri ilə başlayan N.Şəmsizadə surət haqqında mövcud qənaətləri tədqiqat müstəvisinə çəkəndən sonra fikrinin davamında yazır: “Hansı növə daxil olursa-olsun, obraz yazıçının həyata münasibəti zamanı əldə etdiyi hiss və duyğuların bədii ifadə şəklidir. Surət vasitəsilə yazıçı öz intibahlarını şəklə salır: adam şəklinə, at şəklinə və s. Bədii obraz yazıçının (sənətkarın) estetik idealının ifadəsidir. Onların xarakterini yazıçının estetik ideali müəyyənləşdirir. Biz deyilənləri nəzərə alaraq belə qənaətə gəlirik: yalnız insan obrazına surət deyilir: Atın surəti, itin surəti, qağayının, yaxud dənizin surəti demək olmaz. Bunlara at obrazı, dəniz obrazı demək daha düzgündür”. Çünki, obraz nə qədər daha geniş anlayış olsa da, onun əsasında insan surəti durur.

Bu spesifikliyi nəzərə alaraq, N.Şəmsizadənin haqlı iradını və burdan irəli gələn nəzəri qənaətini qəbul edir, bədii obraz istilahını aşağıdakı təsnifatda qruplaşdırılmasını məqsədəuyğun bilir: surətlər (insandan bəhs edən qəhrəmanlar) və obrazlar (*yəni, flora, fauna və digər predmetləri əhatə edən, özündə birləşdirən qəhrəmanlar*).

**Açar sözlər:** lirik şeirlər, ədəbi obraz, ədəbi qəhrəman, poetik düşüncə, uşaq poeziyası.

## ÖZET

Makale, Z.Khalil'in lirik çocuk şiirlerinin kahramanlarının özelliklerini tartışıyor. Ama önce "obraz" ve "suret" kavramları arasındaki benzerlikler ve farklılıklar açıklığa kavuşturulur.

"Obraz" ve "suret" kavramlarının her zaman çift kanat olarak yan yana geliştirildiği, fakat "obraz" kavramının "suret" kavramından daha geniş bir anlama sahip olduğu belirtilmektedir.

O anlamda ki, her hanki bir dağ, yamaç, ceylan, karaca, her hanki tip çiçek de yazar tarafından tasvir edilebilir, insan da. Ancak dağlar, yamaçlar, ceylanlar, karacalar, herhangi bir çiçek tipi asla kopyas (suret) olamaz. Suret kavramı sadece insan için geçerli olabilir. Edebiyat eleştirmeni Nizameddin Shamsizadeh bu görüştedir. N. Shamsizade'den önce, tüm edebiyat eleştirmenleri obraz kavramı üzerinde hemfikirdi.

Böyle ki, "Azerbaycan Dili Açıklayıcı Sözlüğü" nde edebi bir terim olarak "obraz" teriminin "suret", "figüratif" (sıfat) ve figüratif (isim);

Aziz Mirahmadov'a göre "Sanatsal obraz (suret), sanatın varoluşla ilişkisi, sanatın iç yasaları hakkındaki düşünceler, bilgi sorunu ile ilgili karmaşık, çok yönlü bir kavramdır";

Leonid Ivanovich Timofeyev'e göre, "sanatsal bir imge, somut ve aynı zamanda genelleştirilmiş bir insan yaşamı görüşüdür, incenesetin yardımıyla yaratılmış ve estetik öneme sahiptir";

Leonid Ivanovich Timofeyev'e göre, "sanatsal obraz, somut ve aynı zamanda genelleştirilmiş bir insan yaşamı görüşüdür, edebiyatın yardımıyla yaratılmış ve estetik öneme sahiptir";

Maxim Gorky'ye göre, “Sanatsal obraz, her zaman düşünceden daha geniş ve derindir; insanı ruhsal yaşamının tüm çeşitliliğiyle, duygu ve düşüncelerinin tüm çelişkileriyle yönetir”;

Nafiz Gahramanlı obrazı edebiyatın kalbindeki ana terminklerden biri, belki de birincisi olarak değerlendiriyor. Araştırmacıya göre, sanatsal obraz, yaratıcılığın doğasını, biçimini ve işlevini belirler. Sanatsal obrazın merkezinde, her şeyden önce, insan yaşamının genelleştirilmiş tanımı, insan doğasının tesviri dayanır;

Mir Celal ve Panah Halilov da "Edebiyat Araştırmalarının Temelleri" adlı ders kitaplarında aynı görüştedirler;

Rafiq Yusifoğlu tüm bu sonuçları tekrarlıyor ve genel bir sonuç çıkarıyor: "Obraz şu şekilde tanımlanabilir: Belirli grupların tek bir kişi üzerinde genelleştirilmesine obraz deyilir".

Göründüğü gibi, farklı ifade biçimleri olan, ancak teorik olarak tekrarlanan bu fikirler ortak bir merkezde birleşiyor: insan dahil tüm nesnelere obrazlardır.

Tek fark Nizameddin Shamsizade'nin araştırmasında: "Bir atın sureti, bir köpeğin sureti, bir martının sureti veya bir deniz sureti söyleyemezsiniz. Onlara bir atın obrazı, denizin obrazı demek daha doğrudur".

Yukarıda bahsedilen tüm fikirlere duyduğumuz saygıyı ifade ederek, N.Shamsizadeh'in teorik görüşüne katılıyoruz ve söylemek istiyoruz ki, örneğin, "dağ" coğrafi bir terim olduğu için bir obraz olabilir, suret değil.

R.Yusifoğlu, görüntüyü aynı kabul etmesine rağmen, N.Shamsizadeh'e fikrini başka bir noktada hissetmeden doğrulaması için bir "ipucu" veriyor: Diğer suretler yardımcı bir karaktere sahiptir ve nihayetinde bir kişinin mükemmel bir sanatsal suretini yaratmaya yardımcı olur".

Rus edebiyat eleştirmeni L.I.Timofeyev'in bu bağlamdaki görüşü, R.Yusifoğlu'nun görüşünü de yansıtıyor. L.I.Timofeyev şunu yazıyor: her hangi bir sanatçı bir sandalyede veya masada oturan bir kişiyi tasvir ederse, bu heç de sandalyenin veya masanın insana eşit olduğu anlamına gelmez, masa ve sandalye sadece bir insanın obrazını tam olarak yansıtmamanın bir yoludur.

Asıl sorun, kişi dışındaki görüntülerin destekleyici bir rol oynaması ve görüntünün başrol oynaması ve diğer görüntülerin yalnızca bir kişinin imajını tam olarak yansıtmamanın bir yolu olmasıdır.

Yorumuna "her şeyden önce teorisyenlerimizin imajla ilgili bazı teorilerine bakalım" sözleriyle başlayan N.Shamsizade suret ile ilgili mevcut sonuçları araştırma düzeyinde çıkardıktan sonra, görüşünün devamında şöyle yazıyor: "Türü ne olursa olsun, obraz, yazarın hayata karşı tutumunda edindiği duygu ve duyguların sanatsal bir ifadesidir. Yazar imgenin içinden rönesansını resmetmektedir: bir insan biçiminde, bir at biçiminde ve s. Sanatsal obraz, yazarın (sanatçının) estetik idealinin bir ifadesidir. Karakterleri yazarın estetik ideali tarafından belirlenir.

Yukarıdakileri göz önünde bulundurarak şu sonuca varıyoruz: yalnızca bir insan görüntüsüne suret denir: bir atın sureti, bir köpeğin sureti, bir martının sureti veya bir deniz sureti demek olamaz. Onlara bir atın obrazı, denizin obrazı demek daha doğrudur. Çünkü obraz anlayışı ne kadar geniş olursa-olsun, insan suretine dayanmaktadır.

Bu özgüllüğü hesaba katarak, N.Shamsizadeh'in haklı sözünü ve ortaya çıkan teorik sonucu kabul ediyoruz, sanatsal obraz terimini aşağıdaki sınıflandırmada gruplandırmanın uygun olduğunu düşünüyoruz: suretler (insandan bahs eden kahramanlar) ve obrazlar (yani flora, fauna ve diğer nesnelere kapsayan, kendinde birleştiren kahramanlar).

Böylece, sunulan makalede, Z. Khalil'in çocuk şiirlerinde suretler değil, obrazlar araştırma düzeyine getirilmiştir.

**Anahtar kelimeler:** lirik şiirler, edebi obraz, edebi kahraman, şiirsel düşünce, çocuk şiiri.

## ABSTRACT

The article discusses the features of the heroes of Z.Khalil's lyrical children's poems. But first, the similarities and differences between the concepts of "obraz" and "image" are clarified.

It is stated that the concepts of "obraz" and "image" have always been developed side by side as a double wing, but the concept of "obraz" has a broader meaning than the concept of "image".

In that sense, every single mountain, slope, gazelle, roe deer, any type of flower can be depicted by the author, as well as man. However, mountains, slopes, gazelles, roe deer, any type of flower can never be duplicates. The concept of surrogacy can only apply to human beings. The literary critic Nizameddin Shamsizadeh takes this view. Before N. Shamsizadeh, all literary critics agreed on the concept of obraz.

Thus, in the "Explanatory Dictionary of the Azerbaijani Language", the term "obraz" as a literary term is used as "suret", "figurative" (adjective) and figurative (noun);

According to Aziz Mirahmadov, "Artistic obraz (suret) is a complex, multifaceted concept related to the relation of art to existence, thoughts about the inner laws of art, the problem of cognition";

According to Leonid Ivanovich Timofeyev, "an artistic image is a concrete and at the same time a generalized view of human life, created with the help of refinement and has aesthetic significance";

According to Leonid Ivanovich Timofeyev, "artistic obraz is a concrete and at the same time a generalized view of human life, created with the help of literature and has aesthetic significance";

According to Maxim Gorky, "The artistic obraz is always wider and deeper than thought; man rules with all the diversity of his spiritual life, with all the contradictions of his feelings and thoughts";

Nafiz Gahramanlı considers obraz as one of the main terminologies at the heart of literature, perhaps the first. According to the researcher, artistic obraz determines the nature, form and function of creativity. At the center of the artistic obraz, above all, the generalized definition of human life is based on the impression of human nature;

Mir Celal and Panah Halilov have the same opinion in their textbooks called "Fundamentals of Literary Studies"

Rafiq Yusifoğlu repeats all these conclusions and draws a general conclusion: "Obraz can be defined as follows: Generalization of certain groups over a single person is called obraz";

As it seems, these ideas, which are different forms of expression but theoretically repeated, converge at a common center: all objects, including human beings, are obras.

The only difference is in Nizameddin Shamsizadeh's research: "You cannot say the image of a horse, the image of a dog, the image of a seagull, or the image of a sea. It is more correct to call them the horn of a horse, the obraz of the sea".

Expressing our respect for all the ideas mentioned above, we agree with the theoretical view of N. Shamsizadeh, and we want to say that, for example, "mountain" may be an obraz, not an image, since it is a geographical term.

Although R. Yusifoğlu accepts the image as the same, he gives N. Shamsizadeh a "clue" to justify his idea without feeling it elsewhere: Other replicas have an auxiliary character and ultimately help create a perfect artistic copy of a person".

The opinion of the Russian literary critic L.I. Timofeyev in this context also reflects the view of R. Yusifoğlu. L.I. Timofeyev writes that if any artist depicts a person sitting on a chair or a table, this does not mean that the chair or the table is equal to a person, the table and chair are just a way of reflecting the obraz of a person.

The main problem is that images outside of the person play a supporting role, and the image takes the lead role, and other images are just a way to fully reflect a person's image.

Starting his interpretation with the words "First of all, let's look at some theories about the image of our theorists", N. Shamsizadeh, after making the current results about the reproduction at the research level, writes: The author portrays his renaissance through the image: in the form of a human, in the form of a horse, and S. Artistic obraz is an expression of the author's (artist's) aesthetic ideal.

Taking the above into account, we conclude that a mere human image is called an image: it cannot mean the image of a horse, the image of a dog, the image of a seagull, or the image of the sea. It is more correct to call them the horn of a horse, the obraz of the sea. Because no matter how wide the understanding of obraz is, it is based on the human image.



Taking into account this specificity, we accept the justification of N. Shahamsizadeh and the resulting theoretical conclusion, we consider it appropriate to group the term artistic obraz in the following classification: surets (human images) and obrazes (i.e., including flora, fauna and other objects, essentially uniting heros).

Thus, in the article presented, obrazes, not suretes, in Z. Khalil's children's poems were brought to the research level.

**Keywords:** lyrical poems, literary obraz, literary hero, poetic thought, children's poetry.

**KIRŞEHİR YÖRESİ TARIMININ DÜNÜ BUGÜNÜ YARINI**  
THE PAST, PRESENT AND FUTURE OF AGRICULTURE OF KIRŞEHİR

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**ÖZET**

Kırşehir ili İç Anadolu bölgesinin 33° 30' - 34° 50' Doğu boylamları, 38° 50' - 39° 50' Kuzey enlemleri arasında yer alır. Yıllık yağış miktarı 350-500 mm olup kışları soğuk ve kar yağışlı, yazları ise sıcak ve kurak geçen karasal iklime sahiptir. Bölge 4.500.000 dekarlık bir alana yayılmıştır. Tarım arazisinin %66' sında tarla bitkileri, %0.9'unda meyve yetiştiriciliği ve %0.6' sında sebze yetiştiriciliği yapılmakta olup geri kalan tarım arazileri (%32) nadasa bırakılmaktadır. Toplam tarımsal üretimin %53'ünde bitkisel üretim yapılmakta olup üretilen tarımsal üretimin ülke içindeki payı %1 civarındadır. Bölgede daha ziyade ceviz, badem, elma, armut, domates, biber, taze fasulye, buğday, arpa, nohut, ayçiçeği ve şeker pancarı üretimi ön plana çıkmaktadır. Meyve üretim alanı 2002 yılında 93.280 hektar, üretim miktarı 52.325 ton iken 2020 yılında meyve üretim alanı 40.391 hektar, üretim miktarı 13.467 ton olmuştur. Tarla bitkileri üretim alanı 2002 yılında 242.2870 hektar, üretim miktarı 714.173 ton iken 2020 yılında 264.1771 hektar üretim alanı ve 1.043.221 ton üretim miktarına ulaşmıştır. Sebze üretim alanı ise 2002 yılında 54.430 hektar, üretim miktarı 52.279 ton iken 2020 yılında sebze üretim alanı 12.557 hektar, üretim miktarı 28.553 ton olmuştur. Ülkemizde üretilen şeker pancarının % 1.76'sı, arpanın % 4.5'i, nohutun % 12.33'ü, cevizin % 0.13'ü, armutun % 0.13, domates ve karpuzun % 0.11'i Kırşehir yöresinde yetiştirilmektedir. Bölgede jeotermal kaynaklı seracılık, mantar, tıbbi aromatik bitkiler ve kaba yem üretiminin gelecek yıllarda daha da yaygınlaşması beklenmektedir.

**Anahtar kelimeler:** Bahçe Bitkileri, Kırşehir, Tarla bitkileri, Meyve üretimi, Sebze Üretimi

**ABSTRACT**

Kırşehir is a city located at Central Anatolia with the gps coordinates of 33° 30' - 34° 50' East longitudes and 38° 50' - 39° 50' North latitudes. Annual precipitation is 350-500 mm, and it has a continental climate with cold and snowy winters and hot and dry summers. Kırşehir is spread over an area of 4 500 000 decares. Field crops cultivation is made in 66%, fruit cultivation is made in 0.9% and vegetable cultivation is made in 0.6% of the agricultural land and the remaining agricultural land (%32) is left fallow. Plant production is made in 53% of the total agricultural production and the share of agricultural production in the country is around 1%. In the province, walnut, almond, apple, pear, tomato, pepper, green beans, wheat, barley, chickpea, sunflower and sugar beet production come to the fore. While the fruit production area was 93.280 hectares and the production amount was 52.325 tons in 2002, the fruit production area was 40.391 hectares and the production amount was 13.467 tons in 2020. While the field crops production area was 242.2870 hectares and the production amount was 714.173 tons in 2002, they reached 264.1771 hectares and 1.043.221 tons of production in 2020. While the vegetable production area was 54.430 hectares and the production amount was 52.279 tons in 2002, the vegetable production area was 12.557 hectares and the production amount was 28.553 tons in 2020. 1.76% of sugar beet, 4.5% of barley, 12.3% of chickpea, 0.13% of walnut, 0.13% of pear, 0.11% of tomato and watermelon produced in Turkey are grown in Kırşehir province. It is expected that greenhouse cultivation using geothermal energy, mushroom, medicinal aromatic plants and forage production will become more widespread in the region in the coming years

**Keywords:** Horticulture, Kırşehir, Field crops, Fruit production, Vegetable production

**Basidiomycetes MANTARLARININ MİKOREMEDİASYON POTANSİYELİ**  
MYCOREMEDIATION POTENTIAL OF *Basidiomycetes* MUSHROOMS

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**ÖZET**

Çevre kirliliği, halk sağlığı ve ekonomi üzerindeki olumsuz etkilerinin yanı sıra gıda güvenliğini, içme suyunun bulunabilirliğini ve biyolojik çeşitliliği de tehdit etmektedir. Sürekli artan nüfus, hızlı kentleşme ve sanayileşme, çevre kirliliği ile ilgili sorunların her geçen gün büyümesine sebep olmaktadır. Bu nedenle, sürekli büyüyen bu sorunla mücadele etmek için stratejiler geliştirmek çok önemlidir. Mantarlar, lezzetleri, besinsel değerleri ve tıbbi özellikleri nedeniyle tüm dünyada değerli besin maddeleri olarak kabul edilirler. Ayrıca, mantarlar güçlü bir enzim sistemine sahiptirler ve bu enzim sistemleri sayesinde endüstride çeşitli amaçlarla kullanılırlar. Mantarların, sahip oldukları bu enzim sistemi vasıtasıyla toprak ve su da bulunan çeşitli toksik bileşikleride parçalayabilme yeteneğine sahip oldukları da bilinmektedir. Biyoremediasyon, kirlenmiş bölgeleri kirleticilerden temizlemek için bakterilerden bitkilere, algelere ve mantarlara kadar çeşitli organizmaların kullanılmasıdır. Biyoremediasyon tekniklerinden biri olan, diğer geleneksel ve biyoremediasyon yöntemlerine göre avantajları olan, çevre dostu, düşük maliyetli ve doğal bir süreç içeren mikoremediasyon, toksik kimyasalların yok edilmesinde en etkili yöntemlerden biri olarak kabul edilmektedir. Bu derlemede, *Basidiomycetes* takımında yer alan mantarların, polisiklik aromatik hidrokarbon (PAH), pestisitler, herbisitler, herbisitler ve ağır metaller gibi çeşitli inatçı, kalıcı ve zararlı kirleticileri parçalamadaki rolü özetlenmiştir. Ayrıca, mikoremediasyonun kirlilik sorununun çözümünde kullanılması ve uygulama etkinliğini artırmak ile ilgili önerilerde bulunulmuştur.

**Anahtar kelimeler:** Biyoremediasyon; mikoremediasyon, ağır metaller; polisiklik aromatik hidrokarbonlar; tarımsal kirleticiler

**ABSTRACT**

Environmental pollution can threaten food security, drinking water availability and biodiversity, as well as its negative effects on public health and the economy. The ever-increasing population, rapid urbanization and industrialization cause the problems related to environmental pollution to grow day by day. Therefore, it is essential to develop strategies to tackle this ever-growing problem. Mushrooms are known as valuable foods due to their flavor, nutritional value, and medicinal properties. In addition, fungi have a strong enzyme system and are used for various purposes in industry thanks to these enzyme systems. It is also known that fungi have the ability to degrade various toxic compounds found in soil and water through this enzyme system. Bioremediation is the use of organisms ranging from bacteria to plants, algae and fungi to clean contaminated areas of contaminants. Mycoremediation, which has advantages over other traditional and bioremediation methods, is an environmentally friendly, low-cost and natural process, is considered one of the most effective methods in eliminating toxic chemicals in the soil and water. In this review, the role of mushrooms in the Basidiomycetes order in breaking down various stubborn, persistent and harmful contaminants such as polycyclic aromatic hydrocarbons, pesticides, herbicides, heavy metals, detergents, dyes are summarized. In addition, suggestions have been made to increase the use of mycoremediation in the solution of the pollution problem and its application efficiency.

**Keywords:** Bioremediation; mycoremediation, heavy metals; polycyclic aromatic hydrocarbons; agricultural pollutants



## **SIĞIR YETİŞTİRİCİLİĞİ İŞLETMELERİNİN TESIS YERİ SEÇİMİ İÇİN BİR AHP KARAR MODELİ: KIRŞEHİR İLİ ÖRNEĞİ**

**AN AHP DECISION MODEL FOR FACILITY LOCATION SELECTION OF CATTLE BREEDING ENTERPRISES: THE CASE OF KIRŞEHİR PROVINCE**

**Başar ALTUNTAŞ**

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### **ÖZET**

İşletmenin başarısında önemli bir faktör olan kuruluş yeri seçimi, çok kriterli bir karar problemidir. Tesis yeri seçimi uzun dönemli olarak alınan stratejik bir karar olması nedeniyle üzerinde hassasiyet ile durulması gereken önemli bir konudur. İşletmenin tesisleşeceği yer seçim kararında etkili olan çok fazla kriter olması ve birbirine karşı zıtlıklar içeren bu kriterler arasında uzlaşma gerektirmesinden dolayı karmaşık bir problem özelliği taşımaktadır. Girişimcilerin karar vermelerine yardımcı olabilmek amacıyla çok kriterli karar verme yöntemleri geliştirilmiştir. Analitik Hiyerarşi Proses (AHP) yöntemi karar verecek kişilerin kriterleri birlikte değerlendirmeleri gerektiği durumlarda sıklıkla tercih edilen bir yöntemdir.

Bu çalışmanın temel amacı tarım sektörü içerisinde önemli faaliyet alanı olan sığır besiciliği işletmesi için kuruluş yeri seçim kararını etkileyen kriterleri ortaya koymaktır. Bu doğrultuda Kırşehir ilinde yeni kurulacak bir sığır besiciliği işletmesi için en uygun alternatif bölgenin belirlenmesi hedeflenmektedir. Kırşehir ilinin dört farklı lokasyonu, üç ana kriter ve onbir alt kritere göre karşılaştırılmış ve en uygun kuruluş yeri belirlenmiştir. Yozgat yolu olarak tanımlanan bölge ideal kuruluş yeri olarak belirlenirken, kriterlere göre uygunluğu en az olan bölgenin ise Savcılı yolu üzeri olduğu görülmüştür. Kuruluş yeri seçimini etkileyen en önemli ana kriterin pazara ilişkin faktörler olduğu tespit edilmiştir. Bu ana kriterin altında hammaddeye ve kesimhaneye yakın lokasyon olması bu seçim kararına etki eden önemli faktörler olarak belirlenmiştir. Kırşehir ilinde devlet teşvikleri, yasal zorunluluklar ve ulaşım imkanları alt kriterleri ise seçim kararını en az düzeyde etkileyen kriterlerdir. Çalışma yeni girişimcilere ve politika belirleyicilere önemli bir takım sonuçlar ortaya koymaktadır.

**Anahtar kelimeler:** Hayvancılık, Sığır Besiciliği, Tarım sektörü, Analitik Hiyerarşi Proses, Kuruluş yeri seçimi

### **ABSTRACT**

The choice of facility location, which is an important factor in the success of the business, is a multi-criteria decision problem. Facility location is an important issue that needs to be carefully considered, since it is a long-term strategic decision. It is a complex problem because there are too many criteria that are effective in the decision to choose the place where the business will be established and it requires reconciliation between these criteria, which are contradictory to each other. Multi-criteria decision making methods have been developed to help entrepreneurs make decisions. The Analytical Hierarchy Process (AHP) method is often preferred when decision makers need to evaluate the criteria together.

The main purpose of this study is to reveal the criteria that affect the decision of the facility location for the cattle breeding business, which is an important field of activity in the agricultural sector. In this direction, it is aimed to determine the most suitable alternative region for a cattle breeding business to be established in Kırşehir province. Four different locations of Kırşehir province were compared according to three main criteria and eleven sub-criteria, and the most suitable facility location was determined. While the region defined as the Yozgat road was determined as the ideal facility location, it was seen that the region with the least compliance according to the criteria was on the Savcılı road. It has been determined that the most important main criterion affecting the selection of the facility location is the market-related factors. Under this main criterion, the location close to the raw material and slaughterhouse has been determined as the important factors affecting



this selection decision. State incentives, legal obligations and transportation facilities in Kırşehir province are the criteria that affect the selection decision at the least level. The study reveals a number of important implications for new entrepreneurs and policy makers.

**Keywords:** Livestock, Cattle breeding, Agriculture sector, Analytical Hierarchy Process, Facility Location

**TARIMSAL KOOPERATİFÇİLİĞİN GELİŞİMİ VE KIRŞEHİR İLİNİN TARIMSAL  
KOOPERATİFÇİLİK POTANSİYELİNİN SWOT ANALİZİ İLE DEĞERLENDİRİLMESİ**

**DEVELOPMENT OF AGRICULTURAL COOPERATIVES AND EVALUATION OF AGRICULTURAL  
COOPERATIVE POTENTIAL OF KIRŞEHİR PROVINCE WITH SWOT ANALYSIS**

**Başar ALTUNTAŞ**

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**ÖZET**

Eski çağlarda insanların tek başına üstesinden gelemedikleri zorluklar karşısında işbirliği yapma davranışı sergiledikleri ve nihayetinde ekonomik yarar sağladıkları bilinmektedir. Birlikte hareket etme ihtiyacı zaman içerisinde kooperatif olarak adlandırılan modern örgütlenme yapısının ortaya çıkmasını sağlamıştır. Günümüzde kooperatifçilik sürdürülebilir bölgesel kalkınmada etkili bir model olarak kabul edilmektedir. Kırsalın kalkındırılmasında temel amaçlardan birisi kent ve kırsal arasındaki gerek ekonomik gerekse de sosyo-kültürel farklılığı en aza indirmek koşuluyla, kırsal nüfusu yerinde tutabilmektir. Bu bakımdan kooperatifçiliğin tarım sektörü üzerinde geliştirilmesini sağlamak kırsalda yaşayan çiftçilerin ekonomik yönden yetersiz kalması sorununa çözüm olabilecek ya da etkisini en aza indirecektir. Küçük çaplı üretim yapan çiftçiler üretimlerinin az olması, buna karşılık maliyetlerinin fazla olması nedeniyle düşük gelir elde etmektedirler. Karşılaşılan bu sorunun üstesinden gelebilmek için küçük üreticileri örgütlü bir yapıya kavuşturmak ve oluşturulan bu yapıda etkin biçimde çalışması sağlanmalıdır. Bu bağlamda yürütülen çalışmanın temel amacı Kırşehir ilinde tarımsal kooperatifçiliğin potansiyelini irdelemek, mevcut potansiyeli SWOT analizi ile değerlendirmek, kooperatifçiliği geliştirme ve yaygınlaştırmaya yönelik öneriler geliştirmektir.

**Anahtar kelimeler:** Kooperatif, Kalkınma, SWOT Analizi, Kırşehir

**ABSTRACT**

It is known that in ancient times, people exhibited cooperative behavior in the face of difficulties that they could not overcome alone and ultimately provided economic benefits. The need to act together has led to the emergence of a modern organizational structure called cooperative over time. Today, cooperatives are accepted as an effective model for sustainable regional development. One of the main purposes in rural development is to keep the rural population in place, provided that the economic and socio-cultural differences between the city and the countryside are minimized. In this respect, ensuring the development of cooperatives on the agricultural sector will either be a solution to the economic insufficiency of rural farmers or minimize its impact. Small-scale farmers earn low income because their production is low and their costs are high. In order to overcome this problem, small producers should have an organized structure and work effectively in this structure. The main purpose of the study carried out in this context is to examine the potential of agricultural cooperatives in Kırşehir, to evaluate the current potential with SWOT analysis, and to develop suggestions for developing and disseminating cooperatives.

**Keywords:** Cooperative, Development, SWOT Analysis, Kırşehir

## **BİTKİ BÜYÜMESİNİ TEŞVİK EDEN BAZI BAKTERİLERİN BİYOFİLM OLUŞTURMA KAPASİTELERİNİN BELİRLENMESİ**

DETERMINATION OF BIOFILM FORMING CAPACITIES OF SOME PLANT GROWTH PROMOTING BACTERIA

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### **ÖZET**

Günümüz şartlarında tarım; hayvancılığa olan talebin artması ve giderek artan insan nüfusunun gıda ihtiyacına karşılık verebilmek için sürdürülebilir tarımsal üretim, sınırlı kaynakların kullanılması (verimli topraklar gibi), geleneksel tarım uygulamalarından kaynaklanan yoğun çevresel sorunların giderilmesi gibi farklı zorluklarla karşı karşıyadır. Bu sorunlar, gıda verimliliğini arttırmak için kimyasal gübre yerine mikroorganizma içerikli organik gübrelerin kullanımı yoluyla ve bu amaçla yerli toprak mikroorganizmalarının keşfi ve kullanılması ile minimize edilebilir. Zengin toprak mikroflorası arasında, bitki büyümesini teşvik eden rizobakterilerin (BBTER), bir dizi yararlı etki yoluyla bitki büyümesini arttırmada önemli bir rol oynadığı yapılan çalışmalarda belirtilmiştir. Bu genellikle, rizosferdeki planktonik bakteri varlığına göre avantajları olan biyofilmler oluşturarak elde edilmektedir. Ancak, bitki büyümesini teşvik eden bakterilerin biyofilm oluşturma yetenekleri geçmişte yapılan araştırmalarda ihmal edilmiştir. Geleneksel olarak, bakteri hücreleri serbest yaşayan hücreler olarak tanımlanmış ve karakterize edilmiştir, ancak farklı çevresel koşullar altında biyofilm oluşturma yetenekleri vardır. Biyofilm oluşumu ve yayılımının çok iyi tanımlanmış ve aşağıdaki aşamaları içerdiği bilinmektedir: ilk bağlanma, hücreler arası bağlanma, desorpsiyon, biyofilm olgunlaşması ve biyofilm dağılımı. Biyofilmlerin ayrıca azot ve fosfor gibi kompleks besin maddeleri içeren farklı bileşikler parçaladığı bildirilmiştir. Biotik yüzeylerle biyofilm ilişkilendirmeleri hakkındaki araştırmalar önem kazanmaya başlamış ve bu, tarımda bakteriyel biyofilmlerin kullanımına ivme kazandırmıştır. BBTER tarafından gerçekleştirilen biyofilm yapıları, doğal koşullar altında ortak bir yaşam tarzı olarak kabul edilir ve bitkiler için biyotik ve abiyotik stres koşullarına karşı koruma sağlar. Bitki büyümesini teşvik eden çeşitli rizobakteriler arasındaki etkileşim, esas olarak bakterilerin planktonik büyüme modu altında araştırılmıştır. Bununla birlikte, BBTER'nin bitkilerin kök yüzeyleri ve topraktaki biyofilm modundaki davranışları hakkında daha çok araştırmaya ve bilgiye ihtiyaç vardır. Bu çalışmanın ana amaçlarından biri de bu alana katkı sunmaktır. Yapılan araştırmalarda tarım sektörüne odaklanan biyofilimli biyogübrelerin önemli potansiyel faydalarının olabileceği belirtilmiştir. Bu tür ürünlerin, bitkiyi sadece çeşitli çevre ve toprak kaynaklı hastalıklara karşı değil, aynı zamanda tuzluluk, kuraklık, inorganik ve organik kirleticiler gibi abiyotik streslere karşı koruyabileceği ve potansiyel olarak ürün verimliliğini artıracığı belirtilmiştir. Bu çalışmada seçmiş olduğumuz toprak bakterilerinin biyofilm oluşturma kapasiteleri kristal viyole deneyi ile belirlenmiştir.

**Anahtar kelimeler:** Biyofilm, BBTER, mikrobiyal biyofilm, mikrobiyal biyogübre

### **ABSTRACT**

Agriculture in today's conditions; In order to meet the increasing demand for livestock and the food needs of the growing human population, sustainable agricultural production is faced with different challenges such as the use of limited resources (such as fertile lands), and the elimination of intense environmental problems arising from traditional agricultural practices. These problems can be minimized by the use of organic fertilizers containing microorganisms instead of chemical fertilizers to increase food productivity and by the discovery and use of native soil microorganisms for this purpose. Among the rich soil microflora, studies have

indicated that plant growth promoting rhizobacteria (PGPR) play an important role in enhancing plant growth through a series of beneficial effects. This is usually achieved by forming biofilms that have advantages over the presence of planktonic bacteria in the rhizosphere. However, the biofilm forming abilities of plant growth promoting bacteria have been neglected in past research. Traditionally, bacterial cells have been described and characterized as free-living cells, but they have the ability to form biofilms under different environmental conditions. Biofilm formation and dispersal are well defined and known to involve the following stages: initial attachment, intercellular attachment, desorption, biofilm maturation, and biofilm dispersal. Biofilms have also been reported to break down different compounds containing complex nutrients such as nitrogen and phosphorus. Research on biofilm associations with biotic surfaces has gained importance and this has accelerated the use of bacterial biofilms in agriculture. The biofilm structures realized by PGPR are considered a communal lifestyle under natural conditions and provide protection for plants against biotic and abiotic stress conditions. The interaction between various rhizobacteria promoting plant growth has been mainly investigated under the planktonic growth mode of bacteria. However, more research and information is needed on the behavior of PGPR on the root surfaces of plants and in soil biofilm mode. One of the main purposes of this study is to contribute to this field. Studies have shown that biofilm biofertilizers focusing on the agricultural sector may have significant potential benefits. It has been stated that such products can protect the plant not only against various environmental and soil-borne diseases, but also against abiotic stresses such as salinity, drought, inorganic and organic pollutants, and potentially increase crop productivity. In this study, the biofilm forming capacities of the selected soil bacteria were determined by the crystal violet assay.

**Keywords:** Biofilm, PGPR, microbial biofilm, microbial biofertilizer

**KURU TARIM KOŞULLARINDA FARKLI YAĞLIK AYÇİÇEĞİ (HELİANTHUS ANNUUS L.) ÇEŞİTLERİNİN BÜYÜME VE VERİM PARAMETRELERİNİN KARŞILAŞTIRILMASI**  
**COMPARISON OF GROWTH AND YIELD PARAMETERS OF DIFFERENT SUNFLOWER (HELİANTHUS ANNUUS L.) CULTIVARS IN DRY FARMING CONDITIONS**

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**ÖZET**

Çalışma kuru tarım koşullarında ayçiçeği çeşitlerinin büyüme ve verim parametrelerinin karşılaştırılması amacıyla Kırşehir ekolojik koşullarında 2018 yılında yürütülmüştür. Denemede 7 adet ayçiçeği çeşitleri (Sanbro, Transol, Cadix, Tunca, Bosfora, LG5880 ve Sanay) tesadüf blokları deneme desenine göre üç tekerrürlü olarak kurulmuştur. Araştırmada ayçiçeğinde bitki boyu (cm), sap kalınlığı (mm), tabla çapı (cm), 1000 tohum ağırlığı (g), tohum verimi (kg/da), iç oranı (%), ham yağ oranı (%) ve ham yağ verimi (kg/da) belirlenmiştir. Araştırmada çeşitler arasında bitki boyu, sap kalınlığı, tabla çapı, 1000 tohum ağırlığı, tohum verimi, iç oranı ve ham yağ verimi yönünden önemli ( $P<0.01$ ) farklılıklar tespit edilirken, ham yağ oranı çeşitler arasında önemli farklılık göstermemiştir. Araştırmada kuru tarım koşullarında Transol, Bosfora ve LG5880 çeşitleri diğer çeşitlere göre bitki boyu, sap ve tabla çapı, bin dane ağırlığı tohum ve yağ verimi yönünden daha üstün gruplamada yer almıştır. Tohum iç oranı yönünden Sanbro ve Tunca çeşitleri daha yüksek orana sahip çeşitlerdir. Yarı kurak iklim koşullarında tohum ve yağ verimi dikkate alındığında Transol, Bosfora ve LG5880 çeşitleri daha iyi sonuçlar sağladığı gözlenmiştir.

**Anahtar kelimeler:** Ayçiçeği, kuru tarım, verim, yağ oranı

**ABSTRACT**

The study was carried out in 2018 in Kırşehir ecological conditions in order to compare the growth and yield parameters of sunflower cultivars under dry farming conditions. In the experiment, 7 sunflower cultivars (Sanbro, Transol, Cadix, Tunca, Bosfora, LG5880 and Sanay) were established in a randomized block design with three replications. In the research, plant height (cm), stem thickness (mm), table diameter (cm), 1000 seed weight (g), seed yield (kg/da), kernel ratio (%), crude oil ratio (%) and crude oil yield (kg/da) were investigated. In the study, significant ( $P<0.01$ ) differences were detected between the cultivars in terms of plant height, stem thickness, table diameter, 1000 seed weight, seed yield, kernel ratio and crude oil yield, but no significant differences in crude oil rates. In the research, Transol, Bosfora and LG5880 cultivars have higher plant height, stem thickness, table diameter, thousand-grain weight, seed, and oil yield under dry farming conditions. In this context, Transol, Bosfora and LG5880 cultivars have better results in terms of seed and oil yield under semi-arid climate condition.

**Keywords:** Sunflower, dry farming, yield, oil rate

## **TIBBİ VE AROMATİK BİTKİLERDEN EKSTRAKT ELDESİNDE KULLANILAN YÖNTEM VE TEKNOLOJİLERE GENEL BİR BAKIŞ**

AN OVERVIEW OF THE METHODS AND TECHNOLOGIES USED TO OBTAIN EXTRACTS FROM MEDICINAL AND AROMATIC PLANTS

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### **ÖZET**

Bitkisel tıbbi ürünlere, nutrasötiklere ve doğal ürünlere olan talebin tüm dünyada artmasıyla birlikte, yüksek kalitede ekstraktlar ve uçucu yağların üretimini mümkün kılan en uygun ekstraksiyon teknolojileri araştırılmaya devam etmektedir. Tıbbi bitkiler; geleneksel tıp ilaçları, modern ilaçlar, nutrasötikler, kozmesötikler, gıda takviyeleri ile farmasötik ara ürünlerin eldesi için gerekli kimyasal bileşikler bakımından zengin, biyolojik ilaç kaynaklarıdır. Aromatik bitkiler ise gıda ve kozmetik endüstrilerinde ihtiyaç duyulan kokulandırma veya tatlandırma işlemlerinde kullanılan terpenler veya fenolikler gibi bileşikler bakımından zengin bitkilerdir. Gelişmekte olan ülkelerde üretilen tıbbi ve aromatik bitkiler (TAB), gelişmiş ülkelere satın alındıktan sonra çeşitli endüstrilerde ihtiyaç duyulan ve daha yüksek ekonomik değeri olan hammadde veya ürünlere dönüştürülmektedirler. TAB biyokaynaklarında katma değer yaratmanın ilk adımı, basit geleneksel teknolojilerden gelişmiş ekstraksiyon tekniklerine kadar çeşitli yöntemler kullanarak bitkisel ilaç preparatlarının (yani ekstraktların) üretilmesidir. Başlangıç materyali olarak kullanılan bitki organı veya dokusu, ekstraksiyon için kullanılan solvent, kullanılan ekipman tipi ile kullanılan üretim yöntemi ve hammadde:ekstrakt oranı ekstraktın kalitesini etkileyen temel parametrelerdir. Uygun bitki materyalinin, ekstraksiyon teknolojisinin ve ekipmanının, ekstraksiyon yönteminin ve çözücünün kullanılması kaliteli bir ekstraktın üretilmesine yardımcı olmaktadır. TAB biyokaynaklarından en yüksek ekonomik gelirin elde edilebilmesi için ekstraksiyon teknolojilerindeki gelişmelerin ve üretimdeki kalite parametrelerine ait bilgilerin TAB çeşitliliği bakımından zengin ve gelişmekte olan ülkelerde yaygınlaştırılması gerekmektedir. Bu derlemede TAB ekstraktlarının eldesinde benimsenen geleneksel yöntemlere ve en son teknolojilere yer verilmiştir.

**Anahtar kelimeler:** Aromatik bitki, bitki ekstraktları, bitkisel ilaç, ekstraksiyon, sekonder metabolit, tıbbi bitki

### **ABSTRACT**

With the increasing demand for herbal medicinal products, nutraceuticals and natural products all over the world, research continues on the most appropriate extraction technologies that enable the production of high quality extracts and essential oils. Medicinal plants are the resources of biological drugs rich in chemical compounds necessary for the production of traditional medicine drugs, modern drugs, nutraceuticals, cosmeceuticals, food supplements and pharmaceutical intermediates. Aromatic plants, on the other hand, are plants rich in compounds such as terpenes or phenolics used in scenting or flavoring processes needed in the food and cosmetic industries. Medicinal and aromatic plants (MAP) produced in developing countries are converted into raw materials or products with higher economic value, which are needed in various industries after being purchased by developed countries. The initial step in value addition to MAP bioresources is the production of herbal extracts by the adoption of a variety of methods, from simple traditional techniques to advanced extraction technologies. The plant organ or tissue used as the starting material, the solvent used for extraction, the type of equipment utilized, the production process followed and the raw material:extract ratio are the main parameters that affect the quality of the extract. The use of appropriate plant material, extraction technology and equipment, extraction method and solvent helps to produce a high-grade extract. In order to obtain the highest economic income from MAP bioresources, developments in extraction technologies and information on quality parameters in production should be disseminated in developing countries rich in MAPs



diversity. In this review, the traditional methods and the latest technologies adopted in the production of MAP extracts were summarized.

**Keywords:** Aromatic plant, extraction, herbal drug, herbal extracts, medicinal plant, secondary metabolite



## KIRGIZİSTAN ÇÜY BÖLGESİNDEKİ BAZI MERALARIN VEJETASYON YAPISI ÜZERİNE BİR ARAŞTIRMA

A RESEARCH ON THE VEGETATION STRUCTURE OF SOME RANGELAND IN KYRGYZSTAN  
CUY REGION

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### ÖZET

Bu araştırma, Kırgızistan'ın Çüy Bölgesinde farklı rakımlarda (810-2680 m.) bulunan 6 farklı doğal merada, vejetasyon yapısının belirlenmesi amacıyla 2018-2019 yıllarında yürütülmüştür. Araştırmada, her merada toplam 12 lup hattındaki 1200 noktada ölçüm yapılarak meralardaki bitkilerin tür, cins ve familyaları, otlatmaya karşı tepkileri (azalıcı, çoğalıcı, İstilacı), ömür uzunlukları belirlenmiştir. Yapılan vejetasyon etütlerinde, meralarda ortalama familya cins ve tür sayısının sırasıyla 11.3, 22.0, 23.7, kaplama oranının % 97.1, botanik kompozisyon oranının buğdaygil, baklagil ve diğer familya bitkilerinde sırasıyla % 36.4, % 15.8 ve % 47.8, tek yıllık ve çok yıllık bitkilerin botanik kompozisyondaki oranlarının sırasıyla % 4.2, % 95.2, azalıcı, çoğalıcı ve istilacı türlerin oranlarının sırasıyla % 36.2, % 6.8 ve % 57.0, olduğu belirlenmiştir.

Araştırma sonuçlarına göre, incelenen meralarda kaplama alanının yüksek, bitkilerin büyük bir kısmının çok yıllık, istilacı türlerin oranının çoğalıcı ve azalıcılardan yüksek olduğu belirlenmiştir. Bu ve benzer ekolojik koşullardaki meralarda, otlatmanın düzenlenmesi, toprak ve topoğrafik koşullarına bağlı olarak üstten tohumlama veya doğal tohumlama yöntemlerinin tek başlarına veya diğer ıslah yöntemleri ile kombine edilerek ıslah edilebilme imkanlarının araştırılması ve uygulanması gerekmektedir.

**Anahtar kelimeler:** Kırgızistan, Mera, vejetasyon,

### ABSTRACT

This research was carried out in 2018-2019 years in order to determine the hay yields, forage qualities, botanical compositions and range conditions of 6 different natural rangelands located in different altitudes (810-2680 m.) in Chuy Region, Kyrgyzstan. In the research, plant species in rangelands were determined at 1200 points in 12 loop lines in each rangeland.

In this research, species, genus and families of plants in rangelands, their responses to grazing (decreaser, increaser, invader), plant life span, plant coverage of rangelands, botanical compositions of each area were determined. In the vegetation research, mean numbers of species, genera and families were 23.7, 22 and 11.3, respectively. In the rangelands, the mean of plant coverage was 97.1%, the mean of grasses in the plant covered area was 36.4%, the mean of legumes was 15.8%, and the mean of other family ranged from was 47.8%. In the rangelands, the mean of decreaser species was 36.2%, the mean of increaser species was 6.8% and the mean of invader species was 57.0%.

According to research results, the grazing control in the rangelands analyzed and rangelands with the similar ecological conditions is recommended. Extensive research targeting appropriate range improvement strategies for each individual rangeland with unique soil and topographic conditions is recommended in order to select among the top seeding, seeding or natural seeding methods alone or combined with other range improvement strategies.

**Keywords:** Kyrgyzstan, Rangeland, Vegetation

## **TÜRKİYE’DE MERA KANUNU KAPSAMINDA YÜRÜTÜLEN MERA ISLAHI VE AMENAJMAN PROJELERİNİN GENEL BİR DEĞERLENDİRİLMESİ**

EVALUATION OF RANGELAND IMPROVEMENT AND MANAGEMENT PROJECTS CARRIED OUT WITH IN THE SCOPE OF RANGELAND LAW IN TURKEY

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### **ÖZET**

Çayır ve mera alanları hayvanların ihtiyaç duyduğu kaba yemin sağlandığı en önemli yem kaynaklarıdır. Türkiye’de 14.6 mil.ha çayır mera alanı ve 2.1 mil.ha yem bitkisi üretim alanlarından üretilen toplam kaba yem, 73.7 milyon büyük ve küçükbaş hayvan varlığının kaba yem ihtiyacını karşılayamamaktadır. Türkiye’de mevcut çayır mera alanlarının büyük çoğunluğunun ot verimi ve kalitesinin artırılması ve sürdürülebilirliğinin sağlanması için ıslahı gereklidir.

Mevcut mera alanının 1/3’ü zayıf, 1/2’si orta, 1/10’u ise iyi ve çok iyi mera durumundadır. Mera kanununun yürürlüğe girdiği 1998 yılından beri Tarım ve Orman Bakanlığı 12 630 592 da alanda, 1916 adet Mera Islahı ve Amenajmanı Projesi yürütmüştür. Yürütülen projelerin değerlendirildiğinde, ıslah projelerinden beklenen faydanın ve başarının sağlanmadığı, söylenebilir.

4342 sayılı Mera Kanunu ile birlikte başlatılan Mera Islah ve Amenajman Projeleri ile bugüne kadar ıslah edilen mera alanları oldukça yetersizdir. Mevcut durumu ile projelerin sürdürülebilirliği Ayrıca, ıslah edilen mera alanlarının otlatılmasında mera idaresinin teknik kurallarına uyulmamasından dolayı yapılan ıslah işlemi sürdürülebilir olmamaktadır. Bundan dolayı mera alanlarının kullanımında mevcut uygulamaları değiştirip farklı bir politika uygulamak gerekmektedir. Özellikle bu alanların kullanımında özel sektöre kiralanana mera alanların artırılması bu alanlardan elde edilen ot verimi ve kalitesini artırabilecektir.

**Anahtar kelimeler:** Türkiye, Mera Kanunu, Islah ve Amenajman Projeleri

### **ABSTRACT**

Meadows and rangelands are the most important feed sources that provide the roughage needed by the animals. Total roughage produced from 14.6 miles of meadow rangeland and 2.1 miles of forage crop production areas in Turkey cannot meet the roughage needs of 73.7 million cattle and sheep. The majority of the existing meadow rangeland areas in Turkey need to be improved in order to increase the grass yield and quality and to ensure its sustainability.

In Turkey, 1/3 of the rangeland area is poor, 1/2 is medium, 1/10 is in good and very good condition. Since 1998, 1916 Rangeland Improvement and Management Projects have been carried out in an area of 12 630 592 decares within the scope of the Rangeland Law.

When the projects carried out are evaluated, it can be said that the expected benefit and success from the improvement projects has not been achieved.

The rangeland lands that have been rehabilitated with the Rangeland Improvement and Management Projects initiated with the Rangeland Law No. 4342 are quite insufficient. Sustainability of the projects with their current status In addition, the improvement process is not sustainable due to non-compliance with the technical rules of the rangeland management in the grazing of the reclaimed rangelands. Therefore, it is necessary to change the existing practices and apply a different policy in the use of rangeland areas. Increasing the rangeland areas leased to the private sector, especially in the use of these areas, will increase the yield and quality of grass obtained from these areas.

**Keywords:** Turkey, Rangeland Law, Rangeland Improvement and Management Projects

## İÇ ANADOLU BÖLGESİ'NDE NOHUT ÜRETİM PROFİLİNİN BULANIK KÜMELEME YAKLAŞIMIYLA ANALİZİ

### ANALYSIS OF CHICKPEA PRODUCTION PROFILE IN CENTRAL ANATOLIA REGION BY FUZZY CLUSTERING APPROACH

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#### ÖZET

Tarımsal araştırmalarda veri yapılarının etkin bir şekilde kullanılabilmesi amacıyla kümeleme ve sınıflandırma çalışmalarında yapay zekâ tabanlı alternatif yöntemler araştırmacılar tarafından tercih edilmektedir. Danışmansız örüntü tanımlama tekniklerinden birisi olan bulanık c-means, bulanık mantık teorisinden yola çıkılarak geliştirilmiş bir kümeleme tekniğidir. Bu yöntemde, veri setinde yer alan gözlem değerleri üyelik dereceleri ile ifade edilmektedir ve üyelik derecelerine göre ait oldukları kümeler yerleşmektedirler. Bu çalışmada, çiftlik tipolojisinin belirlenmesi ve nohut üreticilerinin profilinin ortaya koyulması amacıyla temel bileşen tabanlı bulanık c-ortalama algoritması önerilmeye ve değerlendirilmeye çalışılmıştır. Geçerlilik ölçütleri kullanılarak optimum küme sayısı elde edilmiştir. Araştırma bulguları, bulanık kümeleme analizinin nohut üretim profilini objektif bir şekilde yansıttığını ve alternatif çiftçilik tipolojisi belirleme yöntemlerinden birisi olabileceğini göstermektedir.

**Anahtar kelimeler:** Bulanık kümeleme, Fuzzy C-Means, Nohut, Çiftlik Tipolojisi.

#### ABSTRACT

In order to use data structures effectively in agricultural research, artificial intelligence-based alternative methods are preferred by researchers in clustering and classification studies. Fuzzy c-means, one of the unsupervised pattern identification techniques, is a clustering technique developed based on fuzzy logic theory. In this method, the observation values in the data set are expressed with membership degrees and they are placed in the clusters they belong to according to their membership degrees. In this study, principal component-based fuzzy c-means algorithm was tried to be proposed and evaluated in order to determine the farm typology and to reveal the profile of chickpea producers. The optimum number of clusters was obtained by using the validity criteria. Results of analysis show that fuzzy cluster analysis reflects the chickpea production profile objectively and can be one of the alternative farming typology determination methods.

**Keywords:** Fuzzy clustering, Fuzzy C-Means, Chickpea, Farm Typology.

## **NOHUT ÜRETİCİLERİNDE RİSK GRUPLARININ BELİRLEYİCİLERİ: İÇ ANADOLU BÖLGESİ ÖRNEĞİ**

### **CHARACTERISTICS OF RISK GROUPS IN CHICKPEA PRODUCERS: CASE STUDY FOR CENTRAL ANATOLIA REGION**

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#### **ÖZET**

Bu çalışmada, İç Anadolu Bölgesi'nde nohut üretimi gerçekleştiren çiftçilerin riske karşı tutumlarını etkileyen faktörlerin belirlenmesi amaçlanmıştır. Faktörlerin belirlenmesinde Multinomial Logit model kullanılmıştır. Multinomial logit model, bağımlı değişkenin iki değerli olduğu durumlarda değişkenler arasındaki ilişkinin araştırılmasında tarımsal alanda oldukça yaygın şekilde kullanılan yöntemlerden birisidir. Multinomial Logit regresyon modeli, iki durumlu Logit modelin ikiden fazla kategorisi için genişlemiş bir versiyonudur ve bu yöntemde bağımsız değişkenlerin sıralama içermeyen bağımlı değişken kategorisi üzerindeki etkisi bir bütün olarak aynı anda incelenmektedir. Analizlerde bağımlı değişken "risk almayı seven", "riske duyarsız" ve "riskten kaçınan" olmak üzere üç kategori halinde ele alınmıştır. Referans grup riske karşı nötr olan çiftçi grubu alınmıştır. Buna göre, çiftçilerin riske karşı tutumları modelde yer alan bağımsız değişkenlerin etkisi açısından incelenmiştir. Analiz bulguları, modelin istatistiksel olarak kullanılabilir olduğunu ve istatistiksel açıdan anlamlı çıkan değişkenlerin satış fiyatı, maliyet unsurları, çiftçilerin eğitim seviyesi, pazara uzaklık, tarımsal konularda başvurulan bilgi kaynakları, verim miktarı ve kooperatif üyeliği olduğunu göstermektedir.

**Anahtar kelimeler:** Multinomial Logit, Nohut Üretimi, Risk, Tarım.

#### **ABSTRACT**

In this study, it was aimed to determine the factors affecting the attitudes of the farmers producing chickpea in the Central Anatolia Region towards risk. The Multinomial Logit model was used to determine the factors. The multinomial logit model is one of the most widely used methods in agriculture in investigating the relationship between variables when the dependent variable is binary. The Multinomial Logit regression model is an expanded version of the two-state Logit model for more than two categories. In this method, the effect of the independent variables on the dependent variable category without ranking is examined entirely at the same time. In the analyzes, the dependent variable was considered in three categories as "risk-taking", "risk-neutral" and "risk-averse". The reference group is the farmer group that is neutral to risk. Accordingly, farmers' attitudes towards risk were examined in terms of the effect of independent variables in the model. Results of analysis show that the model is statistically usable and the variables that are statistically significant are the selling price,



cost elements, farmers' education level, distance to the market, information sources consulted on agricultural issues, yield and cooperative membership.

**Keywords:** Multinomial Logit, Chickpea Production, Risk, Agriculture.

## DEVELOPMENT OF EDIBLE OIL QUALITY IN LEAFY CABBAGE

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### ABSTRACT

In cases where intraspecific variation is insufficient, the Plant Breeder uses new genetic resources at the species genus level to create new variation. *Brassica napus* L., that is, canola quality in rapeseed breeding, was determined in the rapeseed gene pool and then transferred to varieties with high yield and traditional quality by intraspecies crossings. In 2000, vegetable oil quality, ie high oleic and low erucic acid content, was determined for the first time in the *Brassica oleracea* gene pool. In the Black Sea Region, leafy cabbage (*B. oleracea* conv. *acephala*) is a traditional vegetable. Cabbage genotypes with vegetable oil quality can easily be crossed with black cabbage and seeds can be obtained. The aim of the study is to develop *Brassica oleracea* genotypes, which are similar to black cabbage in terms of genotype and also contain vegetable oil quality, with quality and molecular analyzes in the opening generation after crossing with cabbage genotypes with vegetable oil quality, after breeding the F1 generation. This material will create a genetic material infrastructure in selecting leafy cabbage genotypes with high grain yield and vegetable oil quality for further *Brassica* research. As a future result of the study, an income source that can be harvested for two product purposes, namely its green leaves and seeds, will be revealed for the farmers of the Black Sea Region.

**Keywords:** *Brassica*, cabbage, edible oil, quality

## **EFFECT OF ORGANIC FERTILIZERS ON TEA (*Camellia sinensis* L. Kuntze) YIELD**

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### **ABSTRACT**

Turkey's tea plantations are more concentrated in Rize, Ordu, Giresun, Trabzon and Artvin provinces. Beginning from the border from Georgia up to to the Araklı district, this spesific are represents the most appropriate and high yielding area for tea production. Tea is the most important income of for most of the people living in this region. In 2006, this issue became important due to the transition to organic tea cultivation in Hemşin district and the gradual transition to organic tea cultivation in Rize. There is not much research about organic fertilizers used in tea production. This research was carried out between 2017-2019 in order to determine the effect of different organic fertilizers on yield at different locations (Hopa, Fındıklı, Ardeşen, Pazar, Hemşin, Çayeli, Ortapazar and Division / Of) in Rize province. While the average yield of fresh tea was around 1500 kg / da in 2017, it increased to 2000 kg / da in 2019. In addition, the soil pH was around 3.5 before the application of organic fertilizer in the first year, but increased by 4.5 at the end of the first harvest in 2017 and the same situation was repeated in 2018/2019. While the soil organic matter values were high (up to 10%) in the locations where the study was conducted, it decreased below 4% on average at the end of 2017 and in 2018/2019 the organic matter was around 4%. The results of the experiment dsplayed that organic fertilizer can be used in tea cultivation.

**Keywords:** Tea, organic fertilizer, yield

## EFFECTS OF FLAXSEED, TURMERIC AND POPPY SEED ON SOME QUALITY CHARACTERISTICS OF CRACKERS

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### ABSTRACT

Cracker is a cereal product prepared with wheat flour, shortening, salt, yeast and/or chemical leavening agents. Crackers have an important place among snact products due to their ease of transportation, storage and long shelf life. Consumer desire for healthy snacks results in an increased variety of products. Flaxseed (*Linum usitatissimum*) is a valuable functional food ingredient with its high  $\alpha$ -linolenic acid (ALA), high quality proteins, soluble fibers, lignans and phenolic compounds. Turmeric (*Curcuma longa* L.) is one of the most well-known spices containing natural antioxidants with many health benefits. Due to its yellow coloured phenolic pigment curcumin, it has is a powerful antioxidant. Poppy (*Papaver somniferum* L.), especially grown in China, India, Czech Republic, Slovakia and Turkey, has rich oil content and desirable fatty acid composition. In this research, flaxseed, turmeric and poppy seed were used in cracker formulation (at 5 % level) and some physical (colour, diameter, thickness and spread ratio) and sensory properties of cracker samples were evaluated and compared to control samples. Flaxseed, turmeric and poppy seed reduced the brightness values ( $L^*$ ) of the control samples ( $p < 0.05$ ). The highest redness ( $a^*$ ) and yellowness ( $b^*$ ) values were obtained in samples containing flaxseed and turmeric, respectively. Crackers containing turmeric revealed the highest SI and Hue values among the samples. The diameter, thickness and spread ratio values of cracker samples were varied between 52.13-54.62 mm, 9.95-10.95 mm and 4.92- 5.27, respectively. The diameter of the samples containing flaxseed was higher than the samples containing turmeric and poppy seeds. In addition, no significant difference was determined between the cracker samples in terms of thickness and spread ratio. According to the sensory analysis results, crackers containing turmeric had lower appearance, colour, odour, taste, mouthfeel and overall acceptability scores than other samples. Crackers containing poppy seed and flaxseed were more appreciated by the panelists.

**Keywords:** Cracker, flaxseed, turmeric, poppy seed, physical, sensory



## EFFECTS OF BUCKWHEAT, QUINOA AND TRANSGLUTAMINASE ENZYME ON COUSCOUS QUALITY

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### ABSTRACT

Buckwheat and quinoa have great potential as a food ingredient, especially for the functional food industry, due to their unique chemical composition. Buckwheat contains protein of high nutritional value, dietary fiber, resistant starch, vitamins, minerals, rutin and other phenolic compounds. Quinoa is a rich source of protein, dietary fiber, essential fatty acids, vitamins, minerals and bioactive components. Transglutaminase (TG, protein-glutamine  $\gamma$ -glutamyl transferase) is an enzyme used as a protein modifier in the food industry. Studies have reported that TG catalyzes the cross-linking of a number of grain proteins such as wheat, barley and rice. In this study, the effects of buckwheat flour (BWF) and quinoa flours (QF, 25%, on flour basis) and transglutaminase enzyme (TG) on the quality of couscous samples were investigated. The results were compared with the control sample prepared without using BWF, QF and TG enzyme. The colour, weight increase, volume increase, cooking loss and sensory properties of all samples were evaluated. The brightness value ( $L^*$ ) of the samples changed in the range of 45.46-63.16 and the use of BWF decreased the brightness value of the samples. The highest redness value ( $a^*$ ) was determined in the samples containing BWF. In general, the use of BWF and QF caused an increase in the yellowness ( $b^*$ ) and SI values of the samples. In the couscous samples, weight increase and volume increase values varied between 114.40-151.30% and 116.43-185.00%, respectively. TG enzyme decreased the volume increase and cooking loss values in couscous samples. Samples containing BWF had higher taste and odour scores than samples containing QF, while all samples scored equal to or higher than the control sample in terms of stickiness. In sensory analysis, samples containing TG enzyme scored higher in terms of appearance and stickiness than those without TG enzyme. The use of TG with BWF in couscous production has yielded successful results in terms of both technological and sensory properties.

**Keywords:** Buckwheat, quinoa, transglutaminase, enzyme, couscous

## **DEVELOPMENT OF MOBILE-BASED FOOD TRACING SYSTEM FOR SRI LANKA**

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### **ABSTRACT**

Since most of the growing foods are contaminated with many chemicals during growth period, modern consumers prefer to consider about the quality and the history of what they are sold. Furthermore, there has been a greater emphasis on consumers' right to know where their food comes from. There are no reliable technology and management system that can trace back food to its origin in Sri Lanka. Therefore, this study aimed at developing of an online mobile-based food tracing system, which would be of great importance for improving confidence of farmers and consumers. We focused on five vegetable productions, radish, tomato, pumpkin, Winged bean, and bitter gourd, growing in Denipitiya village, Weligama in Sri Lanka. Every farmer of the village was provided with a registration ID in the system that is used together with vegetable identification code, and would be a unique identity for particular farmer and his food production. The vegetable ID code denotes farmer's ID, planting date, plot number and name of the vegetable. Farmers have to maintain growing information records on daily farming activities in the field. In the food supply chain, delivery and packing are done by one group and therefore these records will be handled by them. The system is to be maintained by this group and they should enter the data to the database at the supermarkets. The mobile-based food tracing system was developed using Android studio and MySQL database. Each vegetable pack would carry an ID code with its price. Interesting customer can use this ID code to trace the food history through the online at the supermarket or home through the mobile app. This online system may help to increase consumer confidence that would benefit the food industry as well as to promote sustainable agriculture.

**Keywords:** Food safety, online food trace, Sri Lanka and vegetables



## REVIEW ON FOOD WASTAGE IN SOCIETY

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### ABSTRACT

Around The World the major problem is Food Wastage. High Rates of Food wastage is leads threaten to intensify food insecurity around the globe. Food loss and waste refers to edible parts of plants and animals that are produced, Harvested for human consumption. Mainly at Weddings, Events, Restaurants, Hotels and houses are the Major problem for food wastage. The food wastage has been occurring from harvesting to packaging everywhere. The wastage of food in India around 67 Million tons of food in every year. The food wastage has been reduced using evaporative coolers, small metal silos, Plastic Crates and redistribution.

It was concluded that this Review will help people to create awareness about food wastage.

**Keywords:** Food Wastage, Redistribution, Harvesting.

## DETERMINATION OF FATTY ACID CONTENT OF FISH OILS OBTAINED FROM FISHMEAL-OIL FACTORY OPERATING IN THE BLACK SEA REGION

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### ABSTRACT

In this study, the fatty acid content of fish oils produced by processing of rainbow trout (*Oncorhynchus mykiss*) and sprat (*Sprattus sprattus*) obtained from a fishmeal-oil factory operating in the Black Sea region was investigated. According to the results of the research, the main fatty acids determined in sprat and rainbow trout oils are myristic acid (C14:0), palmitic acid (C16:0), stearic acid (C18:0), arachidic acid (20:0), palmitoleic acid (C16:1), oleic acid (C18:1n9), vaksenic acid (C18:1n7), linoleic acid (C18:2n6), eicosapentaenoic acid (EPA, C20:5n3) and decosahexaenoic acid (DHA, C22:6n3) were determined. While the total monounsaturated fatty acids in sprat and rainbow trout oils were determined as 24.76% and 23.99% polyunsaturated fatty acids were determined as 31.40% and 30.71%, respectively. The amount of oleic acid, one of the most important monounsaturated fatty acids, was determined in the highest amount in sprat oil (15.74%). It has been determined that both oil groups contain high amounts of Omega-3 fatty acids, especially EPA and DHA. While the amount of EPA in sprat oil (9.03%) was higher than that in rainbow trout oil (7.64%), the amount of DHA (19.21%) in trout oil was higher than that in sprat oil (17.57%). PUFA/SFA ratios were determined as 0.96 and 0.90 in sprat and trout oil, respectively. In both oils, these values were found to be above the recommended limit value (at least 0.45). The w6/w3 ratio is an important indicator used to compare the nutritional value of the ratio of fish oils. In this study, the w6/w3 ratio of sprat and rainbow trout oil obtained from the fishmeal-oil factory was determined as 0.12 and 0.09, respectively. It was determined that the w6/w3 ratio did not exceed the recommended limit value (maximum 4) in both oil groups. As a result, it was determined that both oils obtained were rich in Omega-3 fatty acids, but the PUFA content of sprat oil was higher than rainbow trout oil.

**Keywords:** Fatty acid, Omega-3, Rainbow trout, Sprat

## TİYAZOLİDİNON TÜREVLERİNİN SENTEZ METOTLARI SYNTHESIS METHODS OF THIAZOLIDINONE DERIVATIVES

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### ÖZET

Heterosiklik bileşikler, kimyadaki ve özellikle organik kimyadaki en büyük bileşik sınıfıdır. Bu bileşikler, biyolojik olarak aktif moleküllerin önemli bir sınıfını oluşturur. Alkaloidler, esansiyel amino asitler, vitaminler, hemoglobin, hormonlar gibi çok sayıda bileşikler, ilaç ve boyalar heterosiklik halka sistemleri içerir. Pürol, pürolidin, furan, tiyofen, piperidin, püridin ve tiyazol gibi heterosiklik bileşikler organik sentezlerde önemli uygulamalara sahiptir. Kükürt ve azot atomları içeren heterosiklik bileşikler farmakolojik ve biyolojik olarak aktif bileşiklerdir. Azot ve kükürt atomları içeren heterosiklik bileşikler, doğal ürün ve ilaçların yapısında yaygın olarak bulunurlar. Bu bileşikler biyolojik olarak aktif moleküllerin önemli bir sınıfını oluştururlar. Bu atomları içeren beş ve altı üyeli halkalara sahip heterosiklik bileşikler, sentetik organik kimya ve tıbbi kimyada büyük ilgi görmektedir. Tiazolidinon bileşikler de bu heterosiklik bileşikler sınıfına dahil olup, yeni biyoaktif bileşiklerin geliştirilmesi için çok yönlü bileşiklerdir. Bu bileşikler son yıllarda organik ve tıbbi kimya açısından dikkat çeken araştırma konuları arasındadır. Tiazolidinonlar, 1 pozisyonunda kükürt atomu, 3 pozisyonunda azot atomu ve ayrıca 2, 4 veya 5 pozisyonlarında ise karbonil grubu içeren tiazolidin türevi bileşiklerdir. Bu bileşiklerin sentezi için literatürde birçok yöntem tanımlanmıştır. Geleneksel olarak tek kademe ve iki kademe sentezleri ile mikrodalga sentez yönteminin yanı sıra kombinatoriyal sentez yöntemlerini de içeren çeşitli sentez yöntemleri mevcuttur. Bu bileşikler amin, aldehit/keton ve tiyoglikolik asidin kondenzasyonu ve halkalaşması sonucu elde edilir. Üç bileşenli sentezlerde oluşan suyu uzaklaştırmak verim artışı sağlaması için önemli olup moleküler sieves, sodyum sülfat, çinko klorür gibi kurutucular kullanılmaktadır. Ayrıca tepkime verimini arttırmak için N,N-disikloheksakarboimid (DCC), 2-(1H-benzotriazo-1-il)-1,1,3,3-tetrametil uranyum hekzafloro fosfat (HBTU), 1-butil-3-metil imidazolium hekzafloro posfat ([bmim][PF<sub>6</sub>]), Montmorillonit K-10, Bi(SCH<sub>2</sub>COOH)<sub>3</sub> ve silika klorür gibi katalizör kullanılmaktadır.

Tiazolidinon ve türevleri, antiinflatuar, anti tüberküloz, antikanser, anti tümör, anti-HIV, anti bakteriyel, anti fungal, analjezik, hipotermik, anesteziik, nematisidal gibi önemli biyolojik ve farmakolojik aktivitelere sahip bileşiklerdir. Bu çalışmada biyolojik aktivite özelliklere sahip olan tiyazolidon ve türevlerinin sentez yöntemleri hakkında bilgi verilmesi amaçlanmıştır.

**Anahtar kelimeler:** Heterosiklik bileşikler, tiyazolidinon, tiazolidin, biyolojik aktivite.

### ABSTRACT

Heterocyclic compounds are the largest class of compounds in chemistry, and especially organic chemistry. These compounds form an important class of biologically active molecules. Numerous compounds such as alkaloids, essential amino acids, vitamins, hemoglobin, hormones, drugs and dyes contain heterocyclic ring systems. Heterocyclic compounds such as pyrrole, pyrrolidine, furan, thiophene, piperidine, pyridine and thiazole have important applications in organic synthesis. Heterocyclic compounds containing sulfur and nitrogen atoms are pharmacologically and biologically active compounds. Heterocyclic compounds containing nitrogen and sulfur atoms are commonly found in the structure of natural products and drugs. These compounds form an important

class of biologically active molecules. Heterocyclic compounds with five- and six-membered rings containing these atoms are of great interest in synthetic organic chemistry and medicinal chemistry. Thiazolidinone compounds are also included in this class of heterocyclic compounds, and they are versatile compounds for the development of new bioactive compounds. These compounds are among the research topics that have attracted attention in terms of organic and medicinal chemistry in recent years. Thiazolidinones are thiazolidine derivative compounds containing a sulfur atom at the 1 position, a nitrogen atom at the 3 position, and also a carbonyl group at the 2, 4 or 5 positions. Many methods have been described in the literature for the synthesis of these compounds. Traditionally, there are various synthesis methods, including one-pot and two-step synthesis, and combinatorial synthesis methods as well as microwave synthesis methods. These compounds are obtained as a result of condensation and cyclization of amine, aldehyde/ketone and thioglycolic acid. It is important to remove the water formed in the three-component syntheses to increase the efficiency, and desiccants such as molecular sieves, sodium sulfate, zinc chloride are used. In addition, catalysts such as *N,N*-dicyclohexacarboimide (DCC), 2-(1*H*-benzotriazo-1-yl)-1,1,3,3-tetramethyl uranium hexafluorophosphate (HBTU), 1-butyl-3-methyl imidazolium hexafluoro phosphate ([bmim][PF<sub>6</sub>]), Montmorillonite K-10, Bi(SCH<sub>2</sub>COOH)<sub>3</sub> and silica chloride are used to increase the reaction efficiency.

Thiazolidinone and its derivatives are compounds with important biological and pharmacological activities such as anti-inflammatory, anti-tuberculosis, anti-cancer, anti-tumor, anti-HIV, anti-bacterial, anti-fungal, analgesic, hypothermic, anesthetic, nematicidal. In this study, it is aimed to give information about the synthesis methods of thiazolidone and its derivatives, which have biological activity properties.

**Keywords:** Heterocyclic compounds, thiazolidinone, thiazolidine, biological activity.

**THE ROLE OF THE FLAG CARRIER AIRLINE ON EXPORT: TODA-YAMAMOTO  
CAUSALITY ANALYSIS**

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**ABSTRACT**

The trade deficit, which is among the most important factors affecting the current account deficit, is one of the main obstacles to sustainable economic growth. In this context, both developed and developing countries pursue strategies to increase exports.

In this study, the relationship between Turkey's exports and Turkish Airlines (THY), which is the flag carrier airline, revenue passenger kilometer and load factor was examined by the Toda-Yamamoto causality test. The data set of the study includes 36 observations on a quarterly basis between 2011 and 2019.

According to the findings obtained in the Toda-Yamamoto causality test, causality at the 5% significance level was determined from THY's load factor and from revenue passenger kilometer to Turkey's exports. On the other hand, causality could not be determined at 5% significance level from export to load factor, while causality was observed at 10% significance level. In the study, causality at the 5% significance level was determined from revenue passenger kilometer to load factor. Finally, no causality can be detected at the 5% significance level from the load factor to the revenue passenger kilometer, while causality is observed at the 10% significance level.

According to the findings obtained in the study, it has been revealed that THY, the flag carrier of Turkey, has a contribution on exports, and it is of great importance to maintain the investments made in the civil aviation sector in order to reduce the trade deficit and ensure sustainable economic growth.

**Keywords:** Export, Turkish Airlines (THY), Toda-Yamamoto Causality Test

**AKADEMİK PERSONELİN İNTERNET/MOBİL BANKACILIĞININ GÜVENİRLİĞİ  
HAKKINDAKİ TUTUM VE DAVRANIŞLARINI ARAŞTIRILMASI**

INVESTIGATION OF ACADEMIC'S ATTITUDES AND BEHAVIORS ABOUT THE RELIABILITY OF  
MOBILE AND INTERNET BANKING

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**ÖZET**

Teknolojideki gelişmelerle birlikte bankacılık sektöründe elektronik bankacılık yaygın kullanılmaya başlanmıştır.

İnternet bankacılığı, Türkiye’de ilk olarak 1998 yılında kullanılmaya başlanmıştır. Geleneksel bankacılık işlemlerini büyük ölçüde kolaylaştıran internet bankacılığını kullananlar, mevduat işlemleri, yatırım hesabı işlemleri, para transferleri, vergi ve fatura ödemeleri gibi birçok işlemi şubeye gitmeden kolayca yapabilmektedirler.

İnternet bankacılığı bankalara şube sayısını azaltmasına imkân vermesi nedeniyle maliyetleri düşürmeyi sağlamaktadır. İnternet bankacılığının avantajları yanında, güvenlik gibi çok önemli bir olguyu da beraberinde getirmektedir. İnternet bankacılığı dolandırıcılığında en çok kullanılan metotlar arasında phishing (oltalama), e-mail (sahte e-posta), keylogger (tuş kaydetme) ve screenlogger (ekran kaydetme) gibi yöntemler bulunmaktadır. Bu yöntemleri kullanan internet bankacılığı dolandırıcıları, müşterilerin hesap numara ve şifrelerini bularak, bu hesaplar üzerinde işlem yapabilmektedirler. Bankalar ise bu gibi durumlara karşı müşterilerini uyarmakta ve güvenlik önlemlerini artırma yolunda her geçen gün yeni çözüm yolları bulmaktadırlar.

Bu çalışmada akademik personelin internet/mobil bankacılığın güvenirliliği konusundaki tutum ve davranışları araştırılmaktadır. Bunun için araştırmacı tarafından hazırlanan anket ile veriler toplanmıştır. Söz konusu ankette ilk bölümde, çalışmaya katılan akademik personelin sosyo-demografik özellikleri, ikinci bölümde internet ve mobil bankacılığı tercih ve görüşlerine ilişkin sorular yer almaktadır. Anketin son bölümünde ise, internet ve mobil bankacılığı güvenirliliği konusundaki tutum ve algılarına yönelik 30 maddeden oluşan ifadeler bulunmaktadır. Bu ifadelere verilecek cevaplar 5’li Likert tipi ölçek şeklinde hazırlanmıştır.

Elde edilen veriler ile faktör analizi uygulanacak ve 30 madde alt boyutlarda toplanacak ve bu alt boyutlara verilecek cevaplar ile akademik personelin internet ve mobil bankacılığının güvenirliliği konusundaki tutumları ile yaş, cinsiyet, akademik unvanlarına göre farklılık olup olmadığı araştırılacaktır.

**Anahtar kelimeler:** İnternet Bankacılığı, Mobil Bankacılık, Akademik Personel.

**ABSTRACT**

With the developments in technology, electronic banking has started to be used widely in the banking sector.

Internet banking was first used in Turkey in 1998. Those who use internet banking, which greatly facilitates traditional banking transactions, can easily perform many transactions such as deposit transactions, investment account transactions, money transfers, tax and bill payments without going to a branch.

Internet banking allows banks to reduce the number of branches, thereby reducing costs. In addition to the advantages of internet banking, it also brings with it a very important phenomenon such as security. Among the most used methods in internet banking fraud, there are methods such as phishing, e-mail, keylogger and screenlogger. Internet banking fraudsters using these methods can find the account numbers and passwords of the customers and make transactions on these accounts. Banks, on the other hand, warn their customers against such situations and find new solutions every day to increase their security measures.





In this study, the attitudes and behaviors of academic staff about the reliability of internet/mobile banking are investigated. For this, data were collected with a questionnaire prepared by the researcher. In the first part of the questionnaire, there are questions about the socio-demographic characteristics of the academic staff participating in the study, and questions about the preferences and opinions of internet and mobile banking in the second part. In the last part of the questionnaire, there are 30-item statements about their attitudes and perceptions about internet and mobile banking reliability. The answers to these statements were prepared in the form of a 5-point Likert type scale.

With the data obtained, factor analysis will be applied and 30 items will be collected in sub-dimensions, and it will be investigated whether there is a difference according to the answers to these sub-dimensions and the attitudes of academic staff about the reliability of internet and mobile banking, and age, gender, academic titles.

**Keywords:** Internet Banking, Mobile Banking, Academic Staff.

**BIST İLETİŞİM İŞLETMELERİNİN FİNANSAL PERFORMANSLARININ NAKİT AKIŞ TABLOSU TEMELİNDE EDAS VE WASPAS YÖNTEMİ İLE KARŞILAŞTIRILMASI**  
**COMPARISON OF FINANCIAL PERFORMANCES OF BIST COMMUNICATION ENTERPRISES WITH EDAS AND WASPAS METHOD ON THE BASIS OF CASH FLOW STATEMENT**

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**ÖZET**

Nakit akış tabloları, işletmelerin nakit ve benzeri varlıklarındaki önceki dönem ile cari dönem arasındaki değişimleri de içermesinden dolayı önem taşımaktadır. İşletmeler, diğer finansal tablolardan elde edemedikleri bilgilere nakit akış tabloları aracılığıyla ulaşabilmektedirler. Bu sebeple, nakit akış tablolarıyla gerçekleştirilen finansal performans analizleri geleneksel finansal oran hesaplamalarına kıyasla işletmelerin finansal durumunu daha gerçekçi yansıtmaktadır. Bu araştırmanın amacı, Borsa İstanbul İletişim Endeksi'nde (BIST XILTM) işlem gören işletmelerin finansal performanslarının nakit akış tablosuna dayalı oranlarla çok kriterli karar verme tekniklerinden (ÇKKV) EDAS (Evaluation Based on Distance from Average Solution) ve WASPAS (Weighted Aggregated Sum Product Assessment) yöntemleriyle değerlendirmektir. Çalışmada öncelikle, XILTM'de kayıtlı 2 işletmenin 2016-2020 dönemlerine ilişkin nakit akış oranlarına dayalı 16 finansal oran belirlenmiştir. Bu oranlar; likidite/borç ödeme oranları, etkinlik/faaliyet oranları, karlılık oranları ve kapsama/kaldıraç oranları olmak üzere dört grupta incelenmiştir. Belirlenen finansal oranların hesaplanmasında, işletmelerin Kamuyu Aydınlatma Platformu'nda yayınladıkları finansal tablolarından yararlanılmıştır. Ardından, analize dahil edilen işletmelerin finansal performans sıralamalarının oluşturulabilmesi için EDAS ve WASPAS yöntemleri uygulanmıştır. Kriter ağırlıklarının belirlenmesinde, Entropi yönteminden yararlanılmıştır. Elde edilen analiz bulguları sonucunda, nakit akış oranlarına bağlı analizi gerçekleştirilen işletmelerin nakit akış performansları değerlendirilmiştir. Performans sıralamasına göre TTKOM işletmesi; EDAS yöntemine göre; 2019 ve 2020 haricindeki tüm dönemlerde ilk sırada yer alırken, WASPAS'a göre yalnızca 2017 yılındaki finansal performans sıralamasında ilk sırada yer almıştır. TCELL ise, WASPAS metoduna göre 2017 haricindeki tüm yıllarda, EDAS yöntemi sonuçlarına göre sadece 2019 ve 2020 yıllarında finansal performans sıralamasında birinci olmuştur. Bu bulgulara göre, çalışmadaki analiz dönemlerinde işletmelerin finansal performansları yıllara göre değişkenlik göstermekle birlikte EDAS yöntemine göre beş dönemin üçünde ilk sırada yer alan TTKOM'un finansal performansı, WASPAS'a göre TCELL'e kıyasla daha iyi olduğu söylenebilir. Ayrıca, EDAS ve WASPAS yöntemlerinden elde edilen sıralama sonuçları karşılaştırıldığında her iki yöntemin de dört dönemde birinci olan TCELL'in finansal performansı daha iyidir. Elde edilen bu sonuçlar, EDAS ve WASPAS yöntemleri arasında tutarlılık olup olmadığını düşündürmektedir. Bu sebeple Spearman'ın Sıra İlişkisi Testi uygulanmıştır. Elde edilen Z değeri, %95 güven düzeyinde ( $\alpha=0,05$ ) 1,645'in üzerinde bulunarak 3,51 olarak hesaplanmıştır. Bu sonuç ise, EDAS ve WASPAS yöntemleri arasında tutarlılık olduğunu desteklemektedir.

**Anahtar kelimeler:** BIST İletişim, Finansal Performans Analizi, Nakit Akış Tablosu, EDAS, WASPAS.

**ABSTRACT**

Cash flow statements are important because they include the changes in the cash and similar assets of the enterprises between the previous period and the current period. Businesses can access information that they cannot obtain from other financial statements through cash flow statements. For this reason, financial performance analyzes performed with cash flow statements reflect the financial status of enterprises more

realistically compared to traditional financial ratio calculations. The purpose of this research is to evaluate the financial performances of the companies traded in the Borsa Istanbul Communications Index (BIST XILTM) with the ratios based on the cash flow statement, using EDAS and WASPAS methods, which are multi-criteria decision making techniques (MCDM). In the study, firstly, 16 financial ratios based on the cash flow rates of the 2 businesses registered in XILTM for the 2016-2020 periods were determined. These ratios are; liquidity/debt payment ratios, efficiency/activity ratios, profitability ratios and coverage/leverage ratios were analyzed in four groups. In the calculation of the determined financial ratios, the financial statements of the enterprises published on the Public Disclosure Platform were used. Then, EDAS and WASPAS methods were applied to establish the financial performance rankings of the companies included in the analysis. Entropy method was used to determine the criterion weights. As a result of the analysis findings obtained, the cash flow performances of the enterprises whose analysis based on cash flow rates were carried out were evaluated. According to the performance ranking, TTKOM enterprise; According to the EDAS method; While it was in the first place in all periods except 2019 and 2020, it was only in the first place in the financial performance ranking in 2017 according to WASPAS. TCELL, on the other hand, ranked first in the financial performance ranking in all years except 2017, according to the WASPAS method, and only in 2019 and 2020, according to the results of the EDAS method. According to these findings, it can be said that the financial performance of TTKOM, which ranks first in three of the five periods according to the EDAS method, is better than TCELL according to WASPAS, although the financial performance of the enterprises during the analysis periods in the study varies according to years. In addition, when the ranking results obtained from the EDAS and WASPAS methods are compared, the financial performance of TCELL, which is the first in the four periods of both methods, is better. These results suggest whether there is consistency between EDAS and WASPAS methods. For this reason, Spearman's Rank Relationship Test was applied. For this reason, Spearman's Rank Relationship Test was applied. The Z value obtained was found to be over 1.645 at the 95% confidence level ( $\alpha=0.05$ ) and calculated as 3.51. This result supports the consistency between EDAS and WASPAS methods.

**Keywords:** BIST Communication, Financial Performance Analysis, Cash Flow Statement, EDAS, WASPAS.

## **SÜRDÜRÜLEBİLİR GİRİŞİMCİLİK ÖRNEĞİ: GÜNEY ADANA GİRİŞİMCİ KADINLAR TARIMSAL KALKINMA KOOPERATİFİ**

**A CASE STUDY ON SUSTAINABLE ENTREPRENEURSHIP: SOUTH ADANA WOMEN  
ENTREPRENEURS AGRICULTURAL DEVELOPMENT COOPERATIVE**

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### **ÖZET**

Sürdürülebilir enerji kaynakları tüm dünyada olduğu gibi Türkiye’de de daha fazla tartışılmaya ve araştırılmaya başlanmıştır. Sürdürülebilir girişimcilik, sürdürülebilir kalkınma ve inovasyon ile girişimciliğin bağlantı noktasındadır. Girişimcilik tarihi açısından sürdürülebilir girişimcilik, yeni bir yöntem, yeni bir pazar ya da örgütlenme nedeniyle yaratıcı yıkımın günümüzdeki yansıması olarak kabul görmektedir. Ekonomik ve sosyal kalkınma açısından büyük önem taşıyan sürdürülebilir girişimciliği açıklamaya yönelik pek çok model bulunmaktadır. Ancak sürdürülebilir girişimciliğin başarısının örgüte, paydaşlara, topluma, yerel yönetimlere ve merkezi yönetime bağlı olması nedeniyle bu çalışmada sürdürülebilir girişimcilikte kültürün önemine dikkat çeken ve O’Neill Jr, Hershauer, and Golden (2009) tarafından geliştirilen bütüncül değer önermesi temel alınmıştır. Bütüncül değer önermesinin çalışmanın temelini oluşturmasıyla, girişimin yarattığı parasal ve parasal olmayan değerlerin yanı sıra yerel kültürün sürdürülebilir girişimcilikteki yerinin ortaya konulması hedeflenmiştir. Bu hedef doğrultusunda çalışmada dezavantajlı kadınların ev ekonomilerine katkı sağlamak amacıyla 2019’da kurdukları Güney Adana Girişimci Kadınlar Tarımsal Kalkınma Kooperatifi incelenmektedir. Kooperatif, güneş enerjisi ile kurutma tesisini kurarak bin metrekarelik bir üretim tesisi haline gelmiştir. Söz konusu kooperatif, sürdürülebilir enerji kaynağı ile daha etkili ve verimli üretim yapmakla kalmamış aynı zamanda dezavantajlı kadınlara da istihdam olanağı sağlamıştır. Nitel araştırma yöntemiyle gerçekleştirilen bu çalışmanın, özellikle sürdürülebilir girişimciliğin artırılması ve dezavantajlı kadınların girişimciliğe yönlendirilmesine dair politikalara ve uygulamalara faydalı olması umulmaktadır.

**Anahtar kelimeler:** Sürdürülebilir girişimcilik, güneş enerjisi ile kurutma tesisi, dezavantajlı kadınlar

### **ABSTRACT**

Sustainable energy sources have been started to be discussed and researched more in Turkey as well as all over the world. Sustainable entrepreneurship is at the cross-section of sustainable development, innovation, and entrepreneurship. In terms of entrepreneurship history, sustainable entrepreneurship is accepted as the current reflection of creative destruction due to the creation of a new method, a new market, or an organization. There are many models to explain sustainable entrepreneurship, which is of great importance in terms of economic and social development. However, since the success of sustainable entrepreneurship depends on the organization, stakeholders, society, local governments, and central government, this study is based on the holistic value proposition developed by O’Neill, Hershauer, and Golden (2009), which draws attention to the importance of culture in sustainable entrepreneurship. With the holistic value proposition as the basis of the study, it is aimed to reveal the monetary and non-monetary values created by the initiative as well as the importance of local culture in sustainable entrepreneurship. In line with this goal, the South Adana Entrepreneurial Women's Agricultural Development Cooperative, which was established in 2019 to contribute to the home economy of disadvantaged women, is examined in this study. The cooperative has become a production facility of one thousand square meters by establishing a drying facility with solar energy. The



cooperative in question not only made more effective and efficient production with its sustainable energy source but also provided employment opportunities for disadvantaged women. It is hoped that this study, which is carried out with a qualitative research method, will be beneficial for policies and practices especially for increasing sustainable entrepreneurship and directing disadvantaged women to entrepreneurship.

**Keywords:** Sustainable entrepreneurship, solar drying facility, disadvantaged women

## **AHİLİKTEKİ TAKİPÇİLİK ANLAYIŞININ MODERN TEORİLER BAĞLAMINDA DEĞERLENDİRİLMESİ**

**EVALUATION OF THE UNDERSTANDING OF FOLLOWERSHIP IN AKHISM WITHIN THE  
CONTEXT OF MODERN THEORIES**

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### **ÖZET**

Liderlik ile takipçilik adeta bir elmanın iki yarısını teşkil eden iki farklı kavramdır. Biri olmadan diğ erinin varlığından söz edebilmek mümkün değildir. Her ne kadar son birkaç on yılda ülkemizde gerçekleştirilen yönetim bilimi çalışmalarında liderlik kavramı sıklıkla konu edilmekte ise de söz konusu çalışmaların büyük çoğunluğunun kavramın ayrılmaz bir unsurunu teşkil eden takipçilik olgusundan büyük ölçüde soyutlanmış şekilde gerçekleştirildiğini ifade edebilmek mümkündür. Kültürümüzdeki yerel nitelikli liderlik uygulamaları liderlik literatürünün önemli gelişim gösterdiği son birkaç on yıllık dönem ile kısıtlı değildir. Geçmişten günümüze kendi kültürümüze has unsurlar barındıran ve birçok açıdan eşi benzeri bulunmayan liderlik uygulamalarının, dolayısıyla takipçilik anlayışlarının varlığından bahsedebilmek mümkündür. Bu çalışmada söz konusu eşsiz liderlik uygulamalarından birisinin görüldüğü ahilik teşkilatındaki takipçilerin liderleriyle yüksek düzeyli etkileşim sağlama adına ortaya koyduğu tutum ve davranışlar ele alınmıştır. Bu maksatla ahilik teşkilatının hüküm sürdüğü döneme ışık tutan yazılı metinler ile literatür araştırılmıştır. Araştırmanın temel amacını, etkin olduğu dönemdeki güçlü yapısını günümüze taşıyamamış kültürel bir unsur teşkil eden ahilikteki takipçilik anlayışının modern teoriler ışığında yeniden değerlendirilmesi şeklinde ifade etmek mümkündür. Elde edilen bulgular neticesinde ahilik teşkilatında yer alan takipçilik anlayışının güncel takipçilik modelleri ve takipçilik kavramına yönelik modern teoriler ile örtüşen ve söz konusu teorilerden ayrılan yönleri tartışılmıştır. Ahilik teşkilatındaki takipçilik anlayışının kendine has temel özelliklerinin tespit edilmesi suretiyle, benzersiz bir takipçilik anlayışı sergilendiği sonucuna ulaşılmıştır.

**Anahtar kelimeler:** Ahilik, Takipçilik, Liderlik.

### **ABSTRACT**

Leadership and followership are two different concepts that make up the two halves of an apple. It is not possible to talk about the existence of one without the other. Although the concept of leadership has often been the subject of management science studies conducted in our country in the last few decades, it is possible to state that the majority of the studies in question have been carried out in a way that is largely isolated from the phenomenon of followership, which is an inseparable element of the leadership. Local leadership practices in our culture are not limited to the last few decades, when the leadership literature has developed significantly. From past to present, it is possible to talk about the existence of leadership practices that contain elements specific to our own culture and that are unique in many respects, and therefore the understanding of followership. In this study, the attitudes and behaviors of the followers of the Akhi organization, where one of these unique leadership practices are seen, in order to provide high-level interaction with their leaders are discussed. For this purpose, written texts and literature that shed light on the period in which the Akhi organization reigned were searched. It is possible to express the main purpose of the research as the re-evaluation of the understanding of followership in the Akhism, which is a cultural element that has not carried its strong structure in the period it was active, to the present day, in the light of modern theories. As a result of the findings obtained, the aspects of the understanding of followership in the Akhi organization that overlap with the current follower models and modern theories of the concept of followership and diverge from the aforementioned theories are discussed. It has been concluded that a unique understanding of followership is exhibited by determining the basic characteristics of the follower understanding in the Akhi organization.

**Keywords:** Akhism, Followership, Leadership.

## **TOKSİK LİDERLİK ZARARLI BİR LİDERLİK TARZI MIDİR? BİR LİTERATÜR ARAŞTIRMASI**

IS TOXIC LEADERSHIP A HARMFUL LEADERSHIP STYLE?: A LITERATURE RESEARCH

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### **ÖZET**

Liderlikle ilgili yapılan araştırmalara bakıldığında genel itibarıyla liderliğin olumlu yönlerine vurgu yapılmaktadır. Dönüştürücü liderlik, karizmatik liderlik, etik liderlik gibi liderlik tarzları bu olumlu yaklaşımlara örnek gösterilebilir. Bu yaklaşımların; çalışanların verimliliği, iş performansları, motivasyonları ve iş tatminleri gibi olumlu iş tutum ve davranışı göstermeleri üzerinde yapıcı etkileri olduğu bilinmektedir. Ancak literatürde bahsedilen diğer bir liderlik tarzı ise çalışanlar ve örgüt üzerinde olumsuz etkileri olan toksik liderliktir. Liderliğin karanlık yüzü olarak da nitelendirilen bu yaklaşım, işletme yönetimi ve örgütsel davranış üzerinde çalışan araştırmacıların dikkatini çekmiş ve araştırmacıları bu konuda araştırma yapmaya yöneltmiştir. Yapılan araştırmalarda toksik liderliğin ego ve hırs kullanarak, totaliter davranış sergileyerek, kayırmacılığı ve yolsuzluğu teşvik ederek örgütsel adalet anlayışını zayıflatan bir liderlik tarzı olduğundan söz edilmiştir. Başka bir ifadeyle toksik lider, kötü niyetli ve uyumsuz davranışlar sergileyerek örgütte çalışanlar arasında hoşnutsuzluğa yol açan lider olarak tanımlanmıştır. Bunun yanında toksik liderliğin çalışanların yaratıcılık göstermesini engelleyen, örgütte güvensizliğin yayılmasına sağlayarak örgüt içi iletişim kanallarını zayıflatan eylemler sergilediği belirtilmiştir. Buna ilaveten toksik liderliğin çalışanlar üzerinde de birtakım olumsuz sonuçları vardır. Bunlar çalışanların motivasyonlarını, performanslarını, işe ve örgüte bağlılığı azaltıcı etkilerdir.

Literatürde toksik liderliğin boyutlarından; otoriterlik, narsistlik, istismarcı yönetim, öngörülemezlik ve kendi reklamını yapma olarak bahsedilmiştir. Bu anlamda bir örgütte toksik liderliğin ortaya koyduğu toksisiteden kurtulmak için en önemli görev liderlere düşmektedir. Bu doğrultuda liderlerin sağlıklı işleyen örgütsel iletişim kanalları oluşturması, örgüt kültürünü destekleyici politikalar üretmesi, örgütün iç dinamiklerini iyi bir şekilde tanımlayabilmesi gerekmektedir. Bu çalışmada toksik liderlikle ilgili literatür araştırması yapmak amaçlanmıştır. Bu doğrultuda, çalışmada toksik liderliğin tanımı, önemi, toksik liderlik davranışlarının çeşitleri, toksik davranışların örgütlerde oluşum nedenleri, liderliğin oluşum süreci ve toksik liderlikle ilişkili teoriler, toksik liderliğin boyutları, özellikleri, etkilediği faktörler, toksik liderlerin davranışlarına karşı geliştirilebilecek öneriler ele alınmıştır. Bu çalışmanın hem literatüre hem ileride bu konu ile ilgili araştırma yapacak araştırmacılara yol gösterme anlamında faydalı olabileceği düşünülmektedir.

**Anahtar kelimeler:** Liderlik, Çalışanlar, Toksik liderlik, Örgüt

### **ABSTRACT**

Leadership is the art of influencing followers and guiding them to achieve organizational purposes; and leaders, on the other hand, are people who perform this art in an effective and accurate manner. When the studies conducted on leadership are evaluated, the positive aspects of leadership were emphasized in them in general. Leadership styles such as transformational leadership, charismatic leadership, and ethical leadership can be given as the examples of these positive approaches. It was mentioned in the literature that these approaches have positive effects on the productivity, job performance, motivation, and job satisfaction of employees. However, another leadership type that was mentioned in the literature is toxic leadership behaviors, which have negative impacts on employees and the organization. This approach, which is also described as the dark side of leadership, attracted the attention of researchers who worked in business management and organizational behavior, and guided them to conduct studies on this subject. It was mentioned in previous studies that toxic leadership weakens the understanding of organizational justice by using the ego

and greed showing totalitarian behavior, encouraging nepotism, and corruption. In other words, a toxic leader is defined as the one who causes discontent among employees in the organization by showing malicious and maladaptive behaviors. It was also reported that a toxic leader exhibits leadership model characteristics, which prevent employees from showing creativity, and weaken the intra-organizational communication channels by spreading distrust within the organization. Toxic leadership also has some negative outcomes on employees. These results are the effects, which reduce the motivation, performance, and commitment of employees to their job and organization.

In the literature, authoritarianism, narcissism, abusive management, unpredictability, and self-promotion are mentioned among the dimensions of toxic leadership. In this sense, the most important task falls to the leaders to eliminate the toxicity of toxic leadership within an organization. In this respect, leaders must create a healthy functioning organizational communication channels, produce policies supporting organizational culture, and be able to define the internal dynamics of the organization well. In this study, the purpose was to conduct a literature search on toxic leadership. In this regard, the definition of toxic leadership, its importance, types of toxic leadership behaviors, the reasons for the formation of toxic behaviors in organizations, the formation process of leadership and theories associated with toxic leadership, the dimensions of toxic leadership, its characteristics, the factors it affects, and suggestions that can be developed against the behavior of toxic leaders were discussed in the present study. It is considered that this study may be useful in terms of guiding the literature and researchers who will conduct studies on this subject in the future.

**Keywords:** Leadership, Employees, Toxic leadership, Organization



## COĞRAFİ BÖLGELERE GÖRE ONLİNE YEMEK SİPARİŞLERİNİN ARAŞTIRILMASI: YEMEKSEPETİ ÖRNEĞİ

### RESEARCHING ONLINE FOOD ORDERS BY GEOGRAPHICAL REGIONS: YEMEKSEPETİ SAMPLE

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#### ÖZET

Küreselleşen dünya ekonomisinin yeni ticaret biçimi olarak adlandırılan e-ticaret, alışlagelmiş ticaret kavramına çok farklı boyutlar kazandırmıştır. Bireylerin internet üzerinden satın aldıkları mal veya hizmet hacmi, toplam ticaretin 1/3'ni oluşturuyor olması kişilerin alışveriş alışkanlıklarındaki değişimi net bir şekilde yansıtmaktadır. Uzaktan, çevrimiçi veya online olarak ifade edilen bu alışveriş tekniğinde önemli bir pazar da internet üzerinden yemek siparişidir. İnsanların uzun süre evlerinde veya işyerlerinde bulunması sonucu yemek hazırlamak veya restorana giderek zaman kaybetmek yerine buldukları yere yemek sipariş etme alışkanlığı giderek artmaktadır. Dolayısıyla evlere servis yemek hizmeti veren restoran sayısında da artış görülmektedir. Özellikle Covid-19 pandemi döneminde restoranların faaliyetlerine devam etmelerinin tek yolu evlere servis satış şekli olmuştur. Ülkemizde internet aracılığıyla sipariş edilen yemeklerin bölgelere göre çeşitliliği ve en çok sipariş edilen yemeklerin belirlenmesi bu çalışmanın konusunu oluşturmaktadır. Online yemek sipariş sitelerinden en çok kullanılan site olması nedeniyle yemeksepeti.com sitesi üzerinden bu araştırma gerçekleştirilmiştir. Yemeksepeti'nden elde edilen veriler değerlendirildiğinde, ülkemizde çoğunlukla fast food türü yemek sipariş edilmiş olup sırasıyla tavuk döner, lahmacun ve hamburger en çok sipariş edilen yemekler olmuştur. İnternet üzerinden yapılan yemek siparişlerinin ülkemiz coğrafi bölgelerine göre çeşitlilik göstermekle birlikte kuzey ve iç bölgelerde çoğunlukla lahmacun ve tavuk döner sipariş edilirken güney bölgelerde hamburger ve lahmacun sipariş edilmiştir. Doğu bölgelerinde hamburger ve pizza ağırlık gösterirken batı bölgelerde lahmacun ve pide siparişi yoğun olarak sipariş edilmiştir. Bunların sonucu olarak, kişiler kendi yemek kültürlerinden farklı olarak başka tatları merak edip yemek siparişlerinde onları zirveye taşımış olmaları, bu yiyecekleri benimseyip, beğenmiş olabileceklerini düşündürmektedir. Bununla birlikte, online yemek siparişlerinin bölgesel olarak yemek kültürlerinin tanınmasında büyük rol üstlendiğini göstermektedir. Evlere servis hizmeti veren işletmelerin menülerini güncellerken farklı yiyecekleri menülerine eklemelerinin faydalı olabileceği düşünülmektedir.

**Anahtar kelimeler:** yemek siparişi, yemeksepeti, çevrimiçi alışveriş

#### ABSTRACT

E-commerce, which is called the new trade form of the globalizing world economy, has brought many different dimensions to the conventional trade concept. The fact that the volume of goods or services purchased by individuals over the internet constitutes 1/3 of the total trade clearly reflects the change in people's shopping habits. An important market in this shopping technique, which is expressed remotely or online, is food ordering over the internet. As a result of people staying at their homes or workplaces for a long time, the habit of ordering food to their location is increasing instead of wasting time preparing food or going to the restaurant. Therefore, there is an increase in the number of restaurants providing home delivery food service. Especially during the Covid-19 pandemic period, the only way for restaurants to continue their activities has been home delivery sales. In our country, the variety of the dishes ordered via the internet according to the regions and the determination of the most ordered dishes are the subject of this study. This research was carried out on the website Yemeksepeti.com, as it is the most used site among online food ordering sites. When the data obtained from Yemeksepeti are evaluated, fast food type meals are mostly ordered in our country and chicken doner kebab, lahmacun and hamburger are the most ordered dishes, respectively. Although the food orders made online vary according to the geographical regions of our country, mostly lahmacun and chicken doner kebab



are ordered in the northern and inner regions, while hamburger and lahmacun are ordered in the southern regions. While hamburger and pizza are dominant in the eastern regions, lahmacun and pide orders are heavily ordered in the western regions. As a result of these, the fact that people were curious about other tastes different from their own food culture and brought them to the top in their food orders suggests that they may have adopted and liked these foods. However, it shows that online food orders play a big role in the recognition of regional food cultures. It is thought that it may be beneficial for businesses that provide home delivery services to add different foods to their menus while updating their menus.

**Keywords:** food ordering, Yemeksepeti, online shopping

## GAYRİMENKULDE DEĞERLEMENİN ÖNEMİ: TÜRKİYE’DE GAYRİMENKUL DEĞERLEMESİ ÜZERİNE BİR ÇALIŞMA

IMPORTANCE OF APPRAISAL IN REAL ESTATE: A STUDY ON REAL ESTATE VALUATION IN TURKEY

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### ÖZET

Gayrimenkul tüm dünyada olduğu gibi Türkiye’de de ekonomik ve stratejik öneme sahiptir. Ekonomik bir değer ifade etmesi nedeniyle yatırımcılar için en güvenli yatırım araçlarından birisi olarak görülmektedir. Mülkiyet sahipleri açısından gayrimenkul, ekonomik ve sosyolojik bir güç olarak görülmektedir. Gayrimenkuller; arazi, arsa, konut, özel (okul, hastane vb.), endüstriyel ve ticari gibi sınıflara ayırmak mümkündür. Özellikle konut sektörü gayrimenkul sınıfları içerisinde özel bir yere sahiptir. Gelişmiş ve gelişmekte olan ülkelerde konut sektörü ve imalat yönü olan inşaat sektörünün ekonomiye olan katkıları önemli düzeydedir. Konut sektörü kendi alanında ve etki alanı içerisinde olan alt sektörleri de harekete geçirme özelliğine sahiptir. Gayrimenkul piyasasının önemli paydaşlarından birisi finansman desteği sağlayan kuruluşlardır. Bankalar ve diğer finans kuruluşları için gayrimenkul değerlendirme konusu önem arz etmektedir. Amerika Birleşik Devletlerinde 2008 yılında başlayan ve kısa sürede tüm dünyayı etkisi altına alan mortgage krizi gayrimenkul konusunun ülke ekonomileri için ne denli önemli olduğunu göstermektedir. Türkiye’de gayrimenkul değerlendirme konusu 2000’li yıllardan itibaren ülke gündemine girmiştir. Daha sonraki yıllarda gerek akademik çalışmaların ve gerekse özel sektörün ilgi gösterdiği alanlardan birisi olmuştur. Türkiye’de 2018 yılında Cumhurbaşkanlığı hükümet sistemine geçilmesiyle birlikte hükümetin birinci yüz günlük icraat programında taşınmaz değerlendirme sisteminin kurulmasını kararlaştırmıştır. Bu kararın ardından Cumhurbaşkanlığı kararnamesi ile Tapu ve Kadastro Genel Müdürlüğü bünyesinde “Taşınmaz Değerleme Dairesi Başkanlığı” kurulmuş olup, taşınmazlara ait değer bilgi merkezini kurmak, yönetmek ve değer haritalarının üretilmesi ile güncel tutulmasını sağlamak gibi görevler icra edilmeye başlamıştır. Devletin değerlendirme konusuna verdiği önemin birçok gerekçesi olmakla birlikte, en önemli gerekçelerinden birisi devletin gelir kaynaklarından vergi ve harçlarda meydana gelen gelir kayıplarının önüne geçmeyi hedeflemesidir. Türkiye’de gayrimenkul değerlendirme konusunun bundan sonra daha da önemli hale gelmesi beklenmektedir. Çalışmanın temel amacı taşınmaz değerlendirme konusunda literatür taraması yapılarak Türkiye için önemini araştırmaktır. Değerleme özelliği taşıyan bu çalışmada taşınmaz değerlemenin önemi hakkında genel bilgilere yer verilmiştir.

**Anahtar kelimeler:** Gayrimenkul, Tapu, Değerleme, Mortgage

### ABSTRACT

Real estate has an economic and strategic importance in Turkey as well as in the rest of the world. Due to its economic value, it is seen as one of the safest investment tools for investors. For property owners, real estate is seen as an economic and sociological force. Real estates; It is possible to classify land, land, residence, private (school, hospital, etc.), industrial and commercial. Especially the housing sector has a special place among the real estate classes. In developed and developing countries, the contribution of the housing sector and the construction sector, which has a manufacturing aspect, to the economy is significant. The housing sector also has the feature of activating the sub-sectors that are in its own field and area of influence. One of the important stakeholders of the real estate market is the organizations that provide financial support. Real estate valuation is important for banks and other financial institutions. The mortgage crisis, which started in the United States in 2008 and affected the whole world in a short time, shows how important the real estate issue is for the country's economies. The subject of real estate valuation in Turkey has been on the agenda of the country since the 2000s. In the following years, it became one of the areas of interest for both academic



studies and the private sector. With the transition to the Presidential government system in Turkey in 2018, the government decided to establish a real estate valuation system in the first hundred-day execution program. Following this decision, the "Department of Real Estate Valuation" was established within the body of the General Directorate of Land Registry and Cadastre with the Presidential decree, and tasks such as establishing and managing the value information center for immovables, producing value maps and keeping them up-to-date began to be carried out. Although there are many reasons for the importance given by the state to the subject of valuation, perhaps one of the most important reasons is that the state aims to prevent income losses in taxes and fees from income sources. It is expected that the subject of real estate valuation in Turkey will become even more important from now on. The main purpose of the study is to investigate the importance of real estate valuation for Turkey by making a literature review. In this study, which has the feature of compilation, general information about the importance of real estate valuation is given.

**Keywords:** Real estate, Title Deed, Valuation, Mortgage



**THE DYNAMICS OF INTER-ORGANIZATIONAL COOPERATION IN ECONOMIC INTEREST GROUPINGS: THE CASE OF TARGANINE EIG IN MOROCCO**

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**ABSTRACT**

Inter-organizational cooperation has become a major issue for the development of organizations. Inter-organizational relations succeed enormously in the term of cooperation, especially when we speak of Social and Solidarity Economy (SSE) enterprises. Today, several forms of cooperation have emerged in Morocco with the creation of groups, unions, networks and federations. Through this paper, we study the dynamics of inter-organizational cooperation and its contribution to the economic and social development of an Economic Interest Group (EIG) of women's cooperatives. We proceed for our analysis according to the dialectical approach as it was adopted by Dameron (2001, 2002), via the study of the cooperation relations of EIG TARGANINE, based on a qualitative approach led by semi-structured interviews. directives made to the EIG President and the leaders of the member cooperatives.

**Keywords:** Cooperation, Inter-organizational Relations, EIG, Cooperative, Economic and Social Development.

**VERGİLEME SINIRININ AŞILMASI: VERGİLEMEDE AŞIRI YÜK PROBLEMLERİ  
PERSPEKTİFİNDEN BİR DEĞERLENDİRME**

EXCEEDING THE TAX LIMIT: AN ASSESSMENT FROM THE PERSPECTIVE OF OVERLOAD  
PROBLEMS IN TAXATION

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**ÖZET**

Vergiler devlet tarafından kamu giderlerinin finansmanı amacıyla veya iktisadi ve sosyal amaçlı olarak birey ve kurumlardan alınmaktadır. Vergi ödeyen bireyler, vergi ödeme dolayısıyla oluşan rahatsızlıktan kurtulmak için vergiyi bir başkasına aktarma eğilimine girmektedir. Vergiler bir bireyden diğer bir bireye, sınırlı ya da sınırsız bir biçimde; tüketiciden üreticiye ya da üreticiden tüketiciye doğru aktarılabilir. Verginin yansımaları etkileyen birçok faktör yer almaktadır. Bunlar içerisinde vergilendirilen malın türü, talep ve arz esneklikleri, piyasa yapısı, vergi tabanı ve yüksekliği gibi mikro faktörler yer aldığı gibi, konjonktürel durum, mükelleflerin vergileri finansman biçimi ve vergilerin devlet tarafından hemen hizmete döndürülmesi gibi makro faktörler de yer almaktadır. Hükümetler kendi maliye politikalarını uygulayabilmek için bu faktörlerden yararlanma ve istedikleri şekilde kullanmak gereksinimi duymaktadır.

Vergi ödeme dolayısıyla mükelleflerin refahlarında meydana gelen azalmanın tespit edilmesi, vergi yükünün bireyler arasında adaletli dağıtılması açısından bir fikir vermektedir. Üretici ve tüketiciler üzerinde kalan vergi yüklerinin hesaplanması dolayısıyla vergi yükünün bir taraf aleyhine bozulmasının önüne geçilebilecektir.

Bu çalışmada vergi yükünün tüketici ve üretici üzerinde ne şekilde dağıldığı uygulamalı örneklerden yararlanılarak açıklanmaktadır. Çalışmada sayısal problemlerden yola çıkılarak özellikle malın talep ve arz esnekliğine bağlı olarak vergi yükünün nasıl dağıldığı, toplam vergi hasılatının nasıl etkilendiği, net vergi yükünün ne olduğu ve tüketici ve üretici rantlarındaki değişimlerin neler olduğu, problemin sonunda vergi kamasının nasıl etkilendiği gibi hususlar analiz edilmiştir. Elde edilen bulgulara göre devletin bir malı vergilendirmesi sonucu malın fiyatının artması, talep esnekliğine bağlı olarak malın tüketimini azaltmaktadır. Yani tüketici faydası da (rantı) bu durumda belirgin bir biçimde azalmaktadır. Fakat tüketici rantındaki azalmanın tamamı, toplum refahı açısından kayıp değildir.

Vergilemede ortaya çıkan aşırı yükün minimize edilebilmesi için ramsey vergileri tavsiye edilmektedir. Bu vergi türünde malın talep esnekliği yüksek ise düşük oranda, malın talep esnekliği düşük ise yüksek oranda vergilendirilmesi gerekmektedir. Fakat bu durumda vergilemede adalet sorunu ortaya çıkmaktadır. Ramsey vergileri bu olumsuzluğa rağmen vergi hasılatını artırması dolayısıyla verimli sayılır ve aynı zamanda mükelleflerde davranış değişikliğine yol açmadığından ötürü etkin de sayılmaktadır.

**Anahtar kelimeler:** Vergi yükü, Vergi, Refah Kaybı, Verginin Yansımaları

**ABSTRACT**

Taxes are collected by the state from individuals and institutions for the purpose of financing public expenditures or for economic and social purposes. Individuals who pay taxes tend to transfer the tax to someone else in order to avoid the inconvenience caused by paying taxes. Taxes from one individual to another, in a limited or unlimited way; It can be transferred from consumer to producer or from producer to consumer. There are many factors that affect the reflection of the tax. These include micro factors such as the type of goods taxed, demand and supply elasticities, market structure, tax base and height, as well as macro factors



such as the cyclical situation, the form of financing of taxes and the immediate return of taxes to service by the state. Governments need to benefit from these factors and use them as they wish in order to implement their own fiscal policies.

The determination of the decrease in the welfare of the taxpayers due to tax payment gives an idea in terms of the fair distribution of the tax burden among individuals. Due to the calculation of the remaining tax burdens on the producers and consumers, it will be possible to prevent the tax burden from deteriorating against one party.

In this study, how the tax burden is distributed on the consumer and producer is explained by using practical examples. In the study, starting from numerical problems, especially how the tax burden is distributed depending on the demand and supply elasticity of the goods, how the total tax revenue is affected, what the net tax burden is, what the changes in consumer and producer surpluses are, and how the tax wedge is affected at the end of the problem are analyzed. According to the findings, the increase in the price of a good as a result of the state's taxation of a good reduces the consumption of the good depending on the elasticity of demand. In other words, consumer utility also decreases significantly in this case. But not all of the reduction in consumer surplus is not a loss to society's welfare.

Ramsey taxes are recommended in order to minimize the overload in taxation. In this type of tax, if the demand elasticity of the good is high, it should be taxed at a low rate, and if the demand elasticity of the good is low, it should be taxed at a high rate. But in this case, the problem of fairness in taxation arises. Despite this negativity, Ramsey taxes are considered efficient as they increase tax revenues and are also considered effective because they do not cause behavioral changes in taxpayers.

**Keywords:** Tax Burden, Tax, Welfare Loss, Tax Incidence



**THE 3 MOST EFFECTIVE CARDS MAKE STOP INSECURE: IMPROVE WORSHIP, INVEST & TAKE CARE OF HEALTH**

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**ABSTRACT**

Not confident or the trend language Insecure is a feeling of insecurity that makes a person feel anxious, afraid, embarrassed, to not confident. If you have ever felt insecure or are feeling it then this is normal and human. Although classified as normal, feelings of insecurity should not be taken lightly and left alone, because it will become a big problem if allowed to drag on. People feel insecure because they judge themselves too low and don't believe in themselves. There are many reasons why everyone feels insecure, both from physical appearance, economic situation, and even achievement. Either because of weight or height that is not ideal, skin color, face shape is not as desired, or because they feel that they are not from a well-to-do economy. One of the things that often triggers feelings of insecurity is body shaming. It can even cause mental disorders, so they can do self-harm or self-harm activities that are done intentionally and even worse can cause someone to commit suicide. Feelings of insecurity can have a positive or negative impact. The positive impact is that it can help us to improve the situation by moving forward. While the negative impact can make things worse, because an excessive and unresolved sense of insecurity can cause serious mental health problems. Such as depression, personality disorders, anxiety disorders and can even cause death. However, the awareness of the Indonesian people that is still low on this issue has a major influence on a person's physical and psychological factors. Insecure will still come in the future and will not disappear completely, but there are various ways that can be done so that this feeling does not continue to appear and disturb the mind, including: increasing worship, investing & maintaining health.

**Keywords:** Insecure, increase worship, invest & take care of health





**ANALYSIS AND REPRESENTATION OF THE OVERALL PERFORMANCE OF  
COOPERATIVES**

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**ABSTRACT**

Global performance, defined as “the aggregation of economic, social and environmental performance” (Reyaud, 2003), is a multidimensional concept that was introduced with the emergence of the concept of CSR and sustainable development. Today, the difficulty for organizations is to measure overall performance and understand the interactions between its various dimensions: economic, social and environmental. The search for overall performance has become more and more important for any organization to affirm its relevance, effectiveness and efficiency in meeting the expectations of their stakeholders in order to ensure its sustainability. Cooperatives are no exception to this logic. THE' performance evaluation of cooperatives takes on new importance given all the challenges they will have to face and given their dual character (association / company). The objective of this article is to propose a model of representation of the overall performance of cooperatives making it possible to describe the components of this performance and to analyze the interactions between its different dimensions.

**Keywords:** Global performance, social and solidarity economy, cooperatives, conceptual model.



**THE NEXUS BETWEEN ENTREPRENEURSHIP DEVELOPMENT AND SMES PERFORMANCE  
IN NIGERIA**

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**ABSTRACT**

Entrepreneurship and small – medium enterprise is a key factor to the development of any nation, the developed economy have invested much in the development of entrepreneurship with a focus on small scale enterprises. The less developed countries like Nigeria are yet to take cognizance of the importance of these sectors and that has been a major setback couple with other factors for the development and growth of their economy. The study investigated the link between entrepreneurship development and Small and Medium-sized Enterprises (SMEs) performance in Nigeria. The study adopted exploratory research design to investigate how ED has enabled SMEs performance in Nigeria. The environment in the developing countries such as Nigeria is very challenging for businesses to thrive, especially SMEs, due to their limited financial capacity and size of their operations. Therefore, these businesses do not find it easy to excel as their performance is greatly affected. The study reviewed extant literature to situate the relationship between the variables. The study concluded that ED is vital for enhanced performance by SMEs in the country. It was recommended that the SMEs owners and managers should take advantage of ED program to hone their skills and that of their employees in order to achieve relevant competencies to improve their operations.

**Keywords:** Entrepreneurship Development, (ED) Performance, Nigeria, SMEs.



**THE IMPORTANCE OF COMPILING FINANCIAL STATEMENTS IN TRANSITION  
COUNTRIES SUCH AS THE REPUBLIC OF SERBIA**

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**ABSTRACT**

The importance of compiling financial reports has become increasingly important for the normal and safe operation of heterogeneous companies, especially in transition countries such as the Republic of Serbia. Financial reporting can contribute to the safe and quality of the overall business of companies, because financial statements can contribute to the safe reporting of the company's top management. This enables the improvement of the process of making key business decisions by top management because it makes valid decisions in the business of all parts of the company in which it manages. Financial statements that realistically represent the company's business are the basis of good governance. Business decisions that are made in a timely and secure manner are the basis of good and secure business management in companies.

**Keywords:** valid financial statements, decision, sectors.



**BUSINESS DECISION-MAKING OF TOP MANAGEMENT IN TRANSITION COUNTRIES ON  
THE EXAMPLE OF THE REPUBLIC OF SERBIA**

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**ABSTRACT**

The process of introducing rational business decision-making, which is essentially applied by top management in heterogeneous companies, is of special importance for the business of companies in transition economies such as the Republic of Serbia. The business decision-making process by top management begins with making a valid business decision by the company's top management. Implementing a valid business decision is the second stage. Making valid business decisions should be accompanied by an active role of all organizational parts in the company. In addition, helpful decision-making assistance to top management can be provided by computer support and the use of a number of international standards that apply to business decision-making in companies. In this paper, the authors pointed out that for making a valid business decision, it is important that there is a connection between several sectors in the company. At the same time, it is necessary to have a satisfactory level of control in companies (internal control, internal audit, etc.).

**Keywords:** business decision making, sectors.

**MANAGEMENT DECISIONS OF TOP MANAGEMENT IN ENTERPRISES DEALING WITH  
FOOD DISTRIBUTION IN A PANDEMIC CONDITION LIKE KOVID**

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**ABSTRACT**

Top management makes big business decisions even in conditions that are not standard and that do not reflect standard business in normal business conditions. The goal of making valid business decisions by the company's top management is that business decisions can result in improved company management and improved business results. This is especially important in conditions that are not standard, such as wars, earthquakes, natural disasters, but also in conditions of great impact on the behavior of the population, such as the KOVID pandemic. These are situations when the company's environment forms a strong influence on the company's business, and in such conditions, the company must bring answers to the new situation, such as the KOVID situation. Essentially, it happens that top management needs to change its strategy in the short term and make structural adjustments such as the conditions in the operation of CODVID in the world.

We have an example of the influence of the environment on the decisions of top management in 2020, when the environment formed a strong influence on companies in the field of food production and distribution. In such new situations, the company had to find a strategy that would take into account the current situation, and the population to provide the necessary quantities of food through the existing distribution channels and functioning in the conditions of the KOVID pandemic.

These are non-standard conditions for business entities. In such conditions, it is possible that the goals set by the top management often change. Thus, in the conditions of KOVID, the goal does not have to be the maximum realization of profit that can be realized in the economy as a whole. The goal of the business can be to provide the population with the necessary foodstuffs, to ensure security of supply, durability of distribution, distribution of medicines and disinfectants, protective equipment, health equipment, etc.

This paper draws attention to the importance of respecting the changed conditions in which there is a strong influence of the environment on the decisions of top management companies in the field of food distribution, in non-standard conditions for general business such as the KOVID pandemic.

**Keywords:** food distribution channels, state of emergency, agricultural producer.



**BUSINESS AND INNOVATION: MUTUAL CONDITIONS**

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**ABSTRACT**

Economic business is the type of activity specific to the market economy which consists in concluding and carrying out transactions and processes in order to obtain advantages. Any business has a well-defined object, recognized by the economic agents involved, but also by the public administration, which is reflected as such in the conditions and ways of realization. The adoption by the economic agents of some lines of conduct takes place by virtue of the decisional and functional autonomy that they enjoy, autonomy that favors transactional, competitive or cooperative relations, as the case may be, everything materializing in the transformation of the business agent into agent of competitive satisfaction of the general market relationship: needs, desires and demands for goods and services. For the consumer interested in a more generous offer, the innovations are found in all the goods and services that he did not know until a certain moment and that promise a greater utility than the previous ones. This is why, at least for marketing, innovation is the driving force behind competitiveness, growth, profitability and the creation of sustainable values. Although it can easily fall into the rather narrow category of product or technology development, it is a fundamental challenge for the whole business. Innovation is a natural component of the marketing mix, due to its benefits. From the moment the manager asks his managerial team to create an adequate framework for stimulating innovative processes, the whole business is placed under the protection of a shadow of its own culture, characterized by freedom, flexibility, involvement, responsibility and reward. It is an axiomatic truth that employees constrained by rational, rigid procedures, subjected to severe functional controls, pressed by provocative tasks, completely ignore any creative involvement. Management open to innovation is convinced that innovation is not the exclusive prerogative of a person, a department, but is a major component of each position in the organizational structure. The essence of innovation is necessarily related to the managerial style and the attitude of the employees, which together harmonize the business with the innovation, and conversely, the innovation with the business.

**Keywords:** business, innovation, marketing, management, organization, culture, market, profit, competitiveness, success.

## REVIEW ON ROOF GARDENING

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### ABSTRACT

The roof garden is a garden on the roof. This means that each roof covers with plants such as trees, shrubs, bushes and grasses. Roof gardening can also be defined as environment or nature in the sky. Similarly, If vegetables are allowed to grow on the roof in place of other ornamental plants than it is called roof top vegetables garden. Green roofs are roofs of building covered with a growth substrate and plants, which are also called roof top vegetables garden, living roofs, and eco- roofs. Urban communities face many challenges related to the health and well being of citizens. Many of these challenges arises as the direct consequence of dense urban environments. Industry, automobiles and impermeable concrete and asphalt surface combined to negatively impact upon the air and water quality, wed ich due to climate change there is a continuous increases in the atmospheric temperature because of global warming. Intense competition for land decreases green space and there is a sub sequent spiritual disconnect from agricultural roofs and natural world. In urban locations high night temperature caused by the heat island effect makes it difficult to live there comfortably in the summer. Roof top gardening is expected to reduce temperature and excessive heat energy absorption from solar radiation, thus resulting in significant energy saving for air conditioning in a building. In additional growing vegetable on roof top reduces the expenditure on purchase of vegetable from the market. It also provides minerals rich good quality fresh organic vegetable free from chemical, thus contributing to nutritional security

**Keywords:** Urban Island Effect, Surface Water Runoff, Energy Efficiency, Biodiversity.



## REVIEW ON PADDY HARVESTER

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### ABSTRACT

The ultimate aim of agriculture or farming in India is not only limited to growing of crops but is also associated with the economic growth of farmers and labours. Small scale farmers frequently face the problem of labour shortage or are unable to afford the wages to be paid. These problems prevent the fiscal growth of farmers and ultimately hamper the development of their farmland and family. Efficient, effective, cheap and productive techniques are needed to strengthen the farming community. This project is focussed on developing a machine which addresses labour problems faced by small scale farmers. The newly developed mini paddy harvester, can harvest up to two rows of paddy at a time. The components of the machine comprise of a petrol engine of 2hp, pulley, a belt drive, a collecting mechanism and a cutter. The crop is being harvested by a scissoring type of motion. The power from the engine is provided to the cutter through slider crank mechanism and driven by a pulley arrangement a collecting mechanism is provided to the cutter to collect the harvested crop. The assembled mini paddy harvester has been tested for its working and found to be working satisfactorily. It makes the harvesting process faster and safer, hence reduces the time required to harvest. This newly designed mini paddy harvester will ultimately reduce the cost of harvesting by 53.33%.

**Keywords:** Mini Paddy Harvester, Paddy, Efficiency, Belt drive, Collecting Mechanism.



## FABRICATION OF AUTOMATED VEGETABLE CUTTING MACHINE

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### ABSTRACT

Automation was the rage of the engineering world. The investigation on the existing vegetable cutting machine reviews the following drawbacks such as high investment cost, the contamination, additional manpower and time consumption caused by manual processing. The setup involves a hopper arrangement and the pressure block is actuated by a pneumatic cylinder, and has a reciprocatory motion along the vertical length of casing, while the cutting grid remains fixed. The air supply to the cylinder is controlled by a solenoid actuated DCV, which is controlled by a microcontroller. The entry of vegetable into the grid apparatus is controlled using a pneumatic cylinder along with a single bar mechanism. The vegetables are feeded via inclined tube. A tray is placed at the bottom of the apparatus to collect the vegetable pieces after processing. Variable pressure setting for cutting different vegetables is carried out by the microcontroller. The intricacy involved with such a system is the type of vegetables it can process. The system is advantageous in the fact that existing automation is high in cost, and the power consumption is high. The proposed work is benefitted by pneumatic power, which is abundant. In the era of industrialization, automatic machines become an integral part of human life. These machines help to reduce the time needed to do a specific task. Nowadays, human life becomes more competitive and faster than the previous. Automation brought about by technology has saved human effort and time to a large extent. Slicing vegetables are a risky and time-consuming task in our busy life. This project is aimed at solving above stated problems by introducing a special product named Automatic Vegetable Chopper. This chopper is mainly designed to reduce human effort and make the job of chopping vegetables much easier and faster. Its main features are fully automated, easily portable, less power consumption and changeable stainless, sharp blade, etc. This product is designed and established by following a structured product design process and with the help of a board of design engineers. Product planning, customer needs identifying, product specification, concept screening, concept scoring and bill of materials are tools that mainly used to accomplish this task. Finally, this paper also suggests various techniques and opportunities of product planning in manufacturing industries as future recommendations. Vegetable slicing machine can be manual powered or automated. The design of manual vegetable slicing machine is low operation cost as it eliminates the usage of electricity, safer, consistent and affordable. However, it can be time consuming and low efficiency. An automated slicing machine basically includes a base housing a motor, feeder part, feeder mouth which houses a presser and cutting knife which carried by the cutting plate. It allows the user to cut a large amount of vegetables precisely in a shorter period. However, it is more expensive and difficult when it comes to maintenance operation.

**Keywords:** Automation, relays, microcontroller, DCV



## FABRICATION OF SOLAR SEED DRYER

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### ABSTRACT

Drying is one of the important and most energy consuming processes in the food processing. Direct solar energy has been applied to grain drying for over a years. The agricultural field most cases uses sun and wind dryers are used. This investigation reports about implementation of artificial dryers to benefits of loses and to increase the harvesting efficiency in agricultural field. Drying crops are grains by solar energy is of great economic importance in the world. Especially in Nigeria where most of the crops and grains harvests are lost to fungal and microbial attacks. Proper drying can easily prevent the wastages, which enhances storage of crops and grains over long periods. In farmer level drying is being done on open yards. The objective of this paper is modification of design of a solar seed dryer and evaluation of its performance test on maize grain. It offers a better control over drying and better quality than natural drying.

**Keywords:** Solor dryer, Moisture content, Temperature, Battery, Heating elements and Blower.



## **PRACTICE OF HYDROGEL TECHNIC IN AGRICULTURE**

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### **ABSTRACT**

A hydrogel is a crosslinked hydrophilic polymer that does not dissolve in water. They are highly absorbent yet maintain well defined structures. Cross-linked polymers can hold water 400 times their own weight & release 95% of that to growing plants. Use of hydrogel leads to increased water use efficiency by preventing leaching & increasing frequency for irrigation.

It is estimated by 2025 water scarcity will be a major issue in India requiring immediate redressal. As per the Central Water Commission, the demand for water is growing at a steady rate but the availability of clean water in future is declining even faster. In the Indian scenario, agricultural irrigation practices seem to be responsible for consumption of 80% of the available portable water.

Mostly this type of hydrogel technic is used in the areas facing water scarcity like arid & semi-arid areas. Hydrogel works as water reservoirs around the root mass zones of the plant. In presence of water, it expands to around 200-800 times the original volume. Rainwater that can then be collected, stored & gradually released for crop requirements over prolonged durations. Hydrogel mixed with soil placed around root zones increase soil permeability & improve germination rates. mostly used for orchard crops. Use of hydrogel varies with soil.



**SIGNIFICANCE OF CAFETERIA FOOD LEFTOVER AS ALTERNATIVE CHEAP FEED RESOURCE IN POULTRY NUTRITION: A VIABLE STRATEGY TO REDUCE ITS POLLUTION IMPACT ON THE ENVIRONMENT**

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**ABSTRACT**

This study was conducted to evaluate the effect of dried cafeteria food leftover (DCFL) as a partial replacement of maize on growth performances and carcass characteristics of broiler chickens. The DCFL was mixed with other feed ingredients as a replacement of maize at 0% (control diet, T1), 5% (T2), 10% (T3), and 15% (T4). After two weeks of brooding, one hundred sixty unsexed broiler chickens were randomly allocated into four treatment diets with four replicates of 10 chicks each. Feed intake and body weight were measured on daily and weekly basis, respectively. At the end of the feeding trial, two birds (one male and female) were used to evaluate the carcass components. Results indicated that the daily feed intake (g/chicken) was 108, 109, 110, and 110 for T1, T2, T3, and T4 diets, respectively. Chickens fed with the control diet had the lower ( $p<0.05$ ) final body weight (1790g) than those of T2 (1834g), T3 (1867g) and T4 (1914g) and differed ( $p<0.05$ ) from each other. The lowest feed conversion ratio (kg feed/kg weight gain) was observed with chickens fed on T4 (2.77) as compared to those of T1 (2.93), T2 (2.89), and T3 diets (2.85) and differed ( $p<0.05$ ) from each other. Male chickens had ( $p<0.05$ ) higher values for all carcass components than females except for wings. Chickens fed with T4 diet had higher ( $p<0.05$ ) breast meat, thighs, drumsticks, and keel bone meat values than those of T1. They had also higher ( $p<0.05$ ) thighs, and drumsticks than those fed on T1, T2 and T3 diets. The highest dressing percentage was observed in chickens fed with T4 (68.1%) followed by T3 (66.8%) and differed ( $p<0.05$ ) from those of T2 (64.2%) and T1 (63.7%). In conclusion, the DCFL can be safely included up to 15% in the broiler diets by replacing maize grain in smallholder poultry settings thereby reducing its pollution impact on the environment.

**Keywords:** broiler chickens; cafeteria food leftover; carcass components; nutrient intake; growth performances



## DISTRIBUTION AND ANTIBIOTICS SENSITIVITY PATTERN OF *VIBRIO* SPECIES FROM DOMESTIC WASTEWATERS

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### ABSTRACT

Cholera is a life-threatening secretory diarrhea induced by an enterotoxin from *Vibrio cholerae* and remains an outbreak in Nigeria. Wastewater samples were collected from Federal University of Technology Akure, school hostels of about 4,000 in population. Isolation and enumeration of *Vibrio* species were done according to standard microbiological method using thiosulfate-citrate-bile salts-sucrose agar. Identification of colonies was by morphological and biochemical characterization in comparison to Bergey's manual. Antibiotics susceptibility pattern were determined using Kirby-bauer method and a panel of ten conventional antibiotics-kanamycin (30 µg); imipenem (10 µg); ciprofloxacin (5µg); nitrofurantoin (100µg); azithromycin (15µg); trimethoprim (1.25µg) sulfamethoxazole (23.75µg); ampicillin (25µg); amoxicillin (20µg) and clavulanic acid (10µg). Jadesola hostel had the mean bacterial counts ( $8.2 \times 10^3$  cfu/ml). Jibowu hostel has the overall highest frequency of occurrence ( $8.5 \times 10^3$  cfu/ml). Five *Vibrio* species were isolated from the waste water samples. The *Vibrio* spp identified were *Vibrio cholerae*, *Vibrio paraheamolyticus*, *Vibrio alginolyticus*, *Vibrio harveyi* and *Vibrio vulnificus*. All *Vibrio* isolates are susceptible to ciprofloxacin (5µg) and imipenem (10 µg) while 100% resistance to azithromycin (15µg) was recorded. This work indicates the presence of various *Vibrio* spp. in domestic wastewaters and may be a source for microbial pollution of receiving water milieu, and then the public health.

**Keywords:** Cholera, domestic wastewater, hostel, *Vibrio* spp.



**DIVERSITY OF 16s-rRNA (mtDNA) SEQUENCE IN STRIPED TREE  
FROG (*Polypedates leucomystax*): A META-ANALYSIS STUDY**

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**ABSTRACT**

Striped tree frog (*Polypedates leucomystax*) is one of *Rhacophoridae* frogs that found in the area with an altitude about 200 - 1400 masl. This research carried out to determine the diversity of 16s-rRNA (mtDNA) sequence through a meta-analysis study. Total 49 sequences of 16s-rRNA in frog (848 bp) were collected from GenBank for the analysis. Results showed that total 84 mutation sites were detected in this study and reveal 34 haplogroups. The haplotype diversity ( $H_d$ ) and nucleotide diversity ( $P_i$ ) in frogs were 0.97 and 0.014, respectively. Two (2) haplogroups and four (4) clades of Striped tree frog were determined in this study. The Fu's  $F_s$  statistic and Tajima tests in frogs were -11.72 and -1.33, respectively. In conclusion, the diversity of 16s-rRNA sequences can be used as the barcode for Striped tree frog at Southeast Asia.

**Keywords:** Diversity, GenBank, mtDNA, 16s-rRNA sequences, Striped tree frog



**IMPACT OF PUBLIC DEBT ON ECONOMIC GROWTH OF LOW-INCOME STATES IN INDIA**

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**ABSTRACT**

Deficit financing has become unavoidable for developing countries such as India, with growing needs of developmental and social expenditure. The government typically relies on public borrowings to finance fiscal deficits because deficit financing through additional taxes or an increase in tax rate would cause leakage in the economic system and would likely have a negative impact on production and employment. Also, persistently increasing public borrowing requirements to finance budget deficits would eventually result in an increase in the amount of outstanding liabilities and, as a result, debt service obligations over time. Therefore, it is crucial to assess the impact of public debt on the economic growth so to suggest appropriate policy implications regarding public borrowing. The Indian states have been entrusted with greater responsibilities for the provision of public goods and services such as education, health, security, transportation, electricity, and among other things, and thus states' finances play important role in the overall economic growth and development of India. This study is an attempt to analyze the impact of public debt on economic growth of three low-income category states; *Madhya Pradesh, Uttar Pradesh and Bihar*. For each selected state, both short-run and long-run impact of public debt, debt servicing burden and fiscal deficit on economic growth has been analyzed by using Vector Error Correction Model (VECM) for the time-period of thirty years from 1990-1991 to 2019-2020. Moreover, the direction of causality between public debt and economic growth have also been examined by applying Wald test.

**Keywords:** Public Debt, Economic Growth, Cointegration, Vector Error Correction Model, Causality



## TARIFFS AND GROWTH PROSPECT IN AFRICAN COUNTRIES

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### **ABSTRACT**

The debate that growth in African countries have not been stable and in some instance declining in recent times have generated concern among the academic scholars and policy makers across the globe. Growth is volatile and a function of policy and macroeconomic indicators. This study investigate the effect of simple tariff average on GDP using heterogeneous panel data covering thirty eight (38) African countries for the period 2010 to 2020. The study used the random effect regression having supported by the Hausman specification test. Thus, the robust options and time varying effect options are also applied to the model which will show the robustness of the model and variations in the coefficients and standard errors as well. The result of the study revealed that MFN Simple Average tariff rate has a negative sign indicating that Simple Average tariff rate has the tendency of lowering GDP growth rate in the region. The result also shows that real exchange rate and government stability have a negative effect on GDP. Conversely, the coefficients population growth, corruption and investment profile posit a positive effect on GDP. No doubt, there have been limited outcomes in the trade policy blue print which reduce GDP growth. More so, African countries may not have embraced the concessions or implement fully the tariff line level. Thus this has the tendency of lowering GDP growth rate far less than the estimated or projected values and that of the emerging and developed countries. Corruption having a positive sign does not reduce growth. However, it will require proper and well equipped institutions with efficient legal framework to reduce its tendency to discourage foreign confidences. However, it is also possible that the growth in investment profile shows the extent to which African countries have improved their rate investment especially domestically and abroad.

**Keywords:** MFN, tariffs and economic growth





**A STUDY OF ONLINE COURSES OF ACCOUNTING SUBJECTS DURING THE COVID PERIOD**

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**ABSTRACT**

With the Covid- 19 started from 2019 it has changed the entire world. It has affecting all sphere of life including higher education. We have started to teach the students of accounting and other specilisation with the help of online system. This has been a new experience for the faculty as well as the students. We have started to teach the students with the help of different software. This study is based on a purposive study from the students as the respondents. This paper is a pilot study for the topic. This study is based on the experience of teaching with the help of online system to the students. The study was done on the sample of 50 students who were the graduation students. It was to study the factors which influenced the teaching on the online basis. This data was collected in the spring semester of 2020. Another study would be conducting based on a larger set of respondents for better generalisation of the result . A questionnaire was developed to study the factors which influenced the online teaching among the students.. The objective was to study the factors which were held responsible for the higher education students. The factors analysis was taken for the study which was used for the data reduction and purification. The total of Total Variance explained shows that eigenvalues of the first two components are greater than 1 and the cumulative contribution rate has reached 48.132%. The total variance explained by factor 1 is 27.717 percent it contains internet not proper quality, difficulty in attending the classes due to children at home, academic dishonesty, numerical questions. The second variance explained the 20.415 percent which is class's satisfactory conducted, clarification of online classes is possible, learning resources are helpful. Most of the students were satisfied with the online teaching initiative started by the university. However some students faced a problem of internet services and problem of connectivity.

**Keywords:** Covid -19, Accounting Education, Factor analysis, Oman



**ECONOMIC GROWTH FROM SELF-EMPLOYMENT IN RURAL AREAS**

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**ABSTRACT**

Self-employment is one of the main factors in terms of labor market restructuring and economic recovery. It is considered that self-employment has a positive effect on the economic growth of a country, the creation of new jobs, and the increase of income in society. The purpose of this paper is to analyze the impact that self-employment has on economic growth in rural areas in Kosovo, using the simple linear regression model. Data processing was performed through the statistical program SPSS 21.0. From the conducted study we conclude that in the rural areas studied we do not find that there was an impact and the connection between self-employment and economic growth. This is because the incomes of the self-employed in rural areas have been too low to give an economic effect. Therefore, we suggest that the self-employed in rural areas in Kosovo should be supported in many ways, such as: providing favorable conditions for financing by financial institutions, providing training for doing business, providing professional advice, etc.

**Keywords:** self-employment, farmer, economic growth, rural areas.

**KIRŞEHİR’DE JEOTERMAL KAYNAKLARIN TURİZM AÇISINDAN DEĞERLENDİRİLMESİ<sup>1</sup>**  
EVALUATION OF GEOTHERMAL RESOURCES IN KIRŞEHİR IN TERMS OF TOURISM<sup>2</sup>

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**ÖZET**

Kırşehir jeotermal kaynak bakımından önemli bir ildir. Turizm açısından jeotermal kaynakların değerlendirilmesinin ise Kırşehir ilinde yeterli önemin gösterilemediği dikkat çekmektedir. Turizmde jeotermal kaynaklara gerekli önemin verilmemesi hem halk hem devlet hem de özel kurumlarının ilgi göstermemesi kaynaklı olduğu söylenebilir. Bu çalışmada Kırşehir ilinin jeotermal kaynaklarının belirlenmesi ve turizm alanında değerlendirilmesi ile girişimci sayısı ile turizmin artmasına katkı sağlamak amaçlanmıştır. Bu çalışmada Kırşehir Ahi Evran üniversitesinde öğrenim gören öğrencilerin Kırşehir ilinin termal turizm durumu ve geleceğine yönelik algılarının belirlenmesi amacıyla ilişkisel tarama modelinde nicel yöntemlerden anket tekniği kullanılarak veriler toplanmıştır. 383 üniversite öğrencisinden elde edilen verilere göre Kırşehir ilinin termal turizm durumu ve geleceğine yönelik algı düzeyleri olumlu olduğu görülmüştür. Araştırmanın bağımsız değişkenleri (yaş, cinsiyet, medeni durum, eğitim düzeyi ve eğitim görülen bölüm) ile termal turizmin durumu ve geleceğine yönelik üniversite öğrencilerinin algıları arasında ilişki bulunamamıştır.

**Anahtar kelimeler:** Jeotermal, jeotermal kaynaklar, turizm

**ABSTRACT**

Kırşehir is an important province due to geothermal resources. In terms of tourism, it is noteworthy that the evaluation of geothermal resources in Kırşehir is not enough. It can be said that the lack of importance of geothermal resources in tourism is due to the lack of interest of both public and private institutions. In this study, determination of geothermal resources of Kırşehir province and evaluation in the field of tourism is aimed to contribute to the increase of tourism together with the number of entrepreneurs. In this study, in order to determine the perceptions of the students of Kırşehir Ahi Evran University about the thermal tourism status and future of Kırşehir province, data were collected by using quantitative methods in the relational survey model. According to the data obtained from 383 university students, the perception levels of Kırşehir province regarding thermal tourism status and future are positive. The independent variables of the study (age, gender, marital status, educational level and education department) and the perceptions of university students regarding the status and future of thermal tourism were not found.

**Keywords:** Geothermal, geothermal resources, tourism

\*Bu çalışma “Jeotermal Kaynakların Turizmde Değerlendirilmesi, Kırşehir Üzerine Bir Araştırma” isimli yüksek lisans tezinden türetilmiştir.

<sup>2</sup> This study is derived from the master's thesis named "The Evaluation of Geothermal Resources in Tourism, A Research on Kırşehir".



**REGIONAL INEQUALITY IN INDONESIA, 2000-2017:  
DO FDI, FISCAL DECENTRALIZATION, MONETARY POLICY, AND HUMAN  
DEVELOPMENT MATTER?**

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**ABSTRACT**

The aim of this study is to identify the trend of regional inequality across provinces in Indonesia, to test Kuznets's hypothesis in Indonesia, and to explore the effect of economic openness, Foreign Direct Investments (FDI), fiscal decentralization, monetary policy, and human development on regional inequality in Indonesia. Using panel data of 26 provinces in Indonesia during the period 2000-2017, the empirical results of this study shows that our findings support the Kuznets's hypothesis. Using panel data, our econometric models show not only some key determinants of regional inequality in Indonesia but also offer a far better explanation than that of Kuznets's model. Fiscal decentralization, monetary policy, and industrialization affected regional inequality negatively. FDI and urbanization rate, together with institutional changes (i.e. law changes, regional division), affected regional inequality positively and significantly in Indonesia during the study period. Our findings suggest that a policy mix is highly required to reduce inequality by combining fiscal decentralization, monetary policy, institutional factors in the ongoing process of urbanization and globalization.

**Keywords:** Kuznets's hypothesis, panel data, openness, inverted U-curve, inequality.



**THE REALITY OF CHANGE MANAGEMENT AND ITS IMPACT ON THE PERFORMANCE OF  
WORKER'S IN THE MINISTRY OF LOCAL GOVERNMENTS IN BETHLEHEM**

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**ABSTRACT**

This study aims to clarify the role of change management and its impact on employee performance, the population of the study is the employees of ministry of local governments from municipalities and village councils in Bethlehem Governorate, the number of participants is 414 , the sample of the study is 150 employees, 100 employees from the municipalities, and 50 from the village councils, the researcher uses the questionnaire to get the data, it is composed of 35 paragraphs which will be divided into four fields, the first one discusses the organizational change, the second filed is about the organizational development, the third field mentions the incentives, while the fourth is about technology.

To achieve the objectives of the study and answer the questions, researchers will use the statistical package for social sciences program (SPSS), and the expected results is to notice changes to occur through senior management, and senior management provides adequate Information on the importance of change. The ministry of local governments will be involved in management, and the upgrade process is based on the improvement of the worker's performance. The ministry of local governments will give special attention to measuring the performance and efficiency of employees in municipalities and village councils.

**Keywords:** Change management, employee's performance, Bethlehem governorat



**SEVEN PHASES OF FREEZING AND REOPENING, AND MECHANISMS OF PUBLIC AID  
TOWARDS THE AUDITORIUM CULTURE SECTOR DURING THE FIRST YEAR OF THE  
COVID-19 PANDEMIC IN THE REPUBLIC OF POLAND**

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**ABSTRACT**

The article describes the phases of the *anti-pandemic policy* and the mechanisms of the *anti-crisis policy* introduced by the Government of the Republic of Poland in the first year of the COVID-19 pandemic in the area of the *auditorium culture sector*. The research conducted by the authors of the article allowed the distinguishing of seven phases of the policy towards this sector as an element of the *anti-pandemic policy* of the Republic of Poland. First, this sector was the object of lockdowns, operation restrictions and reopening. The *anti-pandemic policy* brought adverse effects for the entities and workers in it. Consequently, the Polish Government arranged public aid mechanisms for them as a part of its *anti-crisis policy*. The article characterises these phases and the wide range of public instruments dedicated to supporting the sector.

**Keywords:** anti-pandemic policy, anti-crisis policy, auditorium culture sector, culture, art, COVID-19 pandemic, public aid, subsidies, European Union, Poland, economic crisis

**JEL classification codes:** J48, H11, H12, H20, H23, H24, H25, H71, H80, H81, H84, O52, P11, Z11, Z18

## İLKOKUL 4. SINIF ÖĞRENCİLERİNİN SAYI DOĞRUSU ÜZERİNDE KESİR GÖSTERİMLERİNDE YAŞADIKLARI ZORLUKLAR

### THE DIFFICULTIES OF PRIMARY SCHOOL 4TH GRADE STUDENTS IN REPRESENTING FRACTIONS ON THE NUMBER LINE

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#### ÖZET

İlkokul matematik öğretimi programının en zengin, karmaşık, anlaşılması zor konularından birisi kesirlerdir. Kesirler doğal sayılar kümesi üzerine inşa edilen bir kavramdır. Fakat sayma sayılarından oldukça farklıdır. Kesir sayısının pay ve paydadaki sayının değerlerinin ötesinde bir anlama sahip olduğu yeni bir değer haline gelmesi çocukların anlamasını zorlaştırmaktadır. Kesir sayısının anlamı kesrin değerinin sayı doğrusu üzerinde işaretlenmesi ile daha anlamlı hale gelmektedir. Sayı doğrusu aynı zamanda kesrin hem bir sayı olduğunu hem de diğer sayılara göre göreceli büyüklüğünü vurgular. Kesir etkinliklerinde model kullanımı önemlidir. Modeller öğrenme için farklı fırsatlar sunar. İlkokul seviyesinde olan öğrencilerin çoğunun somut işlemler döneminde oldukları düşünüldüğünde, soyut nesne veya durumların mümkün olduğunca somut ve anlaşılır hale getirilmesinde matematiksel modellerin kullanımı önemlidir. Kesirlerin sayı doğrusu modeli üzerinde gösterilmesinin kesir kavramının gelişimine, kesirlerde karşılaştırma ve sıralama yapmaya, kesirlerde denklik ve kesirlerle dört işlemlerin yapılmasına olanak sağladığı belirtilmektedir. Bu araştırmanın amacı ilkokul 4. sınıf öğrencilerinin sayı doğrusu üzerinde kesirlerin gösteriminde yaşadıkları zorlukların belirlenmesidir. Araştırmanın modelini, nitel araştırma yöntemlerinden durum çalışması oluşturmaktadır. Çalışma grubunu amaçlı örnekleme yöntemlerinden ölçüt örnekleme yoluyla seçilen 2021-2022 eğitim öğretim yılında Burdur ilinde bulunan bir devlet okulunda 4. sınıfa devam eden 54 öğrenci oluşturmaktadır. Araştırmada veri toplama aracı olarak; araştırmacı tarafından geliştirilen birim kesir, basit kesir, bileşik kesir, tam sayılı kesir örnekleri, 0-10 aralığı içeren sayı doğrularının yer aldığı çalışma yaprağı kullanılmıştır. Veriler sınıf öğretmenleri aracılığı ile ders saati süresi içerisinde toplanmıştır. Veriler betimsel analiz yapılarak incelenmiştir. Araştırma sonuçları incelendiğinde; öğrencilerin sayı doğrusu üzerinde birim, basit, bileşik ve tam sayılı kesirlerin gösteriminde yüksek oranda başarısız oldukları görülmüştür. Başarısızlığa sebep olan zorluklar ise; kesirleri sayı doğrusu üzerinde gösterirken sayı aralıklarını eş parçalara ayıramadıkları, sayı aralıklarını belirlerken paydadaki sayı kadar çizgi çizip, daha fazla parça oluşturdukları, kesirlerin hangi iki sayı arasında olduğunu belirleyemedikleri, pay ve paydanın iki ayrı doğal sayı olarak düşünülmesi sonucu, pay ve paydada yer alan sayıların sayı doğrusu üzerinde ayrı ayrı işaretlenerek gösterilmesi olarak belirlenmiştir.

**Anahtar kelimeler:** Sayı doğrusu, Kesir, İlkokul, Matematik öğretimi

#### ABSTRACT

Fractions are one of the richest, most complex, and difficult to understand subjects of the primary school mathematics curriculum. Fractions are a concept built on the set of natural numbers. But it is quite different from counting numbers. The fact that the fraction number has become a new value that has a meaning beyond the values of the number in the numerator and denominator makes it difficult for children to understand. The meaning of the fraction number becomes more meaningful when the value of the fraction is marked on the number line. The number line also highlights that the fraction is both a number and its relative size relative to other numbers. The use of models is important in fraction activities. Models offer different opportunities for learning. Considering that most of the primary school students are in the concrete operational stage, it is important to use mathematical models to make abstract objects or situations as concrete and understandable as possible. It is stated that showing fractions on the number line model enables the development of the concept of fraction, making comparisons and rankings in fractions, equivalence in fractions, and performing four operations with fractions. The aim of this research is to determine the difficulties experienced by primary



school 4th grade students in the representation of fractions on the number line. The model of the research is a case study, one of the qualitative research methods. The study group consists of 54 students attending the 4th grade in a public school in Burdur in the 2021-2022 academic year, selected through criterion sampling, one of the purposive sampling methods. As a data collection tool in the research; A worksheet containing unit fractions, simple fractions, compound fractions, integer fractions, number lines in the range of 0-10, developed by the researcher, was used. The data were collected during the lesson time by the classroom teachers. The data were analyzed by descriptive analysis. When the research results are examined; It has been observed that students are highly unsuccessful in representing unit, simple, compound and integer fractions on the number line. The difficulties that cause failure are; When showing the fractions on the number line, they could not divide the number ranges into equal parts, when determining the number ranges, they drew lines as much as the number in the denominator and formed more parts, they could not determine which two numbers the fractions are between, and the numerator and denominator were considered as two separate natural numbers. It is determined to be shown by marking separately on the number line.

**Keywords:** Number Line, Fraction, Primary school, Mathematics teaching



## ÖĞRETMENLERİN OKULLARINDAKİ YENİLEŞME İKLİMİNE İLİŞKİN TUTUMLARI TEACHERS' ATTITUDES TOWARDS THE INNOVATION CLIMATE IN THEIR SCHOOLS

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### ÖZET

Bu çalışmanın amacı Antalya Milli Eğitim Müdürlüğüne bağlı ilkokul, ortaokul ve lisede görev yapmakta olan öğretmenlerin okullardaki yenileşme iklimine ilişkin görüşlerini belirlemek ve bazı değişkenlere göre karşılaştırmaktır.

Araştırmada nicel araştırma yöntemlerinden betimsel model kullanılmıştır. Araştırmada, Antalya Milli Eğitim Müdürlüğüne bağlı ilkokul, ortaokul ve lisede görev yapmakta olan öğretmenlerin cinsiyet, öğretmenlikte çalışma süresi, mevcut okuldaki çalışma süresi, öğrenim durumu ve çalışılan eğitim kademesinin okullardaki yenileşme iklimi üzerindeki etkisini ortaya koyabilmek amaçlandığı için betimsel model benimsenmiştir. Araştırmanın evrenini 2020–2021 eğitim-öğretim yılında Antalya Milli Eğitim Müdürlüğüne bağlı ilkokul, ortaokul ve lisede görev yapmakta olan öğretmenler oluşturmaktadır. Örneklemi ise basit seçkisiz (olasılıklı) örnekleme yöntemi kullanılarak belirlenen 144 öğretmen oluşturmaktadır. Bu araştırmada üniversite öğrencilerinden verileri toplayabilmek için veri toplama aracı olarak Polatcan (2019) tarafından geliştirilen “Yenileşme İklimi Ölçeği” kullanılmıştır. Verilerin analizinde t-testi, tek yönlü varyans analizi (One Way ANOVA), Levene testi yapılmış ve SPSS 22.0 istatistik yazılımı kullanılmıştır.

Araştırma sonucunda okullarda yenileşme iklimi boyutlarının cinsiyet, öğrenim durumu, branş ve kıdeme göre anlamlı fark görülmezken, yenileşmeye destek boyutunda okulunda 0-5 yıl görev yapan öğretmenler ve 6-10 yıl görev yapan öğretmenler 11 yıl ve üzeri görev yapan öğretmenlere göre daha yüksek puana sahip olduğu görülmüştür. Ayrıca takım çalışması ve uyum boyutunda okulunda 6-10 yıl görev yapan öğretmenler 11 ve üzeri yıl görev yapan öğretmenlere göre daha yüksek puana sahiptir.

**Anahtar sözcükler:** Yenileşme, yenileşme iklimi, okullarda yenileşme

### ABSTRACT

The aim of this study is to determine and compare the perspectives of teachers working in primary, secondary, and high schools affiliated with the Antalya National Education Directorate on the innovation climate in schools. In the research, the descriptive model was used as one method of quantitative research. A descriptive model was adopted in the research because it is designed to demonstrate the impact of gender, time worked in teaching, working time in current schools, education levels and the education phase of teachers in primary, secondary and high schools of the Antalya Directorate of National Education on the climate of innovation in schools. The research universe consists of teachers working at the Antalya National Education Directorate in the academic year 2020-2021 at elementary in primary, secondary and high schools. The sample includes 144 teachers who have been determined by simple random method. The “Innovation Climate Scale” developed by Polatcan (2019) was used as a data collection tool in this study to collect information from university students. In the analysis of the data, t-test, One Way ANOVA and Levene test and SPSS 22.0 statistical application were used.



As a result of the research, while no significant difference was observed in the dimensions of innovation climate in schools according to gender, education level, branch and seniority, teachers who worked in their schools for 0-5 years and teachers who worked for 6-10 years in the dimension of support for innovation had higher scores than teachers who worked for 11 years or more. was found to be. In addition, in the dimension of teamwork and harmony, teachers who have worked in their school for 6-10 years have higher scores than teachers who have worked for 11 or more years.

**Keywords:** Innovation, innovation climate, innovation in schools.

**OKUL YÖNETİCİLERİNİN YALNIZLIĞI: FENEMONOLOJİK BİR ÇALIŞMA**  
**THE LONELINESS OF SCHOOL ADMINISTRATORS: A PHENOMENOLOGICAL STUDY**

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**ÖZET**

Bu araştırmanın amacı, okul yöneticilerinin sosyal yaşamda ve örgütsel yaşamda hissettikleri yalnızlık duygusunun nedenlerini ve başa çıkma yollarını belirlemektir. Araştırmada nitel araştırma yöntemlerinden fenomenoloji deseni kullanılmıştır. Veri toplama sürecinde Antalya merkez ilçelerinde görev yapan 12 okul müdürü ile yarı yapılandırılmış görüşme formu kullanılarak görüşme yapılmış ve veriler içerik analizi yöntemi ile incelenmiştir. Araştırmanın geçici sonuçlarına göre okul yöneticileri örgütsel yalnızlığı okul ortamında planlanan etkinliklere dâhil edilmemek, yönetsel görevlerini yerine getirdikleri zaman anlaşılacak olarak algılamaktadırlar. Sosyal hayatta yalnızlığı ise; yaptıkları işin gereklerinin sosyal çevreleri için tam olarak anlaşılacağı ve değersizleştirildiği durumlarda hissetmektedirler. Örgütsel yalnızlığı aşmak için iletişim ve liderlik tarzının önemli olduğunu düşünmektedirler. İletişim becerilerini geliştirerek üst ilişkinin getirdiği mesafeyi örgüt amaçlarını engellemeyecek biçimde kapatabilmek ve liderlik konusunda eğitim alarak kendilerini geliştirebilmek çözüm yolu olarak ortaya çıkmıştır. Sosyal yaşamda hissettikleri yalnızlıkla baş edebilmek için farklı ilgi alanlarına yönelmek ve grup ilişkilerinin gelişebileceği faaliyetlere katılmak öne çıkan bir çözüm olarak görülmüştür.

**Anahtar kelimeler:** okul yöneticileri, Örgütsel yalnızlık, sosyal hayatta yalnızlık, yalnızlıkla baş etme yolları, fenomenoloji, içerik analizi.

**ABSTRACT**

The aim of this study is to determine the reasons and ways of coping with the loneliness that school administrators feel in social and organizational life. Phenomenology design, one of the qualitative research methods, was used in the research. During the data collection process, 12 school principals working in the central districts of Antalya were interviewed using a semi-structured interview form and the data were analyzed by content analysis method. According to the tentative results of the research, school administrators perceive organizational loneliness as not being included in the activities planned in the school environment and not being understood when they fulfill their administrative duties. Loneliness in social life; They feel in situations where the requirements of their job are not fully understood and devalued for their social environment. They think that communication and leadership style are important to overcome organizational loneliness. It has emerged as a solution to be able to close the distance brought by the superior-subordinate relationship by improving communication skills in a way that does not hinder the goals of the organization, and to improve themselves by receiving training in leadership. In order to cope with the loneliness they feel in social life, turning to different interests and participating in activities where group relations can develop were seen as a prominent solution.

**Keywords:** school administrators, Organizational loneliness, loneliness in social life, ways of coping with loneliness, phenomenology, content analysis.

## 7. SINIF ÖĞRENCİLERİNİN DİJİTAL VATANDAŞLIK KAVRAMININ ALT BOYUTLARINDAN DİJİTAL GÜVENLİK BOYUTUNA İLİŞKİN GÖRÜŞLERİNİN İNCELENMESİ VE DEĞERLENDİRİLMESİ

EXAMINATION AND EVALUATION OF 7<sup>TH</sup> GRADE STUDENTS' OPINIONS ON THE DIMENSION OF DIGITAL SECURITY, FROM THE SUB-DIMENSIONS OF THE DIGITAL CITIZENSHIP CONCEPT

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### ÖZET

Bu çalışma, nitel yöntemle yapılan bir vaka incelemesidir. Araştırmanın çalışma grubunu, 2021-2022 eğitim-öğretim yılında Nevşehir ili merkez ve bir kasabasındaki iki ilköğretim okulunda 7. sınıfta öğrenim görmekte olan 60 öğrenci oluşturmaktadır. Araştırma verilerinin toplanmasında nitel yöntem kullanılmıştır. Ayrıca nitel veri toplama araçlarından birisi olan görüşme tekniği kullanılarak yarı yapılandırılmış görüşme formu yardımıyla veriler elde edilmiştir. İçerik analizi yöntemi ile araştırma verileri çözümlenmiştir ve temalar çıkarılmıştır. Çalışma kapsamında elde edilen bulgulara göre kasaba ve merkez okulunda öğrenim görmekte olan öğrenciler arasında benzer sonuçlar ortaya çıkmaktadır. Araştırma kapsamında görüşlerine başvuru sosyal medya hesapları için aynı şifreyi kullandığını belirten öğrencilerin sayısı 33'tür. Bu sayı merkezdeki ve kasabada öğrenciler için birbirine yakındır. Ayrıca kız ve erkek öğrencilerin sonuçları da birbirine yakındır. Öğrencilerin yüzde 30'u dijital dünyada güvende olduğunu düşünmektedir. Buna karşın görüş bildiren öğrencilerin çoğunluğu kendisini dijital dünyada güvende hissetmediğini belirtmiştir. Dijital güvenlik için ücreti ödenmiş bir anti virüs uygulaması kullandığını söyleyen öğrencilerin sayısı yalnızca 10'dur. Öğrencilerin büyük bir çoğunluğu anti virüs programı kullanmadığını veya ücretsiz olarak kullandığını ifade etmiştir. Ücret ödeyerek lisanslı bir program kullandığını belirten öğrencilerin hepsi il merkezindeki okulda öğrenim görmekte olan 7. sınıf öğrencileridir. Kasaba okulunda öğrenim görmekte olan öğrencilerin vermiş oldukları görüşlere göre ise, ücret ödeyerek güvenliği için herhangi bir lisanslı anti virüs uygulaması kullanan öğrenci bulunmamaktadır.

Bu araştırmanın amacı, ilgili 7. sınıf öğrencilerinin dijital vatandaşlık kavramının alt boyutlarından dijital güvenlik kavramına yönelik görüşlerinin benzer ve farklı yönlerini karşılaştırarak ortaya koymaya çalışmaktır.

**Anahtar sözcükler:** Vatandaşlık, dijital vatandaşlık, dijital güvenlik.

### ABSTRACT

This study is a case study conducted with the qualitative method. The study group of the research consists of 60 7<sup>th</sup> grade students studying in two primary schools in Nevşehir city center and a town in the 2021-2022 academic year. Qualitative method was used in the collection of research data. In addition, using the interview technique, which is one of the qualitative data collection tools, data were obtained with the help of a semi-structured interview form. With the content analysis method, the research data were analyzed and themes were extracted. According to the findings obtained within the scope of the study, similar results emerge between the students studying in the town and central school. The number of students who stated that they used the same password for the social media accounts whose opinions were sought within the scope of the research is 33. This number is close to each other for students in the center and in the town. In addition, the results of male and female students are close to each other. 30 percent of students think that they are safe in the digital world.



On the other hand, the majority of the students who expressed their opinions stated that they do not feel safe in the digital world. Only 10 students say they are using a paid antivirus app for digital security. The majority of the students stated that they did not use an antivirus program or that they used it for free. All of the students who stated that they used a licensed program by paying a fee are 7<sup>th</sup> grade students studying at the school in the city center. According to the opinions of the students studying at the town school, there are no students who pay a fee and use any licensed antivirus application for their security. The aim of this research is to try to reveal the similar and different aspects of the views of the 7<sup>th</sup> grade students on the concept of digital security, one of the sub-dimensions of the concept of digital citizenship, by comparing them.

**Keywords:** Citizenship, digital citizenship, digital security.

**ORTAOKUL SOSYAL BİLGİLER ÖĞRETİM PROGRAMI KÜLTÜR VE MİRAS ÖĞRENME  
ALANI KAZANIMLARINDA DOLAYLI DEĞER AKTARIMLARI**

INDIRECT VALUE TRANSFERS OF CULTURE AND HERITAGE LEARNING FIELD OUTCOMES IN  
SECONDARY SCHOOLS AT SOCIAL STUDIES CURRICULUM

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**ÖZET**

Değerler; bireyin iyi yönlerinin ortaya çıkartılmasına yardımcı olan, toplum içinde ideal insan yapısına ulaşılmasını sağlayan inançlardır. Değerler eğitimi ise insanın doğuştan sahip olduğu iyi yönlerinin zenginleşmesini ve ahlaki anlamda daha iyiye ulaşmasını sağlayan ilkelerdir. Ailede başlayan değerler eğitimi, okullarda da devam etmektedir. Değerlerin davranışa dönüşebilmesi ve öğrencilerin topluma uyum sağlayabilmesi gibi konularda okullara görev ve sorumluluklar yüklenmiştir. Okullarda değerler eğitimi konusu, öğretim programlarında yer almıştır. Bu amaçla Sosyal Bilgiler Öğretim Programı; 5, 6 ve 7. sınıf kültür ve miras öğrenme alanı kazanımları disiplinler ve değerler açısından incelenmiş ve nitel araştırma yöntemlerinden doküman incelemesi tekniği kullanılmıştır. Elde edilen verilerin analizi ise içerik analiz yöntemiyle yapılmıştır. Araştırmanın sonuçlarına göre Sosyal Bilgiler Öğretim Programı “Kültür ve Miras” öğrenme alanında, her sınıf düzeyinde beş farklı kazanımın yer aldığı görülmüştür. Kazanımlarda, farklı disiplinlerden ve bu disiplinlerle verilmek istenen farklı değerlere yer verilmiştir. 5. sınıf kazanımları ağırlık olarak antropoloji, tarih, çevre eğitimi ve sosyoloji disiplinlerinden oluşurken, 6. Sınıf kazanımları ağırlık olarak tarih başta olmak üzere sosyoloji, antropoloji ve iktisat gibi disiplinlerden oluşmuştur. 7. sınıf kazanımları ise tarih disiplini ağırlıkta olmakla birlikte siyaset, iktisat, sosyoloji ve antropoloji gibi disiplinlerden oluşmuştur. Kazanımlarda estetik ve kültürel mirasa duyarlılık değerleri doğrudan ünitenin geneline yayılan değerler olarak verilirken 5. sınıflarda vatanseverlik ve saygı; 6. sınıflarda vatanseverlik, estetik ve bağımsızlık; 7. sınıflarda ise adalet ve bağımsızlık değerlerinin dolaylı olarak aktarıldığı tespit edilmiştir.

Bu çalışmada, 2018 Ortaokul Sosyal Bilgiler Öğretim Programı, kültür ve miras öğrenme alanı kazanımları, değerler eğitimi açısından ele alınarak Sosyal Bilgiler Öğretim programı kültür ve miras öğrenme alanı kazanımlarında doğrudan aktarılması istenen değerler dışında dolaylı olarak aktarılması gereken değerler ortaya çıkartılmaya çalışılmıştır.

**Anahtar kelimeler:** Sosyal Bilgiler Öğretim Programı, Kültür ve Miras, Değerler Eğitimi.

**ABSTRACT**

Values; These are the beliefs that help reveal the good aspects of people and enable them to reach the ideal human structure in society. Values education, on the other hand, are the principles that enable people to enrich their innate good aspects and achieve moral betterment. Values education, which starts in the family, continues in schools. Schools have duties and responsibilities on issues such as transforming values into behavior and adapting students to society. The subject of values education is also present in school programs. For this purpose, Social Studies Curriculum; The 5th, 6th and 7th grade culture and heritage learning areas were examined in terms of disciplines and values. Document analysis technique, one of the qualitative research methods, was used. The analysis of the obtained data was made with the content analysis method. According



to the results of the research, there are five different acquisitions in each class type in the Social Studies Curriculum "Culture and Heritage" learning area. In the outcomes, different values that are desired to be given with different disciplines are included. While the 5th grade achievements mainly consist of anthropology, history, environmental education and sociology disciplines, the 6th grade achievements mainly consist of history, and disciplines such as sociology, anthropology and economics. The 7th grade achievements, on the other hand, consist of disciplines such as politics, economics, sociology and anthropology, although the discipline of history is dominant. Aesthetic and cultural heritage sensitivity values are values that spread directly throughout the unit. Patriotism and respect in 5th grades; patriotism, aesthetics and independence in 6th grades; In the 7th grades, it was determined that the values of justice and independence were given indirectly.

In this study, the 2018 Secondary School Social Studies Curriculum, culture and heritage learning area acquisitions were handled in terms of values education, and it was tried to reveal the values that should be conveyed indirectly, apart from the values that are to be transferred directly in the Social Studies Curriculum culture and heritage learning area acquisitions.

**Keywords:** Social Studies Curriculum, Culture and Heritage, Values Education.

## ÜNİVERSİTE ÖĞRENCİLERİNİN AKADEMİK ÖZ YETERLİLİKLERİ VE EMPATİK EĞİLİMLERİ ARASINDAKİ İLİŞKİNİN İNCELENMESİ

### EXAMINATION OF THE RELATIONSHIP BETWEEN ACADEMIC SELF-EFFICIENCIES AND EMPATHIC TENDENCIES OF UNIVERSITY STUDENTS

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#### ÖZET

Eğitim, insan ve onun içinde yaşadığı sosyal çevre arasında oluşan bir süreçtir. Bu süreçte bireyler arasında farklılıklar ve bu farklılıkları etkileyen faktörler yer almaktadır. Aile, akranlar, okul, öğretmen gibi dış faktörler olabileceği gibi bireyin motivasyon, öz yeterlilik, empati gibi içsel etmenler de önemli bir yere sahiptir. Öz-yeterlilik; kişinin belirlenmiş hedeflere ulaşmak için zorlukları aşmada kendi yeteneklerine olan inancı olarak tanımlanırken (Bandura, 1993); empatik eğilim ise hem duygusal hem de bilişsel bir süreç içerdiği ve kişinin kendini karşısındakinin yerinde hissetme ve kendisine ait benzer yaşantıları hatırlaması olarak ifade edilmiştir (Budak, 2009). Öz yeterlilik ve empati arasındaki duyuşsal boyutlar bireylerin kararlarını belirlemede önemli rol oynamaktadır. Öz yeterlilik; bireylerin ne kadar çaba harcayacakları, engellere ne kadar dayanabilecekleri gibi davranışsal durumlarını ve aktivitelerini etkilerken, zorluklarla başa çıkabilme becerisi o kadar güçlü olacaktır (Bandura ve Adams, 1977) ve bireylerin düşüncelerini, hislerini, motivasyonlarını ve hareketlerini de etkileyecektir (Bandura, 1995). Bu etkilerin bir sonucu olarak da bireyin öz-yeterlilik inancı insanların gösterecekleri çabayı, kararlılığı, girişkenliği, uyumu ve empatik düzeylerini belirleyecektir.

Bu bağlamda bu araştırma, üniversite öğrencilerinin akademik öz yeterlilikleri ile empatik eğilimleri arasındaki ilişkiyi belirlemek için amaçlanmıştır. Araştırmanın çalışma grubunu 2021-2022 eğitim öğretim yılında Kırıkkale Üniversite Sağlık Bilimleri Fakültesi'nde öğrenim gören 197 öğrenci oluşturmaktadır. Araştırma, iki temel değişken arasında bir ilişki olabileceği düşüncesinden hareketle ilişkisel desende tasarlanmış olup, elde edilen verilerde değişkenler arasındaki ilişkiyi belirlemek amacıyla Pearson korelasyon analizi yapılmıştır. Araştırmada veri toplama aracı olarak, araştırmacı tarafından oluşturulan "Genel Bilgi Formu", Dökmen (1988) tarafından geliştirilen "Empatik Eğilim Ölçeği" ve Kandemir (2010) tarafından geliştirilen "Akademik Öz Yeterlilik Ölçeği" kullanılmıştır. Araştırma sonunda bulgular incelendiğinde; Empatik Eğilim Ölçeği ve Akademik Özyeterlilik Ölçeği puanları arasında anlamlı düzeyde ilişki bulunmaktadır ( $r=-.33$ ). Empatik eğilim ile akademik öz yeterlilik, iyi bir vatandaş olma, sosyal öz yeterlilik, akademik yardım etkinliği ve nicel özyeterlilik arasında anlamlı düzeyde ilişki bulunmaktadır. Ancak puanlar arasındaki ilişkinin düşük düzeyde olduğu görülmektedir. Empatik eğilim ile anlayış ve toplum akademik öz yeterlilik puanları arasında ise orta düzeyde anlamlı bir ilişki olduğu bulgularda yer almaktadır.

**Anahtar kelimeler:** Akademik öz yeterlilik, empatik eğilim, üniversite öğrencileri.

#### ABSTRACT

Education is a process that occurs between people and the social environment in which they live. In this process, there are differences between individuals and the factors that affect these differences. There may be external factors such as family, peers, school, teacher, as well as internal factors such as motivation, self-efficacy and empathy of the individual. Self-efficacy; it is defined as the belief in one's own abilities in overcoming difficulties to achieve determined goals (Bandura, 1993); empathic tendency, on the other hand, is expressed as involving both an emotional and cognitive process, and feeling one's place in the other person's place and remembering similar experiences (Budak, 2009). Affective dimensions between self-efficacy and





empathy play an important role in determining individuals' decisions. Self-sufficiency; the stronger the ability to cope with difficulties will be, as it affects the behavioral states and activities of individuals, such as how much effort they will expend, how long they can withstand obstacles ((Bandura ve Adams, 1977) and will also affect the thoughts, feelings, motivations and actions of individuals (Bandura, 1995). As a result of these effects, the individual's self-efficacy belief will determine the effort, determination, assertiveness, harmony and empathic levels of people.

In this context, this research was aimed to determine the relationship between university students' academic self-efficacy and their empathic tendencies. The study group of the research consists of 197 students studying at Kirikkale University Faculty of Health Sciences in the 2021-2022 academic year. Based on the idea that there may be a relationship between two main variables, the research was designed in a relational design, and Pearson correlation analysis was performed in order to determine the relationship between the variables in the data obtained. In the research were used as data collection tools "General Information Form" created by the researcher, "Empathic Tendency Scale" developed by Dökmen (1988) and "Academic Self-Efficacy Scale" developed by Kandemir (2010). When the findings are examined at the end of the research; there is a significant correlation between Empathic Tendency Scale and Academic Self-Efficacy Scale scores ( $r=-.33$ ). There is a significant relationship between empathic tendency and academic self-efficacy, being a good citizen, social self-efficacy, academic helping effectiveness and quantitative self-efficacy. However, it is seen that the relationship between the scores is at a low level. Findings show that there is a moderately significant relationship between empathic tendency and understanding and community academic self-efficacy scores.

**Keywords:** Academic self-efficacy, empathetic disposition, University students.

## GELİŞTİRİLEN ETKİNLİKLERİN FİZİK ÖĞRETMENLERİNİN PARÇACIK FİZİĞİ HAKKINDAKİ ALAN BİLGİLERİNE ETKİSİ<sup>1</sup>

THE EFFECT OF DEVELOPED ACTIVITIES ON THE FIELD KNOWLEDGE OF PHYSICS TEACHERS ON PARTICLE PHYSICS

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### ÖZET

Bu çalışmanın amacı fizik öğretmenlerinin parçacık fiziğiyle ilgili alan bilgilerinin, uygulanan etkinlikler sonrasında değişimini tespit etmektir. Kullanılan 12 etkinliğin 7'si alan yazından esinlenerek tasarlanmış, 5 tanesi ise yazarlar tarafından hazırlanmıştır. Yapılan alan yazın taramasında fizik öğretmenlerinin parçacık fiziğine yönelik bir başarı testi tespit edilememiştir. Bu nedenle araştırmacılar tarafından bir başarı testi geliştirilmek istenmiştir. Başarı testinin geliştirilmesi için öncelikle lise fizik öğretim programında parçacık fiziği konusuyla ilgili tespit edilen 10 adet kazanımın her biri için en az iki adet kısa cevaplı açık uçlu soru yazılmıştır. Hazırlanan 30 maddeden oluşan başarı testi anlaşılabilirlik, bilimsel ve kazanım açısından uygunluk şeklindeki üç kriter için 9 uzmanın değerlendirmesine sunulmuştur. Uzmanlar görüşlerini; uygun/düzeltilmeli/uygun değil olarak belirtmiştir. 9 uzman için Kapsam Geçerlilik Ölçütü 0.75 olması gerekirken, başarı testindeki 13 madde bu değerden küçük çıkmış ve bu sorular testten çıkartılmıştır. Geriye kalan 17 adet açık uçlu ve kısa cevaplı olan sorulardan oluşan Parçacık Fiziği Başarı Testi, fizik öğretmenlerinin görüşlerinin tespiti için kullanılmıştır.

Salgın hastalık nedeniyle Zoom aracılığıyla çevrimiçi yapılan araştırmaya 14 fizik öğretmeni gönüllü olarak katılmıştır. Her gün dört etkinliğin uygulanması sonucunda, 3 günde etkinliklerin uygulanması sorunsuz tamamlanmıştır. Etkinlikler uygulanmadan önce ve uygulandıktan sonra Google-Formlar aracılığıyla paylaşılan başarı testine verilen yanıtlarla fizik öğretmenlerinin görüşleri toplanmıştır. Elde edilen görüşler önceden belirlenen temalara göre betimsel analiz sonucunda kategorilere ayrılmıştır. Yapılan analiz sonucunda etkinliklerin: Stern-Gerlach deneyinin sonuçları, CERN'de yapılan çalışmaların büyük patlama ile bağlantısı, standart model çerçevesinde atom altı parçacıkları tanımlamaları, elektro-zayıf etkileşim, atom altı parçacıklar arasındaki etkileşim, atom altı parçacıklardan başlayarak madde oluşumunun modellenmesi, Higgs bozonu ve madde ve anti maddenin özellikleri hakkındaki bilgileri kazandırmada oldukça başarılı olduğu tespit edilmiştir. Standart modele göre evrendeki kuark çeşitleri ve evrendeki dört temel etkileşim hakkında ise katılımcıların etkinlikler uygulanmadan önce de yeterli ön bilgilere sahip oldukları tespit edilmiştir. Yük ve spini verilen bir parçacığın tahmininde ise etkinliklerin olumlu etkisi tespit edilememiştir.

**Anahtar kelimeler:** Parçacık fiziği, etkinlik geliştirme, standart model.

### ABSTRACT

The aim of this study is to determine the change in the field knowledge of physics teachers about particle physics after the applied activities. 7 of the 12 activities used were inspired by the literature, and 5 of them were prepared by the authors. In the literature review, an achievement test for particle physics could not be determined. For this reason, researchers wanted to develop an achievement test. In order to develop the achievement test, first of all, at least two short-answer open-ended questions were written for each of the 10 learning outcomes related to particle physics in the high school physics curriculum. The achievement test,

<sup>1</sup> Bu çalışma ilk yazarın doktora çalışmasının bir bölümünden oluşmaktadır.

consisting of 30 items, was submitted to the evaluation of 9 experts for three criteria: comprehensibility, scientific and appropriateness in terms of learning outcomes. Experts opinions; indicated as appropriate/must be corrected/not appropriate. While the Scope Validity Criterion was supposed to be 0.75 for 9 experts, 13 items in the achievement test were found to be smaller than this value and these questions were removed from the test. The Particle Physics Achievement Test, consisting of the remaining 17 open-ended and short-answer questions, was used to determine the views of physics teachers.

Due to the epidemic, 14 physics teachers voluntarily participated in the research conducted online via Zoom. As a result of the implementation of four activities every day, the implementation of the activities in 3 days was completed without any problems. Before and after the activities were implemented, the answers given to the achievement test shared via Google-Forms and the opinions of the physics teachers were collected. Obtained opinions were divided into categories as a result of descriptive analysis according to predetermined themes. As a result of the analysis, activities is quite successful in gaining information about the properties of matter and antimatter, Stern-Gerlach experiment, CERN and the big bang connection, subatomic particles within the framework of the standard model, the electro-weak interaction, the interaction between subatomic particles, the explanation of the formation of matter with a model starting from subatomic particles and the Higgs boson.

According to the standard model, it was determined that the participants had sufficient preliminary information about the types of quarks in the universe and the four basic interactions in the universe before the activities were implemented. On the other hand, the positive effect of the activities could not be determined in the estimation of a particle whose charge and spin are given.

**Keywords:** Particle physics, activity development, standard model.

## TÜRKİYE'DEKİ ÜNİVERSİTELERİN ÇOCUK ARAŞTIRMALARI MERKEZLERİ PROFİL ARAŞTIRMASI

### THE PROFILE RESEARCH OF UNIVERSITY CHILD'S STUDIES CENTERS IN TURKEY

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#### ÖZET

**Amaç:** Bu çalışma, Türkiye'deki Üniversitelerde yer alan çocuk araştırma merkezlerinin genel profillerini ortaya koymak amacıyla yapılmıştır.

**Yöntem:** Tanımlayıcı olarak yapılan bu çalışmada, Üniversitelerde yer alan çocuk araştırma merkezlerine üniversitelerin ana sayfaları taranarak ulaşılmıştır. Çocuk araştırma merkezleri, araştırmacılar tarafından literatür ışığında geliştirilen bir anket formu ile değerlendirilmiştir. Veriler SPSS 21.0 yazılımı kullanılarak sayı ve yüzde olarak değerlendirilmiştir.

**Bulgular:** Üniversitelerde yer alan çocuk araştırma merkezlerinin %86.2'sinin Web sayfası mevcut olup, %73.8'inin Web sayfasının aktif olduğu belirlenmiştir. Merkez müdürlerinin yarıdan fazlasının (%66.2) çocuk ile ilgili bölümler ya da alanlardan olduğu ya da çocuk ile ilgili çalışmalar yaptığı belirlenmiştir. Çocuk araştırma merkez müdürlerinin %35.8'i profesördür. Merkezlerin 2012 ve sonrası yıllarda kuruluş sayılarının arttığı görülmektedir. Çocuk Araştırma merkezlerinin son 1 yıl içerisinde %56.2'sinin sosyal, kültürel veya eğitim içeren bir etkinlik gerçekleştirmediği belirlenmiştir. Aynı zamanda bu merkezlerde son 1 yıl içerisinde %92.5'inin sonuçlanmış projesinin olmadığı, % 71.2'sinin sosyal sorumluluk projesi yürütmediği, %87.5'nin konferans düzenlemediği, %90'nında panel çalışmaları yapılmadığı, %86.2'sinde herhangi bir sertifikalı kurs programı düzenlenmediği ve merkezlerin %91.2'sinin herhangi bir süreli yayın çıkarmadığı belirlenmiştir.

**Sonuç:** Üniversitelerde yer alan çocuk araştırma merkezlerinin %33.8'inin yöneticisinin alan/konu ile ilgili bir yetkinliğinin olmadığı ve bu merkezlerin bilimsel ve sosyal faaliyetlerinin yetersiz olduğu görülmektedir.

**Anahtar kelimeler:** Yükseköğretim, çocuk araştırmaları merkezleri, çocuk.

#### ABSTRACT

**Aim:** This study was conducted to reveal the general profiles of child research centers in Universities in Turkey.

**Material and Methods:** In this descriptive study, child research centers in universities were reached by scanning the home pages of universities. Child research centers were evaluated with a questionnaire developed by the researchers in the light of the literature. Data were evaluated as numbers and percentages using SPSS 21.0 software. Data were evaluated as numbers and percentages using SPSS 21.0 software.

**Results:** It has been determined that 86.2% of the child research centers in universities have a Web page, and 73.8% of them have an active Web page. It has been determined that more than half of the center directors (66.2%) are from departments or areas related to children or are working on children. 35.8% of child research center directors are professors. It is observed that the number of establishments of the centers has increased in 2012 and later years. It has been determined that 56.2% of Child Research Centers have not carried out any social, cultural or educational activity in the last 1 year. At the same time, 92.5% of these centers did not have a completed project in the last 1 year, 71.2% did not carry out social responsibility projects, 87.5% did not



organize conferences, 90% did not conduct panel studies, 86.2% did not organize any certified course program. and it was determined that 91.2% of the centers did not publish any periodical.

**Conclusion:** It is seen that the managers of 33.8% of the child research centers in universities do not have any competence related to the field/subject and the scientific and social activities of these centers are insufficient.

**Keywords:** Higher education, child research centers, child.

## ÜNİVERSİTE ÖĞRENCİLERİNİN BİLİŞSEL OLGUNLUK VE DÜŞÜNME BECERİLERİ ARASINDAKİ İLİŞKİNİN İNCELENMESİ

INVESTIGATION OF THE RELATIONSHIP BETWEEN COGNITIVE MATURITY AND THINKING  
SKILLS OF UNIVERSITY STUDENTS

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### ÖZET

Bilgisayarca düşünme kavramı analitik düşüncenin bir türü olarak Türkçe alan yazındaki kaynaklarda farklı isimlerle anılsa da içerisinde benzer becerilere odaklanmaktadır. Bilgisayarca düşünme becerileri kavramının tercih edilme sebebi ise çalışmada kullanılan ölçekten kaynaklanmaktadır. Bilgisayarca düşünme kavramının içerisinde yaratıcılık, algoritmik düşünme, eleştirel düşünme, problem çözme, işbirlikçi düşünme ve iletişim becerileri bir arada ele alınmaktadır. Çünkü bu becerilerin hiçbirinin birbirinin yerini alamayacağı ancak birbirlerini destekleyip potansiyellerini arttırabileceği düşünülmektedir. 21. Yüzyıl becerileri olarak adlandırılan kavramlarla karşılaştırıldığında da benzer becerilerin ön plana çıktığı görülmektedir. Bu nedenden dolayı öğrencilerin sahip olması beklenen düşünme becerileri bilgisayarca düşünme olarak tanımlanmaktadır. Üniversite öğrencilerinin bilişsel becerilerini değerlendirmek adına geliştirilen metodlardan biri olan Perry modeli, ikicilik, çokçuluk ve görecilik olmak üzere üç temel ilke üzerinden öğrencileri sınıflandırmaktadır. Bunun için de öğrenme sürecinden yola çıkan sistem dokuz aşamadan oluşturulmuş ve kademeli olarak bilişsel olgunluğu temsil etmektedir. Bu sistem aracılığı ile üniversite öğrencilerinin mevcut bilişsel düzeyleri belirlendiği gibi bilişsel olgunlukları için eğitim sistemi içerisinde de önlem alınabilmesi sağlanmaktadır. Betimsel araştırma yöntemlerinden korelasyonel araştırma kullanılan bu çalışma üniversite öğrencilerinin bilişsel olgunluk ve düşünme becerileri arasındaki ilişkinin incelenmesi ve etkili olabilecek faktörlerin ortaya konulmasını amaçlamaktadır. Araştırmanın çalışma grubunu sağlık bilimleri fakültesinde öğrenim gören 258 üniversite öğrencisi oluşturmaktadır. Çalışma içerisinde öğrencilerin bilişsel olgunluğunu değerlendirmek için “Üniversite Öğrencileri Bilişsel Gelişim Ölçeği”, düşünme becerilerini değerlendirmek için ise “Bilgisayarca Düşünme Ölçeği” kullanılmıştır. Üniversite Öğrencileri Bilişsel Gelişim Ölçeği Katung, Johnstone ve Downie (1999) tarafından Perry modeli dikkate alınarak tasarlanmıştır. Türkçe geçerlik güvenirlik çalışması ise Şenocak (2006) tarafından yapılmış ve güvenirlik kat sayısı .94 olarak bulunmuştur. Bilgisayarca Düşünme Ölçeği ise, Korkmaz, Çakır ve Özden (2017) tarafından geçerlik güvenirliği yapılmış ve Cronbach’s Alpha değerleri .73 ile .87 arasında bulunmuştur. Analizler sırasında verilerin normallik dağılımını belirlemek için çarpıklık basıklık değerlerine bakılmış ve  $\pm 1$  arasında olduğu görülmüştür. Uygun parametrik analizler sonucunda öğrencilerin yaşadıkları bölge, sosyal etkinlik katılım düzeyi gibi değişkenlerde puanlar arası anlamlı farklılık bulunurken, bilişsel olgunlukları ve düşünme becerileri arasında istatistiksel olarak anlamlı bir ilişki bulunmuştur.

**Anahtar kelimeler:** düşünme, olgunluk, bilişsel.

### ABSTRACT

Although the concept of computational thinking is referred to by different names in Turkish literature as a type of analytical thinking, it focuses on similar skills. The reason why the concept of computational thinking skills is preferred is due to the scale used in the study. In the concept of computational thinking, creativity, algorithmic thinking, critical thinking, problem solving, collaborative thinking and communication skills are considered together. Because it is thought that none of these skills can replace each other, but they can support

each other and increase their potential. When compared with the concepts called 21st Century skills, it is seen that similar skills come to the fore. For this reason, the thinking skills expected of students are defined as computational thinking. The Perry model, which is one of the methods developed to evaluate the cognitive skills of university students, classifies students on three basic principles: dualism, pluralism and relativism. For this, the system, which starts from the learning process, is formed of nine stages and represents cognitive maturity gradually. Through this system, it is ensured that the current cognitive levels of university students are determined and that measures can be taken within the education system for their cognitive maturity. This study, which uses correlational research, one of the descriptive research methods, aims to examine the relationship between university students' cognitive maturity and thinking skills and to reveal the factors that may be effective. The study group of the research consists of 258 university students studying at the faculty of health sciences. In the study, the "Cognitive Development Scale for University Students" was used to evaluate the cognitive maturity of the students, and the "Computational Thinking Scale" was used to evaluate their thinking skills. The University Students Cognitive Development Scale was designed by Katung, Johnstone and Downie (1999) considering the Perry model. The Turkish validity and reliability study was conducted by Şenocak (2006) and the reliability coefficient was found to be .94. The validity and reliability of the Computational Thinking Scale was made by Korkmaz, Çakır, and Özden (2017) and Cronbach's Alpha values were found to be between .73 and .87. During the analyses, the skewness and kurtosis values were checked to determine the normality distribution of the data and it was found to be between  $\pm 1$ . As a result of appropriate parametric analysis, there was a significant difference between the scores in variables such as the region where the students live and the level of participation in social activities, while a statistically significant relationship was found between their cognitive maturity and thinking skills.

**Keywords:** thinking, maturity, cognitive.

## **ÖĞRETMEN ADAYLARININ KENDİLERİNİN VE STAJ UYGULAMA ÖĞRETMENLERİNİN YETERLİLİKLERİ HAKKINDAKİ GÖRÜŞLERİ**

**OPINIONS OF TEACHER CANDIDATE ON THEIR AND THEIR INTERNSHIP PRACTICE TEACHERS' COMPETENCIES**

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### **ÖZET**

Toplumların gelişimini sağlayan, gelecek nesillerin inşa edilmesinde güçlü bir role sahip olan öğretmenlik mesleği her geçen gün daha da önemli hale gelmektedir. Eğitim sisteminde öğretmenlerin yetiştirilmesi, öğretmen yeterlilikleri de her zaman tartışılan konulardan birisidir. Çıktısı çok uzun zaman sonra gözlenebilen eğitimde öğretmenlerin yeterli bir eğitim alması önemli görülmektedir, çünkü hatalı çıktı insan olacağı için bu durum istenmeyen bir durumdur. Öğretmen yetiştirme sürecinde öğretmen adaylarının önemli bir rol modeli olan staj öğretmenleri, uygulamanın göstericisi rolünü üstlenmektedir. Bu yüzden staj öğretmenleri ve uygulamaları öğretmen adaylarının gelişimine önemli katkı sağlamaktadır. Bu bağlamda araştırma, öğretmen adaylarının mesleğe başlamadan önceki yeterlilik durumları hakkında ve son sınıfta gittikleri stajlarda uygulama öğretmenlerinin yeterlilik durumlarına ilişkin derinlemesine bir bakış açısı sağlar.

Araştırmanın amacı, öğretmen adaylarının kendilerinin ve staj uygulama öğretmenlerinin yeterlilikleri hakkındaki görüşlerini tespit etmek ve anlamaktır. Bu amaca ulaşmak adına aşağıdaki sorulara cevap aranmıştır:

- Öğretmen olarak derslere katıldığınızda hissettiğiniz duygular nelerdir?
- Öğretmen olarak kendinizi yeterli görüyor musunuz? Öğretmen olarak en etkili özelliğiniz nedir açıklayınız?
- Öğretmen olarak eksik olduğunuzu hissettiğiniz özellikler nelerdir açıklayınız?
- Uygulama öğretmeniz size göre yeterli mi? Yeterli gördüğünüz özelliklerini örnekleriyle anlatınız.
- Uygulama öğretmenin fark ettiğiniz eksik özellikleri nelerdir? Örnekleriyle açıklayınız.

Bu araştırma olgu bilim desenli nitel bir araştırmadır. Araştırmada nitel araştırmada kullanılan amaçlı örneklem yöntemlerinden kolay ulaşılabilir örneklem tekniği kullanılmıştır. Akdeniz Üniversitesi Spor Bilimleri Fakültesinde 4. Sınıfta öğrenim görmekte olan staj uygulamasına katılmış 24 öğrenci örneklem olarak seçilmiştir. Araştırma verileri 2019-2020 eğitim-öğretim yılı bahar döneminde toplanmıştır. Araştırmanın veri toplama tekniği bireysel görüşmedir. Görüşmeler yarı yapılandırılmış görüşme formu kullanılarak yapılmıştır. 25-30 dakikalık görüşmeler kaydedilmiş ve kategorilere ayrılmıştır. Bireysel görüşmelerden elde edilen veriler NVIVO 11.0 Nitel Veri Analizi Paket Programına aktararak veri çözümlemeleri tamamlanmıştır.

Araştırmanın bazı sonuçlarına göre, öğrenen adaylarının büyük bir çoğunluğu kendilerini öğretmen olarak yeterli görmektedir, etkili özellikleri olarak da güler yüz, konuya hakimiyet, etkili iletişim becerilerine sahip olduğu ifade edilmektedir. Öğretmen adayları eksik olduğu yanları olarak da tecrübesizlik, sabırsızlık ve güven eksikliği gibi özellikler olduğunu ifade etmektedirler. Staj uygulamalarında öğretmen adaylarının çoğunluğu heyecan, mutluluk ve bazıları katılımcılar ise endişe duymaktadırlar. Staj Uygulama öğretmenlerinin genel olarak yeterli olduğu ancak sınıf yönetimi becerilerinin eksik kaldığı düşünülmektedir.

**Anahtar sözcük:** öğretmen, aday öğretmen, sınıf yönetimi, öğretmen yeterlilikleri, yükseköğretim



## ABSTRACT

The teaching profession, which provides the development of societies and has a strong role in the construction of future generations, is becoming more important day by day. The training of teachers in the education system and teacher competencies are always one of the issues discussed. In education, the output of which can be observed after a very long time, it is considered important that teachers receive adequate training, because this is an undesirable situation since the wrong output will be human. Trainee teachers, who are an important role model for teacher candidates in the teacher training process, take on the role of demonstrator of the practice. Therefore, internship teachers and their practices make an important contribution to the development of teacher candidates. In this context, the research provides an in-depth perspective on the proficiency status of pre-service teachers before starting the profession and the proficiency status of practice teachers during their final year internships.

The aim of the research is to determine and understand the opinions of pre-service teachers about their own and internship practice teachers' competencies. In order to achieve this aim, answers to the following questions were sought:

- What are the emotions you feel when you attend classes as a teacher?
- Do you consider yourself sufficient as a teacher? Explain what is your most influential feature as a teacher?
- Explain what are the characteristics that you feel are missing as a teacher?
- Is your practice teacher sufficient for you? Explain the features that you consider sufficient with examples.
- What are the missing features of the practice teacher that you noticed? Explain with examples.

This research is a qualitative research with a phenomenological pattern. In the research, easily accessible sampling technique, which is one of the purposeful sampling methods used in qualitative research, was used. 24 students who were studying in the 4th grade of Akdeniz University Faculty of Sport Sciences and participated in the internship application were selected as a sample. Research data were collected in the spring term of the 2019-2020 academic year. The data collection technique of the research is individual interview. Interviews were conducted using a semi-structured interview form. 25-30 minute interviews were recorded and categorized. Data analysis was completed by transferring the data obtained from individual interviews to the NVIVO 11.0 Qualitative Data Analysis Package Program.

According to some results of the research, the majority of prospective teachers consider themselves sufficient as teachers, and it is stated that they have a smiling face, mastery of the subject, and effective communication skills as effective features. Pre-service teachers state that there are features such as inexperience, impatience and lack of confidence as their deficiencies. In internship applications, the majority of pre-service teachers are excited, happy, and some participants are worried. It is thought that the internship practice teachers are generally sufficient, but their classroom management skills are lacking.

**Keywords:** teacher, candidate teacher, classroom management, teacher competencies, higher education

## ORTAOKUL ÖĞRENCİLERİNİN TÜRKÇE AKADEMİK BAŞARILARININ DİĞER DİSİPLİNLERLE İLİŞKİSİNİN İNCELENMESİ

### EXAMINING THE RELATIONSHIP BETWEEN SECONDARY SCHOOL STUDENTS' TURKISH ACADEMIC ACHIEVEMENT AND THE OTHER DISCIPLINES

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#### ÖZET

Bu çalışmanın amacı, ortaokul altıncı sınıf öğrencilerinin Türkçe akademik başarı düzeylerinin belirlenmesi ve söz konusu akademik başarıyla diğer disiplinlere (matematik, fen bilimleri, sosyal bilgiler, yabancı dil, din kültürü ve ahlak bilgisi, görsel sanatlar, beden eğitimi ve spor, müzik, bilişim teknolojileri ve yazılım) ait akademik başarıları ve genel not ortalaması arasındaki ilişkinin ortaya konmasıdır. Mevcut çalışma ilişkisel tarama modeli temel olarak yürütülmüştür. Araştırmanın örneklem grubunu 2020-2021 eğitim öğretim yılı bahar döneminde Kilis ili merkez ilçede bulunan altı devlet ortaokulunda öğrenim görmekte olan 334 ortaokul altıncı sınıf öğrencisi oluşturmaktadır. Araştırmanın sonucunda öğrencilerin Türkçe dersi akademik başarılarının iyi düzeyde olduğu tespit edilmiştir. Ayrıca öğrencilerin Türkçe akademik başarı puanlarıyla matematik, fen bilimleri, sosyal bilgiler, yabancı dil, din kültürü ve ahlak bilgisi, görsel sanatlar, beden eğitimi ve spor, müzik ve bilişim teknolojileri ve yazılım disiplinlerine ait başarı puanları arasında istatistiksel açıdan anlamlı bir ilişki ( $p<0.05$ ) bulunmuştur. Buna göre Türkçe akademik başarıyla matematik, fen bilimleri, sosyal bilgiler, yabancı dil, din kültürü ve ahlak bilgisi, müzik, bilişim teknolojileri ve yazılım derslerine ait başarı puanları arasında pozitif yönlü yüksek düzeyde bir ilişki olduğu; görsel sanatlar ile beden eğitimi ve spor derslerine ait başarı puanları arasında ise pozitif yönlü orta düzeyde bir ilişki olduğu tespit edilmiştir. Ortaokul öğrencilerinin Türkçe akademik başarı puanlarının pozitif yönlü en yüksek düzeyde ilişkili olduğu disiplinin matematik, en az ilişkili olduğu disiplinin ise beden eğitimi ve spor dersi olduğu sonucuna ulaşılmıştır. Bunun yanı sıra öğrencilerin Türkçe akademik başarı puanlarıyla genel not ortalamaları arasındaki ilişkinin oldukça yüksek düzeyde pozitif yönlü olduğu belirlenmiştir.

**Anahtar kelimeler:** Türkçe, akademik başarı, ortaokul, ilişkisel analiz.

#### ABSTRACT

The aim of this study is to determine the level of Turkish academic achievement of the sixth grade secondary school students and to study other disciplines (mathematics, science, social studies, foreign language, religious culture and ethics, visual arts, physical education and sports, music, information technologies and software) with their academic achievement and overall grade point average. The present study has been conducted based on the relational screening model. The sample group of the research consists of 334 sixth grade students at the secondary school studying at six state schools in the central district of Kilis in the spring term of the 2020-2021 academic year. As a result of the research, it was determined that the academic achievement of the students in the Turkish course was at a good level. In addition, it was found that there is a statistically significant relationship ( $p<0.05$ ) between the Turkish academic achievement scores of the students and the achievement scores of mathematics, science, social studies, foreign language, religious culture and ethics, visual arts, physical education and sports, music and information technologies and software disciplines. Accordingly, there is a high level of positive correlation between academic achievement in Turkish, mathematics, science, social studies, foreign language, religious culture and ethics, music, information technologies and software courses; on the other hand, it was determined that there is a positive moderate relationship between the success scores of visual arts and physical education and sports lessons. It was concluded that the discipline with the highest positive correlation with the Turkish academic achievement scores of secondary school students was mathematics, and the discipline with the least correlation was physical education and sports. In addition, it was



determined that the relationship between the students' Turkish academic achievement scores and their overall grade point averages was highly positive.

**Keywords:** Turkish, academic achievement, secondary school, relational analysis.

**ORTAOKUL 7. SINIF ÖĞRENCİ VELİLERİNİN MATEMATİK EĞİTİMİNDEN BEKLENTİLERİ İLE ÖĞRENCİLERİN MATEMATİK KAYGILARI, MATEMATİKSEL TUTUMLARI VE AKADEMİK YILMAZLIKLARI ARASINDAKİ İLİŞKİNİN İNCELENMESİ**

RESEARCH OF THE RELATIONSHIP BETWEEN SECONDARY SCHOOL 7TH GRADER'S PARENTS ANTICIPATIONS FROM MATHS EDUCATION AND STUDENTS MATH ANXIETY, MATHEMATICAL ATTITUDES, ACADEMIC RESILIENCE

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**ÖZET**

Eğitim sürecine velilerin aktif bir şekilde katılması ile öğrencilerin akademik başarısının arttığı, olumlu davranışlarının ve duygusal gelişimlerinin daha iyi olduğu yapılan bazı çalışmalarla ortaya konmuştur (Booth ve Dunn, 1996; Henderson ve Berla, 2004; Nyabuto ve Njoroge, 2014). Yine bu çalışmalarda velisi aktif olarak eğitim öğretim sürecine katılan öğrencilerin genellikle daha yüksek notlar aldıkları, bir üst öğrenime daha kolay çıktıkları, okullarına düzenli olarak devam ettikleri ve sosyal becerilerinin daha çabuk geliştiği ortaya konmuştur. Ayrıca yapılan bazı çalışmalarda öğrenci velilerinin matematik dersi özelinde bilinç ve farkındalık kazanmasının, çocukların matematik başarısında rolü olduğu görülmektedir (Cai, Moyer ve Wang, 1999; Hatch, 1998; Pezdek, Tiffany, Paul ve Reno, 2002). Bu beklentiler ile belki de öğrencilerin hazır bulunuşluk, düşünme süreçleri, öğrenme yaklaşımları, üstbilişsel farkındalıkları, matematik kaygıları ve tutumları, yılmazlıkları gibi çeşitli faktörler birbirini etkileyebilir. Bu faktörlerden özellikle öğrencilerin matematik kaygıları ve tutumları ve matematik yılmazlıkları, velilerin matematik eğitiminden beklentileri ile bir ilişkisi olabileceğini söyleyebiliriz.

Matematik eğitiminde başarıyı etkileyen faktörlerden ikisinin matematiksel kaygı ve matematiksel tutum olduğunu söyleyebiliriz. Matematik kaygısı matematik başarısını olumsuz yönde etkilediği yapılan çalışmalarda ortaya konmuştur (Şentürk,2010; Dede, Dursun,2008). Matematik kaygısının oluşmasında öğretmenin dersteki tutumunun yanında velinin tutumu da olumsuz yönde etkilemesi sonucu ortaya çıktığını söyleyebiliriz. Yapılan araştırmalar da matematiksel tutumunda matematik başarısını etkilediği sonucuna ulaşılmıştır (Cynthia ve Engelhard, 1991). Velilerin matematik eğitiminden beklentilerini etkileyebilecek bir diğer faktör ise öğrencilerin akademik yılmazlıkları olduğunu söyleyebiliriz. Akademik yılmazlık, olumsuzluklara rağmen mevcut koşullarda beklenenden daha yüksek performans gösterme olarak tanımlanabilir (Gürkan,2006).

Öğrenci velileriyle yapılan çalışmalara bakıldığında beklentileri (Baltacı, Aytekin, Yıldız, 2019; Kutluca, Aydın, 2010; Akay, Küçükkaragöz, 2014) düşünceleri veya ilgi, tutumlarına odaklanıldığı görülmektedir. Matematik kaygısı ile yapılan çalışmalara bakıldığında genel olarak cinsiyete ve sınıf düzeylerine göre farklılık gösterip göstermediği (Dede, Dursun, 2008), matematik dersinde aldıkları not ve kaygıları arasında bir ilişki olup olmadığına (Şentürk, 2010) gibi konulara odaklanıldığı, tutumla ilgili yapılan çalışmalara bakıldığında da matematik dersine olan tutumun ilgi, çalışma, kaygı, gereklilik gibi konulardan etkilendiği görülmüştür (Önal, 2013). Diğer taraftan akademik yılmazlık ile ilgili olarak (Pekdemir, Yazıcı, Altun, Tosun,2019; Kesici,2016) çalışmalarına rastlanıldığı fakat az sayıda olduğu dikkat çekmektedir. Bu yüzden yapılan bu araştırmada Ortaokul 7. sınıf öğrenci velilerinin matematik eğitiminden beklentilerinin öğrencilerin matematik kaygıları, matematiksel tutumları ve akademik yılmazlıkları arasında nasıl bir ilişki vardır?" sorusuna yanıt aranacaktır. Araştırmada nicel araştırma yöntemlerinden ilişkisel tarama yöntemi kullanılmıştır. Araştırma kapsamında yapılacak anketler, Çorum ilindeki 912 ortaokul 7. sınıf öğrencileri ve bu öğrencilerin velilerine uygulanmıştır. Veriler SPSS programı ile analiz edilmiştir. Araştırmanın sonucunda veli beklentileri ile matematiksel tutum arasında pozitif zayıf ilişki ortaya çıkmıştır ( $\rho=0.109^{**}$ ,  $P<0.01$ ). Diğer taraftan veli beklentileri ile öğrencilerin kaygı ve yılmazlıkları arasında ise anlamlı bir ilişkinin olmadığı belirlenmiştir

( $P>0.05$ ). Ayrıca uygulanan ölçeklere bakıldığında en yüksek puan ortalamasına akademik yılmazlık ölçeğinde, en düşük puan ortalamasına ise tutum ölçeğinde olduğu görülmüştür.

**Anahtar kelimeler:** Matematik eğitiminden beklentiler, veliler, matematiksel kaygı, matematiksel tutum, akademik yılmazlık.

## ABSTRACT

It has been demonstrated by some studies that the academic success of students increases, their positive behavior and emotional development are better with the active participation of parents in the education process (Booth & Dunn, 1996; Henderson & Berla, 2004; Nyabuto & Njoroge, 2014). It means, in these studies, it has been revealed that students whose parents actively participate in the education process generally get higher grades, go to the next education more easily, attend school regularly, and develop their social skills more quickly. In addition, in some studies, it has been seen that the awareness and awareness of the parents of the students in the mathematics lesson has a role in the mathematics success of the children (Cai, Moyer, & Wang, 1999; Hatch, 1998; Pezdek, Tiffany, Paul, & Reno, 2002). These expectations may be influenced by various factors such as students' readiness, thinking processes, learning approaches, metacognitive awareness, mathematics anxiety and attitudes, and resilience. We can say that among these factors, students' math anxiety and attitudes and math resilience may have a relationship with parents' expectations from mathematics education. We can say that two of the factors affecting success in mathematics education are mathematical anxiety and mathematical attitude. Studies have shown that mathematics anxiety negatively affects mathematics achievement (Şentürk, 2010; Dede, Dursun, 2008). We can say that the formation of mathematics anxiety occurs as a result of the teacher's attitude in the lesson, as well as the negative influence of the parents' attitude. We can say that two of the factors affecting success in mathematics education are mathematical anxiety and mathematical attitude. Studies have shown that mathematics anxiety negatively affects mathematics achievement (Şentürk, 2010; Dede, Dursun, 2008). We can say that the formation of mathematics anxiety occurs as a result of the teacher's attitude in the lesson, as well as the negative influence of the parents' attitude. Looking at the studies conducted with the parents of the students, it is seen that the focus is on their expectations (Baltacı, Aytekin, Yıldız, 2019; Kutluca, Aydın, 2010; Akay, Küçükkaragöz, 2014), thoughts or interests and attitudes. When we look at the studies on mathematics anxiety, it can be seen that there is a general difference between gender and grade level (Dede, Dursun, 2008), whether there is a relationship between the grades they get in mathematics lessons and their anxiety (Şentürk, 2010). It has been observed that the attitude towards mathematics lesson is affected by subjects such as interest, study, anxiety and necessity (Önal, 2013). On the other hand, it is noteworthy that there are studies on academic resilience (Pekdemir, Yazıcı, Altun, Tosun, 2019; Kesici, 2016) but few in number. Therefore, in this study, what kind of relationship is there between the expectations of the parents of 7th grade students from mathematics education and the mathematics anxiety, mathematical attitudes and academic resilience of the students? question will be answered. Relational survey method, one of the quantitative research methods, was used in the research. The surveys to be conducted within the scope of the research were applied to 912 secondary school 7th grade students in Çorum and their parents. The data were analyzed with the SPSS program. As a result of the research, a weak positive correlation emerged between parents' expectations and mathematical attitude ( $\rho=0.109^{**}$ ,  $P<0.01$ ). On the other hand, it was determined that there was no significant relationship between parents' expectations and students' anxiety and resilience ( $P>0.05$ ). In addition, when the scales applied were examined, it was seen that the highest average score was in the academic resilience scale, and the lowest average score was in the attitude scale.

**Keywords:** Expectations from mathematics education, parents, mathematical anxiety, mathematical attitude, academic resilience.

**SOSYAL BİLGİLER VE TARİH DERS KİTAPLARINDA AHİLİK**  
**AKHISM (AHILIK) IN SOCIAL STUDIES AND HISTORY TEXTBOOKS**

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**ÖZET**

Toplumlarda birlik beraberliği, toplumsal düzeni sağlamak için çeşitli kuruluşlar yer alır. Tarihsel süreç içerisinde de bu amaçla kurulmuş kuruluşlar bulunmaktadır. Yüzyıllar öncesinde Anadolu’da Ahi Evran tarafından Ahilik isimli esnaf dayanışma teşkilatı kurulmuştur. Bir kültür olarak uzun yıllar devam eden Ahilik kültürünün eğitim sürecine de yansımıştır. Türkiye’de eğitimi verilen birçok dersin içeriğinde Ahilik yer almaktadır. Bu derslerden bazıları sosyal bilgiler ve tarih dersleridir. Sosyal bilgiler ve tarih dersi gibi birçok dersin eğitim sürecinde önemli yardımcı kaynak ders kitaplarıdır. Sosyal bilgiler ve tarih ders kitapları içeriklerinde Ahilik yer alabilmektedir. Fakat önemli bir kültür olan Ahilik’in sosyal bilgiler ve tarih ders kitaplarına nasıl yansıdığı önemli bir sorundur. Bu nedenle bu araştırmanın problem cümlesini sosyal bilgiler ve tarih ders kitaplarında Ahilik nasıl yer almaktadır? Sorusu oluşturmaktadır. Bu çalışmanın amacını da Türkiye sosyal bilgiler ve tarih ders kitaplarında Ahilik kültürü araştırılmak amaçlanmıştır. Araştırma nitel araştırma desenlerinden durum çalışmasına göre tasarlanmıştır. Araştırmanın çalışma grubu amaçlı örnekleme yöntemine göre belirlenmiştir. Araştırmanın çalışma grubunu Türkiye sosyal bilgiler ve tarih ders kitapları oluşturmaktadır. Araştırmanın verileri ise doküman incelemesi tekniği ile toplanmıştır. Doküman incelemesi tekniği aracılığıyla toplanan veriler ise betimsel analiz tekniği ile analiz edilmiştir. Betimsel analiz sürecinde elde edilen veriler iki araştırmacı tarafından araştırma soruları kapsamında önce ayrı ayrı kodlanmış sonra bir araya gelinerek yapılan kodlamalar ortak kategoriler altında toplanmıştır. Kategoriler altında yer alan kodlar frekans sıklıklarına göre sıralanmıştır. Sonra ise elde edilen tablolar betimlenmiştir. Araştırma sonucunda ise şu sonuçlara ulaşılmıştır: Ahilik kelimesi ders kitaplarında “*eli açıklık, cömertlik, yiğitlik, kardeşlik*” anlamlarında kullanılmıştır. Ahilik kültürü ile bireylere birçok değer ve beceri edinimi sağlamak hedeflenmiştir. Değerler olarak; “*dürüstlük, çalışkanlık, cömertlik, dayanışma, yardımseverlik, saygı, sevgi, ahlaklı olmak, misafirperverlik*” kazandırılmak hedeflenmektedir. Beceriler olarak ise; “*işbirliği, sosyal katılım, iletişim, girişimcilik, empati, eleştirel düşünme*” bireylere kazandırılmak hedeflenmektedir. Ders kitapları bütüncül olarak incelenip değerlendirildiğinde Ahilik kültürünün ders kitaplarında çok sınırlı yer aldığı sonucuna ulaşılmıştır.

**Anahtar kelimeler:** Ahilik, sosyal bilgiler, tarih, ders kitapları.

**ABSTRACT**

There are various institutions in societies that ensure unity and social order. There have been institutions established for this purpose in history. Centuries ago, a solidarity organization for tradesmen called Akhism (Ahilik) was established in Anatolia by Ahi Evran. Akhism culture, which continued to exist as a culture for many years, also had an impact on the education system. Akhism is included in the content of many courses taught in Turkey. Some of these courses are social studies and history courses. An important resource used in many courses such as social studies and history courses is textbooks. Akhism may be included in the content of social studies and history textbooks. However, it is an important issue how Akhism, an important culture, is reflected in the social studies and history textbooks. For this reason, the problem statement of this research is, How is Akhism included in social studies and history textbooks? The purpose of this research



is to examine the Akhism culture in the social studies and history textbooks used in Turkey. The research has been designed as a case study, one of the qualitative research methods. Purposeful sampling method was used for the sampling of the research. The sample of the research consists of social studies and history textbooks used in Turkey. The data of the research was collected through document analysis method. The data collected through document analysis method were then analyzed using the descriptive analysis method. The data obtained as a result of descriptive analysis were first coded separately by two researchers within the context of research questions, and the codes were then gathered in categories with a meeting. The codes in the categories were ranked according to their frequency. Lastly, the obtained tables were described. The following research results have been reached: The word Akhism has been used in the textbooks to mean “*generosity, benevolence, bravery, and brotherhood*”. The acquisition of many values and skills have been aimed through Akhism culture. As values, the acquisition of “*honesty, diligence, generosity, solidarity, benevolence, respect, love, morality, and hospitality*” has been aimed. As skills, on the other hand, the acquisition of “*collaboration, social participation, communication, assertiveness, empathy, and critical thinking*” has been aimed. When the textbooks are examined and evaluated holistically, it has been concluded that the Akhism culture has been included in the textbooks in a very limited way.

**Keywords:** Akhism, social studies, history, textbooks.

**STUDENTS ACHIEVEMENT IN SCIENCE AND MATHEMATICS AND THEIR CAREER  
PERSPECTIVES IN STEM FIELDS: HIGHER EDUCATION EXAM RESULTS FOR LAST TEN  
YEARS**

ÖĞRENCİLERİN FEN VE MATEMATİK BAŞARISI VE STEM ALANLARINDA KARİYER  
PERSPEKTİFİ: SON ON YILIN YÜKSEKÖĞRETİME GEÇİŞ SINAVI SONUÇLARI

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**ABSTRACT**

Today, it has become very important to raise qualified individuals who will adapt to the developments in information and technology. STEM approach involves interdisciplinary integration of Science, Technology, Mathematics, and Engineering (STEM) fields. This helps students to integrate their knowledge and skills in these fields, and to transfer their knowledge and skills in the solutions to daily life problems. In recent years, the decreasing number of students who chose a STEM related career in their undergraduate education has attracted attention as a serious problem for developed countries. This study focused on the reflection of this problem in Turkey and tries to find out possible solutions for it. For this purpose, the last ten years' statistical data from higher education exams in Turkey were collected. The average academic achievement in subfields, the success levels of male and female students, the number of students who selected STEM related fields, and the factors that affect students' career choices were investigated. A mixed research methodology involving quantitative and qualitative data was used. The quantitative data were collected from the annual statistical reports published by the Student Selection and Placement Center between 2010 and 2020 for higher education exams. The qualitative data were collected using a semi-constructed interview with 12 undergraduate students who undertake education in STEM or non-STEM fields.

The quantitative data showed that the success rate of students in Science and Mathematics was much lower than the success rate in other fields, the average success rate of female students in university entry exams was higher than male students. In addition, it was determined that the occupancy rate of undergraduate programs in the field of health sciences was higher than in other fields, the number of quotas of undergraduate programs providing education in the field of natural sciences decreased, and the number of quota and occupancy rates in the fields of engineering and agriculture fluctuated yearly. The qualitative data demonstrated that interest, helping people, prestige, finding a job, and recommendation from close friends were the major factors that influenced students who selected a STEM related major. The students who selected a non-STEM field reported that they prefer their fields due to job opportunities, prestige, helping people, and their lack of interest and skills in science and mathematics. Based on these results and the literature, it was suggested that the success and choices of students in STEM related fields should be carefully reviewed for all levels of education, and education policies should be updated with this perspective in order to raise individuals who can adapt to the requirements of the 21<sup>st</sup> century and international competition.

**Keywords:** Students achievement; STEM fields; gender difference; career perspective



## ÖZET

Bilgi ve teknolojiadaki gelişmelere uyum sağlayacak nitelikli bireylerin yetiştirilmesi günümüzde son derece önemli hale gelmiştir. Fen, Teknoloji, Matematik ve Mühendislik (STEM) alanlarının bütüncül bir yaklaşımla ele alınmasını amaçlayan STEM yaklaşımıyla, ilgili alanlardaki bilgi ve becerilerin entegrasyonu ve bu kazanımların günlük hayatta karşılaşılan problemlerin çözümüne transferi hedeflenir. Son yıllarda öğrencilerin lisans eğitimlerinde ve kariyer tercihlerinde STEM alanlarından uzaklaşmaları gelişmiş ülkeler açısından ciddi bir sorun olarak dikkati çekmektedir. Bu sorunun Türkiye'deki yansımaları ve çözüm önerilerine ilişkin geniş kapsamlı çalışmalara duyulan ihtiyaç nedeniyle bu çalışmada 2010-2020 yılları arasında yapılmış olan yükseköğretim kurumları sınavına ait sayısal verilerin; test alanlarındaki öğrenci başarı yüzdeleri, kız ve erkek öğrencilerin başarı düzeyleri, STEM alanlarını ilgilendiren programlara yerleşen öğrenci sayıları ve öğrencilerin lisans programı tercihini etkileyen faktörler açısından irdelenmesi amaçlanmıştır. Bu amaçla çalışmada nicel ve nitel verilerin birlikte değerlendirildiği karma araştırma deseni kullanılmıştır. Nicel veriler Öğrenci Seçme ve Yerleştirme Merkezi (ÖSYM) tarafından yayınlanan yükseköğretim kurumları sınavına ve yerleştirme sonuçlarına ilişkin sayısal bilgiler kullanılarak, nitel veriler ise STEM ve STEM dışı alanlarda öğrenim görmekte olan 12 lisans öğrencisiyle yapılan yarı yapılandırılmış mülakatlar yoluyla elde edilmiştir.

2010-2020 yılları arasında yapılan merkezi sınavlarla ilgili nicel verilerden; öğrencilerin Fen Bilimleri ve Matematik alanlarındaki başarı yüzdesinin diğer alanlardaki başarı yüzdesinden oldukça düşük olduğu, bu sınavlarda kız öğrencilerin başarı ortalamasının erkek öğrencilerden daha yüksek olduğu, sağlık bilimleri alanında eğitim veren lisans programlarının doluluk oranının diğer alanlara göre daha yüksek olduğu, doğa ve temel bilimler alanında eğitim veren lisans programlarının kontenjan sayılarının azaldığı, mühendislik ve tarım alanlarında ise kontenjan ve doluluk oranlarında dalgalanmaların gözlemlendiği belirlenmiştir. STEM'le ilgili lisans programlarında öğrenim gören öğrencilerin ilgi, insanlara yardım etme, saygınlık, iş bulma, arkadaş çevresinin önerisi gibi nedenlerle, STEM dışı alanlarda öğrenim gören öğrencilerin ise fen ve matematik alanlarına ilgi duymamaları ve bu alanlarda yeteneklerinin olmayışı, iş imkânları, saygınlık ve insanlara yardım etme gibi nedenlerle bu alanları tercih ettikleri belirlenmiştir. Elde edilen sonuçlara ve literatüre dayalı olarak 21. yüzyılın ve uluslararası rekabetin gereklerine uyum sağlayabilecek bireylerin yetiştirilmesi için STEM alanlarındaki öğrenci başarısının ve yöneliminin eğitimin her kademesi için dikkatlice gözden geçirilmesi ve eğitim politikalarının bu perspektifle güncellenmesi önerilmektedir.

**Anahtar kelimeler:** Öğrenci başarısı; STEM alanları; cinsiyet farkı; kariyer perspektifi

## **KİMYANIN TƏDRİSİNDƏ İNTERAKTİV TƏLİM METODLARINDAN İSTİFADƏNİN ÜSTÜNLÜKLƏRİ**

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### **ÖZET**

Məqalədə qeyd olunur ki, kimyanın tədrisi prosesində mənimsənilmə keyfiyyəti interaktiv təlim metodun müxtəlif forma, üsul və üsullarından istifadə olunmasından asılıdır. Müəllif qeyd edir ki, interaktiv təlim metodlarından istifadə məntiqi, tənqidi və yaradıcı təfəkkürü inkişaf etdirir, araşdırma qabiliyyətini formalaşdırır.

Problemin elmi yeniliyi: İnteraktiv təlim metodları əldə edilmiş biliklərin təcrübədən keçirilməsi əsasında konkretləşmişdir.

Problemin praktik əhəmiyyəti: İnteraktiv təlim metodlarından istifadə məntiqi, tənqidi və yaradıcı təfəkkürü inkişaf etdirir, elmi tədqiqat vərdişləri formalaşdırır.

Yeni təlim texnologiyalarının tətbiqi ilə əlaqədar ənənəvi təlimin üstün və çatışmazlıqları təhlil edilərək təkmilləşdirilməsinə daha çox ehtiyac vardır.

Problemin praktik əhəmiyyəti. Təlim prosesində ənənəvi təlim metodları ilə fəal metodları arasında müəyyən fərqlər mövcuddur. Şagirdlərin şəxsiyyətyönlü ünsiyyət və fəaliyyətləri əsasında həyati bacarıqlarını inkişaf etdirməklə onda milli və bəşəri dəyərlərin formalaşdırılır.

İnteraktiv təlim metodları biliklərin daha müstəqil və sərbəst qavranılmasında mühüm rol oynayır. Fəal təlim biliyin qrup və cütlərlə iş formalarından müntəzəm şəkildə istifadə etməklə axtarılıb tapılması ön plana çəkilir. Bu cür təlim texnologiyası ilə təşkil olunan dərslərdə əvvəlcə problemə istiqamət verəcək motivasiya yaradılır. Motivasiya problemə çıxaracaq məsələnin qoyulmasıdır.

İnteraktiv təlim prosesində şagirdlərin yaradıcılıq qabiliyyətləri və dünyagörüşləri inkişaf edir. İnteraktiv öyrənmə prosesində şagirdlər müstəqil şəkildə düşünmə qabiliyyətinə yiyələnir, təcrübələr aparır, həll yollarının düzgünlüyünü öyrənir, müqayisə aparmaqla məlumatların daha düzgün mənimsənilməsinə nail olurlar.

Müasir təlim metod və texnologiyalarının öyrədilməsi istiqamətində təşkil olunan seminarlarda, layihələrdə (treninqlər, monitorinqlər) müəllimlərin iştirakı məqsədəuyğundur.

**Anahtar kelimələr:** kimya, interaktiv təlim, aktiv metod, planlaşdırma, dərslər

## **BİOLOGİYA DƏRSLƏRİNDƏ MÜASİR TƏLİM METODLARINDAN İSTİFADƏNİN TƏKMİLLƏŞDİRİLMƏSİ**

IMPROVING OF THE USE OF MODERN TEACHING METHODS IN BIOLOGY LESSONS

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### **XÜLASƏ**

Məqalə biologiya dərslərində müasir təlim metodlarından istifadənin elmi-pedaqoji əsaslarının modernləşdirilməsi probleminə həsr olunmuşdur. Məqalənin əvvəlində müasir təlim metodlarının təsnifatı öz əksini tapır. Bu təsnifatda Azərbaycanın pedaqoq-metodist alimləri ilə yanaşı, xarici ölkə pedaqoqlarının və metodistlərinin təqdim etdikləri təsnifatlar müqayisəli şəkildə şərh olunur. Məqalədə biologiya dərslərində istifadə edilən ən aparıcı təlim metodlarının tətbiqi yolları və praktik istiqamətləri öz əksini tapır.

Məqalədə biologiyanın tədrisi prosesində modernləşdirilməsi müasir təlim metodlarından səmərəli şəkildə istifadə etməklə bağlı bir sıra elmi idealar, konseptual fikirlər, nəzəri müddəalar irəli sürülmüşdür ki, bütün bunlar məqalənin elmi yeniliyi kimi qiymətləndirilə bilər.

Məqalənin praktik əhəmiyyəti və tətbiqinə dair isə qeyd etmək olar ki, burada biologiya müəllimlərinin bir sıra praktik fəaliyyət istiqamətləri öz əksini tapır. Bunlardan orta ümumtəhsil məktəblərində biologiyayı tədris edən müəllimlər, habelə zoologiya, botanika müəllimləri də faydalana bilərlər.

**Açar sözlər:** biologiya dərsləri, təlim metodları, müəllimin kompetensiyaları, praktik metodlar, əyani metodlar

### **ABSTRACT**

The article is devoted to the problem of modernization of scientific and pedagogical bases of use of modern teaching methods in biology lessons. At the beginning of the article is a classification of modern teaching methods. This classification compares the classifications presented by pedagogues and methodologists of Azerbaijan, as well as foreign pedagogues and methodologists. The article reflects the ways and practical directions of application of the most advanced teaching methods used in biology lessons.

The article puts forward a number of scientific ideas, conceptual ideas, theoretical provisions related to the modernization of biology in the teaching process and the effective use of modern teaching methods, all of which can be considered as scientific novelty of the article.

Regarding the practical significance and application of the article, it should be noted that it reflects a number of practical activities of biology teachers. Teachers of biology in secondary schools, as well as teachers of zoology and botany can benefit from them.

**Keywords:** biology lessons, training methods, teacher`s competences, practical methods, visual methods

## **SOSYOEKONOMİK AÇIDAN DEZAVANTAJLI BÖLGEDE YAŞAYAN 6 YAŞ OKUL ÖNCESİ ÇOCUKLARINA YÖNELİK CESARET TEMELLİ DEĞERLER EĞİTİMİ UYGULAMALARININ ETKİLİLİĞİNİN İNCELENMESİ**

**INVESTIGATION OF THE EFFECTIVENESS OF COURAGE-BASED VALUES EDUCATION PRACTICES FOR PRESCHOOL CHILDREN AGED 6 YEARS LIVING IN A SOCIOECONOMICALLY DISADVANTAGED REGION**

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### **ÖZET**

Günümüzde gelişmelere ayak uydurabilmesi, ihtiyaçları karşılanması ve sorunlara çözüm bulunabilmesi için eğitimde yapılandırma gerekmektedir. Bunun için uygun araç gereç ve materyaller en iyi şekilde kullanılmalıdır. Bu kapsamda, okulöncesinde yeni eğitim programlarının hazırlanması oldukça önemlidir. Bu şekilde, okul öncesindeki çocukların özgüvenli, kendilerine yeten, mutlu, başarılı, kendisine ve topluma yararlı bireyler olması sağlanabilir. Bu durum, çocukların duyarlı, karşılaştıkları sorunları çözebilen bireyler olması üzerinde etkili olabilecektir. Çocukların sağlıklı bireyler olmasında ve özgüvenlerin artmasında değerler eğitimi çok önemli bir yer tutmaktadır. Son zamanlarda değerler ile ilgili araştırmalarda bir artış görülmektedir. Çocukların değerleri öğrenebilmeleri ve içselleştirmeleri için aile ve okul arasında işbirliğinin sağlanması gerekmektedir. Buna ilave olarak, uygun amaçların belirlenmesi, gerekli yöntem ve tekniklerin kullanılması, uygun sürenin ayarlanması, uygun eğitim ortamlarının ve eğitim programlarının hazırlanması gerekmektedir. Okulöncesi değerler eğitimi programı, sosyal duygusal gelişim üzerinde de etkili olmaktadır. Bu kapsamda, değerler eğitimi programlarında içerik ve uygulama sürelerine dikkat edilmesi gerekmektedir. Bu araştırmada, sosyoekonomik açıdan dezavantajlı bölgede yaşayan 6 yaş okul öncesi dönem çocuklarına yönelik geliştirilen cesaret temelli değerler eğitimi uygulamalarının çocukların cesaret değer kazanımına etkililiği incelenmiştir. Araştırmanın örneklemini, Ankara ili Altındağ ilçesinde bulunan bir bağımsız anaokuluna devam eden 6 yaş grubu çocuklar oluşturmuştur. Araştırma, 22 çocuk deney grubu, 22 çocuk kontrol grubu olmak üzere toplam 44 çocukla gerçekleştirilmiştir. Araştırmada, cesaret temelli değerler eğitimi uygulamalarıyla çocukların cesaret değer kazanımlarına katkı sağlanması amaçlanmıştır. Eğitim uygulamaları 18 oturum olarak hazırlanmış olup haftada üç gün araştırmacı tarafından deney grubuna uygulanmıştır. Araştırmada, Cesaret Değeri Gözlem Formu ve araştırmacı tarafından geliştirilen Kişisel Bilgi Formu kullanılmıştır. Deney ve kontrol gruplarının Cesaret Değeri Gözlem Formu'ndan aldıkları öntest ve sontest puanları arasında anlamlı bir farklılık olup olmadığının belirlenmesi ve grupların karşılaştırılması amacıyla Wilcoxon İşaretli Sıralar ve Mann-Whitney U testleri kullanılmıştır. Araştırma sonuçları, cesaret temelli değerler eğitimi uygulamalarının çocukların cesaret değeri kazanımında etkili olduğunu göstermektedir. Cesaret değeri gözlem formu verilerine göre cesaret değer kazanımlarının anlamlı derecede arttığı görülmüştür.

**Anahtar kelimeler:** Cesaret temelli değerler eğitimi, okulöncesi eğitim, cesaret.

### **ABSTRACT**

Today, structuring in education is necessary in order to keep up with the developments, to meet the needs and to find solutions to the problems. For this, appropriate tools and materials should be used in the best way. In this context, it is very important to prepare new education programs in preschool. In this way, it can be ensured that preschool children become self-confident, self-sufficient, happy, successful individuals who are beneficial to themselves and the society. This situation may have an impact on children being sensitive individuals who can solve the problems they encounter. Values education has a very important place in children's being healthy individuals and increasing their self-confidence. Recently, there has been an increase in research on values. In order for children to learn and internalize values, cooperation between family and school is necessary. In addition, it is necessary to determine appropriate goals, use the necessary methods and techniques, arrange the

appropriate time, and prepare appropriate training environments and training programs. Preschool values education program is also effective on social emotional development. In this context, it is necessary to pay attention to the content and application periods in values education programs. In this study, the effectiveness of courage-based values education practices developed for pre-school children aged 6 years living in a socioeconomically disadvantaged region on children's courage value acquisition was examined. The sample of the study consisted of 6-year-old children attending an independent kindergarten located in Altındağ district of Ankara province. The research was carried out with a total of 44 children, 22 of which were in the experimental group and 22 in the control group. In the research, it was aimed to contribute to the courage value acquisition of children with courage-based values education practices. The training practices were prepared in 18 sessions and were applied to the experimental group by the researcher three days a week. The Value of Courage Observation Form and the Personal Information Form developed by the researcher were used in the research. Wilcoxon Signed Ranks and Mann-Whitney U tests were used to determine whether there was a significant difference between the pretest and posttest scores of the experimental and control groups from the Courage Value Observation Form and to compare the groups. Research results show that courage-based values education practices are effective in children's acquisition of courage value. According to the courage value observation form data, it was observed that the courage value gains increased significantly.

**Keywords:** Courage-based values education, preschool education, courage.

## **DİJİTAL ÖĞRETİCİ YETERLİKLERİNDE DÖNÜŞÜM: ÖĞRETMEN ADAYLARININ GÖRÜŞLERİ**

**NEW DIGITAL TEACHING COMPETENCIES: OPINIONS OF PRE-SERVICE TEACHERS**

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### **ÖZET**

Dijital yeterlikler farklı alanlarda devam eden profesyonel gelişimin önemli bir parçası haline gelmiştir. Teknolojik gelişim ve dönüşümlerin göz ardı edilemeyeceği günümüz eğitim planlama ve uygulamalarında, öğretmenlerin dijitalleşen dünyaya ayak uydurmada sahip olması gerektiği sıklıkla vurgulanan dijital yeterlikler çerçevesi gün geçtikçe genişlemektedir. Öğretmen yetiştirme programlarında öğretmen adaylarının ilgili program kapsamında geliştirilmesi beklenen birçok beceri ve yeterlik, yakın zamanda deneyimlediğimiz uzaktan eğitim süreçleri ile de güncellenme ihtiyacı ile de karşı karşıya kalmıştır. Bu doğrultuda araştırmanın temel amacı, öğretmenlerin Yükseköğretim Kurulu tarafından yayınlanan Öğretmen Yeterlikleri Çerçevesinde sahip olması beklenen dijital yeterlikleri, uzaktan eğitim sürecinin önemli paydaşları olan öğretmen adayları görüşleri ile değerlendirmek; yeni deneyim sonrasında ilgili çerçevede olması beklenen yeterliklerle ilgili önerilerde bulunmaktır. Çalışmanın amacına istinaden uzaktan eğitim süresince öğrenimlerine devam eden öğretmen adaylarının dijital öğretici yeterliklerine yönelik görüşlerine başvurulmuştur. Bu görüşler bir öğretimin temel bileşenlerini oluşturan öğretim materyalinin geliştirilmesi, öğretim süreci ve ölçme-değerlendirme etkinlikleri başlıkları ile sınırlandırılmıştır. Araştırma nitel araştırma yaklaşımı kullanılarak gerçekleştirilmiştir. Araştırmanın katılımcıları Muğla Sıtkı Koçman Üniversitesi'nin Eğitim Fakültesi'nde öğrenim gören ve pandemi döneminde uzaktan eğitim sürecine katılmış öğretmen adaylarından oluşmaktadır. Verilerin toplanmasında demografik bilgilerin ve araştırma amacına yönelik oluşturulmuş açık uçlu soruların yer aldığı çevrimiçi formla toplanmıştır. Araştırma verilerinin analizi halen devam etmekte olup, demografik ve betimleyici sorular için betimsel analiz, açık uçlu soruların derinlemesine incelemesinde içerik analizi yöntemlerinden faydalanılmaktadır. Elde edilen bulgular araştırma kapsamında yorumlanarak, tartışma ve öneriler bölümü tam metin süresinde eklenecektir.

**Anahtar kelimeler:** dijital yeterlik, öğretmen yeterlikleri, uzaktan eğitim, öğretmen adayları.

### **ABSTRACT**

Digital competencies are of the fundamental components of different professional developments. The outlined digital competencies of teachers are continuously enriched in order to empower digital adaptation in instructional designs and practices in which technology advancement can no longer be ignored. The expected digital competencies and skills of pre-service teachers that are taken into account in initial teacher education programs face with the necessity of revision due to the outcomes of recently experienced distance education. Accordingly, this study aims to examine digital competencies of teachers which were previously outlined by Higher Education Council through Teacher Competencies Framework document in line with pre-service teachers' opinions regarding their distance education experiences. Moreover, the study wishes to offer new digital competencies for teachers-to-be referring to distance education practices. To reach the necessary results, the study pays attention to opinions of pre-service teachers who continued their training through distance education during pandemic. These opinions were categorized into three main components of teaching practice namely as; developing teaching materials, instructional period, and assessment and evaluation procedures. The study captured qualitative research approach. Participants of the study were the pre-service teachers who are studying in Faculty of Education in Muğla Sıtkı Koçman University. The participants also had the experiences of distance education practices during pandemic. The necessary data were collected through an online form which includes demographic information and open-ended questions. The data analysis is still under treatment, yet demographic information will be presented through descriptive analysis as well as open-ended questions



will be examined with content analysis. The forthcoming results will be illustrated in full manuscript, they will be discussed accordingly, and supporting suggestions will be offered.

**Keywords:** digital competencies, teacher competencies, distance education, pre-service teachers

## **ERBAKAN VE ECEVİT'TEN, KARAMOLLAOĞLU VE KILIÇDAROĞLU'NA MİLLİ GÖRÜŞ VE CHP İLİŞKİSİ**

FROM ERBAKAN AND ECEVIT TO KARAMOLLAOĞLU AND KILIÇDAROĞLU NATIONAL  
OUTLOOK AND CHP RELATIONSHIP

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### **ÖZET**

Türk Siyasal Hayatı'nda pek çok koalisyonlar kurulmuştur. Bu koalisyonların en ilgi çekicilerinden birisi 1974 yılında kurulan Milli Selamet Partisi (MSP) ve Cumhuriyet Halk Partisi (CHP) koalisyonudur. Birbirine yakın görüşte olan partiler bile koalisyon kurmakta zorlanırken, siyasi yelpazenin iki ucundaki partiler bir koalisyon kurmayı başarmışlardır. Kurulan koalisyon kısa ömürlü olmuş, 10 ay sonra iki partinin birlikteliği sona ermiştir. Yine de bu koalisyon döneminde Kıbrıs Barış Harekâtı başta olmak üzere pek çok önemli gelişmeler yaşanmıştır. İslamcı siyasetin temsilcisi MSP Genel Başkanı Necmettin Erbakan ile kendisini ortanın solunda konumlandıran CHP Genel Başkanı Bülent Ecevit'in 1974 yılında kurduğu koalisyonun 44 yıl sonra 2018 yılında MSP'nin devamı Saadet Partisi ile CHP tekrar bir araya gelmiştir. Saadet Partisi lideri Temel Karamollaoğlu ve CHP Genel Başkanı Kemal Kılıçdaroğlu, Haziran 2018 seçimlerine ittifak çatısı altında girmek için anlaşmışlardır. 2018 seçimlerine CHP ve İyi Parti'nin oluşturduğu Millet İttifakı ile birlikte giren Saadet Partisi bu seçimlerde iki milletvekili elde etmiştir. Bu çalışmada Türk siyasetinde ayrı uçlarda bulunan iki partinin birbirleriyle olan ilişkileri ele alınacaktır.

**Anahtar kelimeler:** Necmettin Erbakan, Bülent Ecevit, Temel Karamollaoğlu, Kemal Kılıçdaroğlu, MSP, CHP

### **ABSTRACT**

Many coalitions have been established in Turkish Political Life. One of the most interesting of these coalitions is the coalition of the National Salvation Party (Milli Selamet Partisi-MSP) and the Republican People's Party (Cumhuriyet Halk Partisi-CHP) established in 1974. While even the parties that were close to each other had difficulty in forming a coalition, the parties at both ends of the political spectrum succeeded in forming a coalition. The coalition established was short-lived, and the unity of the two parties ended 10 months later. However, during this coalition period, there were many important developments, especially the Cyprus Peace Operation. 44 years after the coalition formed in 1974 by MSP Chairman Necmettin Erbakan, the representative of Islamist politics, and CHP Chairman Bülent Ecevit, who positioned himself on the left of the centre, in 2018, the continuation of the MSP, the Felicity Party (Saadet Partisi), and the CHP came together again. Felicity Party leader Temel Karamollaoğlu and CHP Chairman Kemal Kılıçdaroğlu agreed to enter the June 2018 elections under the umbrella of an alliance. The Felicity Party, which entered the 2018 elections together with the Nation Alliance formed by the CHP and Good Party, won two parliamentary seats in these elections. In this study, the relations between the two parties, which are at different ends in Turkish politics, will be discussed.

**Keywords:** Necmettin Erbakan, Bülent Ecevit, Temel Karamollaoğlu, Kemal Kılıçdaroğlu, MSP, CHP



**ERKEN CUMHURİYET DÖNEMİNDE ÜNİVERSİTE REFORMU VE ULUS İNŞASI**  
UNIVERSITY REFORM AND NATION BUILDING IN THE EARLY REPUBLICAN PERIOD

**Özgür BAYRAKTAR**

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**ÖZET**

1923 yılında Mustafa Kemal Atatürk önderliğinde kurulan Cumhuriyet rejimi sağlam temeller üzerine oturabilmek için bir dizi reformlar gerçekleştirmiştir. Bir yandan ekonomik zorluklarla boğuşan yönetim, diğer yandan seküler, yüzünü Batı'ya dönmüş bir ulus inşa etmeye çabalamıştır. Başta Atatürk olmak üzere Cumhuriyet kadroları modernleşme ve ulus bilinci oluşturma hamleleri esnasında özellikle de eğitime büyük önem vermiştir. Bu bağlamda Cumhuriyet'in 10. yılında gerçekleştirilen Üniversite Reformu oldukça dikkat çekicidir. Tam da "10 yılda 15 milyon genç yarattık" sözlerinin yazıldığı ve coşkuyla söylendiği yıl olan 1933'te çıkartılan bir kanunla İstanbul'da bulunan Darülfünun, modern anlamda bir yükseköğretim kurumuna dönüştürülmüş ve İstanbul Üniversitesi adını almıştır. Ayrıca bu dönemde Almanya'daki Nazi egemenliğinden kaçan pek çok öğretim üyesi de Türkiye'ye yerleşmiş ve üniversitelerde görev almıştır. 1933 Üniversite Reformuyla birlikte Cumhuriyet yönetiminin hedeflediği seküler, modern ve Batılı tarzda üniversite eğitimi başlamıştır. Bu doğrultuda önce 1946'da başkentte Ankara Üniversitesi olmak üzere birçok ilde üniversiteler açılmıştır. Bu çalışmada öncelikle Cumhuriyet'in oluşturmaya çalıştığı ulus bilinci ve bu amaç için attığı modernleşme adımları ele alınacak ardından üniversite reformu ve bu reformun ulus inşası sürecindeki önemi araştırılacaktır.

**Anahtar kelimeler:** Cumhuriyet, Darülfünun, 1933 Üniversite Reformu, İstanbul Üniversitesi, Ulus İnşası

**ABSTRACT**

The republican regime in Turkey, which was established in 1923 under the leadership of Mustafa Kemal Atatürk, carried out a series of reforms in order to sit on solid foundations. On the one hand, the administration struggling with economic difficulties, on the other hand, tried to build a secular nation that turned its face to the West. The cadres of the Republic, especially Atatürk, gave great importance to education, during the moves of modernization and nation-building. In this context, the University Reform carried out in the 10th year of the Republic is quite remarkable. Darülfünun, located in Istanbul, was transformed into a higher education institution in the modern sense and named Istanbul University in 1933, the year when the words "We have created 15 million young people in 10 years" were written and said with enthusiasm. In addition, many academics who fled the Nazi rule in Germany settled in Turkey and took charge in universities during this period. With the 1933 University Reform, the secular, modern and Western style university education aimed by the Republican administration began. In this context, universities were opened in many cities, firstly Ankara University in 1946. In this study, first of all, the nation consciousness that the Republic tried to create and the modernization steps it took for this purpose will be discussed, then the university reform and the importance of this reform for the nation-building process will be investigated.

**Keywords:** Republic, Darülfünun, 1933 University Reform, Istanbul University, Nation Building

## DOĞU AKDENİZ'İN MÜNHASIR EKONOMİK BÖLGE SORUNU VE TÜRKİYE

### THE EXCLUSIVE ECONOMIC REGIONAL PROBLEM OF THE EASTERN MEDITERRANEAN AND TURKEY

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#### ÖZET

Doğu Akdeniz; Asya, Avrupa ve Afrika kıtalarına göre merkezi konumda bulunan, Orta Doğu, Kafkasya ve Orta Asya'da bulunan enerji rezervlerinin Avrupa'ya taşınmasını sağlayan, tüm Akdeniz coğrafyası ile birlikte dünya ticaretinin yaklaşık üçte birinin yapıldığı çok önemli bir kesişim noktasıdır. Doğu Akdeniz, tarihin her döneminde dünyanın önemli ve kalabalık merkezlerinden biri olma özelliği göstermiştir. Doğu Akdeniz'in çok boyutlu (askeri, ticari, ulaştırma vs.) stratejik önemini yanı sıra, sahip olduğu düşünülen yüksek enerji potansiyeli, kaynakların ve denizlerin paylaşımı mücadelesini beraberinde getirmiştir. Bu durum Münhasır Ekonomik Bölge (MEB) kavramını 1982 tarihli 3. Deniz Hukuku Konferansı sonucunda yeni bir kavram olarak Deniz Hukuku literatürüne eklemiştir. Münhasır Ekonomik Bölge kıyıdağ itibaren 200 deniz mili genişliğinde geniş deniz alanlarını ifade eden ve kıyı devletine önemli ekonomik haklar ve yetkiler veren bir kavramdır. Doğu Akdeniz'de birçok devlet arasında deniz yetki alanlarının belirlenmesine yönelik çeşitli anlaşmalar yapılmış ve Münhasır Ekonomik Bölge ilanında bulunulmuştur. Türkiye'nin ise Karadeniz haricinde, anlaşmalarla sınırlandırılmış Münhasır Ekonomik Bölge niteliğinde deniz yetki alanı bulunmamaktadır. Türkiye Doğu Akdeniz'de en uzun kıyı uzunluğuna sahip ülkedir. Türkiye'yi güneyden kuşatan Kıbrıs Adası ile de karşılıklı kıyıları bulunmaktadır. Bölge de avantajlı durumunu her yönüyle kullanmak isteyen Türkiye, Doğu Akdeniz de Münhasır Ekonomik Bölge (MEB) ilanında bulunmamıştır. Ayrıca, komşu ve kıyıdağ devletlerarasında MEB sınırlandırması anlaşması bulunmamaktadır.

Genel hatlar nezdinde bu çalışmada, Doğu Akdeniz'in önemi, Doğu Akdeniz de kıyıdağ devletlerin ve bölge dışı devletlerin münhasır ekonomik bölge politikaları, Doğu Akdeniz'in ülkemiz açısından önemi ortaya konulmuş, MEB oluşumu ve uyumsuzluklarına dikkat çekilmiş ve sonuç kısmında MEB ve Türkiye için genel bir değerlendirilmeye gidilmiştir.

**Anahtar kelimeler:** Doğu Akdeniz, Münhasır Ekonomik Bölge (MEB), Türkiye, Kıbrıs, Deniz Hukuku, Deniz Yetki Alanı

#### ABSTRACT

East Mediterranean; It is centrally located relative to the continents of Asia, Europe and Africa. It enables the energy reserves in the Middle East, Caucasus and Central Asia to be transported to Europe and is a very important intersection point where approximately one third of the world trade is made, together with the entire Mediterranean geography.

The Eastern Mediterranean has been one of the most important and crowded centers of the world in every period of history. In addition to the multidimensional (military, commercial, transportation, etc.) strategic importance of the Eastern Mediterranean, its high energy potential has brought along the struggle for the sharing of resources and seas. This situation added the concept of Exclusive Economic Zone (EEZ) to the Law of the Sea literature as a new concept as a result of the 3rd Conference on the Law of the Sea in 1982. Exclusive Economic Zone is a concept that expresses large sea areas 200 nautical miles from the coast and gives important economic rights and powers to the coastal state. Various agreements have been made between many states in the Eastern Mediterranean to determine maritime jurisdiction areas and an Exclusive Economic Zone has been declared. Except for the Black Sea, Turkey does not have a maritime jurisdiction in the nature of an Exclusive Economic Zone, which is limited by treaties. Turkey is the country with the longest coastline in the Eastern Mediterranean. It also has reciprocal shores with the island of Cyprus, which surrounds Turkey from



the south. Turkey, which wants to use its advantageous position in the region in every aspect, has not declared an Exclusive Economic Zone (EEZ) in the Eastern Mediterranean. In addition, there is no EEZ delimitation agreement between neighboring and riparian states.

In general terms, in this study, the importance of the Eastern Mediterranean, the exclusive economic zone policies of the riparian states and non-regional states in the Eastern Mediterranean, and the importance of the Eastern Mediterranean for our country have been revealed. Attention was drawn to the formation of the EEZ and its conflicts, and in the conclusion, a general evaluation was made for the EEZ and Turkey.

**Keywords:** East Mediterranean, Exclusive Economic Zone (EEZ), Turkey, Cyprus, Maritime Law, Maritime Jurisdiction

**ERNESTO LACLAU VE CHANTAL MOUFFE'UN SİYASAL YAKLAŞIMLARI:  
POST-MARKSİZM VE RADİKAL DEMOKRASİ**

POLITICAL APPROACHES OF ERNESTO LACLAU AND CHANTAL MOUFFE: POST-MARKSİZM  
AND RADICAL DEMOCRACY

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**ÖZET**

Postmodernizm modernizmin temel prensipleri olan akılcılık, rasyonalite gibi kavramlardan bir kopuşu temsil eder ve Aydınlanma düşüncesinin rasyonalitesine karşı dünyanın temelsiz, çeşitli, belirsiz nitelikte ve farklı yorumlara dayalı olduğu iddiasını ortaya atar.

Ernesto Laclau ve Chantal Mouffe'un kurucuları olduğu Post-Marksizm de bu bağlamda postmodern bir ideolojidir. 1970'li yıllarda neo-liberal politikaların hegemonyasının hakim konuma geldiği görülmüş, böylece de Sosyalizm ideolojisinin sonuna gelindiğine dair güçlü bir kanı egemen olmuş ve Marksist teori çıkmaza girmiştir. Postmodern düşünürler olarak Laclau ve Mouffe ise Marksist geleneğin kapitalizme bir alternatif oluşturmasını sağlayabilmek amacıyla yeni eğilimleri uyarlayarak Marksizm'i yeni bir değişimle ortaya koymuşlar, böylece Post-Marksizm ortaya çıkmıştır.

Post-Marksizm Marksizm'in sınıf temelli yaklaşımına ve ekonomik altyapının üstyapıları belirleyici kesinliklerine karşı çıkmakta, Marksizm'in klasik yorumunu eleştirmektedir. Post-Marksizm'in en dikkat çekici özelliği işçi sınıfına duyduğu derin güvensizliktir. Bu ideolojiye göre işçi sınıfı yerine feministler, çevreciler, sendikalar, partiler, etnik gruplar gibi pek çok farklı unsurlar toplumsal değişim için önemli merkezler haline gelebilirler. Bu yaklaşıma dayanarak işçi sınıfının devrimci niteliğini kaybettiğini ve artık temel özne olamayacağını düşünen Laclau ve Mouffe, toplumdaki farklılıklar üzerinden sol ideolojiyi yeniden kurgulamışlardır.

Bu kurgulamayı yaparken de toplumdaki antagonizmalardan yararlanmışlardır. Antagonizma zıtlıklar anlamına gelmektedir. Antagonizmaları yaklaşımlarının temelini yerleştirmişler, homojen bir toplumda demokrasinin yaşayamayacağını, heterojenliğin demokrasinin birinci şartı olduğunu öne sürmüşlerdir. Toplumda oluşan çatışmalar asla çözümlenemeyecek çatışmalardır. Bu çatışmaların çözümsüz oluşu da bir kusur değil, aksine demokrasinin canlılığını gösteren bir unsurdur.

Laclau ve Mouffe çekişmeci çoğulculuk ismini verdikleri bu teoriyi ortaya atarken, uzlaşmacı yaklaşımlara da karşı çıkarlar. Toplumdaki farklılıklar uzlaşmaya giden bir çizgiye gelmemelidirler. Böyle bir durum demokrasiyi baltalayan bir sonuç doğurur.

Günümüzde sınıfların değil, birbirinden çok farklı özellikler gösteren çeşitli grupların mücadelesine tanık olunurken Marksizm'in de bu konjonktürel duruma uygun hale getirilmesi onu neo-liberalizme bir alternatif yapma çabasından kaynaklanmaktadır. Post-Marksizm adı verilen bu çaba solun yeniden canlandırılması için atılmış önemli bir adımdır.

Bu çalışmada klasik Marksizm'in krizine değinilecek, krizden çıkmak için klasik Marksizm'in eleştirildiği noktalar gösterilecek, Post-Marksizm'in dayandığı temeller ele alınacak, Post-Marksizm'in temel taşı olan antagonizma kavramı açıklanacak, hegemonya kavramı üzerinde durulacak ve son olarak da liberalizm ile demokrasi arasında var olduğu iddia edilen çelişkilere değinilecektir.

**Anahtar kelimeler:** Post-Marksizm, Radikal demokrasi, Laclau, Mouffe, Antagonizma

## **ABSTRACT**

Post-Marxism represents a break with the main principles of modernity, with concepts such as reason and rationalism, and argues, against the rationalism of Enlightenment thought, that the world is based on unfounded, diverse, vague, and different interpretations.

Post-Marxism, a post-modern ideology founded by Ernesto Laclau and Chantal Mouffe, among others, can be considered in this context. By 1970s, there was a growing realization that neoliberal policies had become hegemonic, the idea that Socialism had come to an end as an ideology gained prominence, and the Marxist theory was at an impasse. Laclau and Mouffe, on the other hand, as post-modern thinkers, offered a new type of Marxism by adapting new tendencies, in order to allow the Marxist tradition to keep serving as an alternative to capitalism, thus giving rise to the emergence Post-Marxism.

Post-Marxism rejects the class-based approach of Marxism and its conviction that the economic base determines the superstructure, criticizing the classical interpretation of Marxism. The most prominent feature of Post-Marxism is its deep distrust of the working class. According to this ideology, many different social groups besides the working class can become important drivers of social change, including environmentalists, labor unionists, parties, and ethnic groups. Based on this approach, Laclau and Mouffe thought that the working class lost its revolutionary character, and reimagined the left ideology on the basis of social differences.

In doing so, they utilized the antagonisms or oppositions in society. They placed antagonisms at the center of their approach, arguing that democracy cannot survive in a homogeneous society and heterogeneity is a prerequisite for democracy. Social conflicts are conflicts that can never be resolved. That these conflicts are unresolvable is not a defect; to the contrary, it is an indicator of democratic vitality.

By offering this theory of contentious pluralism, Laclau and Mouffe also oppose conciliatory approaches. Social differences are not supposed to move towards conciliation as it would hinder democracy.

The contemporary world witnesses conflicts between groups with many different characteristics, not just among classes, and the updating of Marxism to fit these conditions is part of an effort to turn it into a realistic alternative to neoliberalism. This effort called Neo-Marxism is an important step taken to rejuvenate the left.

This study will discuss the crisis of classical Marxism, review the criticisms directed at classical Marxism in order to overcome this crisis, clarify the foundations of Post-Marxism, explain the concept of antagonism, which plays a key role in Post-Marxism, dwell upon the concept of hegemony, and finally, discuss the proposed contradictions between liberalism and democracy.

**Keywords:** Post-Marxism, Radical Democracy, Laclau, Mouffe, Antagonism

**İDARİ UYUŞMAZLIKLARDA ARABULUCULUK**  
**MEDIATION IN ADMINISTRATIVE DISPUTES**

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**ÖZET**

İdare hukuku, kamu hukuku rejimi içinde yer alan ve özel hukuktan farklı bir niteliği sahip olan bir hukuk dalıdır. İdare, kamu hizmetlerini ifa ederken idari işlem ve sözleşmeler akdetmektedir. Özellikle tek yanlı tasarruflarında kamu gücü kullanma yetkisine sahiptir. Ancak idare sadece idare hukuku kurallarına göre faaliyette bulunmamaktadır. Özel malları üzerinde tasarrufları, kiralama, ihale akabinde akdettiği sözleşmeler, kamu iktisadi teşebbüslerinin faaliyetleri ağırlıklı olarak idarenin özel hukuka tabi faaliyetleri arasında yer almaktadır.

İdarenin tasarruflarından kaynaklanan uyuşmazlıkların çözümünde uygulanacak hukuk kuralları uyuşmazlığın niteliğine göre belirlenmektedir. İdarenin hakimiyet tasarruflarında idare hukuku kuralları uygulanmakta ve uyuşmazlıklar idari yargı mercilerinde giderilmektedir. Buna karşılık özel hukuk tasarruflarında ise özel hukuk kuralları uygulanmakta uyuşmazlıklar ise adli yargı mercilerinde görülmektedir. Ancak yargının yükünün ağır olması, yargılamanın uzun sürmesi ve adaletin geç tecelli etmesi gibi sebeplerle karşılaştırmalı hukukta olduğu gibi hukukumuzda da uyuşmazlıkların yargı dışı yollarla giderilmesi üzerinde gelişmeler yaşanmaya devam etmektedir. Özel hukuk ilişkilerinden kaynaklanan uyuşmazlıkların yanında kamu hukuku ilişkilerinde de alternatif uyuşmazlık çözüm yöntemleri gelişmiştir. Ceza hukukunda uzlaşma, idare hukukunda sulh, tahkim, kamu denetçiliğine başvuru gibi yargı dışı uyuşmazlık çözüm yolları bulunmaktadır.

2012 yılında yürürlüğe giren 6325 sayılı Hukuk Uyuşmazlıklarında Arabuluculuk Kanunu (HUAK) ile hukuk uyuşmazlıklarının, diğer bir ifadeyle özel hukuka tabi uyuşmazlıkların arabuluculuk yoluyla çözülmesi imkanı getirilmiştir. Hukuk Uyuşmazlıklarında Arabuluculuk Kanunu Yönetmeliği ile de ayrıntılar düzenlenmiştir. Ancak kanuna 2017 yılında idarenin taraf olduğu hukuk uyuşmazlıklarının da arabuluculuk yoluyla giderilebileceği hükmü eklenmiştir. Buna karşılık idarenin kamusal yönetim usulleri çerçevesinde yaptığı tasarruflarda arabuluculuğa gidilmesi konusunda herhangi bir hüküm bulunmamaktadır. İdarenin, idare hukuku kurallarına göre tesis ettiği işlem, eylem veya sözleşmelerden kaynaklanan uyuşmazlıkların arabuluculuk yoluyla giderilip giderilemeyeceği tartışılması gereken önemli bir konudur. Özellikle karşılaştırmalı hukukta İsviçre örneğine baktığımızda idari uyuşmazlıklara ilişkin arabuluculuk müessesesini İdari Usul Kanununda düzenlediği görülmektedir.

**Anahtar kelimeler:** Arabuluculuk, alternatif uyuşmazlık çözümü, idare hukuku

**ABSTRACT**

Administrative law is a public law branch and has a different character from private law. While performing public services, administrative authorities perform administrative acts, actions and contracts. They have the authority to use public power, especially in unilateral administrative acts. However, administrative authorities do not operate only by the rules of administrative law. Powers on private property, renting, contracts concluded after tenders, and activities of state economic enterprises are mainly among the private law activities of administrative authorities.

The legal rules to be applied in the resolution of disputes arising from the activities of administrative authorities are determined according to the nature of the dispute. In terms of the act of sovereignty, administrative law rules are applied and disputes are resolved in administrative courts. On the other hand, in private law acts, private law rules are applied and disputes are seen in civil courts. However, due to reasons such as the heavy burden of the judiciary, the long duration of the trial and the late delivery of justice, developments continue to be experienced in the settlement of disputes by non-judicial means in our law, just as in



comparative law. In addition to disputes arising from private law relations, alternative dispute resolution methods have also developed in public law relations. There are non-judicial dispute resolution methods such as conciliation in criminal law, and compromise, arbitration and Ombudsman in administrative law.

With Law No. 6325 on Mediation in Civil Disputes, which entered into force in 2012, the opportunity to resolve legal disputes, in other words, disputes subject to private law, through mediation has been introduced. Details are also regulated by the Regulation on Mediation in Civil Disputes. However, in 2017, a provision was added to the Law that legal disputes to which the administrative authorities are a party can also be resolved through mediation. On the other hand, there is no provision for mediation in the act of sovereignty of administrative authorities. Whether the disputes arising from administrative acts, actions and contracts established by administrative authorities under the rules of administrative law can be resolved through mediation is an important issue to be discussed. In comparative law, for instance in Switzerland, administrative disputes are regulated in the Administrative Procedure Law.

**Keywords:** Mediation, alternative resolution of disputes, administrative law

**ZORUNLU VATANDAŞLIK DAVRANIŞI ÜZERİNE BİR ARAŞTIRMA**  
A RESEARCH ON COMPULSORY CITIZENSHIP BEHAVIOR

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**ÖZET**

Günümüz örgütleri sürekli değişen rekabet ortamına adapte olabilmek ve sürdürülebilir bir örgüt yapısına sahip olma avantajını kaybetmemek için çalışanlarına örgütsel vatandaşlık davranışı gibi ekstra rol davranışlarında bulunmaları konusunda baskı yapmaktadırlar. Zorunlu vatandaşlık davranışı, örgütsel vatandaşlık davranışının karanlık ve yıkıcı yönü olarak bu baskı ortamında ortaya çıkmaktadır. Zorunlu vatandaşlık davranışı, örgütsel vatandaşlık davranışının zamanla değişik zorlayıcı unsurlar ile çalışanların iş tanımları dışında yaptıkları davranışlarının mecburiyete dönüşmesi sonucu oluşmaktadır. Zorunlu vatandaşlık davranışı kurumların, çalışanları üzerinde belirlenen iş tanımları dışında kalan gönüllü davranışlarını zorunlu hale getirmesinden dolayı örgüt iklimini de zaman içinde bozmaktadır. Gerek örgüt ikliminin bir sonucu gerekse üst düzey yöneticilerin baskıları sonucu ekstra rol davranışları sergileyen çalışanların motivasyon ve verimi de düşmektedir. Dahası üstün astından sürekli olarak örgütsel vatandaşlık davranışı sergilemesini beklemesi, çalışanın baskı hissetmesine ve istenen davranışı gönülsüzce yapmasına neden olmaktadır. Buradan hareketle zorunlu vatandaşlık davranışının örgütsel özdeşleşme, iş becerikliliği, iş tatmini gibi olumlu pozitif örgütsel çıktılarla negatif; mobbing, ekstra rol davranışı, örgütsel muhalefet, iş stresi gibi olumsuz örgütsel çıktılarla da pozitif yönde ilişkili olduğu düşünülmektedir. Yakın zamana kadar zorunlu vatandaşlık davranışı ile ilgili araştırmaların istenilen seviyeye ulaşamadığı görülmektedir. Yapılan araştırma ile literatürde başlangıç aşamasında olan söz konusu kavram ve bu kavrama yönelik performans çıktılarının alana katkı vermesi amaçlanmakta, ayrıca yöneticilerin çalışanlarına ekstra rol davranışında bulunmaları konusunda baskı yaptıklarında çalışanların performanslarının yapılan baskı oranında düştüğü görülmektedir. Yapılan araştırmanın, uygulayıcılara ve alan çalışmalarına katkı sağlayacağı umulmaktadır.

**Anahtar kelimeler:** Zorunlu vatandaşlık davranışı, örgütsel vatandaşlık davranışı, ekstra rol davranışı, örgüt iklimi.

**ABSTRACT**

Today's organizations put pressure on their employees to engage in extra-role behaviors such as organizational citizenship behavior in order to adapt to the ever-changing competitive environment and not lose the advantage of having a sustainable organizational structure. Compulsory citizenship behavior emerges as the dark and destructive aspect of organizational citizenship behavior in this pressure environment. Compulsory citizenship behavior is formed as a result of organizational citizenship behavior turning into an obligation with different coercive factors over time. Compulsory citizenship behavior also disrupts the organizational climate over time, as institutions make voluntary behaviors outside of the job descriptions determined on their employees compulsory. As a result of the organizational climate and the pressure of the senior managers, the motivation and productivity of the employees who exhibit extra role behaviors decrease. Moreover, the fact that the superior constantly expects his subordinates to exhibit organizational citizenship behavior causes the employee to feel pressure and to perform the desired behavior reluctantly. From this point of view, compulsory citizenship behavior has positive and negative organizational outcomes such as organizational identification, job resourcefulness, job satisfaction; It is also thought to be positively related to negative organizational outcomes such as mobbing, extra-role behavior, organizational opposition, and job stress. Until recently, it has been observed that research on compulsory citizenship behavior has not reached the desired level. With the research, it is aimed to contribute to the field with the concept in question, which is at the initial stage in the literature, and the performance outputs for this concept, and it is seen that the performance of the employees





decreases at the rate of pressure when the managers pressure their employees to act in an extra role. It is hoped that the research will contribute to practitioners and field studies.

**Keywords:** Compulsory citizenship behavior, organizational citizenship behavior, extra role behavior, organizational climate.

## İDARİ EYLEMLERDEN DOĞAN TAM YARGI DAVALARININ AÇILIŞ USULÜ

OPENING PROCEDURE OF FULL JURISDICTIONS ARISING FROM ADMINISTRATIVE ACTIONS

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### ÖZET

İdari yargıda idari işlemlerin icrasına ve idari eylemlere karşı tam yargı davası açılması mümkündür fakat idari eylemlere karşı açılan tam yargı davalarında dava açma usulü, idari başvuru zorunluluğu ile farklı bir usule bağlanmıştır. Bu farklılık yargılamalarda bireylerin usul hataları yapmalarına ve akabinde de hak kayıplarına neden olmaktadır. Bu çalışmada öncelikle idari eylemler tanımlanacak, akabinde idari eylemlere karşı idari başvuru usulleri incelenecek ve sonrasında açılan davalara karşı yapılacak ilk incelemeler üzerine verilen kararlar tahlil edilecektir. Tüm bu incelemeler neticesinde uygulamada oluşan aksaklıklara karşı çözüm ve yasal değişiklik önerileri sunulacaktır.

**Anahtar kelimeler:** İdari yargı, tam yargı davası, idari işlem, idari eylem, dava açılış süreci

### ABSTRACT

It is possible to file a full remedy action against the execution of administrative acts and administrative actions in administrative jurisdiction, but the procedure for filing a lawsuit in full remedy actions against administrative actions is tied to a different procedure with the obligation of administrative application. This difference causes individuals to make procedural errors in the proceedings and subsequently to the loss of their rights. In this study, first of all, administrative actions will be defined, then the administrative application procedures against administrative actions will be examined, and then the decisions made on the first examinations to be made against the lawsuits will be analyzed. As a result of all these examinations, solutions and legal amendment proposals will be presented against the problems that occur in practice.

**Keywords:** Administrative jurisdiction, full remedy action, administrative action, administrative action, litigation process



**CHALLENGES AND SOLUTIONS IN TEACHING LITERATURE TO PRE-SERVICE TEACHERS**

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**ABSTRACT**

Teacher candidates should be equipped to teach and introduced to literary teaching approaches, models, and strategies. Being prepared can also help them gain confidence in their ability to teach literature so that the lessons run smoothly. Because these teachers are new to teaching, they may have difficulty teaching English, particularly literature. Pre-service teachers can research teaching techniques, strategies, and approaches to better understand how to implement them in their classrooms. Furthermore, their lack of experience in literary teaching can have an impact on their ability to teach. The purpose of this article was to look into pre-service teachers' readiness to teach literature in schools and their obstacles while doing so. It also aimed at making recommendations for better literary instruction. Questionnaires were provided to 22 TESL pre-service teachers from a public university in Johor for this mixed-method research project. In addition, semi-structured interviews with two lecturers who have extensive experience supervising pre-service teachers in schools were done. The results suggest that most fourth-year TESL students were prepared to teach literature due to the university's training and courses. However, they also had to deal with time management and their students' reactions to the subject. As a result, this study will contribute to teacher training in the field of literature.

**Keywords:** pre-service teachers, literary teaching, readiness, obstacles, teacher training

**ONLINE EDUCATION AND DIGITAL PLATFORMS IN PANDEMIC ROMANIA: FROM ENTERTAINMENT TOOLS TO LEARNING TOOLS**

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**ABSTRACT**

Technology and social media use has grown exponentially in recent years, becoming an integral part of our lives. Undoubtedly, social networks have impacted and continue to change many aspects of our daily lives, from the way we communicate, build and maintain social relationships to the way we discover, access and share information online. Today, and particularly during the covid-19 pandemic, social platforms are highly influencing the way we teach and learn, the roles and behaviours that both students and teachers adopt in creating and sharing learning experiences. In this way, they enable the building of social relationships and communities in which students participate in the “discovery, sharing, filtering and co-construction of knowledge and information” that is a core aspect of the “online world” (Gruzd, Paulin & Haythornthwaite, 2016, p. 46)

Although viewed with reluctance by some higher education institutions, the use of social networking sites in formal learning is recognized by most for its power to innovate educational systems and, by extension, traditional learning processes (Hurt et al., 2012; Sarapin & Morris, 2015; Smith, 2016; Wankel, 2012). Researchers such as Roblyer et al. (2010) show that students prefer to use Facebook and similar technologies to facilitate and support teaching and learning. This idea is also backed by other scholars who document that many students prefer to obtain information through Facebook and email rather than traditional face-to-face interactions (Balakrishnan & Gan, 2016).

Starting from this theoretical background and considering the covid-19 pandemic in which both our professional and private lives have “moved” online, we were interested to explore (by means of semi-structured in-depth interviews) Romanian students’ educational experiences and the role of various digital tools (such as SNS and communication or videoconferencing platforms) in shaping them. Since students around the world are increasingly using these tools for academic purposes, we believe that it is important to understand the complexities of these uses along with the main rewards and risks that can be triggered by them. While it is true that the integration of technology in education can be revolutionary, we argue that it must be used consciously and responsibly by every student.

**Keywords:** online education, digital natives, uses and gratifications, digital learning tools, covid-19 pandemic, Romanian students, social media in academia

## EFFECTS OF VISUAL OCCLUSION TRAINING ON PERCEPTUAL-COGNITIVE SKILLS IN YOUNG FOOTBALL PLAYERS

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### ABSTRACT

Sport science researchers have found that expert performers in many sports use superior perceptual-cognitive skills than novices to recognize patterns in opponents' actions, thereby priming rapid response selection and motor execution. Despite this, little is known about the development of perceptual-cognitive skills in youth players. Different technologies and methods for measuring perceptual-cognitive skills that can also improve these skills have been developed. After decades of research, technologies appear as viable training products that coaches and sport psychologists can use with youth athletes. This article describes the effectiveness of visual occlusion as a training tool for improving perceptual-cognitive sport skills. The aim is to investigate how restricted visual feedback affects performance in a football-specific skills assessment that incorporates the coupling of football a-specific perceptual information with football-specific motor actions. Articles derived from Google Scholar, PubMed and Scopus search engines and databases were reviewed. Keywords included youth football, visual occlusion, perceptual-cognitive skills. Only the articles that met the inclusion criteria (relevance of the topic, visual occlusion techniques as a training tool) were selected for systematic review. Data quality and validity were assessed by examining the methodologies of each study and comparing studies of similar populations using the PRISMA method. Findings demonstrate that visual cognition and football experience mediate the relationship between age and decision making independently, which indicates that they each influence different parts of the decision-making process. These results highlight the importance of the development of perceptual-cognitive skills in young football players. Future research should further investigate the development of these skills and their underlying factors in different kinds of sports.

**Keywords:** Visual Occlusion, Youth Football, Perceptual-Cognitive skills.

### ÖZET

Spor bilimi arařtırmacıları, birçok spor dalında uzman sanatçılarının, rakiplerin hareketlerindeki kalıpları tanımak için acemilerden daha üstün algısal-bilişsel beceriler kullandığını ve böylece hızlı tepki seçimi ve motor yürütmeyi başlattığını bulmuşlardır. Buna rağmen, genç oyuncularında algısal-bilişsel becerilerin gelişimi hakkında çok az şey bilinmektedir. Algısal-bilişsel becerileri ölçmek için bu becerileri de geliştirebilecek farklı teknolojiler ve yöntemler geliştirilmiştir. Onlarca yıllık arařtırmadan sonra teknolojiler, antrenörlerin ve spor psikologlarının genç sporcularla kullanabileceği uygulanabilir antrenman ürünleri olarak ortaya çıkıyor. Bu makale, algısal-bilişsel spor becerilerini geliştirmek için bir eğitim aracı olarak görsel oklüzyonun etkinliğini açıklamaktadır. Amaç, futbola özgü algısal bilgilerin futbola özgü motor eylemlerle birleştirilmesini içeren futbola özgü bir beceri değerlendirmesinde kısıtlı görsel geri bildirim performansını nasıl etkilediğini arařtırmaktır. Google Scholar, PubMed ve Scopus arama motorlarından ve veri tabanlarından elde edilen makaleler incelendi. Anahtar kelimeler arasında gençlik futbolu, görsel oklüzyon, algısal-bilişsel beceriler yer aldı. Sistematiik inceleme için sadece dahil etme kriterlerini (konunun uygunluğu, eğitim aracı olarak görsel oklüzyon teknikleri) karşılayan makaleler seçildi. Veri kalitesi ve geçerliliği, her çalışmanın metodolojileri incelenerek ve PRISMA yöntemi kullanılarak benzer popülasyonlara ait çalışmalar karşılaştırılarak değerlendirildi. Bulgular, görsel biliş ve futbol deneyiminin yaş ve bağımsız olarak karar verme arasındaki ilişkiye aracılık ettiğini göstermektedir, bu da her birinin karar verme sürecinin farklı kısımlarını etkilediğini göstermektedir. Bu sonuçlar genç futbolcularda algısal-bilişsel becerilerin gelişiminin önemini vurgulamaktadır. Gelecekteki arařtırmalar, bu becerilerin gelişimini ve farklı spor türlerinde bunların altında yatan faktörleri daha fazla arařtırmalıdır.

**Anahtar kelimeler:** Görsel Oklüzyon, Gençlik Futbolu, Algısal-Bilişsel beceriler.



**CONGRUENCE OF THE UNIVERSITY BRAND AND THE BRAND  
OF THE UNIVERSITY TEACHER**

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**ABSTRACT**

The article is devoted to the analysis of the categories of the relationship between the university brand and the personal brand of the university teacher. The relevance and interest in the topic of the brand is caused by trends in society, implicit in relation to changes in regional universities in Russia, as well as the positioning of the teacher in higher educational institutions.

The paper analyzes the concepts of these concepts through the prism of congruence. We understand a brand as a combination of functional, emotional, psychological and social factors) that influence consumer decision-making in meeting needs. A personal brand is a reflection in the mind of an image that allows you to attract attention. The brand is influenced by the transformational processes of society.

The purpose of the article is to consider the relationship (congruence) of the university brand and the personal brand of the university teacher in the context of the non-congruence of the classical university model and the transformation of the university's meaning.

By congruence, we mean the coherence of the interaction of the internal picture of the world, form, content, image and meaning of the university with the external reflection of ideas. The internal picture of the university is determined by the corporate environment of the university, in which the university teacher plays a key role.

Conclusions are made that a brand should create a cognitive scheme (construction) of the internal picture of the world, form, content, image and meaning of the university in the context of globalization, internationalization, managerialism, and entrepreneurial strategies.

In our world, everything strives for perfection and conformity, therefore, in the face of transformational changes, universities need to change their attitude to the emerging circumstances of the external environment. a brand should create a cognitive scheme (construction) of the internal picture of the world, form, content, image and meaning of the university in the context of globalization, internationalization, managerialism, and entrepreneurial strategies. In our world, everything strives for perfection and conformity, therefore, in the face of transformational changes, universities need to change their attitude to the emerging circumstances of the external environment.

The cognitive schema (construction) should be created by universities in accordance with the meaning of the university and the teacher at the given university. The Brand assessment should be comprehensive and establish the relationship between groups of factors, and most importantly, focus on the targets for the development of universities. To do this, it is necessary to conduct empirical research, relying on the development strategies of universities, realizing the positive impact and changing thinking and attitudes.



## FACING THE NEW NORM WITH SMART UNIVERSITY BLUEPRINT: A CASE STUDY

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### ABSTRACT

Adapting and adopting a new norm due to COVID-19 spread, organizations and users worldwide face new daily operations challenges such as having full online meeting, online teaching and learning and changing lifestyles. Hence, this paper presents a new smart-university blueprint to drive digital transformation in our university. With the underlying concept of data-driven and student-centric, we introduced 5 clusters and 13 initiatives for digital transformation to support business operation at our university. The 5 clusters consist of smart governance, smart INAQ (smart lifestyle), smart infrastructure, smart learning and smart services. In addition, this smart blueprint is based on 7 principles from our ICT Strategic Plan (ISP) 2021-2025, which emphasized and based on *Maqasid Syariah* (based on Islamic Laws concept), Industrial Revolution, Student-Centric, Data-Driven, Open Source, Agile and Mobility and Prosumerism. We empower smart governance via ICT governance and ICT Policies, moulding digital leaders, execution of Enterprise Architecture and compliance with the Information Security Management System (ISO 270001). While the Smart INAQ, will derive insights from the data collected and then be further analyzed and visualized for knowledge sharing. This includes smart attendance, e-wallet (cashless campus), smart transport, ebook, open access, smart health, masjid portal, which can be accessed through mobile applications. Furthermore, smart infrastructure is introduced to ensure the staff, lecturers, and students have a conducive environment and protect people, data, equipment, systems, facilities, and organization from intruders. As for smart learning, this blueprint adopts automated technologies and emerging technologies such as facial recognition, visual analytics, virtual reality, gamification, secure computer lab, smart barrier and identity access management. Finally, the smart services leverage technologies and innovations to maintain the next-generation university that continually modernizes iteratively over time, including Academic Information System (AIS), E-services, dashboard, virtual museum, interactive website, and Document Management System.

**Keywords:** smart university blue print, smart governance, smart lifestyle, smart learning, smart services, smart infrastructure

**ORTAOKUL MATEMATİK ÖĞRETMENLERİNİN ÜSLÜ SAYILAR KONUSUNA İLİŞKİN  
PEDAGOJİK ALAN BİLGİLERİNİN ÖĞRETİM STRATEJİLERİ BİLGİSİ BİLEŞENİNDE  
İNCELENMESİ**

EXAMINATION OF SECONDARY SCHOOL MATHEMATICS TEACHERS' PEDAGOGICAL  
CONTENT KNOWLEDGE ON THE SUBJECT OF EXPONENTIAL NUMBERS IN THE COMPONENT  
OF KNOWLEDGE OF TEACHING STRATEGIES

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**ÖZET**

Matematik eğitiminin en önemli unsuru eğitimi veren öğretmen faktörüdür. İyi düzeyde pedagojik alan bilgisine sahip olan öğretmenlerin, hedeflenen matematik eğitimini iyi düzeyde gerçekleştireceği düşünülmektedir. Bu kapsamda, araştırmanın amacı ortaokul matematik öğretmenlerinin üslü sayılar konusunda Pedagojik Alan Bilgilerini (PAB), alt bileşeni olan Öğretim Stratejileri Bilgisi çerçevesinde incelemektir. Araştırmada nitel araştırma yöntemlerinden durum çalışması modeli kullanılmıştır. Araştırmanın çalışma grubunu Nevşehir ili Merkez ilçedeki resmi ortaokullarda çalışmakta olan farklı hizmet sürelerine sahip dört matematik öğretmeni oluşturmaktadır. Öğretmenler amaçlı örnekleme yöntemi kullanılarak seçilmiş, veri toplama 2021-2022 eğitim-öğretim yılının güz döneminde gerçekleştirilmiştir. Araştırmanın verileri yarı-yapılandırılmış görüşme ve yarı-yapılandırılmış gözlem teknikleri ile elde edilmiş ve elde edilen görüşme kayıt altına alınmıştır. Görüşme ve gözlem yoluyla elde edilen verilerin analizinde betimsel analiz tekniği kullanılmıştır. Araştırmadan elde edilen bulgulara göre genel anlamda öğretmenlerin öğretim stratejileri bilgisinin yeterli olmadığı, ancak mesleki deneyimi fazla olan öğretmenlerin öğretim stratejileri bilgisinin daha iyi olduğu gözlenmiştir. Öğretmenlerin ders işleme süreçlerinde daha çok geleneksel yöntemleri tercih ettiği görülmüştür.

**Anahtar kelimeler:** Pedagojik Alan Bilgisi, Öğretim Stratejileri Bilgisi, Üslü Sayılar, Ortaokul Matematik Öğretmenleri

**ABSTRACT**

The most important element of mathematics education is the teacher factor. It is thought that teachers who have a good level of pedagogical content knowledge will perform the targeted mathematics education at a good level. In this context, the aim of the research is to examine the Pedagogical Content Knowledge (PCK) of secondary school mathematics teachers on exponential numbers within the framework of its sub-component, Knowledge of Instructional Strategies. The case study model, one of the qualitative research methods, was used in the research. The study group of the research consists of four mathematics teachers working in public secondary schools in the central district of Nevşehir province with different terms of service. The teachers were selected using the purposeful sampling method, and data collection was carried out in the fall semester of the 2021-2022 academic year. The data of the research were obtained by semi-structured interview and semi-structured observation techniques, and the obtained interview was recorded. Descriptive analysis technique was used in the analysis of the data obtained through interviews and observations. According to the





findings obtained from the research, it was observed that teachers' knowledge of teaching strategies was not sufficient in general, but teachers with more professional experience had better knowledge of teaching strategies. It has been observed that teachers mostly prefer traditional methods in teaching processes.

**Keywords:** Pedagogical Content Knowledge, Instructional Strategies Knowledge, Exponential numbers, Secondary School Mathematics Teachers

**KPSS TÜRK DİLİ VE EDEBİYATI ÖĞRETMENLİĞİ ALAN BİLGİSİ SORULARININ TÜRK DİLİ VE EDEBİYATI ÖĞRETMENLİĞİ ÖĞRETİM PROGRAMI VE ÖZEL ALAN YETERLİKLERİ AÇISINDAN DEĞERLENDİRİLMESİ**

EVALUATION OF KPSS TURKISH LANGUAGE AND LITERATURE TEACHER'S FIELD KNOWLEDGE QUESTIONS IN TERMS OF TURKISH LANGUAGE AND LITERATURE TEACHER'S UNDERGRADUATE PROGRAM AND SPECIAL FIELD COMPETENCIES

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**ÖZET**

Türk Dili ve Edebiyatı Öğretmenliği bölümü ülke genelinde 8 üniversitede lisans düzeyinde eğitim vermektedir. Eğitim programında öğretmenlik meslek bilgisinin yanı sıra dil ve edebiyat bilgilerini içeren alan bilgisi de yer almaktadır. KPSS Türk Dili ve Öğretmenliği Alan Bilgisi Testi (TDEÖABT) ile Türk Dili ve Edebiyatı öğretmenlerinin Milli Eğitim Bakanlığına atanmalarında baz alınacak alan bilgileri ölçülmektedir. Çalışmada amaç, KPSS Türk Dili ve Edebiyatı Öğretmenliği Programı Alan Bilgisi sorularının 2011 yılında kabul edilen, Milli Eğitim Bakanlığının hazırlamış olduğu Türk Dili ve Edebiyatı öğretmeni özel alan yeterliklerini ve Türk Dili ve Edebiyatı Öğretmenliği Programı derslerini ne ölçüde karşılayabildiğini tespit etmektir. Çalışma dokümanını, 2017 yılı KPSS Türk Dili ve Edebiyatı Öğretmenliği Alan Bilgisi Testi soruları, Türk Dili ve Edebiyatı Öğretmenliği lisans programı dersleri ile Türk Dili ve Edebiyatı öğretmeni özel alan yeterlikleri oluşturmaktadır. Bu doğrultuda 2017 yılı KPSS Türk Dili ve Edebiyatı Öğretmenliği Alan Bilgisi Testi soruları, Türk Dili ve Edebiyatı öğretmeni özel alan yeterlikleri ile dersler ve ders içerikleri, doküman analizi yoluyla incelenmiştir. Çalışmadan elde edilen bulgular göstermektedir ki KPSS Türk Dili ve Edebiyatı Öğretmenliği Programı Alan Bilgisi soruları Türk Dili ve Edebiyatı öğretmenlik özel alan yeterlikleri tutum ve değerler yeterlik alanı dışında diğer yeterlik alanlarını kapsar niteliktedir fakat lisans programı derslerinin tamamını kapsamamaktadır. Buna yönelik olarak sınavın kapsam geçerliliğinin artması için soru sayısının artırılması bir öneri olarak sunulabilir. Eğitim fakültesi çıkışlı adayların puan ortalamalarının fen edebiyat fakültesi çıkışlı adaylardan daha yüksek olduğu sonucu çalışmadan elde edilen bir diğer bulgudur. Bu sonuç eğitim fakültelerinin KPSS Türk Dili ve Edebiyatı Öğretmenliği Alan Bilgisi testiyle daha fazla örtüşen bir eğitim programı uyguladıklarına yönelik bir gösterge olarak kabul edilebilir. Sınava Fen Edebiyat fakültesi çıkışlı adayların Türk Dili ve Edebiyatı bölümünün dışında Çağdaş Türk Lehçeleri ve Edebiyatları ve Türk Halkbilimi bölümü mezunu olmalarının, Fen Edebiyat fakültesi bölümlerinde eğitim bilimleri derslerinin olmamasının ve bu derslerin formasyon eğitimi ile tamamlanmasının başarı düşüklüğünde etkili olduğu düşünülmektedir.

**Anahtar sözcükler:** KPSS Türk Dili ve Edebiyatı Öğretmenliği Programı Alan Bilgisi soruları, Türk Dili ve Edebiyatı öğretmeni özel alan yeterlikleri, Türk Dili ve Edebiyatı Öğretmenliği Programı dersleri

**ABSTRACT**

Turkish Language and Literature Teaching Department provides undergraduate education in 8 universities across the country. In the curriculum of the education, besides the teaching profession knowledge, there is also field knowledge that includes language and literature knowledge. With the KPSS Turkish Language and Teaching Content Knowledge Test (TDEÖABT), the field knowledge to be taken as a basis for the appointment of Turkish Language and Literature teachers to the Ministry of National Education is measured. The aim of

the study is to determine to what extent the KPSS (Public Personnel Selection Exam) Turkish Language and Literature Teaching Special Field Knowledge Test questions can meet the Turkish Language and Literature teacher special field competencies and Turkish Language and Literature Teaching Program courses accepted in 2011 and prepared by the Ministry of National Education. The study document consists of 2017 KPSS Turkish Language and Literature Teaching Content Knowledge Test questions, Turkish Language and Literature Teaching undergraduate program courses, course contents and Turkish Language and Literature teaching special field proficiency, sub-competence and performance indicators. In this direction, 2017 KPSS Turkish Language and Literature Teaching Content Knowledge Test questions, Turkish Language and Literature teacher special field competencies, courses and course contents were examined through document analysis. The findings obtained from the study show that the questions in the exam cover the other competency areas apart from the special field competencies, attitudes and values, but they do not cover all of the undergraduate program courses. To this end, it can be suggested as a suggestion to increase the number of questions in order to increase the content validity of the exam. Another finding obtained from the study is that the mean score of the candidates from the faculty of education is higher than the candidates from the faculty of science and literature. This result can be accepted as an indication that faculties of education apply an education program that more closely matches the KPSS Turkish Language and Literature Teaching Content Knowledge Test. It is thought that the fact that the candidates from the Faculty of Arts and Sciences graduated from the Faculty of Science and Literature, graduated from the Department of Contemporary Turkish Dialects and Literatures and Turkish Folklore, that there are no educational sciences courses in the departments of the Faculty of Arts and Sciences, and that these courses are completed with formation education are effective in the low level of success.

**Keywords:** KPSS Turkish Language and Literature Teaching Program Subject Knowledge questions, Turkish Language and Literature teacher special field competencies, Turkish Language and Literature Teaching Program courses



**IMPACT OF CSR INITIATIVES AND DEMOGRAPHIC PROFILE OF THE BENEFICIARIES:  
A STUDY OF CSR INITIATIVES IN KORBA COALFIELDS OF CHHATTISGARH (INDIA)**

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**ABSTRACT**

Although Corporate Social Responsibility (CSR) is felt as a dead-weight saddle by some corporate houses, Mining Companies take it as their moral and sought-after duty since the mining industry causes major desolation to the land, water and air resulting huge pollution owing to its mining operations like blasting, transport and handling i. e., loading and unloading. South Eastern Coalfield Limited (SECL) is no exception to it. It has been offering various CSR activities for the benefits of the nearby villagers of the Korba Coalfields of Chhattisgarh (India). This study is confined to two major Initiatives of the SECL – Village Infrastructure and Health. Going for CSR activities without knowing whether the activities are impacting the lives of targeted beneficiaries does serve the purpose. It is necessary to see whether the initiatives introduced by the host are of use for the villagers targeted. On this backdrop, the objective of this study is set to assess the impact of those initiatives on villagers' living, to prioritize variables on the basis of their impact and to unfold whether the impact is dependent on the demographic profiles of the targeted villagers, i.e., beneficiaries. Statistical techniques used for the purpose are Descriptive Statistics and ANOVA.

**Keywords:** CSR, Village Infrastructure, Health, Impact, Korba Coal Fields, Demography, ANOVA, Descriptive Statistics



**SOME STRATEGIES FOR UTILIZING SOCIAL MEDIA IN TEACHING & LEARNING  
ENGLISH FOR ACADEMIC PURPOSES IN NIGERIA**

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**ABSTRACT**

This paper evaluated the uses of social media in teaching and learning English language in Nigeria. It was based on the Uses and Gratification Theory and adopted a qualitative approach in its focus on how social media could be effectively utilized in teaching and learning English. The paper established a link between social media and literacy and also discussed the importance of social media in the teaching and the learning of English. It proposed four (4) strategies that could enhance the use of social media in both teaching and learning of English in different contexts in Nigeria, including English for Academic Purposes (EAP). These are: using social media for visual scaffolding, providing learners with opportunities of multiple literacies, using social media for effective preparation/use in lesson planning, and utilizing social media as virtual classroom. The authors concluded that although social media have potentials for distracting learners, their significance in teaching and learning is rising significantly. They recommended, among others, that English language professionals should continuously develop their ICT/literacy skills and progressively integrate appropriate social media platforms in their lesson plans.

**Keywords:** Social media, literacy, ICT, EAP, teaching English, learning English

**THE DEGREE OF THE PRACTICE OF THE PRINCIPALS OF PUBLIC SCHOOLS IN  
JERUSALEM GOVERNORATE TO THE STANDERS OF PERSONAL QUALITY FROM THE  
PERSPECTIVE OF TEACHERS**

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**ABSTRACT**

This study aimed to identify the degree of practice of the public schools principals in Jerusalem governorate to the personal quality standers from the point of teachers ,this study was conducted on a sample of 381 teacher working in the public schools in Jerusalem governorate ,descriptive approach through the use of a questionnaire as a data collection tools .the study reached the following results :

The degree of practice of the principal of public schools in Jerusalem governorate to the personal quality standers from the point of view of the teachers came to a medium level ,where the mean of the total score of personal quality standers (3.34)and percentage (67.15%)

The degree of practice of the principals of public schools in Jerusalem governorate to the standers of personal quality from the point of view of teachers according to the field of personal qualities came to a great extent ,but the field of human relation and the field of effective communication and the field of the performance of super work came to a medium degree.

There is a significant difference in the total degree of personal quality standers were differences in favor of bachelors and masters degree and above.

There is no statistically significant differences at the level of significance ( $\alpha \leq 0.05$ )in the total degree of personal quality standers of the personal quality of the principals of public schools in Jerusalem governorate from the point of view teachers are attributed to the variable to years of experience.

Based on above results ,the study reached several recommendations ,is the most important of which are:

Setting up accurate and comprehensive regulations to define the rules and responsibilities of managers in academic, administrative and social fields. raising managers awareness of the rights and duties of faculty members and placing them within regulations and regulations. Benefitting from the experiences of the principals and their skills and their practice of personal quality standards in the development principals and training.

**Keywords:** standers of personal quality, Jerusalem area



**THE AVAILABILITY OF LEADERSHIP SKILLS AMONG THE EDUCATIONAL SUPERVISORS  
IN HEBRON GOVERNMENT FROM THE POINT OF VIEW OF TEACHERS AND PRINCIPLES**

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**ABSTRACT**

This study aimed to identify the availability of leadership skills among the educational supervisor in Hebron government from the point of view of teachers and principals, the population of the study was all the directors of public and private schools in north Hebron governorate, the number of them is 132 and all, the sample of the study was 70 principals, 250 teacher, who are working in north government and private schools, the researcher used the questionnaire tool to get the data, it consisted from 55 paragraph were distributed into four fields, the first one talked about the skills of human relations, the 2<sup>nd</sup> one talked about the specialized skills, the 3<sup>rd</sup> one talked one talked about the personal skills, while the 4<sup>th</sup> was communications skills.

To achieve the objective of the study and answer the questions, researcher used the statistical package for social sciences program (spss), the research reached many results like there are no differences with statistical indication at level ( $\alpha \leq 0.05$ ) at the average of the availability of leadership skills among the educational supervisors in north Hebron government from the point of view of teachers and principals that due to the study variables (sex, age, job title, years of experience in administration, years of experience teaching)

**Keywords:** leadership skills, educational supervisors, north hebron

## **PASSION OF A DISTANT FOOTBALL FAN: A QUALITATIVE ENQUIRY**

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### **ABSTRACT**

In sport fandom, the distant fans belong to an understudied fan segment in relation to local fans. Factors driving the distant fans' sport consumption remain unclear. In particular, how the passion construct affects distant fans' behaviour has not been investigated. Through the core elements of the Dualistic Model of Passion (DMP), this exploratory research serves to highlight the important role passion plays towards driving the distant fans' football fandom. In DMP, passion is defined as a strong inclination toward a self-defining activity that people like (or even love), find important, and in which they invest time and energy on a regular basis. Using content analysis, respondents' comments were analysed and associated with the various core elements of the passion construct as described under DMP. The core elements are: (1) distinctive activity, (2) self-identity, (3) enduring fondness, (4) energy and effort, (5) valued and meaningful, (6) motivational, and (7) adaptive and maladaptive outcomes. Through an individual, semi-structured and conversational interviewing approach, 12 eligible respondents (aged 20 to 57) who self-identified as fans of European football were interviewed. It was found that distant football fans from Singapore exhibited all the core passion elements in their behaviour and can be labelled as passionate. Mostly, passion drives a distant fan's consumption of football towards his or her favourite team such as Liverpool or Manchester United. Thus, this suggests team identification as a related, but distinct construct from passion. However, the dual nature of passion accounts for both the positive and negative outcomes of sport consumption. Contrastingly, these two types of outcomes are not explained by the widely studied team identification. Furthermore, the distant football fans' passion is directed at their sole favourite teams. This reveals that other points of attachment such as the leagues, players, coaches etc are not as important for this fan segment. Lastly, directions for future research are proposed and limitations discussed.

**Keywords:** fan psychology, consumer behaviour, distant fan, dualistic model of passion, sport management





**EXPERIENCE OF METACOGNITION, INTEGRITY, AND SELF-EFFICACY LEARNING  
AMONG VOCATIONAL POST-SECONDARY STUDENTS**

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**ABSTRACT**

This investigational article emphasizes on the effects of the second language on academic misconduct of the students at higher institutions of learning. In this era, technology has advanced drastically and contributed to the enhancement of how learning takes place. Relevantly, there are lots of free online programs in view of machine translation such as google translator metamorphosing the method of students' engagement with regards to the second language. The notion of machine translation has intrigued the attentions of many learners in higher institutional settings. Interestingly, issues concerning the predominance of online free translation program could have been deemed from the perspectives of numerous critics, as practically unthinkable. Numerous studies have been conducted on academic integrity and academic misconduct such as cheating, plagiarism, fabrication and falsification of data have been dealt with in separation. Given that, the students with the second language ability usually have specific way to cheat and uncommon methods of engaging in academic misconduct. Thus, this study explores the effects of the second language on academic misconduct of the students. The participants were the populace of Khazar university students. A self-developed questionnaire was randomly distributed to 95 students of the control group. This study adds to the literature for the following reasons: 1- the scarcity of the literature in issues pertaining to the second language and academic integrity, and 2- by addressing the second language students from another perspective. The previous studies addressed and limited the second language students to the classroom settings. This study expands the scope through the student's ability so read and understand another language apart from the university language of instruction. By this, the simplicity in choosing the appropriate and accurate analysis methods confirms the limitations of this study on the one hand and opens the door of contributions for the subsequent studies on the other hands.

**Keywords:** academic integrity; second language; academic misconduct; higher institution students; Khazar university.



**EXPLORING VIETNAMESE WOMEN RURAL MIGRANTS' LIFE EXPERIENCE UNDER THE LENS OF GENDER**

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**ABSTRACT**

This study maps and explains the causes of the social vulnerability of female migrants who live in rural and in other parts of Vietnam and go to Ho Chi Minh City to earn money. It uses the theory of gender and power to operationalise two core concepts: Hegemonic masculinities and their intersection with Vietnamese culture, in particular, Confucianism. By means of in-depth life story interviews with 15 female migrants, who work in the informal sector, the study discovered that on the way to earn their living, they lack of registration, live far away from their families, and lack of ability to build up social networks in both their community and with local people, the participants feel loneliness, hopelessness and inferiority. These feelings and experiences can be contextualised within the context of hegemonic masculinity. The norms that are reproduced as part of this cultural matrix have dictated traditional rules to control women's lives and have given power to the males whose role in society and family is always more valued than that of a woman. Moreover, due to the influence of Confucianism, the participants believe that it is their fate. They keep their feelings of vulnerability to themselves and are reluctant to share these feelings with other people. It is anticipated that based on a complete understanding of the cause of the social vulnerability of female migrants, policymakers may develop and implement appropriate multidimensional programs, with the aim of supporting women to reduce their vulnerability improve their quality of life.

**Keywords:** female migrants, social vulnerability, hegemonic masculinity, Confucianism, Vietnam.



**SUPPORTING ENTREPRENEURSHIP AND INNOVATION IN HIGHER EDUCATION  
INSTITUTIONS FROM THE REPUBLIC OF MOLDOVA**

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**ABSTRACT**

Education is a fundamental component that contributes to the formation of human personality. The nation's ability to prosper and to thrive in an increasingly knowledge-based global society and economy depends on our having a progressively well-educated population. In the current period, taking into account the varied educational offers from universities, in order to be competitive on the market of higher educational services, it is necessary to be innovative and open to entrepreneurship. The purpose of this article is to explain the innovative and entrepreneurial approach of universities in the context of the knowledge economy, to describe the main specific activities, to emphasize the importance of the link between the educational environment and the professional environment. Higher education institutions from the Republic of Moldova offer excellent examples of what it means to be innovative and entrepreneurial, and promote entrepreneurial mindsets, entrepreneurship and knowledge exchange. The strategies of higher education institutions are based on creating value by offering innovative services and products, developing modern teaching-learning processes and applying business models that respond to economic, social and environmental needs. The major challenge for Higher Education Institutions from the Republic of Moldova is to strengthen the anchorage of value creation processes in education and research. This can be achieved by stimulating interdisciplinarity, developing entrepreneurship in all areas, actively engaging researchers and students worldwide, and providing growth-oriented support for startups. In this context, we must also mention the importance of public-private partnerships between universities and the business environment in the context of facilitating the transition on the labor market of young specialists with higher education. According to preventive results, in comparison with other countries, the Republic of Moldova still has much to learn in terms of innovative and entrepreneurial orientation of universities. However, the results that are today recorded at the national and organizational level indicate a high degree of flexibility and quality of the study programs, as well as the tendency to correlate the educational supply with the demand for the labor force. To exemplify these approaches, the authors of the paper present data on the projects implemented by moldovan universities, as well as the number of enterprises created by students and alumni.

**Keywords:** innovation, entrepreneurship, higher education institution, knowledge economy, education, economic development

**THE AVAILABILITY OF DIMENSIONS OF ADMINISTRATIVE EMPOWERMENT AMONG  
GOVERNMENT SCHOOL PRINCIPALS IN THE BETHLEHEM GOVERNORATE**

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**ABSTRACT**

The study aimed to highlight the degree of availability of delegation of authority among the principals of public schools in the Bethlehem Governorate, and to know the degree of self-motivation among the principals of public schools there.

And to identify the degree of availability of teamwork among government school principals as well, and to indicate the degree of availability of professional development for government school principals in the governorate.

And to show the degree of availability of creative behavior development among public school principals in the Bethlehem Governorate. To reveal the degree of availability of participation in decision-making among government school principals in the Bethlehem Governorate.

In choosing the study sample method, the study relied on the simple random sampling method to select the items of the study sample represented by the school principals, which numbered (7) principals. The study tool consisted of identifying administrative empowerment with its dimensions of delegation of authority, self-motivation, teamwork, professional development, creative behavior development, and participation in decision-making.

To verify the validity coefficients of the questionnaire, the researcher calculated the validity by the method of arbitrators' validity, structural validity, and internal consistency validity.

To verify the reliability coefficients of the questionnaire, the researcher calculated the reliability by the split-half method.

Regarding the arrangement of the study axes that show the extent to which school principals practice the dimensions of administrative empowerment, the second dimension related to self-motivation came in the first rank, followed by the field of teamwork in the second rank, then the field of creative behavior in the third rank, then the field of delegation of authority in the fourth rank. The field of personality development is ranked fifth, and all of them have large arithmetic averages, which indicates a high availability of administrative empowerment dimensions.

And in the end, the field of participation in decision-making ranked sixth with an arithmetic average of a medium degree, which indicates that the practice of the dimension of participation in decision-making is practiced in the administrative reality at a medium degree, and the study recommended the need to clearly formulate the objectives of the different educational stages, as well as the formulation of the objectives of the subjects the academic studies so that the administrative director can take administrative and procedural decisions related to the achievement of those goals, And the necessity of exchanging visits between school principals at different stages in the educational zone, so that principals benefit from the experiences of their senior colleagues in the field of school administration, and the necessity of seeking principals' opinions when making various decisions related to the procedural areas of school administration.

**Keywords:** administrative empowerment, delegation of authority.



## STUDY OF THE FREQUENCY OF COMPOSITE BEAMS WITH VARIABLE FIBER VOLUME

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### ABSTRACT

The present study is concerned with the vibration analysis of symmetric composite beams with a variable fiber volume fraction through thickness. First-order shear deformation and rotary inertia have been included in the analysis. The solution procedure is applicable to arbitrary boundary conditions. Continuous gradation of the fiber volume fraction is modeled in the form of an  $m$ -th power polynomial of the coordinate axis in the thickness direction of the beam. By varying the fiber volume fraction within the symmetric composite beam to create a functionally graded material (FGM), certain vibration characteristics are affected. Results are presented to demonstrate the effect of shear deformation, fiber volume fraction and boundary conditions on the natural frequencies and mode shapes of composite beams.

**Keywords:** composite, beam, vibration, volume fraction



## **EFFECT OF PRE-DIFFUSER HEIGHT ON THE PERFORMANCE OF CENTRIFUGE PUMP**

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### **ABSTRACT**

The rotary blades in a centrifugal pump leads to increase the fluid pressure. Fluid is accelerated by impeller and is quickly moved towards the scroll cone where it enters the outlet of the pump. Comprehensive knowledge about geometric parameters has a significant effect on the improvement of the design and manufacture of these types of pumps. In the present study, the effects of different parameters on the flow of fluid in a centrifugal pump are investigated in detail. The diffuser blades of a centrifuge pump with different height are considered. Five different centrifuge pumps with the blade width equal to 3 mm and blade heights of 0.25, 0.5, 1, 2, 3 mm are considered. The fluid flow in the pump is simulated using ANSYS FLUENT software and different results such as mass flow rate, fluid velocity, static pressure on diffuser blades, pump head, pump efficiency and power are obtained. The results show that by increasing the height of blade, the fluid velocity is not changed and the pressure over the blades increases.

## EFFECT OF MAGNETIC FIELD AND VIBRATION ON GROUNDWATER REMEDIATION USING STEAM INJECTION

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### ABSTRACT

Groundwater is of major importance to civilization because it is the largest reserve of drinkable water in regions where humans can live. The pollution of this major supply by non aqueous phase liquid (NAPL) has become an increasing concern with increasing industrialization due to numerous human activities. Although steam injection has been developed as one of the remediation techniques, the need for its improved recovery efficiency has been a subject of continuous study. The objective of this study is to investigate the combined effects of magnetic field, vibration and steam injection on recovery efficiency of pollutants in groundwater.

The governing equations for simulation in three phase flow in groundwater were developed based on conservation of mass, momentum and energy. The equations incorporated steam injection as a flux source and magnetic field as a body force. The porous medium was treated as deformable to incorporate the sonic vibration. A numerical model was subsequently developed by solving the equations using finite element technique. The model was first used to determine recovery efficiency of benzene in an aquifer containing sand of porosity 0.2 and permeability of  $1 \times 10^{-16} \text{ m}^2$  with steam injection only at  $0.01 \text{ m}^3/\text{s}$ . Thereafter recovery efficiency was also determined for incidence of steam injection with varying magnetic field 0.2–0.5T in step of 0.1T and later with vibration frequency of 50-100Hz in step of 10Hz.

The numerical results for recovery efficiency of benzene using steam injection only at  $0.01 \text{ m}^3/\text{s}$  and steam injection of  $0.01 \text{ m}^3/\text{s}$  with magnetic effect at (0.2-0.5) T were 80.94% and (79.33-92.66)% respectively. The model results for recovery efficiency of benzene using steam injection at  $0.01 \text{ m}^3/\text{s}$  with vibration effect at (50-100)Hz and combination of steam injection at  $0.01 \text{ m}^3/\text{s}$  with magnetic and vibration effects of 0.4 T at (50-100)Hz were (85.14-85.68)% and (92.75-92.15)% respectively. The numerical results for recovery efficiency of ethanol using steam injection only at  $0.01 \text{ m}^3/\text{s}$  and steam injection of  $0.01 \text{ m}^3/\text{s}$  with magnetic effect at (0.2-0.5) T were 76.01% and (74.10-79.33)% respectively. The model results for recovery efficiency of ethanol using steam injection at  $0.01 \text{ m}^3/\text{s}$  with vibration effect at (50-100)Hz and combination of steam injection at  $0.01 \text{ m}^3/\text{s}$  with magnetic and vibration effects of 0.4 T at (50-100)Hz were (76.50-82.33)% and (82.55-82.50)% respectively.

The result obtained showed steam injection for remediation of porous media contaminated by NAPL is an efficient technology. However the study further established that a combine application of steam injection with magnetic field and vibration could appreciably enhance groundwater remediation.

**Keywords:** Pollutant, Recovery Efficiency, Magnetic field, Vibration



**CITY LIVABILITY AND ACTIVE TRANSPORTATION IN LAGOS METROPOLIS, NIGERIA**

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**ABSTRACT**

Cities in the world have undoubtedly been experiencing unprecedented populations in the last two decades. The territorial expansion of cities along with population growth is no doubt, facilitated by an improved economy and other infrastructural facilities, including transportation infrastructure. However, improved lifestyle and socio-economic status provided by cities have brought about sudden distortions to the use of active transportation in many developing countries including, Nigeria. With numerous challenges associated with urbanization and population becoming glaring and impactful, livability dilemma in many cities most especially, in developing countries becomes more apparent. Retracing this step led to the livability assessment of global cities and it is regrettable that many African cities, most especially, Lagos are performed below average on the global livability index in the last one or two decades. This situation is an attestation to the poor performance of Lagos on many livability indicators including infrastructure and accessibility to other basic and non-basic services. Importantly, active transportation being the major component of urban infrastructure and mechanism to access essential and non-essential services becomes indispensable when examining the livability status of cities. As a result, this study examines the city livability and active transportation in the Lagos metropolis to improve the overall accessibility and modal choice of residents.

**Keywords:** City, livability, active transportation, modal choice, and Lagos



**ON SOME PARTICULARITIES OF THE FLUID PROPERTIES ON THE WAVE  
AXISYMMETRIC WAVE DISPERSION IN THE HOLLOW CYLINDER WITH  
INHOMOGENEOUS INITIAL STRESSES CONTAINING THIS FLUID**

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**ABSTRACT**

It is studied the influence of some particularities of the fluid properties such as the fluid density and sound speed on the dispersion of the axisymmetric waves propagating in the inhomogeneous pre-stressed hollow cylinder containing this fluid. Under this study, the motion of the cylinder is described by utilizing the three-dimensional linearized theory of elastic waves in bodies with initial stresses. However, the flow of the fluid is described by utilizing the linearized Navier-Stokes equations for the inviscid compressible fluids. For the solution to the equations related to the cylinder, the discrete-analytical solution is employed. According to this method, the cylinder is divided into a certain number of the sub-cylindrical layers and it is successful to find the analytical solution for the corresponding equations of motion within each sublayer. Satisfying the continuity and boundary conditions, as well as the compatibility conditions between the fluid and cylinder it is obtained a system of a certain number homogeneous linear algebraic equations with respect to the unknown constants which enter the aforementioned analytical solutions. Equating to zero the determinant of the coefficient matrix of these equations is obtained the dispersion equation the roots of which are determined numerically. Finally, using these roots the corresponding dispersion equations are constructed for various values of the initial internal fluid pressures and for various fluids. Numerical results are presented for the cases whereas fluids are selected Glycerin, Water, and Kerosene, however, as the material of the cylinder is selected as Steel. The dispersion curves are presented for each selected fluid case and these curves are compared with each other. Finally, according to this comparison, it is made concrete conclusions on the influence of the fluid properties on the velocity of the waves propagating in the inhomogeneous pre-stressed hollow cylinder containing these fluids.

**Keywords:** waves, dispersion, fluid, analytical solution.



**NUMERICAL VALIDATION OF THE 3D MODEL OF THE L4-L5 LUMBAR SEGMENT  
FUNCTIONAL UNIT BY THE FINITE ELEMENT METHOD**

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**ABSTRACT**

The objective of this work is the proposal of a FEM finite element model of the functional unit of the lumbar spine (L4, L5) in order to predict the behavior of these different vertebral and intervertebral disc components. The three-dimensional reconstruction process used is the conversion of lumbar spine medical scanners into a 3D lumbar vertebral simulation model. It includes the conversion of the scanner into a 3D geometry file, the creation of a mesh of the bone, and the assignment of material properties to each element of bone as a function of bone density. Finally, the model is solved using Abaqus Explicit. A good correlation was found between the results of functional unit behavior modeling and experimental data from the literature.

**Keywords:** Von Mises Stress-Strain; Total disc replacement; Finite elements; lumbar; Modeling; 3D reconstruction



**THE DUCTILITY AND FRAGILITY OF HDPE PIPES: EXPERIMENTAL STUDY**

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**ABSTRACT**

In this present paper the experimental study of the fragility, ductility fracture and the mechanical behavior of high-density polyethylene pipe cracked is subject with know the damage law taken account of the deformation velocity which related to the cracking speed. The ductile fracture of HDPE pipes is characterized by a short crack that propagates rapidly perpendicular to direction of stretching. The tests were carried out on different specimens cracked and uncracked taken from high density polyethylene (HDPE). The main aim of this study is studied the damage and material HDPE with two cases cracked and uncracked specimens of HDPE and knowing the physical quantities and the understanding of the effect of the deformation velocity on the mechanical behavior.

**Keywords:** Density Polyethylene (HDPE) pipes, ductile fracture, characteristics, damage, fragility, tensile test, crack, propagation.

**EFFECT OF MACHINING PARAMETERS ON TOOL WEAR AND SURFACE ROUGHNESS IN DRY TURNING OF GRAY CAST IRON**

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**ABSTRACT**

The main objective of this work is to study the impact of cutting parameters ( $a_p$ ,  $f$ ,  $V_c$ , cutting insert material and machining distance) on the evolution of flank wear ( $V_b$ ) and surface roughness ( $R_a$ ) during the turning of EN-GJL-250 cast iron using coated and uncoated ceramic inserts made of silicon nitride ( $Si_3N_4$ ). The ANOVA has been established in order to define the contribution of each cutting parameter on the studied factors, the approach of artificial neural networks “ANN” has been then adopted to generate mathematical prediction models, the latter have been exploited in the optimization of the cutting parameters using a new optimization algorithm called Multi-Objective Ant-Lion-Optimizer (MOALO). The wear examination has been done using a scanning electron microscope (SEM). The results have well demonstrated the role of coating of inserts in wear resistance enhancement. Furthermore, the modulization results qualify the ANNs and MOALO for turning process monitoring.

**Keywords:** Tool-Wear, Surface roughness, Monitoring, ANN, Optimization.

**A COMPUTATIONAL FRAMEWORK ON STRESS INTENSITY FACTOR IN FSW WELDING  
JOINT ZONES BASED ON XFEM METHOD**

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**ABSTRACT**

The mechanism of rupture admits the existence of cracks and provides the tools needed to analyze cracked components. Its objective is to predict the evolution of these defects and to characterize the toughness of the materials. The Metal structures assembled by welding generate privileged areas for the appearance of defects. Friction stir welding is a recent joining technology envisioned in current research to replace conventional processes.

In spite of a good number of publications on the FSW process, the characterization and the numerical analysis of the harmfulness of the defects in the different zones of these joints remain limited. In this hypothesis, our work presents the simulation of the crack propagation in the different zones of the welded joint by the FSW process on the 2024T351 aluminum alloy, using the global approach to fracture mechanics. The numerical simulation was performed using the extended finite element method (XFEM). The XFEM approach makes it possible to obtain the stress intensity factor in each of the zones of the joint, in order to extend the mechanical integrity of the latter. The numerical results consist of showing the mechanical capacity of the welded joint of the 2024T351 aluminum alloy and evaluating the effect of the FSW process on the fracture of these zones.

**Keywords:** Friction stir welding, X-fem, Crack propagation, Stress intensity factor.



**COMPUTATIONAL TOOLS: MATHEMATICS' REPOSITORY IN THE ENGINEERING UNDERGRADUATE COURSES**

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**ABSTRACT**

The computers' network-interconnected society, product of the third Industrial Revolution, demands of the lecturers and institutions of higher education of 21<sup>st</sup> century a proposal of teaching-learning process that mitigates teaching's fragmentation of the subjects and, thus, make the teaching-learning process, centered on the students, more cohesive, interconnected and pragmatic for university contemporary generation. In this sense, the object of the study of this article is based on the following questioning: How to mitigate difficulty of the students from Federal Institute of Education, Science and Technology of the South of Minas Gerais, Inconfidentes' Campus, to access and availability of dynamic math app, centered on student's learning in the Calculus' subject. From this questioning, it was used as methodological procedure: review of literature on thematic by thesis, articles and monography aims at understanding both the teaching-learning process, and voices which compose the external community. It was adopted a qualitative approach through semi structure interview. Based on these collected and analyzed data, is introduced a prototype for solution of the problem: Pocket Laboratory, by systematic integration of technology resources of hardware and software, to meet the demands of access the Engineering undergraduate course students' computational tools of laboratory, which find themselves in social vulnerability conditions. The authors conclude, through collected data by external community, that Pocket Laboratory achieved success in its objective: reading, interpretation, production, and resolution of mathematical problems in dynamic and meaningful way on the part of the students. Moreover, the Pocket Lab make the meaningful teaching-learning process accessible to students in conditions of vulnerability at higher education of Engineering undergraduate courses of Federal Institution of Education, Science and Technology of the South of Minas Gerais, Inconfidentes' Campus.

**Keywords:** Computational Tools; Meaningful Learning; Differential Calculus



**LINEAR INTEGRATED CIRCUITS WITHIN THE FRAMEWORK  
OF THEORETICAL-PRACTICAL TRAINING DURING PANDEMIC OF COVID-19**

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**ABSTRACT**

The pandemic of COVID-19 affects the life of the world severely. Also it affects the teaching and learning. In this paper, we present the instruction of linear integrated circuits within the framework of combination of theoretical and practical skills during the pandemic of COVID-19. The integrated circuits course is very important because this course is one of the key subjects in undergraduate and postgraduate educations. The topics of this course are divided into two major groups. The first group proposes the design topics of integrated circuits and the second group discusses their applications. Student learning ability can be considerably increased by combining the theoretical training and the skill training, especially during the COVID-19 pandemic.

**Keywords:** Theoretical-practical training, integrated circuits course, learning, COVID-19.



**HUMAN ACTION RECOGNITION IN VIDEOS USING 3D CONVOLUTIONAL NEURAL NETWORKS AND OPTICAL FLOW MAPS**

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**ABSTRACT**

Human actions recognition in video sequences is an important problem, currently at the heart of many fields of research such as video surveillance and human-machine interfaces. The development of precise and efficient action recognition algorithms is a difficult task due to the high variability of human forms, clothing and movement. This work aims to recognize human action in video. Human actions in video are three-dimensional (3D) spatiotemporal signals that characterize both the visual appearance and movement dynamics of humans. In this article, we will focus on dynamic information. We use 3D deep convolutional neural networks that take optical flow maps as input.

**Keywords:** Artificial neural networks, Image classification, Infrared imaging, Machine learning





**QSPR-NEURAL NETWORKS MODEL FOR THE PREDICTION OF THE REJECTION  
OF ANTI-INFLAMMATORY DRUGS BY MEMBRANES**

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**ABSTRACT**

The rejection of anti-inflammatory drugs by membranes has shown paramount importance in separation membrane processes such as nanofiltration and reverse osmosis (NF/RO) membranes for pharmaceutical industries. Therefore, the main objective of this paper is to use a neural network based on quantitative structure properties relationship (QSPR-NN) to model the rejections of anti-inflammatory drugs by nanofiltration and reverse osmosis (NF/RO) membranes using 300 experimental data points gathered from the literature. The approach of QSPR-NN model gives close results with a slight superiority of the neural networks model demonstrated by its correlation coefficient (R) and root mean square error (RMSE) values of 0.9930 and 1.8094% respectively. Sensitivity analysis by the weight method demonstrates that the most relevant variables that influence the rejection of anti-inflammatory drugs are: effective diameter of an organic compound in water "d<sub>c</sub>", molecular length, contact angle, and zeta potential. These input relevant variables have a significant contribution (relative importance superior to 10 %).

**Keywords:** QSPR; Neural Networks; Rejection; Anti-inflammatory drugs; Membranes.



## **PREDICTION OF THE ORGANIC COMPOUNDS PASSAGE BY MEMBRANES USING NEURAL NETWORKS**

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### **ABSTRACT**

Membranes are the heart of all membrane separation processes and because of the interactions that exist inside the system (solute, solvent, and membrane), understanding the mechanisms is increasingly difficult, for this purpose, predictive models of the passage of organic compounds by membrane separation are desirable for the choice of the membrane.

The aim of this study is to create a neural network (NN) for twenty-two (22) organic compounds and to evaluate the ability of this model to predict the passage of these organic compounds by nanofiltration and reverse osmosis (NF/RO). For this, we used the following architecture (ten neurons in the input layer, one hidden layer, and one neuron in the output layer), the learning function is “trainbr” (splitting the database only into 80% for training and 20% for the testing of the NN model) and “tansig” as an activation function in the hidden layer.

The results obtained are promising and indicate that the NN model gave similar results for the prediction of the passage of organic compounds by NF/RO. The correlation coefficient (R) value for all phases is **R=0.9941** for NN-passage.

**Keywords:** Prediction; Organic Compounds; passage; Membranes; Neural Networks.



**QSPR LINEAR MODEL FOR THE PREDICTION OF THE REJECTION OF  
ANTI-INFLAMMATORY DRUGS BY REVERSE OSMOSIS MEMBRANES**

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**ABSTRACT**

The rejection of anti-inflammatory drugs by membranes has shown paramount importance in separation membrane processes such as reverse osmosis (RO) membranes for emerging contaminants. Therefore, the main objective of this paper is to use a quantitative structure properties relationship (QSPR) model for the prediction of the rejection of anti-inflammatory drugs by RO membranes using 120 experimental data points gathered from the literature. The QSPR linear model gives close results with a slight superiority demonstrated by its correlation coefficient (R) and root mean square error (RMSE) values of 0.9172 and 2.3144% respectively.

**Keywords:** QSPR-linear; Rejection; Anti-inflammatory drugs; Reverse Osmosis.



## NEURAL PREDICTION OF DIFFUSION COEFFICIENT FOR POLAR BINARY GAS

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### ABSTRACT

In this paper, an artificial neural network (ANN) has been utilized to create prescient models for the estimation of molecular diffusion coefficient of gases at multiple pressures over a large field of temperatures and substances. A feed-forward neural network (NN) have been trained using six physicochemical properties for NN1; molecular weight (M), critical volume (V<sub>c</sub>), critical temperature (T<sub>c</sub>), dipole moment ( $\mu$ ) and pressure for NN, the diffusion coefficient has been regarded as an output.

A set of 311 polar were used to train validation and test the performance of the ANN, a good correlations were found (R =0.986 for NN). Moreover, it is revealed by the comparison between the forecasted outcomes and other models that the neural network models provided greater results.

**Keywords:** Artificial neural networks; Modeling; Molecular diffusion; Prediction.

## **AEROBİK VE ANAEROBİK EGZERSİZİN SARCOPENİ ÜZERİNDE ETKİNLİĞİ** **THE EFFICACY OF AEROBIC AND ANAEROBIC EXERCISE ON SARCOPENIA**

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### **ÖZET**

Toplam vücut kütlelerinin yaklaşık %40'ını oluşturan iskelet kası hareket ve metabolizmada önemlidir. 30'lu yaşlarda maksimum kütlelerine ulaşır ve bu yaştan sonra azalmaya başlar. Yaşlanma sürecinde iskelet kası yavaş yavaş yağsız kütle, boyut ve işlevini kaybeder. Her on yılda bir yaklaşık %3-8 oranında azalmaktadır. Düşüş ritmi 50'li yıllardan itibaren hızlanır ve her on yılda bir yaklaşık %12-15'e ulaşır.<sup>1</sup> Sarkopeni olarak bilinen bu durum, kas liflerinin sayısının azalması ve mevcut liflerin kesit alanının küçültülmesi olarak görünür. Hızlı ve yavaş kasılan kas lifleri yaşlanmadan farklı etkilenir. Sarkopeni en çok hızlı kasılan kas liflerinde gözlemlenir ve ileri yaşın ilk etkilerinden biridir. Yaşlılıkta zayıflığa, kırılabilirlik oranının artmasına, hastalık ve ölüme yol açar.<sup>2</sup> Kas fonksiyonundaki bu ilerleyen bozulma, yaşam kalitesini olumsuz etkiler.

Egzersiz, yaşlanmada kas kalitesini artırma ve sarkopeniyi önlemede etkili mekanizma olarak öne sürülmüştür.<sup>1</sup> Hem aerobik hem de anaerobik egzersiz türlerinin sarkopeni üzerinde farklı etkileri vardır. Aerobik egzersizin sarkopeni üzerinde orta düzeyde etkisi gözlemlenir ve yaşlanmadaki kas gücü kaybını geciktirir.<sup>3</sup> Öte yandan, anaerobik egzersizde, nöromusküler adaptasyon ile kas kütleleri, kalitesi ve gücündeki artış sarkopeninin tedavisinde ve önlenmesinde daha iyi etkinlik göstermiştir.<sup>1</sup> Sarkopenide eksantrik tip direnç egzersizinin en iyi sonucu verdiği belirtilir. Ancak egzersize dayalı yaklaşımlarda altta yatan hücrel mekanizmaları çözümlenmek daha fazla araştırma gerektirmektedir.

**Anahtar kelimeler:** dayanıklılık egzersizi, kuvvet egzersizi, kas kütlelerinde azaltma ve yaşlanma

### **ABSTRACT**

Skeletal muscle accounts for about 40% of total body mass and is important in movement and metabolism. It reaches its maximum mass in the 30s and starts to decline after this age. Skeletal muscle gradually loses lean mass, size, and function during the aging process. It decreases at about 3-8% by every ten years. The decline rhythm accelerates from the 50s and reaches about 12-15% every decade (Rolland et al. 2008). This condition, known as sarcopenia, which appears to be in the form of decreasing the number of muscle fibers and reducing the cross-sectional area of the present fibers. Fast and slow-twitch muscle fibers are affected differently from aging. The most affected type of muscle fiber is fast-twitch muscle fibers. Sarcopenia is one of the first effects of advanced age. It leads to weakness and an increased rate of frailty, and morbid-mortality (Liu-Ambrose and Donalson 2009). This progressive deterioration of muscle function adversely affects the quality of life.

Exercise have been proposed as effective mechanisms for enhancing muscle quality in aging and preventing from sarcopenia (Rolland et al. 2008), Both aerobic and anaerobic exercise have different effects on sarcopenia. Aerobic exercise has the modest effect on sarcopenia, which delays the muscle strength loss in aging (Jones et al. 2009). On the other hand, anaerobic exercise has illustrated a better efficacy in the treatment and prevention of sarcopenia, which enhances augmentation in muscle mass, quality and strength with an increased neuromuscular adaptation (Rolland et al. 2008). Eccentric type of resistance exercise was indicated to be the best for sarcopenia treatment, yet the underlying cellular mechanisms in the exercise-based approaches still require further investigations.

**Keywords:** endurance exercise, strength exercise, muscle mass reduction and aging

## **AİLEVİ AKDENİZ ATEŞLİ HASTALARDA KALP HIZI TÜRBÜLANSI VE KALP HIZI DEĞİŞKENLİĞİ**

**HEART RATE TURBULENCE AND HEART RATE VARIABILITY IN PATIENTS WITH FAMILY MEDITERRANEAN FEVER**

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### **ÖZET**

**Amaç:** Ailevi Akdeniz ateşi (FMF), otozomal resesif geçişli otoimmün bir hastalıktır. Kardiyovasküler hastalıklar, otoimmün hastalıklarda önde gelen mortalite ve morbidite nedenidir. Kalp hızı değişkenliği (HRV) ve kalp hızı türbülansı (HRT), kardiyak otonomik fonksiyonlarının değerlendirilmesinde kullanılır. Bu çalışmanın amacı, FMF’li hastalarda kardiyak otonomik fonksiyonları, sağlıklı kontrollerle karşılaştırmaktır.

**Materyal ve Metod:** Çalışmaya atak dönemi dışında olduğu tespit edilen, koroner arter hastalığı risk faktörlerini taşımayan, 44 FMF’li erişkin hasta, kontrol grubuna ise 42 sağlıklı gönüllü alındı. Hastaların 24 saatlik ambulatuvar elektrokardiyogram (EKG Holter) kayıtları yapıldı. Türbülans eğimi (TS) ve türbülans başlangıcı (TO) dahil, HRV ve HRT'nin parametreleri hesaplandı.

**Bulgular:** İki grupta, HRV ve HRT parametreleri arasında istatistiki anlamlı fark saptanmadı.

**Sonuç:** FMF hastalarında otonomik disfonksiyonun var olup olmadığını saptamak için daha geniş popülasyonlarda, farklı yöntemlerin kullanıldığı çalışmalar yapılmalıdır.

**Anahtar kelimeler:** FMF, HRV, HRT.

### **ABSTRACT**

**Objective:** Familial Mediterranean fever (FMF) is an autosomal recessive autoimmune disease. Cardiovascular diseases are the leading cause of mortality and morbidity in autoimmune diseases. Heart rate variability (HRV) and heart rate turbulence (HRT) are used to evaluate cardiac autonomic functions. The aim of this study is to compare cardiac autonomic functions in patients with FMF with healthy controls.

**Materials and Methods:** Forty-four adult patients with FMF, who were found to be outside the attack period and did not have coronary artery disease risk factors, and 42 healthy volunteers were included in the control group. 24-hour ambulatory electrocardiogram (ECG Holter) recordings of the patients were performed. The parameters of HRV and HRT, including turbulence slope (TS) and turbulence onset (TO), were calculated.

**Results:** There was no statistically significant difference between HRV and HRT parameters in the two groups.

**Conclusion:** Studies using different methods in larger populations should be conducted to determine whether autonomic dysfunction is present in patients with FMF.

**Keywords:** FMF, HRV, HRT.

**MASSIVE INTRACRANIAL HEMORRHAGE MIMICKING ST-ELEVATION MYOCARDIAL INFARCTION IN AN ELDERLY PATIENT**

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**ABSTRACT**

Patients with acute cerebrovascular ischemia or hemorrhage often admit to the emergency department confusion or losing consciousness; thus, it is sometimes out of the question to obtain anamnesis from them. However, ST elevation on electrocardiogram is very rare in acute cerebrovascular events. Therefore, it is difficult to make an accurate diagnosis after differential diagnosis in such cases.

The timing of the correct diagnosis plays a crucial role in the management of the patient with confusion and loss of consciousness. In this case, we present a case of massive intracranial hemorrhage (ICH) who was referred to the emergency department with loss of consciousness and had findings mimicking ST-segment elevation myocardial infarction (STEMI) on admission electrocardiogram (ECG). As the therapeutic strategy for ICH differs from STEMI, accurate and timely diagnosis of ST-segment elevation associated with intracranial hemorrhage is vital. Therefore, the clinician should take serial electrocardiograms and, if possible, should perform cerebral tomography immediately for differential diagnosis.

**Keywords:** Electrocardiogram, intracranial hemorrhage, ST-elevation myocardial infarction

**RUH SAĞLIĞI OKURYAZALIĞINDA HEMŞİRELERE YÖNELİK BİR İNCELEME**  
AN EXAMINATION ON NURSES IN MENTAL HEALTH LITERACY

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**ÖZET**

Ruh Sağlığı okuryazarlığı ruhsal hastalıklara ilişkin bilgi, inanç ve kaynak kullanımına yönelik bir değerlendirme olup, son yıllarda toplumdaki bireylerin ruhsal hastalıklara yaklaşımını belirlemede önemli bir ölçüt haline gelmiştir. Kronikleşme eğilimi yüksek, yaygın ve yaşam kalitesini düşüren ruhsal hastalıkları önleme, erken tanı, etkin tedavi ve rehabilitasyonunda anahtar role sahip hemşirelerin, ruh sağlığı okuryazarlığının yüksek olması ile toplum ruh sağlığına yönelik girişimlerde daha etkin olmaları mümkün olabilir. Tanımlayıcı türde olan bu araştırma ile hemşirelerin ruh sağlığı okuryazarlığını incelemek amaçlanmıştır. Bir devlet hastanesinde çalışan ve araştırmaya katılmayı kabul eden 101 hemşire kolayda örneklem yöntemiyle seçilmiş, veriler çevirim içi anket ile Ekim 2021’de toplanmıştır. Veri toplama formu olarak Kişisel Bilgi Formu ve Ruh Sağlığı Okuryazarlığı Ölçeği kullanılmıştır. Veri analizinde tanımlayıcı istatistikler, Bağımsız Örneklerde t testi ve Tek yönlü Varyans analizi, ileri analizler için Tukey testi kullanılmıştır. Araştırmaya katılan hemşirelerin çoğunluğu kadın, bekar, üniversite mezunu ve gelir düzeyi ortadır. Yaş ortalaması  $29.68 \pm 7.45$ , çalışma yılı ortalaması  $8.61 \pm 7.53$ ’dür. Hemşirelerin %76’sı mesleğini isteyerek seçmiş ve %60.5’i severek yapmaktadır. Hemşireleri ruh sağlığı okuryazarlığı puan ortalamasının  $15.76 \pm 3.60$  olduğu, bir hastalığa sahip olma ve çalışma yılının inanç odaklı, sosyal medyada ruhsal konuları takip etmenin bilgi odaklı puan ortalamasında önemli fark yarattığı ( $p < 0.05$ ); cinsiyet, yaş, medeni durum, eğitim durumu, ekonomik durum, mesleği isteyerek seçme, çalıştığı birim ve bir yakınında psikiyatrik hastalık olma durumunun önemli fark yaratmadığı ( $p > 0.05$ ) saptanmıştır. Anket sorularından alınan puan ortalamaları incelendiğinde hemşirelerin ortalama puanın altında kalan cevapların psikiyatrik hastalıkların oluşma nedenleri, hasta bireye yaklaşım, tedavi dinamikleri ve iyileşmeyle ilgili konular olduğu görülmektedir. Sonuç olarak araştırmaya katılan hemşirelerin ruh sağlığı okuryazarlığının ortanın üstünde olduğu, psikiyatrik hastalıkların ortaya çıkması, tedavisi ve hasta bireye yaklaşım alanlarında gelişim ihtiyacı içinde oldukları söylenebilir.

**Anahtar kelimeler:** ruh sağlığı, ruh sağlığı okuryazarlığı, hemşire

**ABSTRACT**

Mental health literacy is an assessment of knowledge, belief and resource use related to mental illnesses, and has become an important criterion in determining the approach of individuals in society to mental illnesses in recent years. It may be possible for nurses, who have a key role in the prevention, early diagnosis, effective treatment and rehabilitation of mental diseases with a high tendency to become chronic, widespread and reducing the quality of life, to be more effective in interventions for community mental health with high mental health literacy. With this descriptive study, it was aimed to examine the mental health literacy of nurses. 101 nurses working in a public hospital who agreed to participate in the study were selected by convenience sampling method, and the data were collected in October 2021 via an online questionnaire. Personal Information Form and Mental Health Literacy Scale were used as data collection forms. Descriptive statistics, Independent Samples t-test and One-way Analysis of Variance were used for data analysis, Tukey test was used for further analysis. The majority of the nurses participating in the research are female, single, university





graduate and have a medium income level. The mean age was  $29.68 \pm 7.45$ , and the mean working year was  $8.61 \pm 7.53$ . 76% of the nurses chose their profession willingly and 60.5% of them do it lovingly. The mental health literacy mean score of the nurses was  $15.76 \pm 3.60$ , and having a disease and working year made a significant difference in the mean score of belief-oriented, and following mental issues on social media in knowledge-oriented ( $p < 0.05$ ); It was determined that gender, age, marital status, educational status, economic status, choosing the profession voluntarily, working unit and having a psychiatric illness in a relative did not make a significant difference ( $p > 0.05$ ). When the average scores obtained from the survey questions are examined, it is seen that the answers below the average score of the nurses are the reasons for the occurrence of psychiatric diseases, the approach to the sick individual, the dynamics of treatment and the issues related to recovery. As a result, it can be said that the mental health literacy of the nurses participating in the research is above average, and they are in need of improvement in the areas of emergence and treatment of psychiatric diseases and approach to the sick individual.

**Keywords:** mental health, mental health literacy, nurse

**ÇOCUĞUN VE AİLENİN GÖZÜNDEN HEMŞİRELİK BAKIMI**  
**NURSE CARE FROM THE PERSPECTIVE OF THE CHILD AND FAMILY**

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**ÖZET**

Sağlık sadece hastalık ve sakatlığın olmayışı değil, bireyin bedence, ruhça ve sosyal yönden tam iyilik hali olarak tanımlanır ve bunlardan birindeki rahatsızlık sonucu hastalık ortaya çıkar.<sup>1</sup> Çocuk ve yetişkinlerin hastalığa ve hastanede yatarak tedavi görmeye bakış açısı farklıdır.<sup>2</sup> Bu doğrultuda sağlık profesyonellerinin farklı yaş grubundaki hastalara uygulayacağı tedavi ve bakım yaklaşımı da aynı değildir.

Sağlık profesyonelleri arasında hasta ile en fazla vakit geçiren ve etkileşim halinde bulunanlar hemşirelerdir. Hemşirelerin tedavi ve bakım faaliyetlerini yürütebilmesinde, hastanın yaşı ve beklentileri belirleyicidir. Özellikle 0-18 yaş arası çocuklar için hastaneye başvurmak ya da hastanede yatarak tedavi görmek zor bir deneyimdir. Yapılan çalışmalarda çocukların hastane deneyimlerinde korku, kaygı, isteksizlik, mutsuzluk gibi olumsuz duygular yaşadıkları görülmüştür.<sup>3-6</sup> Çocukların hastane deneyimleri değerlendirilirken ailelerinin de göz ardı edilmemesi gerekir. Çocuğun bakımını üstlenen ebeveynlerin, hastane gibi yabancı bir ortamda çocuğu üzerindeki bakım rolünün değişmesi zor kabul edilen bir durumdur. Literatürde çocuğu hastanede kalan ailelerin yabancı ortamda olması, çocuğuna yapılan işlemlere alışık olmaması, bakım eylemlerine katılamaması gibi sebepler nedeniyle yoğun şekilde kaygı, anksiyete, çaresizlik gibi olumsuz duygular yaşadıkları bildirilmiştir.<sup>7,8</sup>

Sağlık bakım hizmetleri her yaş grubuna ve her hastaya özgü planlanıp uygulanan faaliyetlerdir.<sup>4</sup> Hemşirelerin bu faaliyetleri gerçekleştirmesinde çocuğun ve ailenin beklentisinin farkında olması gerekir. Özellikle hastanede yatan hastalar, olumsuz duygularına karşı anlaşılmayı beklerler.<sup>2,9</sup> Çocukların ise bu hasta grubu içerisinde hassas bir şekilde değerlendirilmesi gerekir. Bu nedenle hemşirelerin, çocuk ve ailelerin beklentisine karşı yüksek empati becerisine sahip, mesleki rol ve sorumluluklarının bilincinde, teorik ve pratik bilgisini üst seviyede kullanan sağlık profesyonelleri olması beklenir. Böylece olumlu bir iletişim ortamı kurularak, hem çocuğun tedaviye uyum göstermesi hem de ailelerin endişelerinin azalması sağlanır. Aynı zamanda belirli bakım uygulamalarına çocuk ve ailenin de katılımı ile planlanan hemşirelik girişimlerin eksiksiz yürütülmesi gerçekleşmiş olur.<sup>10</sup>

Çocukların gözünden hemşirelik bakımını anlamak ve aile merkezli bakım ile ailenin katılımını sağlamak, hemşirelik uygulamalarının önemli bir bileşeni olarak görülmelidir. Hemşirelik felsefesinde yer alan holistik bakım, hasta ile beraber çevresini de değerlendiren bütüncül bir yaklaşımdır.<sup>11</sup> Hemşirelerin çocuk ile birlikte ailesini de bakıma katması holizm felsefesine uygun kaliteli bakım hizmetinin sunulmasına yol açar böylece hasta çıktılarının da iyileşmesi sağlanır. Bu kapsamda yapılan çalışmaların çocuklarda ve ailelerde oldukça olumlu sonuçlar ortaya çıkardığı görülmüştür.<sup>12-16</sup> Mesleğimizin sağlık alanında adından söz ettirebilmesi; hemşirelerin etik ilkelere ve mesleki sorumluluklarına bağlı kalarak, güncel gelişmeleri hasta yararına uygulaması ile gerçekleşecek önemli bir görevdir.

**Anahtar kelimeler:** Hemşirelik bakımı, Çocuk, Aile

## ABSTRACT

Health is defined not only as the absence of disease and infirmity, but also as a state of complete physical, mental and social well-being of the individual, and disease occurs as a result of a disturbance in one of these.<sup>1</sup> Children and adults have different perspectives on illness and hospitalization.<sup>2</sup> In this respect, the treatment and care approach that health professionals will apply to patients of different age groups is not the same.

Among health professionals, nurses spend the most time with the patient and interact with them. The patient's age and expectations are decisive for nurses to carry out treatment and care activities. It is a challenging experience to apply to the hospital or to be dealt with as an inpatient, especially for children aged 0-18. Studies have shown that children experience negative emotions such as fear, anxiety, reluctance, and unhappiness in their hospital experiences.<sup>3-6</sup> Parents should not be ignored when evaluating children's hospital experiences. It is a difficult situation for the parents who take care of the child to change the caring role of their child in an unfamiliar environment such as a hospital. In the literature, it has been reported that families whose children stay in the hospital experience intensely negative emotions such as anxiety, anxiety, and helplessness due to reasons such as being in a foreign environment, not being used to the procedures performed on their children, and not being able to participate in care activities.<sup>7-8</sup>

Health care services are activities that are planned and implemented respectively to each age group and each patient.<sup>4</sup> Nurses should be aware of the expectations of the child and family in performing these activities. Hospitalized patients, in particular, expect to be understood while struggling with their negative emotions.<sup>2-9</sup> Children should be evaluated sensitively within this patient group. For this reason, nurses are expected to be health professionals who have high empathy skills against the expectations of children and families, are aware of their professional roles and responsibilities, and use their theoretical and practical knowledge at a high level. Thus, by establishing a positive communication environment, both the child's compliance with the treatment and the anxiety of the families are reduced. At the same time, with the participation of the child and family in certain care practices, the planned nursing interventions are carried out completely.<sup>10</sup>

Understanding nursing care through the perspective of children and ensuring family-centered care and family involvement should be seen as an important component of nursing practices. Holistic care, which is included in the philosophy of nursing, is a comprehensive approach that evaluates the environment as well as the patient.<sup>11</sup> The fact that nurses include their families in care along with the child leads to the provision of quality care services in accordance with the philosophy of holism, thus improving patient outcomes.<sup>12-16</sup>

In this context, it has been seen that the studies have produced very positive results in children and families. The ability of our profession to mention its name in health is an important task that will be carried out by the practice of the patient to apply current developments per the ethical principles and professional responsibilities of nurses.

**Keywords:** Nursing care, Child, Family

## ÇOCUKLUK ÇAĞI OBEZİTESİ VE SAĞLIK SORUNLARI CHILDHOOD OBESITY AND HEALTH PROBLEMS

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### ÖZET

Çocukluk çağı obezitesi çocuğun vücut ağırlığının yaşına göre önerilenden en az %10 fazla olduğu durumdur.<sup>1</sup> Hastalık koruma ve önleme merkezi çocuklardaki kilo dağılımını, Beden Kütle İndeksi (BKI) persantil eğrilerine göre yapmış ve BKI >85-95. persantil arasında olan çocuklar hafif şişman, BKI >95. persantil olanlar obez olarak tanımlanmıştır.<sup>2</sup> Çocuklarda obezite oluşmasında genetik ve çevresel faktörler, bedensel hareketlilik, beslenme tarzı gibi davranışsal etmenler belirleyicidir.<sup>3</sup> Dünya çapında 5 yaş altında yaklaşık 39 milyon, 5-19 yaş grubunda ise 340 milyon civarında fazla kilolu ve obez çocuk bildirilmektedir.<sup>4</sup> Türkiye’de ise çocukluk çağı obezite sıklığı 0-5 yaş grubunda %8,5 iken, 6-18 yaş grubunda %8,2 olarak bildirilmiştir.<sup>5</sup> Ciddi sayılara ulaşan bu durum, çocuklarda önemli sağlık sorunlarını da beraberinde getirmektedir.

Fazla kilolu/obez çocuklarda en fazla kardiyovasküler sorunlar, tip 2 diyabet, psikolojik ve sosyolojik sorunlar, metabolik sendrom, uyku apnesi, hipoventilasyon, safra kesesi taşları, kas-iskelet sisteminde bozuklukları ve stria gibi sağlık sorunları ortaya çıkmaktadır.<sup>6</sup> Ciddi klinik sorunları da beraberinde getiren çocukluk çağı obezitesi, yetişkinlik obezitesi ve komplikasyonları için de risk faktörüdür. Literatürdeki çalışmalarda obez çocuklarda kardiyovasküler risk faktörlerinin normal kilodaki çocuklara göre daha yüksek olduğu<sup>7</sup>, tip 2 diyabetli çocuk sayısında artış yaşandığı<sup>8</sup>, metabolik sendrom oranının ciddi seviyelerde yükseldiği<sup>9</sup> gösterilmiştir. Ayrıca çocukluk çağı obezitesinin yetişkinlik obezitesine neden olabileceği düşüncesi, gelecek nesillerde erken morbidite ve artan mortalite ihtimalini de beraberinde getirmektedir. Bu durum ise gelecekte ciddi sağlık sorunları ve ekonomik yük oluşturacağı anlamına gelmektedir.<sup>6,10</sup> Bu nedenle tüm sağlık çalışanlarına obezitenin önlenmesi, erken dönemde tedavi edilmesi ve sağlık sorunları yaşayan bireylere bakım verilmesi konusunda önemli görevler düşmektedir.

Obezite, hemşirelerin de dahil olduğu multidisipliner bir yaklaşım ile tedavi edilmektedir.<sup>11</sup> Hemşirelerin tedavi sürecinde sağlık bakım hizmetlerinin koruyucu, tedavi ve rehabilite edici aşamalarında sorumlulukları bulunmaktadır. Obezite tedavisinde, hastalık ortaya çıkmadan sağlıklı bireye sunulacak koruyucu hizmetler, son derece önemlidir. Hemşirelerin eğitim ve bakım verici rolü ile obezitenin neden olabileceği sağlık sorunları ve ekonomik yükü önemli oranda azaltabileceği bildirilmiştir.<sup>12,13</sup> Bu nedenle hemşireliğin önemli bir rolü olan koruyucu sağlık hizmetlerinin, sağlıklı bireyin/toplumun oluşturulması ve güçlendirilmesi için uygulanması gereklidir.<sup>14</sup>

**Anahtar kelimeler:** Pediatrik obezite; Hastalık; Hemşirelik

### ABSTRACT

Childhood obesity is a condition in which the child's body weight is at least 10% more than recommended by age.<sup>1</sup> The center for disease protection and prevention conducted a weight distribution in children according to the Body Mass Index (BMI) percentile curves, and BMI >85<sup>th</sup>-95<sup>th</sup> percentile curves children who are overweight, BMI >95<sup>th</sup> percentile curves children have been described as obese.<sup>2</sup> Genetic and environmental factors, physical mobility, behavioral factors such as eating style are decisive in the formation of obesity in children.<sup>3</sup> About 39 million children under the age of 5 and about 340 million overweight and

obese children in the 5-19 age group are reported worldwide.<sup>4</sup> In Turkey, the incidence of childhood obesity was reported as 8.5% in the 0-5 age group and 8.2% in the 6-18 age group.<sup>5</sup> This condition, which has reached serious numbers, also brings about significant health problems in children.

Overweight/obese children with a maximum of cardiovascular problems, Type 2 diabetes, psychological and sociological issues, metabolic syndrome, sleep apnea, hypoventilation, gallstones, Non-skeletal system disorders and health problems such as striae are emerging.<sup>6</sup> Childhood obesity, which also brings with it serious clinical problems, is also a risk factor for adult obesity and its complications. In the literature, it has been shown that cardiovascular risk factors are higher in obese children<sup>7</sup> than in children of normal weight, there is an increase in the number of children with type 2 diabetes<sup>8</sup>, and the rate of metabolic syndrome<sup>9</sup> increases at serious levels. In addition, the idea that childhood obesity can cause adult obesity also leads to the possibility of early morbidity and increased mortality in future generations. This means that in the future it will create serious health problems and an economic burden.<sup>6,10</sup> For this reason, important tasks are assigned to all health workers in terms of preventing obesity, treating it at an early stage, and providing care to individuals experiencing health problems.

Obesity is treated with a multidisciplinary approach, including nurses.<sup>11</sup> Nurses have responsibilities in the preventive, therapeutic and rehabilitative stages of health care during the treatment process. In the treatment of obesity, preventive services that will be provided to a healthy person before the disease occurs are extremely important. It has been reported that with the educational and caring role of nurses, obesity can significantly reduce the health problems and economic burden that can be caused by.<sup>12,13</sup> For this reason, it is necessary to implement preventive health services, in which nursing has an important role, to create and strengthen a healthy individual/ society.<sup>14</sup>

**Keywords:** Pediatric obesity; Disease; Nursing

## COVID-19 PANDEMİSİ SOLİD ORGAN TRANSPLANTASYONU AKTİVİTELERİNİ NASIL ETKİLEDİ?

### HOW DID THE COVID-19 PANDEMIC AFFECT SOLID ORGAN TRANSPLANTATION ACTIVITIES?

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#### ÖZET

Yeni koronavirüs hastalığı (COVID-19), ilk olarak Çin'in Hubei Eyaleti, Vuhan şehrinde 2019 yılı Aralık ayının sonunda ortaya çıkan, ağır akut solunum yetmezliği sendromuna neden olan bulaşıcı bir hastalıktır. Dünya Sağlık Örgütü, COVID-19 salgınına 30 Ocak 2020 tarihinde "Uluslararası Halk Sağlığı Acil Durumu", 11 Mart 2020 tarihinde ise hastalığın tüm dünyadaki yayılım hızı, morbidite ve mortalitesinin artması üzerine "Küresel Pandemi" olarak ilan etmiştir. COVID-19 vakalarının %80'inin hastalığı hafif olarak, %20'sinin ise hastane koşullarında tedavi alarak geçirdiği bilinmektedir. COVID-19 ile ilgili şimdiye kadar edinilen bilgiler ve deneyimler doğrultusunda bazı bireylerin hastalanma riskinin daha yüksek olduğu ve hastalığı daha ağır ve ciddi semptomlarla geçirdiği bilinmektedir. COVID-19 için yüksek riskli gruplar, 60 ve üzeri yaşta olan bireyler, kalp ve damar hastalığı, hipertansiyonu ve diyabeti olanlar, organ transplantasyonu yapılmış, kanser ve immün yetmezliği olan hastalar, ciddi kronik tıbbi rahatsızlığı ve kronik akciğer ya da solunum yolu hastalığı olan bireylerdir.

Solid organ transplantasyonu yapılan hastalar transplantasyon sonrası greft organın fonksiyonlarının korunması ve rejeksiyonun önlenmesi için yoğun bir immünyüpresif tedavi almaktadırlar. Bu zorunlu tedavi nedeniyle immün sistemi baskılanmış olan transplant hastaları COVID-19 pandemi sürecinde yüksek riskli gruplar içerisinde yer almıştır. Bu durum, pandemi öncesinde solid organ transplantasyonu yapılmış hastaların COVID-19'dan korunma ve aşılama konularını transplantasyon profesyonelleri arasında tartışmaya açmıştır. Bunun yanı sıra COVID-19 pandemisinin solid organ transplantasyonuna asıl etkisi transplantasyon bekleme listelerinde organ bekleyen hastalar üzerine olmuştur. COVID-19 pandemisi nedeniyle transplant otoriteleri tarafından dünya genelinde acil ve öncelikli durumlar dışında tüm organ transplantasyon ameliyatlarının ertelenmesi kararları alınmıştır. Solid organ transplantasyonu aktiviteleri COVID-19 pandemi sürecinde, ameliyatın ve ameliyat sonrası sürecin getirdiği riskler açısından oldukça sınırlanmıştır. Bunun yanı sıra COVID-19 pandemisi transplantasyonda önemli bir organ kaynağı olan kadaverik donör sayılarını ciddi şekilde etkilemiştir. Kadaverik donör organlarının COVID-19 bulaşı nedeniyle transplantasyonda kullanılamaması organ transplantasyon aktivitelerinin COVID-19 pandemi sürecinde azalmasına neden olan diğer bir etken olmuştur.

Bu derleme ile COVID-19 pandemi sürecinin solid organ transplantasyonu aktivitelerine etkisinin güncel literatür doğrultusunda tartışılması amaçlanmıştır.

**Anahtar kelimeler:** COVID-19, immünyüpresif, kadaverik donör, solid organ transplantasyonu

#### ABSTRACT

The novel coronavirus disease (COVID-19), first appeared in the city of Wuhan, Hubei Province of China, at the end of December 2019, is an infectious disease causing severe acute respiratory failure syndrome. The World Health Organization declared the COVID-19 epidemic as an "International Public Health Emergency" on January 30, 2020, and as a "Global Pandemic" on March 11, 2020, due to the increase in the rate of spread, morbidity and mortality of the disease all over the world. It is known that 80% of COVID-19 cases are mild and 20% are treated in hospital conditions. The knowledge and experience gained so far about COVID-19 showed that some individuals have a higher risk of getting sick and have the disease with more severe and serious symptoms. High-risk groups for COVID-19 are individuals aged 60 and over, those with cardiovascular



disease, hypertension and diabetes, organ transplant recipients, cancer and immunodeficiency patients, individuals with serious chronic medical conditions and chronic lung or respiratory disease.

Solid organ transplant recipients receive intensive immunosuppressive therapy after the transplantation to preserve the functions of the graft organ and to prevent rejection. Transplant recipients whose immune system was suppressed due to this mandatory treatment were included in high-risk groups during the COVID-19 pandemic. Thus, the prevention from COVID-19 and vaccination of patients who had solid organ transplantation before the pandemic was opened to discussion among transplant professionals. In addition, the main impact of the COVID-19 pandemic on solid organ transplantation has been on patients waiting for an organ in the waiting lists. Due to the COVID-19 pandemic, the decisions to postpone all organ transplantation surgeries, except for emergency and priority situations, have been taken by transplant authorities. Solid organ transplantation activities have been very limited in terms of the risks brought by the surgery and the post-operative process during the COVID-19 pandemic. In addition, the COVID-19 pandemic has seriously affected the number of cadaveric donors, which are an important organ resource in transplantation. The inability to use cadaveric donor organs in transplantation due to the transmission of COVID-19 has been another factor that caused the decrease in organ transplantation activities during the COVID-19 pandemic. In this review, it is aimed to discuss the effect of the COVID-19 pandemic on solid organ transplantation activities in line with the current literature.

**Keywords:** COVID-19, immunosuppressive, cadaveric donor, solid organ transplantation

**KANSER TEDAVISİNDE UMUT VERİCİ YENİ BİR YAKLAŞIM: FOTODİNAMİK TERAPİ**  
A PROMISING NEW APPROACH TO CANCER TREATMENT: PHOTODYNAMIC THERAPY

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**ÖZET**

Çağımızın en büyük sorunlarından biri olan kanser tedavisi henüz tam olarak bulunamamış ölümcül bir hastalıktır. Bu hastalığın tedavisi için yıllardır yapılan araştırmalar ve bilimsel çalışmalar sonuç vermeye başlamış ve son yıllarda önemli gelişmeler kaydedilmiştir. Özellikle kemoterapi ve radyoterapinin aksine hastayı yormayan, kanser dışı dokulara zarar vermeyen hedefe yönelik tedaviler de güzel sonuçlar alınmaktadır. Bu tedavi yöntemlerinden biri olan fotodinamik terapi (FDT) kötü huylu tümör ve deri hastalıkları başta olmak üzere, yaşa bağlı maküler dejenerasyon gibi birçok farklı hastalığın tedavisinde kullanılan yan etkileri geleneksel tedavi yöntemlerine kıyasla yok sayılacak kadar az olan umut verici bir tedavi yöntemidir. FDT, ışıkla aktive olan ilaç (fotoduyarlaştırıcı), ışık ve oksijenin hücrede bir dizi zincir reaksiyon başlatarak hücre ölümüne sebep olması prensibine dayanmaktadır. Bu yöntemde fotoduyarlaştırıcı olarak adlandırılan ilaç olarak kullanılacak bileşikler ışığa duyarlı olmalıdır. Vücudumuzda bulunan pek çok biyomolekülün UV ve görünür bölgedeki ışığı soğurması ve bu ışığın dokulardan geçişini engellemesi nedeniyle fotodinamik terapide kullanılan ışık tercihen yakın kızıl ötesi olmalı ve kullanılan fotoduyarlaştırıcıda bu bölgedeki ışığı verimli bir şekilde soğurabilmelidir. Ayrıca fotoduyarlaştırıcılar vücuda verildiğinde direk hastalıklı dokuya yönlendirilerek etkisini sadece o bölgede göstermesi gerekmektedir.

Hastalıklı dokuda biriken fotoduyarlaştırıcılar kırmızı ışıkla uyarıldığında aktif olarak singlet oksijen ( $^1O_2$ ) üretir ve oluşan singlet oksijen ( $^1O_2$ ) hücre zarındaki lipitleri oksitleyerek hücre bütünlüğünü ve iyon dengesini bozar. Buna ek olarak DNA ve proteinlere yapısal zarar vererek hücre ölümünü gerçekleştirir. Singlet oksijen çok reaktif ve kısa ömürlü olduğundan sadece oluştuğu yerde yani hastalıklı hücrede etkisini gösterdiği için bu yöntemin yan etkileri diğer tedavi yöntemlerine göre çok azdır.

FDT'nin en önemli bileşeni hücre içinde ışık enerjisini kimyasal enerjiye dönüştüren fotoduyarlaştırıcılar olduğundan yeni ve efektif bir fotoduyarlaştırıcının sentezi ve karakterizasyonu konusunda yapılan çalışmalar devam etmektedir. Bizde dizayn ettiğimiz ve sentezlediğimiz fotodinamik terapi için uygun özelliklere sahip, uzun dalga boyunda (600-800 nm) ışığı absorplayabilen ve yapısında bulunan I, Br gibi ağır atomlar aracılığıyla kolaylıkla singlet oksijen üretebilecek kapasiteye sahip olan iki tane yeni fotoduyarlaştırıcı ile literatüre katkımızı sunmuş olduk. Bu amaçla çeşitli pozisyonlardan kolaylıkla fonksiyonlandırılabilen ve fotodinamik terapide yaygın olarak kullanılmaya başlanan BODIPY boyaları tercih edilmiştir. BODIPY temelli dizayn edilen yeni fotoduyarlaştırıcıların sentezi tamamlandıktan sonra karakterizasyonu NMR ve HRMS teknikleriyle yapılmıştır.

**Anahtar kelimeler:** Fotodinamik terapi, fotoduyarlaştırıcı, kırmızı ışık, singlet oksijen.

**ABSTRACT**

Cancer, one of the biggest problems of our age, is a deadly disease whose treatment has not been found yet. Researches and scientific studies conducted for years for the treatment of this disease have started to yield results and significant developments have been recorded in recent years. Especially in contrast to chemotherapy and radiotherapy, targeted therapies that do not harm the patient and do not harm the non-cancerous tissues are getting good results. One of these treatment methods, photodynamic therapy (PDT) is a promising method with minimal side effects compared to traditional therapies and used for the treatment of a number of different diseases including malignant tumor, dermatological diseases and age-related macular degeneration. Researches and scientific studies conducted for years for the treatment of this disease have started to yield results and significant developments have been recorded in recent years. In this method, the



compounds to be used as drugs, which are called photosensitizers, should be light-sensitive. Because many of the biomolecules in our body absorb light in the UV and visible regions and block the passage of light through the tissues, the light used in the photodynamic therapy should preferably be near infrared and the used photosensitizer should be able to efficiently absorb the light in this area. In addition, when photosensitizers are given to the body, they should be directed to the diseased tissue and show its effect only in that region.

Photosensitizers that accumulate in diseased tissue actively produce singlet oxygen ( $^1O_2$ ) when excited by red light and the consisted singlet oxygen ( $^1O_2$ ) corrupts cell integrity and ionic balance by oxidizing lipids in the cell membrane. In addition to providing structural damage to DNA and protein performs cell death. Since singlet oxygen ( $^1O_2$ ) is very reactive and short-lived, it shows effect only in the place where it occurs in other words in the diseased cell so the side effects of this method are very low compared to other treatment methods.

Since the most important component of PDT is photosensitizers that convert light energy into chemical energy in the cell, studies on the synthesis and characterization of a new and effective photosensitizer are continuing. We have contributed to the literature with two new photosensitizers that we have designed and synthesized, which have suitable properties for photodynamic therapy, can absorb light at long wavelengths (600-800 nm), and have the capacity to easily produce singlet oxygen through heavy atoms such as I, Br. For this purpose, BODIPY dyes which can be easily functionalized in various positions and which are widely used in photodynamic therapy have been preferred. After the synthesis of the new photosensitizers designed based on BODIPY was completed, the characterization of these molecules was carried out by NMR and HRMS techniques.

**Keywords:** Photodynamic therapy, photosensitizer, red light, singlet oxygen.

## SOLUNUM SİSTEMİ HASTALIKLARINDA HEMŞİRELİK SÜRECİNİN ÖNEMİ

### THE IMPORTANCE OF THE NURSING PROCESS IN DISEASES OF THE RESPIRATORY SYSTEM

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#### ÖZET

Hemşirelik, hastaların tedavisinin uygulanması ve koruyucu, iyileştirici sağlık hizmetlerinin sürdürülmesini amaçlayan, bu doğrultuda hasta bakım uygulamalarını sergileyen profesyonel bir meslektir. Bakım uygulamaları hasta semptomlarının hafifletilmesinde, doğru tedavi yaklaşımlarının benimsenmesinde, tedavi sonrası rehabilitasyonun sağlanmasında, bireyin tam iyilik haline kavuşmasında ve yaşam kalitesinin artırılmasında son derece önemlidir.<sup>1</sup> Bu nedenle hemşirelik bakımının planlı ve sistematik bir biçimde uygulanması ve değerlendirilmesi gerekir.

Hemşirelik Süreci (HS), hemşirelik uygulamalarının sağlıklı/hasta birey açısından bakım gereksinimlerinin belirlenerek bireye özgü bakımı ön plana çıkaran, uygulamaların kanıta dayalı ve sistematik olarak gerçekleştirildiği bir süreçtir. HS, bireyin ya da ailenin sorunlarının belirlenmesi, bu sorunlara göre hemşirelik tanısına karar verilmesi, tanıya uygun hemşirelik girişimlerinin planlanması, girişimlerin uygulanması ve değerlendirilmesini içerir.<sup>2</sup> Bu aşamalar klinik problemlerin çözümünde oldukça önemlidir.

Bireyde ortaya çıkan hastalıklar, hastanın yaşam aktivitelerini olumsuz etkileyen ve yaşam kalitesini düşüren klinik problemler olarak değerlendirilir.<sup>3</sup> Hemşireliğin önemli rollerinden biri de klinik problemlere yönelik uygun teknikleri kullanarak sorunları çözmektir.<sup>4-6</sup> Özellikle kronik hastalıklar uzun tedavi ve bakımın yanında bireyin sistematik olarak takibini de gerektirir.<sup>7</sup> Kronik hastalıklar arasında ise solunum sistemi hastalıkları ülkemizde ve dünyada üçüncü sırada ölüm nedeni olan<sup>8,9</sup>; nefes darlığı, öksürük, ağrı, yorgunluk gibi önemli semptomlar ortaya çıkaran ciddi hastalıklardır.<sup>10,11</sup> Solunum iyi oksijenlenme ile tüm vücut fonksiyonlarının sağlıklı bir şekilde çalışmasını sağlarken, yetersizliği zamanla diğer sistem hastalıklarının da ortaya çıkmasına yol açabilir. Bu nedenle solunum sistemi hastalıklarında ortaya çıkan/çıkabilecek semptomların belirlenerek uygun bakımın planlanması ve yürütülmesi gerekir.

Solunum sistemi gibi hayati organların ortaya çıkaracağı klinik problemler, belirli bir düzen içerisinde değerlendirilmeli ve aciliyetine göre tedavi ve bakımı planlanmalıdır. Ancak hemşirelerin yoğun çalışma koşulları ve hasta sayısındaki süregelen artış, bakım aktivitelerinin zamanında ve uygun şekilde yürütülememesine neden olabilmektedir. HS sayesinde düzenli ve sistematik hasta yaklaşımı ile kanıta dayalı uygulamaların sağlanması mümkün olabilmektedir. Yapılan çalışmalarda HS ile verilen hemşirelik bakımının hasta çıktılarını iyileştirdiği görülmüştür.<sup>12-16</sup> Bu nedenle özellikle solunum sistemi gibi önemli hastalıkların değerlendirilmesi ve bakım uygulamalarının sunulmasında HS ilk sırada düşünülmesi gereken yaklaşımlardan olmalıdır.

**Anahtar kelimeler:** Hemşirelik süreci, Hemşirelik bakımı, Solunum sistemi.

#### ABSTRACT

Nursing is a professional career aimed at the implementation of patient treatment and the maintenance of preventive, curative health services, demonstrating patient care practices in this direction. Caring practices are extremely important in alleviating patient symptoms, adopting the right treatment approaches, ensuring

rehabilitation after treatment, achieving the full well-being of the individual and improving the quality of life.<sup>1</sup> For this reason, nursing care should be applied and evaluated in a planned and systematic manner.

The Nursing Process (NP), nursing practice healthy/ill assess the needs of the individual, highlighting the personalized care in terms of maintenance, applications, evidence-based process and systematically performed. NP includes identifying the problems of an individual or family, deciding on a nursing diagnosis based on these problems, planning diagnostic nursing initiatives, implementing and evaluating initiatives.<sup>2</sup> These stages are quite important in solving clinical problems.

Diseases that occur in an individual are considered as clinical problems that negatively affect the patient's life activities and reduce the quality of life.<sup>3</sup> One of the important roles of nursing is to solve problems by using appropriate techniques for clinical problems.<sup>4-6</sup> In particular, chronic diseases require long-term treatment and care, as well as systematic monitoring of the individual.<sup>7</sup> Among chronic diseases, respiratory system diseases are the third place cause of death in our country and in the World<sup>8,9</sup>; such as shortness of breath, cough, pain, fatigue are serious diseases that cause important symptoms.<sup>10,11</sup> Breathing provides a healthy functioning of all body functions with good oxygenation, while its insufficiency can lead to the appearance of other system diseases over time. For this reason, it is necessary to plan and carry out appropriate care by identifying the symptoms that occur / may occur in diseases of the respiratory system.

Clinical problems that vital organs such as the respiratory system will cause should be evaluated in a certain order and treatment and care should be planned according to the urgency. However, the intensive working conditions of nurses and the continuous increase in the number of patients may cause the maintenance activities to not be carried out in a timely and appropriate manner. Thanks to NP, it is possible to provide evidence-based practices with a regular and systematic patient approach. In the studies conducted, it has been seen that nursing care provided with NP improves patient outcomes.<sup>12-16</sup> For this reason, NP should be one of the approaches that should be considered first, especially in the evaluation of important diseases such as respiratory system and in the presentation of care practices.

**Keywords:** Nursing process, Nursing care, Respiratory system

## SPORCU VE SEDANTER ÇOCUKLARIN FİZİKSEL UYGUNLUK VE DİKKAT DÜZEYLERİNİN KARŞILAŞTIRILMASI

### COMPARISON OF PHYSICAL FITNESS AND ATTENTION LEVELS OF ATHLETES AND SEDENTARY CHILDREN

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#### ÖZET

**Amaç:** Fiziksel uygunluk aşırı yorgunluk olmaksızın günlük görevleri canlı ve dikkatli bir şekilde yapabilme yeteneğidir. Dikkat davranışsal olarak alakasız olan uyarıların yanı sıra alakalı uyarıların, cevapları, anıları veya düşünceleri seçme konusunda zihinsel yetenektir. Bu çalışmanın amacı sporcu ve sedanter çocukların fiziksel uygunluk düzeylerini ve dikkat düzeylerini karşılaştırmaktır.

**Yöntem:** Çalışmaya 7-12 yaş aralığında 55 sporcu (25 erkek; 30 kız) ve 55 sedanter (26 erkek; 29 kız) olmak üzere toplam 110 çocuk dahil edildi. Çocukların fiziksel uygunluk düzeyleri Eurofit Test Bataryası (ETB) ile dikkat düzeyleri ise Bourdon Dikkat Testi (BDT) ile değerlendirildi. ETB; kardiyovasküler dayanıklılık, kassal kuvvet, kassal dayanıklılık, sürat, esneklik, denge, vücut kompozisyonu, reaksiyon zamanı ve çevikliği değerlendiren testlerden oluşmaktadır. Gruplar arası karşılaştırmada bağımsız örneklem t testi kullanıldı.

**Bulgular:** Sporcu çocukların yaş ortalaması  $11.63 \pm 0.77$  ve sedanter çocukların yaş ortalaması  $11.80 \pm 0.67$  bulundu. Fiziksel uygunluk parametrelerinden Flamingo Denge Testi, Disklere Dokunma Testi, Otur-Eriş Esneklik Testi, Durarak Uzun Atlama Testi, El Kavrama Kas Kuvveti Testi, Mekik Testi, Bükülü Kolla Asılma Testi ve 10\*5 metre Mekik Koşu Testinde sporcu çocuklar lehine anlamlı bir farklılık bulundu ( $p < 0,05$ ). Ayrıca sporcu çocukların dikkat düzeyleri ile sedanter çocukların dikkat düzeyleri arasında anlamlı farklılık bulundu ( $p < 0,05$ ).

**Sonuç:** Çalışma sonucunda sporcu çocukların; sedanter çocuklara göre fiziksel uygunluk düzeylerinin ve dikkat düzeylerinin daha iyi olduğu tespit edilmiştir. Dikkat düzeyi geliştirilmek istenen çocuklara sportif faaliyetlerin de eklenmesi gerektiğini düşünmekteyiz.

**Anahtar kelimeler:** fiziksel uygunluk, sporcu, sedanter, çocuk

#### ABSTRACT

**Purpose:** Physical fitness is the ability to perform daily tasks vigor and attention without excessive fatigue. Attention is the mental ability to select relevant stimuli, responses, memories or thoughts as well as behaviorally irrelevant stimuli. The aim of this study is to compare the physical fitness levels and attention levels of athletes and sedentary children.

**Methods:** A total of 110 children, 55 athletes (25 boys; 30 girls) and 55 sedentary (26 boys; 29 girls) between the ages of 7-12, were included in the study. Children's physical fitness levels were evaluated with the Eurofit Test Battery (ETB), and their attention levels were evaluated with the Bourdon Attention Test (BAT). ETB; it consists of tests evaluating cardiovascular endurance, muscular strength, muscular endurance, speed,



flexibility, balance, body composition, reaction time and agility. Independent sample t-test was used for comparison between groups.

**Results:** The mean age of the athletes children was  $11.63 \pm 0.77$  and the mean age of the sedentary children was  $11.80 \pm 0.67$ . Among the physical fitness parameters, a significant difference was found in favor of the athlete children in the Flamingo Balance Test, the Plate Tapping Test, the Sit and Reach Flexibility Test, the Standing Long Jump Test, the Hand Grip Muscle Strength Test, the Shuttle Test, the Twisted Watch Hanging Test and the 10\*5 meter Shuttle Running Test ( $p < 0,05$ ). In addition, a significant difference was found between the attention levels of athletes children and the attention levels of sedentary children ( $p < 0,05$ ).

**Conclusion:** As a result of the study, athletes children; it has been determined that physical fitness levels and attention levels are better than sedentary children. We think that sports activities should be added to children whose attention level is desired to be improved.

**Keywords:** physical fitness, athlete, sedentary, child

## KADIN OFİS ÇALIŞANLARINDA KAS İSKELET SİSTEMİ PROBLEMLERİNİN İŞ PERFORMANSI İLE İLİŞKİSİNİN İNCELENMESİ

INVESTIGATION OF THE RELATIONSHIP BETWEEN MUSCULOSKELETAL SYSTEM PROBLEMS AND JOB PERFORMANCE IN FEMALE OFFICE WORKERS

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### ÖZET

**Amaç:** Ofis ortamında çalışan kadın bireylerin kas iskelet sistemi problemlerinin; iş performansına etkilerini analiz ederek çalışma koşullarına yönelik yapılacak uygulamalar için öncülük etmektir.

**Gereç ve yöntem:** Çalışmaya Süleyman Demirel Üniversitesi'nde çalışmakta olan ve herhangi bir katılım engeli olmayan 115 kadın idari personel dahil edildi. Katılımcıların bireysel özellikleri kaydedildi. Farklı vücut bölgeleri için kas iskelet sistemi değerlendirmesinde Cornell Kas İskelet Rahatsızlık Anketi ve iş performansı değerlendirmesinde Çalışma Rolü İşlevselliği Anketi (ÇRİA) kullanılmıştır.

**Bulgular:** Ofis çalışanlarının en fazla boyun (%69,9), sırt (%65,2) ve bel (%52,2) bölgesinde kas iskelet sistemi problemleri bulunmaktadır. Çalışanların özellikle alt ekstremitte, kalça ve spinal bölge kas iskelet sistemi problemleri ile iş performansı arasında negatif yönde korelasyon olduğu gözlenmiştir ( $p<0,05$ ). Bel ve kalça ağrı puanları ile işe devam durumu arasında da negatif yönde korelasyon gözlenmiştir ( $p<0,05$ ). En fazla iki saatlik çalışma sonrası ara verenler ile 2 saat üzerinde çalıştıktan sonra dinlenme arası veren çalışanlar arasında ÇRİA çalışma programı, ÇRİA verim ve ÇRİA toplam puanları arasında anlamlı farklılık bulunmuştur ( $p<0,05$ ).

**Sonuç:** Ofis çalışanlarının yaşadıkları kas iskelet sistemi problemleri çalışma koşulları, iş ergonomisi ve fiziksel uygunluk ile ilişkilidir. Çalışan verimini artırmak ve maddi ve manevi kaynaklardan tasarruf edebilmek adına çalışma koşulları planlanırken personel sağlığı ve iş ergonomisi temel alınmalı hem kişi bazında hem de işe bağlı değişiklikler yapılmalıdır.

**Anahtar kelimeler:** Ofis Çalışanı; Ergonomi; Kas-İskelet Sistemi; İş Performansı; Fiziksel Uygunluk.

### ABSTRACT

**Purpose:** Musculoskeletal problems of female individuals working in the office environment; to pioneer applications for work conditions by analyzing their effects on job performance.

**Materials and methods:** 115 female administrative staff working at Suleyman Demirel University and without any barriers to participation were included in the study. The individual characteristics of the participants were recorded. Cornell Musculoskeletal System Questionnaire in the evaluation of the musculoskeletal system for different body regions, Work Role Functionality Questionnaire (WRFQ) in the job performance evaluation, were used.

**Results:** Office workers had the most problems with the musculoskeletal system in the neck (%69.9), back (%65.2) and waist (%52.2) regions. It was observed that there was a negative correlation between the lower extremity, hip, and spinal region musculoskeletal problems of the employees and their work performance ( $p < 0.05$ ). A negative correlation was observed waist and hip pain scores and attendance ( $p < 0.05$ ). A significant difference was found between WRFQ work program, WRFQ efficiency and WRFQ total scores between those who took a break after two hours of study and those who took a break after working over 2 hours ( $p < 0.05$ ).



**Conclusion:** Musculoskeletal system problems experienced by Office workers are related to working conditions, work ergonomics and physical fitness. In order to increase employee efficiency and save material and moral resources, personnel health and work ergonomics should be based on when planning working conditions, and changes should be made both on a personal and business basis.

**Keywords:** Office Worker; Ergonomics; Musculoskeletal System; Job Performance; Physical Fitness

**SON 10 YILDA FİZİK TEDAVİ SERVİSİNDE YATMIŞ PARAPLEJİLİ HASTALARIN TEMİZ ARALIKLI KATETER UYGULAMA PREVELANSI**

PREVELANCE OF APPLICATION OF CLEAN INTERMITTENT CATHETERIZATION OF PATIENTS WITH PARAPLEGIA IN PHYSICAL THERAPY SERVICE IN THE LAST 10 YEARS

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**ÖZET**

**Amaç:** Tanımlayıcı-retrospektif nitelikteki bu araştırma, son 10 yılda fizik tedavi servisinde yatmış paraplejili hastaların Temiz Aralıklı Kateterizasyon (TAK) uygulama prevalansını belirlemek amacı ile yapılmıştır.

**Gereç ve Yöntem:** Araştırma, Nevşehir il merkezine bağlı 170 yatak kapasiteli Kozaklı Fizik Tedavi ve Rehabilitasyon Hastanesi'nde gerçekleştirilmiştir. Verilerin erişimi Hastane Bilgi Yönetim Sistemi üzerinden sağlanmıştır. Araştırmaya başlanmadan önce Kırşehir Ahi Evran Üniversitesi Tıp Fakültesi Klinik Araştırmalar Etik Kurulu'ndan etik kurul onayı ve çalışmanın yapıldığı yerden kurum izni alınmıştır. Adı geçen hastane 2011 yılında kurulmuştur. Veriler hastanenin kurulduğu tarihten günümüze kadar toplanmıştır. Veriler, bilgisayar ortamında sayı, yüzde, ortalama, standart sapma analizleri ile değerlendirilmiştir.

**Bulgular:** Adı geçen hastanenin fizik tedavi servisinde 2011-2021 yılları arasında 2.856 parapleji tanılı hasta yattığı saptanmıştır. Bu hastalardan 1.790 tanesine TAK uygulandığı belirlenmiştir. TAK uygulanan parapleji tanılı hasta prevalansının %62.6 olduğu görülmüştür. 2011-2021 yılları arasında fizik tedavi servisinde TAK uygulanan paraplejili hastaların yaş ortalamasının  $42.2 \pm 12.9$  (min=9, max=89), %28.2'sinin kadın, %71.8'inin de erkek bireyler olduğu saptanmıştır. 2011-2016 arası ilk beş yıllık dönemde %53.1 düzeyinde, 2017-2021 yıllık ikinci beş yıllık dönemde de %46.9 düzeyinde hastaya TAK uygulandığı saptanmıştır. TAK uygulamasının en fazla 2012, 2018, 2019 ve 2013 yıllarında, en az ise 2020 yılında gerçekleştiği belirlenmiştir.

**Sonuç:** Elde edilen veriler sonucunda parapleji tanılı, TAK uygulayan hasta prevalansının (%62.6) önemli seviyede olduğu saptanmıştır. Parapleji hastalarında TAK uygulamasına ilişkin bilgi düzeylerinin belirlenmesi ve sonuca yönelik eğitimlerin planlanması önerilebilir.

**Anahtar kelimeler:** Fizik Tedavi Bölümü, Temiz Aralıklı Kateterizasyon, Parapleji, Hemşirelik, Prevalans.

**ABSTRACT**

**Objective:** This descriptive-retrospective study was conducted to determine the prevalence of Clean Intermittent Catheterization (CIC) in patients with paraplegia hospitalized in the physical therapy service in the last 10 years.

**Materials and Methods:** The research was carried out in Kozaklı Physical Therapy and Rehabilitation Hospital with 170 beds in Nevşehir city center. Access to the data is provided through the Hospital Information Management System. Before starting the research, ethics committee approval was obtained from the Clinical Research Ethics Committee of Kırşehir Ahi Evran University Faculty of Medicine and institutional permission was obtained from the place where the study was conducted. The aforementioned hospital was established in 2011. Data were collected from the date of establishment of the hospital to the present. The data were evaluated by number, percentage, mean and standard deviation analyzes in computer environment.

**Results:** It was determined that 2,856 patients with paraplegia were hospitalized in the physical therapy service of the aforementioned hospital between 2011 and 2021. It was determined that 1,790 of these patients were





applied CIC. The prevalence of patients diagnosed with paraplegia who underwent CIC was 62.6%. It was determined that the mean age of the patients with paraplegia who underwent CIC in the physical therapy service between 2011 and 2021 was  $42.2 \pm 12.9$  (min=9, max=89), 28.2% were female and 71.8% were male. It was determined that CIC was applied to the patients at a level of 53.1% in the first five-year period between 2011 and 2016, and at a level of 46.9% in the second five-year period of 2017-2021. It has been determined that the CIC implementation was carried out at most in 2012, 2018, 2019 and 2013, and at least in 2020.

**Conclusion:** As a result of the data obtained, it was determined that the prevalence of patients with paraplegia who applied CIC was at a significant level (62.6%). It may be recommended to determine the knowledge level of CIC in patients with paraplegia and to plan outcome-oriented trainings.

**Keywords:** Physical Therapy Department, Intermittent Urethral Catheterization, Paraplegia, Nursing, Prevalence.

**TEMPOROMANDİBULAR EKLEM RAHATSIZLIĞI OLAN HASTALARDA SEMPTOMLARIN  
ŞİDDETİ, AĞRI, YAŞAM KALİTESİ VE PSİKOLOJİK DURUM ARASINDAKİ İLİŞKİNİN  
İNCELENMESİ**

INVESTIGATION OF THE RELATIONSHIP BETWEEN SEVERITY OF SYMPTOMS, PAIN,  
QUALITY OF LIFE, AND PSYCHOLOGICAL STATUS IN PATIENTS WITH  
TEMPOROMANDIBULAR JOINT DISORDER

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**ÖZET**

Temporomandibular Eklem Rahatsızlığı (TMER), çiğneme kasları, temporomandibular eklem ve ilişkili yapıları içeren bir dizi nöromusküler ve kas-iskelet sistemi bozukluğu olarak tanımlanır. En sık görülen belirti ve bulgular; eklemde veya çiğneme kaslarında ağrı, çene eklem hareket açıklığında kısıtlılık, eklem sesi ve baş ağrısıdır. TMER; hastaların konuşma, gülme, çiğneme ve sosyal katılım gibi günlük yaşamlarını etkileyerek yaşam kalitelerini azaltır. Bununla birlikte, TMER olan hastalarda şikayet süresi ve semptomların şiddeti ile ağrı, psikolojik durum ve yaşam kalitesi arasındaki ilişkileri inceleyen çalışma sayısı sınırlıdır ve sonuçlar da tartışmalıdır. Literatür, bu konuda ileri çalışmaların yapılmasını ve bu parametreler arasındaki ilişkilerin incelenerek daha kesin sonuçların ortaya koyulmasını önermektedir. Bu yüzden bu çalışmanın amacı, TMER’li hastalarda şikayet süresi, semptomların şiddeti, ağrı şiddeti, yaşam kalitesi ve psikolojik durum arasındaki ilişkilerin incelenmesiydi. Çalışmaya, Temporomandibular Eklem Rahatsızlığı Araştırma Teşhis Kriterlerine göre TMER teşhisi koyulmuş yaş ortalaması 34,72±2,16 olan 38 hasta (28 kadın ve 10 erkek) dahil edildi. Ağrı şiddeti (görsel analog skala ile), semptomların şiddeti (Fonseca Anamnestik İndeksi (FAİ) ile), yaşam kalitesi (SF-36 Yaşam Kalitesi Değerlendirme Anketi (SF-36) ile) ve psikolojik durum (Hastane Anksiyete ve Depresyon Skalası (HADS) ile) değerlendirildi. Şikayet süresi yıl olarak kaydedildi. Elde edilen verilerin normal dağıldığı görüldü ve parametreler arasındaki ilişkiler Pearson Korelasyon Analizi ile değerlendirildi. Şikayet süresi ile semptomların şiddeti, ağrı şiddeti, HADS puanları arasında pozitif yönde korelasyonlar tespit edilirken, şikayet süresi ile SF-36 puanları ile negatif yönde yüksek korelasyonlar tespit edildi ( $p<0,05$ ). Semptomların şiddeti ile ağrı ve HADS puanları arasında pozitif yönde korelasyonlar tespit edilirken, semptomların şiddeti ile SF-36 puanları arasında negatif yönde yüksek korelasyonlar tespit edildi ( $p<0,05$ ). Ağrı şiddeti ile HADS puanları ve SF-36 puanları arasında sırayla pozitif ve negatif yönlerde yüksek korelasyonlar tespit edildi ( $p<0,05$ ). Elde ettiğimiz bulgulara göre TMER’li hastalarda şikayet süresindeki ve semptomların şiddetindeki artış, bireylerin psikolojik durumunu olumsuz etkilemekte ve yaşam kalitelerinin azalmasına neden olmaktadır. Ayrıca ağrının TMER’li hastalarda psikolojik durum ve yaşam kalitesi üzerinde olumsuz etkilere neden olduğu tespit edilmiştir. Yazarlar, klinikte, TMER’li hastaların değerlendirilmesinde ve tedavi planlarının belirlenmesinde bu parametrelerin göz önünde bulundurulmasını önermektedir.

**Anahtar kelimeler:** Temporomandibular Eklem Rahatsızlığı, ağrı, psikolojik durum, yaşam kalitesi, şikayet süresi.

## ABSTRACT

Temporomandibular Joint Disorder (TMJD) is defined as a set of neuromuscular and musculoskeletal disorders involving the masticatory muscles, temporomandibular joint, and related structures. The most common signs and symptoms are; pain in the joint or chewing muscles, limitation in the range of motion of the jaw, joint noise, and headache. The TMJD; reduces the quality of life of patients by affecting their daily lives such as talking, laughing, chewing, and social participation. However, the number of studies examining the relationship between duration of complaint and severity of symptoms and pain, psychological status, and quality of life in patients with TMJD is limited and the results are controversial. The literature recommends further studies on this subject and reveals more precise results by examining the relationships between these parameters. Therefore, the aim of this study was to examine the relationships between the duration of complaints, the severity of symptoms, pain severity, quality of life, and psychological status in patients with TMJD. The study included 38 patients (28 women and 10 men) with a mean age of  $34.72 \pm 2.16$  years who were diagnosed with TMJD according to the Research Diagnostic Criteria for Temporomandibular Joint Disorder. Pain severity (with visual analog scale), the severity of symptoms (with Fonseca Anamnestic Index (FAI), quality of life (with SF-36 Quality of Life Assessment Questionnaire (SF-36)), and psychological status (Hospital Anxiety and Depression Scale (HADS)) with) were evaluated. The duration of the complaint was recorded in years. It was seen that the obtained data were normally distributed and the relationships between the parameters were evaluated with Pearson Correlation Analysis. While there were positive correlations between the duration of the complaint and the severity of the symptoms, the severity of the pain, and the HADS scores, there were high negative correlations between the duration of the complaint and the SF-36 scores ( $p < 0.05$ ). While positive correlations were found between the severity of symptoms and pain and HADS scores, high negative correlations were found between the severity of symptoms and SF-36 scores ( $p < 0.05$ ). High correlations were found between pain severity and HADS scores and SF-36 scores, in positive and negative directions, respectively ( $p < 0.05$ ). According to our findings, the increase in the duration of complaints and the severity of symptoms in patients with TMJD negatively affects the psychological state of individuals and causes a decrease in their quality of life. In addition, it has been determined that pain causes negative effects on the psychological status and quality of life in patients with TMJD. The authors recommend considering these parameters in the clinic when evaluating patients with TMJD and determining treatment plans.

**Keywords:** Temporomandibular Joint Disorder, pain, psychological status, quality of life, duration of complaint.

**ERGOTERAPİ TEMELLİ BİLİŞSEL REHABİLİTASYON MÜDAHALESİ MULTIPL SKLEROZLU BİREYLERİN BİLİŞSEL BECERİLERİNİ VE OKUPASYONEL PERFORMANSLARINI NASIL ETKİLİYOR?**

HOW DOES OCCUPATIONAL THERAPY-BASED COGNITIVE REHABILITATION INTERVENTION AFFECT THE COGNITIVE SKILLS AND OCCUPATIONAL PERFORMANCE OF INDIVIDUALS WITH MULTIPLE SCLEROSIS?

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**ÖZET**

Multipl Skleroz (MS), merkezi sinir sisteminin inflamasyonu ve progresif demiyelinizasyonu ile karakterize olan kronik, otoimmün ve nörodejeneratif bir hastalıktır. Miyelin kılıf hasarı ile sinir iletimi kesintiye uğramakta beraber lezyon yerleşim yerine göre bireylerde motor, duysal, görsel, psikolojik, ağrı, otonomik, bilişsel gibi farklı klinik problemler ortaya çıkmaktadır. Hastalığın seyrine bağlı olarak bireylerin var olan bilişsel becerileri farklı düzeylerde etkilenim göstermektedir. Bilişsel becerilerinin etkilenmesiyle birlikte bireyler günlük yaşamda okupasyonel performans zorlukları yaşamaktadır. Bilişsel becerilerdeki eksiklikler nedeniyle bireylerin yaşamlarındaki olumsuz etkileri azaltmak için rehabilitasyon yaklaşımlarının kullanılması gerekmektedir. Ergoterapi bireye özgü bilişsel rehabilitasyon yaklaşımları olarak fonksiyonel ve iyileştirici müdahale stratejilerini içinde barındırır. Literatüre bakıldığında bilişsel rehabilitasyon müdahalesi sonrası bireylerin okupasyonel performanslarını inceleyen az sayıda çalışma vardır. Bu çalışmada Multipl Skleroz'lu (MS) bireylerde Ergoterapi temelli bilişsel rehabilitasyon müdahalesinin bireylerin bilişsel fonksiyonlar ve okupasyonel performans düzeylerine etkisi incelenmiştir. Çalışmaya MS tanısı almış olan, 18-65 yaş arası, Standardize Mini Mental Test'ten 24 puan ve altını alan, Genişletilmiş Özürlülük Durum Skalası'na (EDSS) göre 2-6,5 puan arası olan, hastalığının akut atak döneminde olmayan toplam 10 kişi dahil edilmiştir. Katılımcılara 3 ay boyunca haftada 3 defa ve her seans 45 dakikadan oluşacak şekilde oryantasyon, görsel algı, uzaysal algı, motor praxis, görsel motor organizasyon ve düşünme becerilerini içeren Ergoterapi temelli bilişsel rehabilitasyon müdahalesi uygulanmıştır. Bireylerin müdahale öncesi ve sonrasında bilişsel fonksiyonları değerlendirmek için Loewenstein Ergoterapi ve Kognitif Değerlendirme Skalası (LOTCA); okupasyonel performans düzeylerini değerlendirmek için Kanada Aktivite Performans Ölçümü (KAPÖ) kullanılmıştır. Bireye özgü müdahale programı oluşturulurken bilişsel problemler nedeniyle okupasyonel performans problemi yaşadığı aktiviteler ile müdahale programının örtüşmesi göz önünde bulundurulmuştur. Bilişsel rehabilitasyon müdahalesi öncesi ve sonrası bireylerin LOTCA ve KAPÖ memnuniyet puanlarında istatistiksel olarak anlamlı iyileşmeler görülmüştür ( $p<0,05$ ). Sonuç olarak MS'li bireylerde Ergoterapi temelli bilişsel rehabilitasyon müdahalesinin bireylerin bilişsel becerilerini geliştirmenin yanı sıra günlük yaşamdaki okupasyonel performans memnuniyet düzeylerine olumlu bir etkisinin olduğu görülmüştür. Bu doğrultuda bilişsel rehabilitasyon müdahalesinin etkinliği için daha fazla örneklem sayısı, randomize kontrollü ve uzun süreli takip çalışmaları gereklidir.

**Anahtar kelimeler:** Multipl Skleroz; Bilişsel rehabilitasyon; Ergoterapi.

**ABSTRACT**

Multiple Sclerosis (MS) is a chronic, autoimmune and neurodegenerative disease characterized by inflammation and progressive demyelization of the central nervous system. With myelin sheath damage, nerve conduction is interrupted, and different clinical problems such as motor, sensory, visual, psychological, pain,

autonomic and cognitive problems occur in individuals depending on the location of the lesion. Depending on the course of the disease, the existing cognitive skills of individuals are affected at different levels. As their cognitive skills are affected, individuals have occupational performance difficulties in daily life. Rehabilitation approaches should be used to reduce the negative effects on individuals' lives due to deficiencies in cognitive skills. Occupational therapy includes functional and remedial intervention strategies as cognitive rehabilitation approaches specific to the individual. Looking at the literature, there are few studies examining the occupational performance of individuals after cognitive rehabilitation intervention. In this study, the effect of occupational therapy-based cognitive rehabilitation intervention on individuals with Multiple Sclerosis (MS) on cognitive functions and occupational performance levels were investigated. A total of 10 patients who diagnosed with MS, aged 18-65, scored 24 or less on the Standardized Mini Mental Test, scored between 2 and 6.5 according to the Extended Disability Status Scale (EDSS), were not in the acute attack phase of their disease were included. Occupational therapy-based cognitive rehabilitation intervention, including orientation, visual perception, spatial perception, motor praxis, visual motor organization and thinking skills, was applied to the participants 3 times a week for 3 months and each session consisted of 45 minutes. Loewenstein Occupational Therapy and Cognitive Assessment (LOTCA) to evaluate cognitive functions of individuals before and after the intervention; Canadian Occupational Performance Measurement (COPM) was used to assess occupational performance levels. While creating the intervention program specific to the individual, the overlap of the intervention program with the activities in which he had occupational performance problems due to cognitive problems was taken into consideration. Statistically significant improvements were observed in the LOTCA and COPM satisfaction scores of individuals before and after the cognitive rehabilitation intervention ( $p < 0.05$ ). As a result, it has been observed that occupational therapy-based cognitive rehabilitation intervention in individuals with MS has a positive effect on satisfaction levels of occupational performance in daily life, as well as improving the cognitive skills of individuals. Accordingly, larger sample size, randomized controlled and long-term follow-up studies are required for the effectiveness of cognitive rehabilitation intervention.

**Keywords:** Multiple Sclerosis; Cognitive rehabilitation; Occupational therapy.

## **MULTİPL SKLEROZLU BİREYLERDE DUYUSAL İŞLEMLEME BECERİLERİ İLE OKUPASYONEL PERFORMANSLARI ARASINDAKİ İLİŞKİ**

### **RELATIONSHIPS BETWEEN SENSORY PROCESSING SKILLS AND OCCUPATIONAL PERFORMANCE OF PEOPLE WITH MULTIPLE SCLEROSIS**

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#### **ÖZET**

Multipl skleroz (MS), merkezi sinir sisteminin inflamasyonu ve progresif demiyelinizasyonu sonucu ortaya çıkan otoimmün ve nörodejeneratif bir hastalıktır. MS'li bireylerde ortaya çıkan lezyonların genellikle beyin sapı ve serebellar bölgede yer alması nedeniyle bireylerin sıkça duyuşal işleme becerilerinde zorluklar görülmektedir. Buna bağılı olarak MS'li bireylerin genellikle görsel, somatosensoryel ve vestibüler sistemlerindeki duyuşal işleme problemleri bireylerin günlük yaşamdaki okupasyonel performanslarını önemli ölçüde etkilemektedir. Duyusal işleme süreci, sinir sistemindeki duyuşal bilgilerin kayıt ve modülasyonunu içerir. Duyusal işleme sürecinde görülen problemler, duyuşal uyarana verilen yanıtların yoğunluğunu ayarlayamamaya neden olmaktadır. Bu problemler sonucunda bireyler duyuşal uyarana karşı az ya da aşırı duyarlılık cevabı göstermektedir. Daha önce MS'li bireylerin duyuşal işleme problemleri üzerine laboratuvar ortamlarında çalışılmış olup belirli duyuşal modalitelere odaklanılmıştır. Çeşitli duyuşal modalitelere ve duyuşal işleme problemlerinin MS'li bireylerin günlük yaşamda okupasyonel performanslarını ne derecede etkilediğine dair ayrıntılı araştırmalara ihtiyaç vardır. Bu doğrultuda çalışmada MS'li bireylerde duyuşal işleme becerileri ve okupasyonel performansları arasındaki ilişki incelenmiştir. Çalışmaya MS tanısı almış 18-65 yaş arası, Genişletilmiş Özürlülük Durum Skalası'na (EDSS) göre 2-6,5 puan arası olan ve hastalığının akut atak döneminde olmayan toplam 60 birey dahil edilmiştir. Bireylerin duyuşal işleme becerilerini değerlendirmek için Adolesan/Yetişkin Duyu Profili; okupasyonel performans düzeylerini belirlemek için Kanada Aktivite Performans Ölçümü (KAPÖ) ve bireylerin hastalık şiddetini belirlemek için EDSS kullanılmıştır. Bireylerin duyuşal işleme becerilerinden tat alma/koklama işlemi, hareketli işlem, görsel işlem ve aktivite seviyesi ile okupasyonel performans ve memnuniyet puanlarında istatistiksel olarak anlamlı bir ilişki bulunmuştur ( $p<0,05$ ). Aynı zamanda hastalık şiddeti ile duyuşal işleme becerileri arasında istatistiksel olarak ileri derece anlamlı ilişki bulunmuştur ( $p<0,01$ ). Bu doğrultuda MS'li bireylerin hastalık şiddetine bağılı olarak duyuşal işleme becerilerindeki problemler günlük yaşamda sıkça karşılaşılmamasıyla birlikte okupasyonel performanslarını ve memnuniyet düzeylerini oldukça etkilemektedir. MS'li bireylerin günlük yaşamda okupasyonlarını gerçekleştirirken duyuşal işleme becerileri terapistler tarafından göz önünde bulundurulması ve ilerideki çalışmalarda duyuşal işleme becerilerini iyileştirmeye yönelik birey merkezli müdahale planı oluşturulması gerekmektedir.

**Anahtar kelimeler:** Multipl Skleroz; Duyusal işleme; Ergoterapi.

#### **ABSTRACT**

Multiple sclerosis (MS) is an autoimmune and neurodegenerative disease resulting from inflammation and progressive demyelization of the central nervous system. Since the lesions that occur in individuals with MS are usually located in the brain stem and cerebellar region, difficulties are frequently encountered in the sensory processing skills of individuals. Accordingly, sensory processing problems in the visual, somatosensory and vestibular systems of individuals with MS significantly affect the occupational performance of individuals in daily life. The sensory processing process involves the recording and modulation of sensory information in the

nervous system. Problems in the sensory processing process cause the inability to adjust the intensity of the responses given to the sensory stimulus. As a result of these problems, individuals show a hypo or hypersensitivity response to sensory stimuli. The sensory processing problems of individuals with MS have been studied in laboratory settings, with a focus on specific sensory modalities. There is a need for detailed research on the extent to which sensory processing problems and various sensory modalities affect the occupational performance of individuals with MS in daily life. Accordingly, in this study, relationships between sensory processing skills and occupational performance of people with MS were examined. A total of 60 individuals diagnosed with MS, aged between 18 and 65, with scores between 2 and 6.5 according to the Expanded Disability Status Scale (EDSS), and who were not in the acute attack phase of their disease were included in the study. Adolescent/Adult Sensory Profile to assess the sensory processing skills of individuals; Canadian Occupational Performance Measurement (COPM) was used to determine the occupational performance levels and EDSS was used to determine the severity of the disease of the individuals. A statistically significant relationships were found between the sensory processing skills of individuals, such as taste/smell process, motion processing, visual processing and activity level, and occupational performance and satisfaction scores ( $p<0.05$ ). At the same time, a highly significant correlation was found between disease severity and sensory processing skills ( $p<0.01$ ). In this respect, problems in sensory processing skills of individuals with MS, depending on the severity of the disease, are frequently encountered in daily life, and they affect their occupational performance and satisfaction levels considerably. While performing occupations of individuals with MS in daily life, therapists should consider their sensory processing skills and create a person-centered intervention plan to improve their sensory processing skills in future studies.

**Keywords:** Multiple Sclerosis; Sensory processing; Occupational therapy.

## SEREBRAL PALSİLİ HASTALARA UYGULANAN FEMUR DEROTASYON OSTEOTOMİSİ SONUÇLARININ KİNEMATİK AÇIDAN DEĞERLENDİRİLMESİ

KINEMATIC EVALUATION OF THE RESULTS OF FEMORAL DEROTATION OSTEOTOMY  
APPLIED TO PATIENTS WITH CEREBRAL PALSY

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### ÖZET

Serebral palsi(SP), çocukluk çağının en sık görülen nöromusküler hastalıkları arasındadır. SP'de içe basmanın en yaygın nedenlerinden biri artmış femoral anteversiyondur. SP'de artmış femoral anteversiyon proksimal ve distal femoral derotasyon osteotomileriyle tedavi edilir.

Çalışmamızda 2003-2016 yılları arasında İstanbul Tıp Fakültesi Yürüme Analizi Laboratuvarı verileri ile retrospektif olarak yapıldı. Cerrahi öncesi ve sonrası bilgisayarlı yürüme analizi yapılmış, pediatrik yaş grubunda, 19 proksimal derotasyon osteotomisi hastası (32 segment) ve 10 distal femoral derotasyon osteotomisi hastası (17 segment) çalışmamızda mevcuttu. Bu hastaları proksimal ve distal derotasyon osteotomisi gruplarına ayırıp klinik bulgular, zaman-mesafe verileri ve diz kinematikindeki değişimler açısından değerlendirdik.

Klinik bulguları değerlendirdiğimizde her iki grupta istatistiksel anlamlı olarak kalça iç rotasyonun arttığı, dış rotasyonunun azaldığı ve toplam kalça rotasyon arkının azaldığını tespit ettik. Her iki grupta da kalça fleksiyon kontraktürünün azaldığını, diz fleksiyon kontraktürü ve popliteal açının değişmediğini gördük. Proksimal osteotomi grubunda abduksiyonu artarken distal grupta değişmediğini gördük. Bunun sebebinin distal gruptaki abduksiyon açısının zaten cerrahi öncesi de yüksek olması nedeniyle olduğunu tespit ettik. Zaman-mesafe verilerinde her iki grupta da yürüme hızı değişmezken dakika adım sayısının azaldığını ve adım mesafesinin arttığını tespit ettik. Diz kinematiklerini karşılaştırdığımızda proksimal grupta yürümede maksimum kalça fleksiyonunun ve salınım fazı maksimum diz fleksiyonunun anlamlı olarak azaldığını gördük. (p=0,002) Bu durumun sert diz yürüyüşü gelişmesine katkıda bulunduğunu tespit ettik.

Sonuç olarak derotasyon osteotomileri ve eklenen yumuşak doku girişimleri yumuşak doku kontraktürleri ve deformiteyi azaltarak, adım sayısını azaltıp adım mesafesini uzatarak yürümenin stabilitesini ve enerji tüketimini azaltmaktadır. Proksimal ve distal osteotomiler arasında maksimum diz fleksiyonu ve kalça fleksiyonuna etki dışında fark yoktur.

**Anahtar kelimeler:** serebral palsi, yürüme, femur, osteotomi, kinematik



## **ABSTRACT**

Cerebral palsy (CP) is amongst the most common group neuromuscular diseases of the childhood. Most common reason of intoeing in CP is increased femoral anteversion. Increased femoral anteversion in CP is treated with proximal and distal femoral derotation osteotomies.

Our study was conducted retrospectively using the data of Istanbul Medical Faculty Gait Analysis Laboratory between 2003 and 2016. In the pediatric age group, there were 19 patients who have undergone proximal derotation osteotomy (32 segments) and 10 who have undergone distal femoral derotation osteotomy (17 segments). Both patients groups had their gait analyzed before and after operations. These two groups of patients were that compared according to clinical findings, time distance data and changes in knee kinematics.

Comparison of clinical findings showed statistically significant increase in internal rotation of the hip joint in both groups, decrease in external rotation and 13 decrease in total hip rotation range. Hip flexion contracture decreased in both groups while knee flexion contracture and popliteal angle remained constant. Abduction increased in proximal osteotomy group while stayed the same in the distal osteotomy group. We establish the cause for this result to be the already increased abduction angle in the distal osteotomy group. In gait analysis comparisons, walking speed did not change in both groups while minute-step decreased and step length increased. By comparing knee kinematics we have found that maximum hip flexion and swing phase maximum knee flexion decreased significantly in the proximal osteotomy group ( $p=0.002$ ). We have determined this to contribute to the stiff knee gait development.

Finally, by decreasing soft tissue contactures and deformity, derotation osteotomies and accompanying soft tissue procedures decrease step count and increase step length to increase the stability of gait and decrease energy expenditure. Except their effects on maximum knee flexion and hip flexion, there is no difference between proximal and distal osteotomies.

**Keywords:** cerebral palsy, gate, femur, osteotomy, kinematics

**MAGNEZYUM OKSİT, ÇİNKO OKSİT VE NİKEL OKSİTİN DERİN ÖTEKTİK ÇÖZÜCÜ ORTAMINDA SENTEZİ, KARAKTERİZASYONU VE İLERİ OKSİDASYON PROSESLERİNDE KATALİZÖR OLMA POTANSİYELLERİNİN ARAŞTIRILMASI**

INVESTIGATION OF MAGNESIUM OXIDE, ZINC OXIDE AND NICKEL OXIDE SYNTHESIS, CHARACTERIZATION AND POTENTIALS TO BE A CATALYST IN ADVANCED OXIDATION PROCESSES IN DEEP EUTECTIC SOLVENT MEDIUM

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**ÖZET**

İyonik sıvı analogları olarak da tanımlanan derin ötektik çözücüler (DÖÇ) ilk defa 2003 yılında Abbott tarafından keşfedildi. Çevre dostu, ekonomik ve biyouyumlu bu çözücüler, hidrojen bağı akseptörü ve donörü arası meydana gelen hidrojen bağları ile karakterize edilir. Derin ötektik çözücüler ekstraksiyon, kataliz, elektrokimya gibi farklı alanda kendine uygulama alanı bulmuştur. Özellikle son yıllarda DÖÇ 'lere dayalı mikro ve/veya nanoyapılı malzemelerin sentezi büyük ilgi uyandırmaktadır. Bu çalışmada magnezyum oksit, çinko oksit ve nikel oksit DÖÇ ortamında solvotermal yöntemi takiben gerçekleştirilen kalsinasyon işlemi ile elde edildi. Bu amaçla sırasıyla  $MgCl_2 \cdot 6H_2O$ : Üre (mol oranı 1:2),  $NiCl_2 \cdot 6H_2O$ : Üre (mol oranı 1:2) ve  $ZnCl_2$ : Üre (mol oranı 1:3.5) DÖÇ'leri kullanıldı. Hesaplı mol oranlarında hazırlanan DÖÇ'ler Teflon kaplı paslanmaz otoklava yerleştirildi, ardından 12 saat boyunca 110 °C 'de tutuldu. Elde edilen karışım santrifüjlendi, saf su ve etanol ile yıkanarak kurutuldu. Ardından 500 °C 'de 3 saat kalsine edildi. Elde edilen metal oksitlerin karakterizasyonu Taramalı Elektron Mikroskopu/Enerji Dağılımlı X-Işını Analizi (SEM-EDX) ve X-ışını kırınımı (XRD) ile gerçekleştirildi. Ayrıca metal oksitlerin Alan Emisyonlu Taramalı Elektron Mikroskopu (FESEM) ile yüzey görüntüleri alındı. Metal oksitlerin morfolojisi üzerinde önemli etkileri olan reaksiyon sıcaklığı, süre, pH ve kalsinasyon süresi optimize edildi. Ayrıca DÖÇ ortamında sentezlenen metal oksitlerin UV ve Fenton temelli ileri oksidasyon proseslerinde katalizör olma potansiyelleri araştırıldı. Elde edilen sonuçlar oluşan metal oksitlerin ileri oksidasyon proseslerinde katalizör olma potansiyellerinin söz konusu metal oksitlerin morfolojisi ve partikül büyüklüğü ile yakından ilgili olduğunu gösterdi.

**Anahtar kelimeler:** Derin ötektik çözücü, ileri oksidasyon yöntemleri, metal oksit.

**ABSTRACT**

Deep eutectic solvents (DES), also known as ionic liquid analogs, were first discovered by Abbott in 2003. These solvents, which are environmentally friendly, economic and biocompatible, are characterized by hydrogen bonds between the hydrogen bond acceptor and the donor. Deep eutectic solvents have found several application in different fields such as extraction, catalysis, electrochemistry. Especially in recent years, the synthesis of micro and/or nanostructured materials based on DES has caused great interest. In this study, magnesium oxide, zinc oxide, and nickel oxide were obtained by solvothermal method followed by calcination process in the DES medium. For this purpose,  $MgCl_2 \cdot 6H_2O$ : Urea (mole ratio 1:2),  $NiCl_2 \cdot 6H_2O$ : Urea (mole ratio 1:2) and  $ZnCl_2$ : Urea (mole ratio 1:3.5) were used as DESs respectively. DESs prepared in calculated mole ratios were placed in a Teflon-coated stainless autoclave, then kept at 110 °C for 12 hours. The obtained mixture was centrifuged, washed with distilled water and ethanol and dried. After that precipitate was then calcined at 500 °C for 3 hours. Characterization of metal oxides was performed by Scanning Electron Microscopy/Energy Dispersive X-Ray Analysis (SEM-EDX) and X-ray diffraction (XRD). In addition, surface images of metal oxides were taken with Field Emission Scanning Electron Microscopy (FESEM). The reaction temperature, time, pH and calcination time, which have important effects on the morphology of metal oxides, were optimized. In addition, the potentials of using metal oxides synthesized in DES medium as catalysts in UV and Fenton based advanced oxidation processes were investigated. The results showed that the



potential of the formed metal oxides to be a catalyst in advanced oxidation processes is closely related to the morphology and particle size of these metal oxides.

**Keywords:** Deep eutectic solvent, advanced oxidation methods, metal oxide.

## PARKINSON AND ATRAUMATIC STERNUM FRACTURE: A CASE REPORT

SHORT TITLE: STERNUM FRACTURE IN PARKINSON

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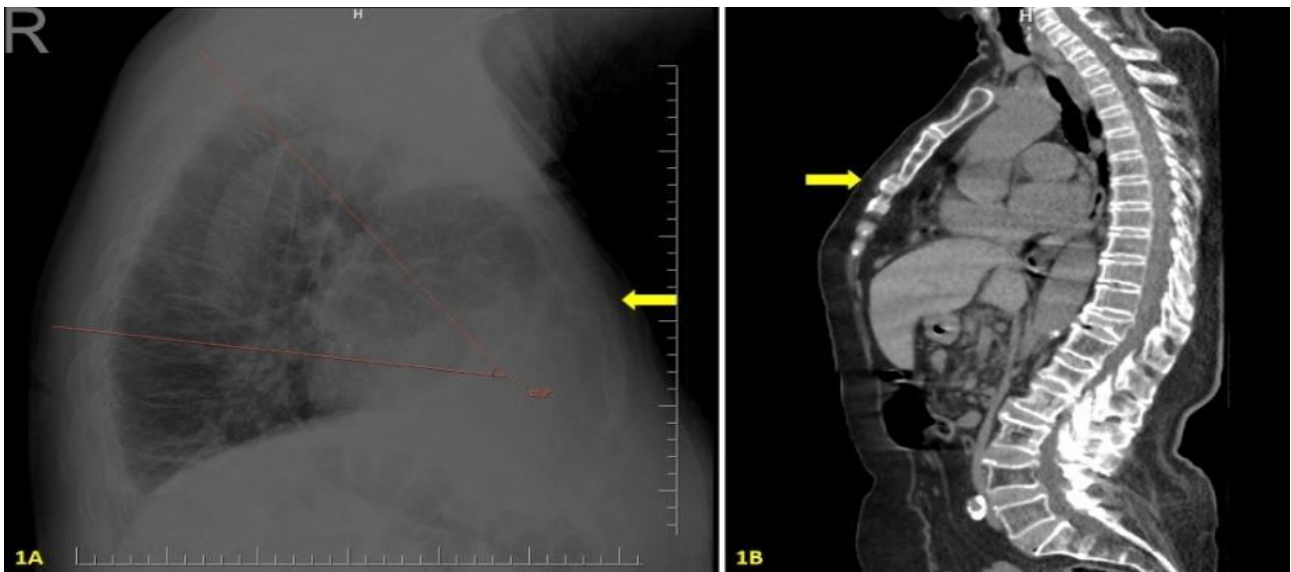
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### ABSTRACT

Although sternum fractures are more common after direct and impact trauma, they are rarely caused by pathological reasons. In the literature, sternum fracture after low-energy indirect trauma has been rarely reported. Although sternum insufficiency fractures are rare, they should be considered in elderly patients, especially in patients with risk factors (patients using long-term corticosteroids due to underlying diseases such as osteoporosis, thoracic kyphosis, obstructive pulmonary disease, systemic lupus erythematosus, rheumatoid arthritis). The incidence of Parkinson's disease increases with the prolongation of life span. Osteopenia and osteoporosis are common in Parkinson's patients and the cause is multifactorial. Thoracic kyphosis is commonly seen in these patients. Although thoracic kyphosis and sternum insufficiency fractures are associated, they are not very common. Insufficiency fractures cause significant morbidity and mortality in the elderly group. Future insufficiency fractures and complications can be prevented, hospital stay times and costs can be reduced with osteoporosis treatment. It should be considered that sternum insufficiency fracture may occur in patients with thoracic kyphosis and osteopenia after urgent cardiac and pulmonary causes are ruled out in patients admitting with anterior chest pain. Our aim in this case is to present a 79-year-old female patient with chest pain after indirect trauma and a sternum fracture on admission to the emergency department. The patient with previously known Parkinson's disease had thoracic kyphosis on direct roentgenograms and a manubrium sternum fracture on computed tomography, and no additional pathology was found (Figure 1A, 1B).

**Keywords:** Sternum insufficiency fracture; Parkinson's disease



**Figure 1:** A) Thoracic kyphosis on direct roentgenograms, B) a manubrium sternum fracture on computed tomography

## TÜRKİYE'DE YENİDOĞAN İŞİTME TARAMALARI NEWBORN HEARING SCREENINGS IN TURKEY

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### ÖZET

Doğumsal işitme kaybı, dünyada en sık görülen doğumsal nörolojik problemidir. Sağlıklı yenidoğanda işitme kaybı oranı tüm dünyada binde 1 ila 3 arasında, ülkemizde binde 2,2 iken yenidoğan yoğun bakım ünitesinde izlenen bebeklerde bu oran % 1-6'dır. Yenidoğana müdahale süreci 1-3-6 metoduyla bilinmektedir. İlk bir ayda tarama, ilk üç ay içerisinde tanı, ilk altı ay içerisinde ise tedavi uygulanmalıdır. Doğuştan gelen işitme kaybının kişi üzerinde yaratacağı olumsuz etkileri azaltmak veya ortadan kaldırmak için erken tanı, cihazlanma ve eğitimin önemi büyüktür. Doğduktan sonra en geç altı ay içinde işitme engeli teşhisi konan ve işitme cihazı uygulanıp özel eğitime alınan bebeklerin konuşma becerisi, normal yaşlılarına benzer seviyede gelişebilmektedir. Ancak cihazlanma ve eğitime başlama yaşına dair bir kaniya ulaşmak için araştırma bulgularının sınırlı olduğu gözlenmektedir. Ülkemizde doğumun olduğu sağlık kuruluşlarındaki (kamu, üniversite, özel) yenidoğan işitme tarama ünitelerinde, eğitilmiş sağlık personeli tarafından, basit, ucuz ve uygulaması kolay testler ile yenidoğan bebeklere işitme taraması yapılmaktadır. İşitme taraması yapılan merkezler doğum yapılan sağlık kuruluşları bünyesinde yer almaktadır. Sağlık Bakanlığı tarafından başlatılan Yenidoğan İşitme Tarama Programı, ülkemizde 2000 yılında pilot uygulamayla başlatılmıştır. 2008 yılında ulusal program olarak uygulanmaya başlamıştır. Türkiye'de tarama programlarının artırılması erken teşhiste önemli rol oynamıştır. Böylece her yıl ortalama 2500 yenidoğana işitme kaybı tanısı konulmakta ve erken rehabilitasyon ve tedavi şansı sağlanmaktadır. Aynı zamanda doğumsal işitme kaybı bebeğin normal konuşma ve lisan gelişiminin yanı sıra kognitif ve davranışsal gelişimini de etkilemektedir. Yenidoğan döneminde kabul edilen iki işitme tarama yöntemi bulunmaktadır: Uyarılmış Otoakustik Emisyonlar (EOAEs) ve İşitsel Beyinsapı Yanıtı (ABR). Tarama emisyonundan geçti/kaldı yanıtına göre ABR testi uygulanmaktadır. İşitme kaybı yaşadığı düşünülen bebekler bir üst merkeze sevk edilmektedir. Bazı bebekler ilaçla tedavi edilebilirken, bazılarının ise işitme cihazı ya da koklear implant denilen biyonomik kulağa ihtiyacı olmaktadır. Bu derlemede, ülkemizdeki yenidoğan işitme taramalarının gelişimi ve önemi üzerinde durulmuştur. Ülkemizin farklı bölgelerinde yapılan işitme tarama sonuçları sunulmaktadır.

**Anahtar kelimeler:** yenidoğan, işitme taraması, işitme kaybı, işitme cihazı, koklear implant

### ABSTRACT

Congenital hearing loss is the most common congenital neurological problem in the world. While the rate of hearing loss in healthy newborns is between 1 and 3 per thousand in the world and 2.2 per thousand in our country, this rate is 1-6% in babies followed in the neonatal intensive care unit. The newborn intervention process is known by the 1-3-6 method. Screening in the first month, diagnosis in the first three months, and treatment in the first six months should be applied. Early diagnosis, equipment and education are of great importance in order to reduce or eliminate the negative effects of congenital hearing loss on the person. Babies who are diagnosed with hearing impairment within six months at the latest after they are born, and who are given special education with hearing aids, can develop speech skills at a level similar to their normal peers. However, it is observed that the research findings are limited in order to reach a conclusion about the age of equipment and starting education. Hearing screening is performed on newborn babies by simple, inexpensive and easy-to-apply tests by trained health personnel in newborn hearing screening units in health institutions (public, university, private) where births take place in our country. Hearing screening centers are within the body of health institutions where births are performed. The Newborn Hearing Screening Program initiated by



the Ministry of Health was launched in our country in 2000 with a pilot application. It started to be implemented as a national program in 2008. Increasing screening programs in Turkey has played an important role in early diagnosis. Thus, an average of 2500 newborns are diagnosed with hearing loss every year, providing the chance for early rehabilitation and treatment. At the same time, congenital hearing loss affects the cognitive and behavioral development of the baby as well as normal speech and language development. There are two accepted hearing screening methods in the neonatal period: Evoked Otoacoustic Emissions (EOAEs) and Auditory Brainstem Response (ABR). ABR test is applied according to the scan emission pass/fail response. Babies who are thought to have hearing loss are referred to a higher center. Some babies can be treated with medication, while others need a bionic ear called a hearing aid or cochlear implant. This review focuses on the development and importance of newborn hearing screenings in our country. Hearing screening results in different regions of our country are presented and statistics on the subject are given.

**Keywords:** newborn, hearing screenings, hearing loss, hearing aid, cochlear implant

**MENOPOZ VE İLGİLİ KANSERLER**  
**MENOPAUSE AND RELATED CANCERS**

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**ÖZET**

Menopoz, bir kadının overleri aktivitesini kaybedip kalıcı olarak yumurta salmayı bıraktığında ortaya çıkar. Normal menopoz sırasında vücudun yumurta üretimi ve progesteron hormonu azalır. Bu da sonunda duran düzensiz adet dönemlerine neden olur. Menopoz semptomları arasında gece terlemeleri, yorgunluk, sıcak basması, vajinal kuruluk, ağrılı cinsel ilişki, cinsel istek azalması, depresyon, saç dökülmesi, osteoporoz, ruh hali değişimleri ve kilo alımı yer alır. Yeni araştırmalara göre 55 yaşından sonra menopoza girmeye başlayan bir kadının meme kanseri ve endometriyal kanser riskini artmaktadır. Bunun nedeni muhtemelen daha fazla östrojene maruz kalmasıdır. Bir kadının adet döngüsü sırasında östrojen, rahim ve meme dokusunu uyarır. Bu nedenle bir kadın ne kadar fazla adet dönemi geçirirse bu dokular o kadar uzun süre östrojene maruz kalır. Menopozu daha geç başlayan kadınlarda, muhtemelen daha fazla yumurtlama geçirdikleri için yumurtalık kanseri riski de artabilir. Yumurtlama, overler yumurta bıraktığında gerçekleşir. Uzun yıllar adet gören kadınlarda çok sayıda yumurtlama olur ve bu da rahim, meme ve yumurtalık kanseri riskini artırır. Bu durum 12 yaşından önce adet gören ve 55 yaşından sonra menopoza giren kadınları içerir. Menopoz semptomlarını yönetmek için hormon replasman tedavisi (HRT) kullanılır. İki ana hormon olan östrojen ve progesteron birleştirilir. Yeni araştırmalar, östrojene ne kadar fazla maruz kalınırsa meme kanseri ve rahim kanseri gelişme şansının o kadar yüksek olduğunu göstermektedir. Araştırmacılar meme kanseri öyküsü olan kadınlara HRT önermemektedir. Bazı araştırmalar, HRT alan kadınların kalp krizi, felç ve kan pıhtılaşması riskinin de yüksek olduğunu göstermiştir. Sonuç olarak menopoz kadın hayatının normal bir evresidir ve yukarıda da bahsettiğimiz gibi tek başına kansere neden olmaz. Kadınlar yaşlandıkça hormonların değişmesi nedeniyle kansere yakalanma riski artar. HRT'yi düşünüyorsanız, doktorunuzla konuşmalı ve semptomlarınızı açıklamalısınız, böylece doktorunuz başka bir doz veya ilaç türü önerecektir.

**Anahtar kelimeler:** menopoz, kanser, risk, östrojen, progesteron

**ABSTRACT**

Menopause occurs when a woman's ovaries lose their activity and permanently stop releasing eggs. During natural menopause, the body's ovaries and progesterone hormone production decreases. This causes irregular menstrual periods that eventually stop. Menopause symptoms includes night sweats, fatigue, hot flashes, vaginal dryness, painful sexual intercourse, decreased sex drive, depression, hair loss, osteoporosis, mood swings and weight gain. According to new researches starting menopause after age 55 increases a woman's risk of breast cancer and endometrial cancer. That's probably because she's been exposed to more estrogen. During a woman's menstrual cycle, estrogen stimulates the uterus and breast tissue. So, the more menstrual periods a woman has, the longer these tissues are exposed to estrogen. Women who start menopause later also may have an increased risk of ovarian cancer, possibly because they have had more ovulations. Ovulation occurs when the ovary releases eggs. Women who have menstruate for many years have many ovulations, which increases the risk of uterine, breast and ovarian cancers. This includes women who have menstruating before age 12 and start menopause after age 55. Hormone replacement therapy (HRT) is used to manage the menopausal symptoms. It's combined from two main hormones estrogen and progesterone. New studies show that the more exposing to estrogen the higher chance of developing breast cancer and endometrial cancer.



Researchers don't recommend HRT for women who have had history in breast cancer. Some studies showed that women who take HRT at a high risk of heart attack, stroke and blood clots too. In conclusion menopause is a normal phase of woman's life and it doesn't cause any cancer by itself as mentioned above. As women age as the risk of developing cancers increases due to hormones' change. If you are considering HRT you should talk to your doctor and explain your symptoms so based on that he will suggest the another dose or medication.

**Keywords:** menopause, cancer, risk, estrogen, progesterone



## **BİR SAĞLIK KURULUŞUNDA ÇALIŞAN ANNELERİN EMZİRME İLE İLİŞKİLİ DOĞUM SONU VE SÜT İZİNİ HAKKINDAKİ GÖRÜŞLERİ**

**OPINIONS OF MOTHERS WORKING IN A HEALTH ORGANIZATION ON BREASTFEEDING RELATED TO PARTITION AND MILK LEFT**

**Ertuğrul DAĞLI**

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### **ÖZET**

**Amaç:** Bu araştırma bir sağlık kuruluşunda çalışan annelerin emzirme ile ilişkili olarak doğum sonu izni ve süt izni konusundaki görüşlerini belirlemek amacıyla yapılmıştır.

**Gereç ve Yöntem:** Araştırmaya Kırşehir Eğitim ve Araştırma Hastanesi'nde çalışan bebeği olan ve emzirme süreci devam eden 100 anne dâhil edilmiştir. Tanımlayıcı nitelikte olan çalışmaya katılım gönüllü olmakla birlikte mesleki ayırım gözetilmemiştir. Çalışmada 13 sorudan oluşan anket formu uygulanmıştır. Veriler yüz yüze anket formu uygulanarak toplanmıştır. Elde edilen araştırma verileri bilgisayar ortamında sayı, yüzde, ortalama ve standart sapma analizleri ile değerlendirilmiştir.

**Bulgular:** Katılımcıların %46'sının 26-29 yaş aralığında, %80'inin üniversite mezunu, %78'inin 0-10 yıl arasında çalışmış olduğu, %73'ünün 22 yaş ve üzerinde işe başladığı, %72'sinin servis ve polikliniklerde ve %28'inin riskli birimlerde çalıştığı, %96'sının 8 saat ve altında gündüz ve %4'ünün ise nöbetli çalıştığı saptanmıştır. Katılımcıların %72'sinin son doğum yaşı 22-29 yaş aralığında olduğu görülmüştür. Son doğum şekli %54 sezaryen, %46 normal doğum olduğu tespit edilmiştir. Katılımcıların %23'ü 3 ay, %57'si 4-6 ay, %11'i 7-9 ay, %6'sı 10-12 ay, %3'ü 13-24 ay doğum sonu izin kullandığı saptanmıştır. Saatlik süt izni konusunda katılımcıların %76'sı iznini işten erken çıkararak kullandığı belirlenmiştir. Katılımcıların %56'sı süt sağmanın emzirmenin yerine geçmediğini, %73'ü emzirme için verilen doğum sonu ve süt izinlerinin yetersiz olduğunu belirtmişlerdir.

**Sonuç:** Anne olma yaşının 30'lu yaşlara dayandığı görülmektedir. Bu durumun eğitim ve iş bulma imkânlarına bağlı olduğu düşünülmektedir. Annelerin çoğu süt sağmayı emzirme yerine kabul etmemekte, doğum sonu ve süt izinlerini yeterli bulmamaktadır.

**Anahtar kelimeler:** Emzirme, Doğum sonu izin, Süt izni

### **ABSTRACT**

**Target:** It was conducted to determine the opinions of mothers working in a health institution for healthy breastfeeding on postpartum leave and breastfeeding leave.

**Materials and Methods** 100 mothers working in Kırşehir Training and Research Hospital and continuing the breastfeeding process were included in the study. Although participation in the descriptive study was voluntary, no professional discrimination was observed. A questionnaire consisting of 13 questions was used in the study. The data were collected by face-to-face interviews and applying a questionnaire. The obtained research data were evaluated by number, percentage, mean and standard deviation analyzes in the computer environment.

**Findings:** It was determined that 46% of the participants were between the ages of 26-29 and 80% were university graduates. It has been determined that 78% of the participants have been working for a maximum of 10 years. It was determined that 73% of the participants started to work at least 22 years old. It was determined that 72% of the participants worked in services and polyclinics and 28% in risky units. It was determined that 96% of the participants worked at most 8 hours during the day and 4% in shifts. It was determined that 72% of the participants had a last birth age of at least 22 and at most 29. It was determined that the last type of delivery was 54% cesarean section, 46% normal delivery. It was determined that 23% of the participants took 3 months, 57% 4-6 months, 11% 7-9 months, 6% 10-12 months, 3% 13-24 months postpartum leave. It was determined that 76% of the participants used their hourly milk leave by leaving work early. 56% of the participants reported that they did not consider expressing milk as breastfeeding. 73% of the participants stated that the hourly milk leave and postpartum leave for breastfeeding are insufficient for breastfeeding.

**Result:** It is seen that the maternal age is based on the average age limit of 30 years. This situation is thought to be related to education and employment opportunities. Most of the mothers do not find it right to express milk. They state that this is not real breastfeeding. Most of the mothers do not find the postpartum leave and breastfeeding leave sufficient.

**Keywords:** Breastfeeding, Postpartum leave, Breastfeeding leave.

**TRANSREKTAL PROSTAT BİYOPSİSİ UYGULANAN HASTALARDA ANTIKOAGÜLAN KULLANIMININ KOMPLİKASYONLARA ETKİSİ**

**THE EFFECT OF ANTICOAGULANT USE ON COMPLICATIONS IN PATIENTS PERFORMED TRANSRECTAL PROSTATE BIOPSY**

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**ÖZET**

**Amaç:** Prostat Spesifik Antijen'in (PSA), tarama testi olarak kullanılmasıyla birlikte prostat kanseri tanısında prostat biyopsisi gereksinimleri artış göstermiştir. Transperineal veya transrektal biyopsiler güvenli işlemler olmakla birlikte genel olarak komplikasyon oranları %10'un altındadır. Sepsis gibi ciddi komplikasyonlar ise %1'den daha az oranlarda ortaya çıkar. Bizde transrektal ultrasonografi eşliğinde biyopsi yaptığımız hastalardaki antikoagülan kullanımı ve komplikasyonlar üzerine olan etkisini araştırmayı amaçladık.

**Materyal Metot:** Eylül 2020-Temmuz 2021 tarihleri arasında kliniğimizde transrektal ultrasonografi eşliğinde prostat biyopsisi uygulanan 90 hasta retrospektif olarak değerlendirildi. Tüm işlemler periprostatik blok eşliğinde lokal anestezi ile gerçekleştirildi. Tüm hastalara işlemden 48 saat önce florokinolon grubu antibiyotik profilaksisi başlandı ve işlem sonrası 72 saat devam edildi. İşlem öncesi tek doz intravenöz seftriakson uygulandı. Antikoagülan kullanımı olan hastalarda işlemden 7 gün önce tedavi kesilerek düşük molekül ağırlıklı heparin başlandı. Biyopsiden sonraki 72. Saatte antikoagülan tedavi tekrar başlandı.

**Bulgular:** Hastaların ortalama yaşı 65,67 (50-84, SD 7,038) olarak saptandı. 7 hastada (%7,8) ciddi olmayan uzamış hematüri gözlenirken 2 (%2,2) hastada hastane yatışı gerektiren ciddi komplikasyon mevcuttu. Bunlardan biri antikoagülan kullanımı olan hastaydı. Yıkama gerektiren uzamış hematürisi mevcuttu ve semptomatik değildi. Hemoglobün düşüşü izlenmedi. Konservatif olarak tedavi edildi. Bir diğer akut üriner retansiyon ve idrar yolu enfeksiyonu olan bir hastaydı. Devam eden 38 derece ve üzeri ateş olmadı, üriner kataterizasyon ve kültür duyarlı antibiyotik sonrası geriledi. Komplikasyonlar ile prostat hacmi (p=0,838), Total PSA düzeyi (p=0,464), vücut kitle indeksi (p=0,608), daha önceki biyopsi sayısı (p=0,594), biyopsi kadran sayısı (p=0,345), patoloji sonucunda kanser olup olmaması (p=0,167) ve antikoagülan kullanımı (p=0,459) açısından bakıldığı zaman anlamlı fark izlenmedi. Total PSA düzeyi (p<0,05) ve pozitif rektal muayene bulgusu (p<0,05) ile prostat kanseri saptanması arasında anlamlı ilişki mevcuttu.

**Sonuç:** Transrektal prostat biyopsisi, antikoagülan kullanılan hastalarda da güvenli ve etkili bir şekilde uygulanabilmektedir.

**Anahtar kelimeler:** Prostat biyopsisi, Antikoagülan, Komplikasyon, Prostat Kanseri

**ABSTRACT**

**Introduction:** With the use of Prostate Specific Antigen (PSA) as a screening test, the requirements for prostate biopsy in the diagnosis of prostate cancer have increased. Although transperineal or transrectal biopsies are safe procedures, complication rates are generally below 10%. Serious complications such as sepsis occur less than 1%. We aimed to investigate the effects of anticoagulant use on complications in patients who underwent transrectal ultrasonography-guided biopsy.

**Methods:** Between September 2020 and July 2021, 90 patients who underwent transrectal ultrasonography-guided prostate biopsy in our clinic were evaluated retrospectively. All procedures were performed under local anesthesia with periprostatic block. All patients were started on fluoroquinolone antibiotic prophylaxis 48 hours before the procedure and continued for 72 hours after the procedure. A single dose of intravenous ceftriaxone was administered before the procedure. In patients with anticoagulant use, treatment was discontinued 7 days before the procedure and low molecular weight heparin was started. Anticoagulant therapy was restarted at 72 hours after biopsy.

**Results:** The mean age of the patients was 65.67 (50-84, SD 7.038). While non-serious prolonged hematuria was observed in 7 (7.8%) patients, there were serious complications requiring hospitalization in 2 (2.2%) patients. One of them was a patient using anticoagulants. He had prolonged hematuria requiring irrigation and was not symptomatic. Hemoglobin decrease was not observed. It was treated conservatively. Another was a patient with acute urinary retention and urinary tract infection. There was no persistent fever of 38 degrees or higher, and it regressed after urinary catheterization and culture sensitive antibiotics. No significant difference was observed in terms of complication rates between prostate volume ( $p=0.838$ ), Total PSA level ( $p=0.464$ ), body mass index ( $p=0.608$ ), number of previous biopsies ( $p=0.594$ ), number of biopsy quadrants ( $p=0.345$ ), pathology results in terms of presence of cancer ( $p=0.167$ ) and use of anticoagulants ( $p=0.459$ ). There was a significant correlation in term of detection of prostate cancer between total PSA level ( $p<0.05$ ) and positive rectal examination finding ( $p<0.05$ ).

**Conclusion:** Transrectal prostate biopsy can also be performed safely and effectively in patients using anticoagulants.

**Key Words:** Prostate biopsy, Anticoagulant, Complication, Prostate Cancer

**PRENATAL İLAÇ KULLANIMINDA OLASI FETAL ETKİLER VE HEMŞİRELİK BAKIMI**  
**POTENTIAL FETAL EFFECTS IN PRENATAL DRUG USE AND NURSING CARE**

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**ÖZET**

Prenatal bakımda gebenin ve fetüsün sağlıklı olması amaçlanır. Ancak gebe kadının vücudunda birçok değişim meydana gelmektedir. Meydana gelen bu değişiklikler sonucunda gebelerin hastalıklara yatkınlığı artabilir. Bu durum tedavi gerektirebilir ya da mevcut olan kronik hastalığının tedavisini değiştirebilir. Gebenin herhangi bir nedenden dolayı ilaç ya da preparat kullanması sonucunda fetüsün büyüme ve gelişmesinde değişiklikler meydana gelmektedir. Kronik hastalıklar nedeniyle gebelikte gerekli hale gelen ilaçların kullanımı risk oluşturmaktadır. Fetal sağlığın korunması için gebelikte ilaç kullanımına dikkat edilmelidir. Hamilelik sırasında ilaçların kullanımı ne kadar sınırlı olursa, riskin ortaya çıkma olasılığı o kadar az olur. İlaç kullanım süresi uzadıkça ilacın vücutta dağılımı ve etki hâkimiyeti ile ileri gebelik dönemlerinde plasental geçişler de artmaktadır. Yani kullanılan ilacın gebeliğin hangi haftasında ve ne kadar süre ile kullanıldığında önemlidir. Fetal etkileri en aza indirmek için önerilebilir ilaç gruplarının bilinmesi gerekmektedir. Reçete edilen ilaçlar bu yönden değerlendirilmelidir. Hemşirelerin, gebelerde ilaç kullanımı konusunda anne adaylarına eğitim ve danışmanlık vermelidir. Bebek ve gebe sağlığının iyileştirilmesine ve geliştirilmesine katkı sağlayacağı açıktır.

**Anahtar kelimeler:** Gebelik; İlaç; Prenatal; Fetüs.

**ABSTRACT**

In prenatal care, it is aimed that the pregnant woman and the fetus be healthy. However, many changes occur in the pregnant woman's body. As a result of these changes, the susceptibility of pregnant women to diseases may increase. This may require treatment or change the treatment of an existing chronic disease. As a result of the use of drugs or preparations by the pregnant woman for any reason, changes occur in the growth and development of the fetus. The use of drugs that become necessary during pregnancy due to chronic diseases is a risk. In order to protect fetal health, attention should be paid to the use of drugs during pregnancy. The more time-limited the use of drugs during pregnancy, the less likely the risk is to occur. As the duration of drug use increases, the distribution of the drug in the body and the dominance of its effect and placental transmission in advanced pregnancy periods also increase. In other words, it is important in which week of pregnancy and for how long the drug is used. In order to minimize fetal effects, it is necessary to know the recommended drug groups. Prescribed drugs should be evaluated in this respect. Nurses should provide training and counseling to expectant mothers about drug use in pregnant women. It is clear that it will contribute to the improvement and development of infant and pregnant health.

**Keywords:** Prenatal; Drug; Prenatal; Fetus.

**PANDEMİ SÜRECİNDE AMELİYAT OLMAK ZORUNDA KALAN HASTALARIN COVID-19'A İLİŞKİN KAYGI DÜZEYLERİ VE KAYGI NEDENLERİNİN BELİRLENMESİ**  
**INVESTIGATION OF SURGICAL FEARS OF PATIENTS UNDERGOING SURGICAL OPERATIONS DURING COVID-19 NORMALIZATION PROCESS**

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**ÖZET**

**Giriş ve Amaç:** İlk olarak Çin'de ortaya çıkan yeni koronavirüsün neden olduğu COVID-19 hastalığı, tüm dünyayı etkileyerek bir pandemi haline gelmiştir. Bu süreçte, elektif ameliyatlara ertelenirken, acil ameliyatlara ve kanser ameliyatlara halen yapılmaktadır. Bu çalışma COVID-19 salgını sırasında ameliyat edilecek hastaların ameliyat öncesi kaygı düzeylerini ölçmek ve COVID-19 ile ilişkili kaygı nedenlerini belirlemek amacıyla planlandı.

**Materyal ve Metod:** Araştırma kesitsel ve tanımlayıcı tiptedir. Çalışma Nisan 2020 ile Haziran 2020 arasında İzmir'deki bir Eğitim ve Araştırma Hastanesinde prospektif olarak gerçekleştirilmiştir. Veri toplama için hastaların sosyo-demografik özelliklerini ve ek olarak COVID-19 ile ilgili anksiyete nedenlerini sorgulayan 8 soruluk bilgi formu ve 21 sorudan oluşan BECK Anksiyete Ölçeği kullanılmıştır. Veriler IBM SPSS 25 programı kullanılarak analiz edilmiştir. Verilerin değerlendirilmesinde sayı- yüzdeler, normal dağılım göstermeyen verilerde ise mann whitney U veya kruksal vallis testleri ile analiz edilmiştir (p< 0,05).

**Bulgular:** Çalışmaya toplam 158 hasta katıldı. Bu hastaların %56,3'ü kadın, 60,7'si evli ve %40,5'i lise mezundur. Hastaların %78,8'inin orta veya yüksek düzeyde anksiyete yaşadığı bulundu. Hastaların %97,5 ameliyat olabileceği için kendini şanslı hissetmekte iken, %42,4'ü COVID-19'a yakalanmaktan korktuğunu, % 59,4'ü kendi hastalığından dolayı endişeli olduğunu ifade etmiştir. Hastalardan, 50-64 arası yaş grubunda olanlar, kronik hastalığı olanlar, ASA skoru 3 olanlar, COVID-19'a yakalanmaktan korkanlar, kendi hastalığından dolayı endişelenenler ve ameliyat sonrası dönemde kendi bakımını yapamayacağını düşünenlerin anksiyete düzeyinin anlamlı şekilde daha yüksek olduğu bulundu.

**Sonuç:** Pandemi döneminde ameliyat olan hastaların ameliyat öncesi dönemdeki anksiyete düzeyinin yüksek olduğu, ancak buna rağmen hastaların ameliyat olabilecekleri için kendilerini şanslı hissettikleri görülmüştür. Hastalardan 50-64 yaş arasındakiler, kronik hastalığı olanlar, COVID-19'a yakalanmaktan korkanlar, kendi

hastalığından dolayı endişelenenler ve ameliyat sonrası dönemde kendi öz bakımını yapamayacağını düşünenlerin anksiyete düzeyinin anlamlı şekilde daha yüksek olduğu bulundu. Veriler doğrultusunda hastalara hastalıkları ile ilgili bilgi verilmesinin yanı sıra, hastanede COVID-19' un bulaşmasını önlemek için gösterilen çabalar hakkında da bilgi verilmesinin anksiyete düzeylerini azaltacağı kanaatini oluşturdu.

**Anahtar kelimeler:** COVID-19, Pandemi, Cerrahi, Ameliyat Kaygısı, Anksiyete Düzeyi.

## **ABSTRACT**

**Introduction and Aim:** The COVID-19 disease caused by the new coronavirus, which first appeared in China, has become a pandemic by affecting the whole world. In this process, while elective surgeries are postponed, emergency and cancer surgeries are still performed. This study was planned to measure the preoperative anxiety levels of patients who will be operated during the COVID-19 outbreak and to determine the causes of anxiety associated with COVID-19.

**Material and Method:** This cross-sectional descriptive study was carried out prospectively between April 2020 and June 2020 in a Training and Research Hospital in Izmir. Methods: For data collection, the BECK Anxiety Scale consisting of 21 questions and a questionnaire consisting of 8 questions questioning the causes of anxiety related to COVID-19 in addition to socio-demographic characteristics were used. The data were analyzed in number and percentage using IBM SPSS 25 program, and in the data that did not show normal distribution, Mann Whitney U or Kruskal Wallis Tests were analyzed ( $p < 0.05$ ).

**Results:** Of the 158 patients participating in the study, 56.3% were female, 60.7% were married and 40.5% were high school graduates. It was found that 78.8% of the patients experienced moderate or high level of anxiety. While 97.5% of the patients felt lucky that they could undergo surgery, 42.4% stated that they were afraid of getting COVID-19 and 59.4% stated that they were worried about their own illness. It was found that among the patients those in the age group 50-64, those with chronic diseases, those with an ASA score of 3, those who are afraid of contracting COVID-19, those who are worried about their own illness, and those who think that they can not care for themselves in the postoperative period were found to have a significantly higher level of anxiety.

**Conclusions:** It was observed that the patients who had surgery during the pandemic period had a high level of anxiety in the preoperative period, but despite this, the patients felt lucky to be able to operate. It was found that the anxiety level of the patients between the ages of 50-64, those with chronic illnesses, those who are afraid of contracting COVID-19, those who are worried about their own illness and who think that they can not do their own self-care in the postoperative period. In addition to informing patients about their illnesses in line with the data, he believed that providing information about the efforts made to prevent the transmission of COVID-19 in the hospital will reduce their anxiety levels.

**Keywords:** COVID-19, Pandemic, Surgery, Surgical Anxiety, Anxiety Level.

**PANDEMİ SIRASINDA ÇALIŞAN KADINLARIN YAŞAM MEMNUNİYETİ VE DEPRESYON DÜZEYLERİ ETKİLENİR Mİ?: KESİTSEL BİR ÇALIŞMA**

ARE LIFE SATISFACTION AND DEPRESSION LEVELS OF WORKING WOMEN AFFECTED DURING THE PANDEMIC?: A CROSS-SECTIONAL STUDY

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**ÖZET**

Pandemi salgının sınırlarının genişlemesi küresel bulaş zincirlerinin oluşması ile ilgili bir süreçtir. Bu süreçte sadece ilgili ajanın geliştirdiği hastalık süreci değil kısıtlama koşullarından kaynaklı unsurların da yaşam ve psikolojik sağlıkta değişim yaratması beklenen bir durumdur. Kesitsel ve tanımlayıcı türdeki bu çalışmanın amacı çalışan kadınların pandemi döneminde değişen süreç içinde yaşam doyumlarının ve depresyon düzeylerinin belirlenmesidir. Evreni Türkiye’de bir devlet üniversitesinde çalışan tüm kadın personel (akademik, idari ve yardımcı personel) (N=550) oluşturmuştur. Eylül-Aralık 2020 tarihleri arasında araştırmaya katılmaya gönüllü olan kadın personel (n=246) örneklem grubuna alınmıştır. Dışlanma kriteri olarak depresif bozukluğu olan kadınlar, pandemi döneminde ücretsiz izinde, doğum sonrası ya da idari izinde olan kadın personel olmak olarak belirlenmiştir. Veri toplama formları; araştırmacılar tarafından geliştirilmiş Kişisel Veri Toplama Formu, Yaşam Doyum Ölçeği ve Epidemiyolojik Araştırmalar Merkezi Depresyon Ölçeği’dir. Dijital formlar mail adreslerine mesaj olarak gönderilmiştir. Aydınlatılmış onam bulunan dijital formların onay kutucuğu işaretlendikten sonra veri toplama formu ve ölçekler ile verilerin toplanması sağlanmıştır. Araştırma için Kastamonu Üniversitesi Sosyal ve Beşeri Bilimler Araştırmaları ve Yayın Etiği (Tarih:12.10.2020, Karar no:37) komisyonundan gerekli yazılı izinler alınmıştır. Araştırmaya katılan kadınların %52,4’ü 30-39 yaş grubunda, eğitim seviyesi %96 üniversite ve üzeri seviyede, %69,9’u akademik personel olarak çalışmakta ve %82,9’unun idari görevi olmadığı saptanmıştır. Kadınların %56,9’unun evli olduğu, %16,3’ünün kronik hastalığı olduğu, %94,7’sinin çekirdek ailede yaşadığı ve %48,8’inin orta gelir düzeyi algısında olduğu saptanmıştır. Pandemi sürecinde %39,8’nin uzaktan çalıştığı, kadınların eşlerinin %21,1’inin normal çalışma düzeni devam ettiği, %78’inin ekonomik gelirinde azalma olmadığı, %54,9’unun en çok stres yaratan durum olarak dışarı çıkamamayı tanımladığı, %91,5’inin salgın süresinde sağlıkla ilgili endişe yaşadığı, %76,4’ünün salgın öncesine göre evde en çok internet kullanımının arttığı ve %68,7’sinin alış-veriş şeklinde değişiklik yapmak zorunda kaldığı saptanmıştır. Katılımcıların yaşam doyumları ve depresyon durumları karşılaştırıldığında istatistiksel olarak anlamlı bir ilişki olduğu görülmüştür (p<0.001). Bu dönemde yaşam doyumlarını en çok etkileyen faktörün ekonomik gelirde kayıp ve dışarı çıkamama olduğu saptanmıştır. Depresyon düzeyini ise etkileyen faktörün ise ekonomik gelirde kayıp, aile büyüklerinin evde olması ve sürekli çalışmak zorunda olmak olduğu saptanmıştır.

**Anahtar kelimeler:** Yaşam doyum; Depresyon; Pandemi.

**ABSTRACT**

Pandemic is a process related to the expansion of the borders of the epidemic and the formation of global chains of transmission. In this process, it is expected that not only the disease process developed by the relevant agent, but also the factors arising from the restriction conditions will create a change in life and psychological health. The aim of this cross-sectional and descriptive study is to determine the life satisfaction and depression levels of working women during the changing process during the pandemic period. The universe consisted of



all female staff (academic, administrative and auxiliary staff) (N=550) working at a state university in Turkey. Female personnel (n=246) who volunteered to participate in the study between September and December 2020 were included in the sample group. The exclusion criterion was determined as women with depressive disorder, being on unpaid leave, postpartum or administrative leave during the pandemic period. Data collection forms; Personal Data Collection Form developed by researchers, Life Satisfaction Scale and Epidemiological Research Center Depression Scale. Digital forms were sent to e-mail addresses as a message. After ticking the checkbox of the digital forms with informed consent, the data were collected with the data collection form and scales. Necessary written permissions were obtained from Kastamonu University Social and Human Sciences Research and Publication Ethics Commission (Date: 12.10.2020, Decision no: 37) for the research. It has been determined that 52.4% of the women participating in the research are in the 30-39 age group, 96% have a university level and above, 69.9% work as academic staff and 82.9% have no administrative duties. It was determined that 56.9% of the women were married, 16.3% had a chronic disease, 94.7% lived in a nuclear family and 48.8% had a perception of middle income level. During the pandemic, 39.8% worked remotely, 21.1% of women's spouses continued their normal working order, 78% did not have a decrease in their economic income, 54.9% described not being able to go out as the most stressful situation, It was determined that 91.5% of them had health concerns during the epidemic, 76.4% of them had the highest increase in internet use at home compared to the pre-epidemic period, and 68.7% of them had to make changes in their shopping style. When the participants' life satisfaction and depression status were compared, it was seen that there was a statistically significant relationship ( $p<0.001$ ). In this period, it was determined that the factors affecting life satisfaction the most were the loss of economic income and the inability to go out. It was determined that the factor affecting the level of depression was a loss in economic income, family elders being at home and having to work constantly.

**Keywords:** Life satisfaction; Depression; Pandemic.

## **TÜRKİYE’DE YAPILAN HEMŞİRELİK EĞİTİMİ KONULU LİSANSÜSTÜ TEZLERİNİN İNCELENMESİ**

EXAMINATION OF GRADUATE THESES ON NURSING EDUCATION IN TURKEY

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### **ÖZET**

**Amaç:** Çalışmanın amacı Türkiye’de, hemşirelik eğitimi konu alan 1993-2019 yılları arasında yapılmış olan hemşirelik lisansüstü tezlerinin sistematik olarak incelenmesidir.

**Gereç-Yöntem:** Bu çalışmada tezler, Ulusal Tez Merkezi’nden 06-12 Nisan 2020 tarihleri arasında ‘‘hemşirelik, eğitim, hemşirelik eğitimi’’ anahtar kelimeleri kullanılarak taranmıştır.

**Bulgular:** Ulusal Tez Merkezi veri tabanına kayıtlı 174 teze ulaşılmıştır. Tezlerin 96’sı yüksek lisans tezi, 78’i doktora tezidir. Yüksek lisans tezlerinin 87’si erişime açık, 9’u erişime kapalıdır. Doktora tezlerinin 73’ü erişime açık, 5’i erişime kapalıdır. Tezlerin çalışma türüne bakıldığında, 154 adet nicel türde, 5 adet nitel türde ve 1 adet karma türde çalışma mevcuttur. 14 çalışma erişime kapalı olduğu için içeriğine ulaşamamıştır. Tezlerin örneklem grubuna bakıldığında ise, 48’i öğrencilerle, 42’si hastalarla, 15’i hemşirelerle, 13’ü hasta yakınlarıyla, 9’u gebelerle, 8’i adolesan bireyler ve aileleriyle, 7’si hasta ve yakınlarıyla, 5’i çocuklar ve ebeveynleriyle, 2’si öğretim elemanı ve öğrencilerle, 1’i hemşire ve ebelerle, 1’i sağlık çalışanlarıyla, 1’i öğretim elemanı ve hastane yönetimiyle, 1’i okul kadrosuyla, 1’i öğretmenlerle, 1’i hükümlü kadınlarla, 1’i yetişkin kadınlarla ve 1’i çocuklar ve öğretmenleri ile yapılmıştır. Tezlerin konularına bakıldığında hemşirelik eğitiminin hastalara yönelik tedaviye ve uyuma etkisi, hemşirelik eğitimi gereksiniminin belirlenmesi, hemşirelik eğitiminde kullanılan öğretim yöntemlerinin incelenmesi, hemşirelik eğitiminin öğrenciler üzerinde öğrenmeye etkisi, hemşirelik öğretim yönteminin öğrenciler üzerindeki etkisi, hemşirelik lisans eğitiminin değerlendirilmesi, hemşirelik lisans eğitimindeki sorunların belirlenmesi, hemşirelik eğitiminde simülasyon kullanımı, hizmet içi hemşirelik eğitimi ve değerlendirilmesi, kültürlerarası hemşirelik eğitimi, web tabanlı hemşirelik eğitimi ve psikoeğitim konularının ele alındığı görülmüştür.

**Sonuç ve Öneriler:** Hemşirelik eğitiminin, hemşirelik bilimsel bilgi temelini oturtulması, hemşirelik bakımının kalitesinin artırılması, hemşirelik uygulamalarına yön vermesi, profesyonel hemşireliğin ve hemşirelik mesleğinin gelişimi açısından önemi büyüktür. 2010-2019 yılları arasında artmış olmasına rağmen hemşirelik eğitimi konu alan doktora tezi sayısı azdır. Doktora tez sayısının ve nitel türdeki çalışmaların artırılması önerilmektedir. Derinlemesine yapılan görüşmelerin eğitim gereksinimini ve yeni sorunların tespitini kolaylaştıracağı böylece hemşirelik eğitiminin kalitesinin artıracacağı öngörülmektedir.

**Anahtar kelimeler:** hemşirelik, eğitim, hemşirelik eğitimi

### **ABSTRACT**

**Aim:** The aim of the study is to systematically examine the nursing graduate theses made between 1993-2019 on nursing education in Turkey.

**Method:** In this study, theses were screened from the National Thesis Center between 06-12 April 2020 using the keywords ‘nursing, education, nursing education’.

**Findings:** 174 theses registered in the database of the National Thesis Center were reached. 96 of the theses are master's theses and 78 are doctoral theses. 87 of the master's theses are open to access, 9 are closed. 73 of



the doctoral theses are open to access and 5 are closed. Considering the type of work of theses, there are 154 quantitative, 5 qualitative and 1 mixed studies. 14 because the study was closed to access, its content could not be reached. Sample thesis when looking in the group, 48% of patients with 42 students, 15 nurses, 13 sick relatives, with 9 pregnant women, individuals and families with adolescent 8, 7 with patients and their relatives, with their parents and 5 children, 2 faculty members and students, with 1 nurse and a midwife with 1% health workers, teaching staff and the hospital administration 1 from 1. with school staff, 1 Teacher, 1 convict women, women with 1 adult and 1 children and teachers were conducted. Considering the topics of the theses, the effect of nursing education on treatment and compliance of patients, determining the need for nursing education, examining the teaching methods used in nursing education, the effect of nursing education on students' learning, the effect of nursing teaching method on students, evaluation of undergraduate nursing education, determination of problems in undergraduate nursing education, use of simulation in nursing education, it has been seen that in-service nursing education and evaluation, intercultural nursing education, web-based nursing education and psychoeducation are discussed.

**Conclusion and Suggestions:** Nursing education is of great importance in terms of establishing the scientific knowledge of nursing, increasing the quality of nursing care, directing nursing practices, and the development of professional nursing and the nursing profession. Although it has increased between 2010 and 2019, the number of doctoral theses on nursing education is small. It is recommended to increase the number of doctoral theses and qualitative studies. It is assumed that in-depth interviews will facilitate the need for education and the detection of new problems, thereby improving the quality of Nursing Education.

**Keywords:** nursing, education, nursing education

## ERİŞKİN MİDE BİYOPSİLERİNİN HİSTOPATOLOJİK ANALİZİ HISTOPATHOLOGICAL ANALYSIS OF GASTRIC BIOPSIES

**Özlem Ceren GÜNİZİ**

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### ÖZET

**Amaç:** Dahiliye, Gastroenteroloji ve Aile hekimliği polikliniklerine en sık başvuru sebepleri arasında epigastrik ağrı, bulantı ve kusma gibi üst gastrointestinal sistem ile ilgili semptomlar ilk sırada yer almaktadır. Üst gastrointestinal sistemin değerlendirilmesinde altın standart tanı yöntemi endoskopik inceleme ve histopatolojik incelemedir. Endoskopik inceleme ile lezyonun tanınması, gereğinde lezyondan biyopsi alınması histopatolojik tanı konulmasını kolaylaştırmaktadır. Bu çalışmamızda üst gastrointestinal sistem ile ilgili şikayetleri olup mide endoskopisi yapılan ve biyopsi alınan hastaların histopatolojik bulgularını retrospektif değerlendirmeyi amaçladık. Çalışmamızla ilgili ara raporu sunmak istiyoruz.

**Materyal ve Metod:** Çalışmamıza 2015–2020 yılları arasında genel cerrahi, dahiliye ve gastroenteroloji kliniklerince gastrik biyopsi alınmış hastaları dahil etmek istedik. Şu ana kadar 2019-2020 yılları arasında endoskopi ile alınmış 1114 hasta biyopsisinin, histopatolojik sonuçlarını değerlendirdik. Burada çalışmamızla ilgili bir ara raporu sunduk.

**Bulgular:** Çalışmamıza dahil edilen 1114 olgunun 451'i (%40.5) erkek, 663'ü (%59.5) kadın idi. Olguların yaşları 18 ile 95 arasında değişmekte olup ortalama yaş  $51.95 \pm 16.6$  idi. 590 (%53) olguda kronik, 112 (%10.1) olguda aktif kronik gastrit, 4 olguda (%0.4) adenokarsinom, 17 (%1.5) olguda hiperplastik polip, 2 (%0.2) olguda nöroendokrin karsinom ve 2 (%0.2) olguda atrofik gastrit izlenmiştir (Tablo 1). Hastaların 387 (%34.6) sinde *Helicobacter pylori* gastriti saptanmıştır.

**Sonuç:** Üst GİS hastalıklarında endoskopik inceleme ve histopatolojik değerlendirme, olguların kesin tanısını koyan ve tedavi planlamasına yön veren en önemli yaklaşımlardır. Gastrit en sık görülen mide patolojisidir. Mide maligniteleri oldukça agresif tümör tipleridir. Çalışmamızda malignite oranı %0,6 olarak bulundu. En sık görülen maligniteler adenokarsinom ve nöroendokrin tümördü.

**Anahtar kelimeler:** Gastrik Endoskopi, Erişkin, Histopatoloji, Gastrik Biyopsi.

### ABSTRACT

**Objective:** Symptoms related to the upper gastrointestinal system, such as epigastric pain, nausea and vomiting, are among the most common reasons for admission to Internal Medicine, Gastroenterology and Family Medicine outpatient clinics. The gold standard diagnostic method in the evaluation of the upper gastrointestinal system is endoscopic examination and histopathological examination. Recognition of the lesion by endoscopic examination and biopsy from the lesion if necessary facilitates histopathological diagnosis. In this study, we aimed to retrospectively evaluate the histopathological findings of patients who had upper gastrointestinal system complaints and underwent gastric endoscopy and biopsy. We would like to present a preliminary report of our work.

**Materials and Methods:** We wanted to include patients who underwent gastric biopsy by general surgery, internal medicine and gastroenterology clinics between 2015 and 2020 in our study. So far, we evaluated the histopathological results of 1114 patient biopsies taken by endoscopy between 2019-2020.

**Results:** Of the 1114 cases included in our study, 451 (40.5%) were male and 663 (59.5%) were female. The ages of the cases ranged from 18 to 95, and the mean age was  $51.95 \pm 16.6$ . Chronic gastritis in 590 (53%) cases, active chronic gastritis in 112 (10.1%) cases, adenocarcinoma in 4 cases (0.4%), hyperplastic polyps in 17 (1.5%) cases, neuroendocrine carcinoma in 2 (0.2%) cases, and 2 (0.2%) cases atrophic gastritis was observed (Table 1). *Helicobacter pylori* gastritis was detected in 387 (34.6%) of the patients.



Conclusion: Endoscopic examination and histopathological evaluation in upper GIS diseases are the most important approaches that make the definitive diagnosis of the cases and guide the treatment planning. Gastritis is the most common gastric pathology. Gastric malignancies are quite aggressive tumor types. In our study, the malignancy rate was found to be 0.6%. The most common malignancies were adenocarcinoma and neuroendocrine tumor.

**Keywords:** Gastric Endoscopy, Adult, Histopathology, Gastric Biopsy.

## KLİNİĞİMİZDE YAPILAN ERİŞKİN TONSİLLEKTOMİ MATERYALLERİNİN RETROSPEKTİF HİSTOPATOLOJİK ANALİZİ

HISTOPATHOLOGICAL ANALYSIS OF ADULT TONSILLECTOMY MATERIALS IN OUR CLINIC

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### ÖZET

**Amaç:** Tonsillektomi, Kulak Burun Boğaz hastalıkları pratiğinde en sık yapılan cerrahi operasyonlardan biridir. Cerrahlar arasında hastadan çıkan her materyal kutsaldır ve patolojik inceleme gerektirir kanısı oldukça yaygındır. Ancak tonsillektomi materyallerinin rutin histopatolojik incelemesinin gerekliliği ise tartışmalı bir konudur. Çalışmamızda, kliniğimizde son 7 yıl içerisinde erişkinlerde yapılan tonsillektomi operasyonu sonucu çıkarılan tonsil materyallerinin histopatolojik olarak analizi ve tonsillektomi materyallerinde rutin patolojik incelemenin gerekliliğini araştırmak istedik. Çalışmamızın ara raporunu sunmak istiyoruz.

**Gereç-Yöntem:** Çalışmamızda, hastanemiz kulak burun boğaz kliniğimizde 2014 yılı ocak ayı ile 2021 yılı eylül arasında değişik endikasyonlar ile tonsillektomi uygulanan hastaları araştırmayı amaçladık. Şu ana kadar 79 hastanın (42 (%53.2) erkek, 37(%46.8) kadın; ortalama yaş 30.73±11.6 ) tonsillektomi materyallerinin histopatolojik sonuçları incelenmiştir. Çalışmamızla ilgili ara raporu sunmak istiyoruz.

**Bulgular:** 79 hastanın tonsillektomi materyalleri incelendiğinde; 67(%84.8) hastada lenfoid hiperplazi en sık konulan tanıydı. 5 (%6.3) hastada skuamöz papillom, 4(%5.1) hastada malignite saptanmış olduğu ve malignite saptanan hastaların 3(%3.8) ünde lenfoma, 1(%1.3) inde Undiferansiye Karsinom olduğu görülmüştür. Çalışmamızda beklenmedik malignite oranı %0 olarak saptanmıştır.

**Sonuç:** Tonsil malignitelerinin en sık nedeni skuamöz hücreli karsinom, ikinci en sık nedeni ise lenfoma olarak bildirilmiştir. Bizim çalışmamızda ise %5.1 hastada malignite saptanmış olup, en sık görülen tonsil malignitesi lenfoma olarak saptanmıştır. Tonsillektomi olan hastalarda, sonuçlarının yüksek olasılıklı benign olması nedeniyle rutin histopatolojik inceleme gerekli olmadığı kanısına varılsa da, çıkarılan materyallerin rutin olarak histopatolojik incelemeye gönderilmesi önerilir ve özellikle ameliyat öncesi risk faktörü olan hastalarda histopatolojik inceleme yapılması önemlidir.

**Anahtar kelimeler:** Tonsil, Tonsillektomi, Erişkin, Histopatoloji.

### ABSTRACT

**Objective:** Tonsillectomy is one of the most frequently performed surgical operations in the practice of Otorhinolaryngology. It is very common among surgeons that every material that comes out of the patient is sacred and requires pathological examination. However, the necessity of routine histopathological examination of tonsillectomy materials is a controversial issue. In our study, we wanted to investigate the histopathological analysis of tonsillar materials removed as a result of tonsillectomy operation performed in adults in the last 7 years in our clinic and the necessity of routine pathological examination of tonsillectomy materials. We would like to present an interim report of our work.

**Materials-Methods:** In our study, we aimed to investigate the patients who underwent tonsillectomy for different indications between January 2014 and September 2021 in our otolaryngology clinic. Histopathological results of tonsillectomy materials of 79 patients (42 (53.2%) male, 37 (46.8%) female; mean age 30.73±11.6%) have been examined so far. We would like to present an interim report on our work.

**Results:** When the tonsillectomy materials of 79 patients were examined; Lymphoid hyperplasia was the most common diagnosis in 67 (84.8%) patients. It was observed that 5 (6.3%) patients had squamous papilloma, 4 (5.1%) patients had malignancy, and 3 (3.8%) of the patients with malignancy had lymphoma and 1 (1.3%)



had Undifferentiated Carcinoma. In our study, the unexpected malignancy rate was found to be 0%.

Conclusion: The most common cause of tonsillar malignancies was reported to be squamous cell carcinoma, and the second most common cause was lymphoma. In our study, malignancy was detected in 5.1% of the patients, and the most common tonsillar malignancy was found to be lymphoma. Although it is concluded that routine histopathological examination is not necessary in patients with tonsillectomy due to the high probability of benign results, it is recommended that the removed materials be sent for histopathological examination routinely, and histopathological examination is important, especially in patients with preoperative risk factors.

**Keywords:** Tonsil, Tonsillectomy, Adult, Histopathology.

**EGE ÜNİVERSİTESİ TIP FAKÜLTESİ MOLEKÜLER PARAZİTOLOJİ LABORATUVARINA  
2009-2019 YILLARINDA BAŞVURU YAPAN HASTALARIN SOLUNUM SİSTEMİ  
ÖRNEKLERİNDE *P. jirovecii* SIKLIĞININ REAL-TİME PZR İLE ARAŞTIRILMASI**

INVESTIGATION OF *P. jirovecii* FREQUENCY IN RESPIRATORY SYSTEM SAMPLES BY  
REAL-TIME PCR OF PATIENTS APPLYING TO EGE UNIVERSITY FACULTY OF MEDICINE  
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**ÖZET**

Pneumocystis pnömonisi (PCP) özellikle immun sistemi baskılanmış hastalarda ortaya çıkan *Pneumocystis jirovecii* (*P. jirovecii*)' nin neden olduğu akciğer enfeksiyonudur. Bu çalışmada solunum sistemi problemi olup Ege Üniversitesi Tıp Fakültesine Moleküler Parazitoloji Laboratuvarına Mart 2009- Haziran 2019 yılları arasında gelen 732 hastadan alınan solunum örneklerinde (BAL, miniBAL, balgam, ağız çalkantı suyu, bronşiyol aspirasyon sıvısı, doku, endotrakeal aspirasyon ve torosentez sıvısı) *P. jirovecii cdc2* geni varlığı Real-Time PCR ile araştırılmıştır. Real-Time PZR sonucunda PcP prevalansı %11,74 (86/732) olarak bulunmuştur. Erkeklerde *P. jirovecii* prevalansı (%12,21), kadın hastalarda saptanan prevalanstan (%10,84) daha yüksek tespit edilmiştir. İmmünsüpresif hastalarda *P. jirovecii* prevalansı %13,92 (39/280) olarak tespit edilirken immun sistemi sağlam olan hastalarda %10,39 olarak belirlenmiştir. *P. jirovecii* prevalansı ile immunité arasında anlamlı bir ilişki bulunmamıştır ( $P>0,05$ ). Ancak HIV pozitif hastalarda *P. jirovecii* sıklığı (%36,84) hem diğer immunsüpresif hastalardan hem de immun sistemi sağlam hastalara göre daha yüksek bulunmuştur ( $P<0,05$ ). Örnek alma yöntemlerine göre *P. jirovecii* prevalansı invaziv yöntemler ile alınan örneklerde %11,82, non-invaziv yöntemler ile alınan örneklerde ise %11,22 tespit edilmiştir. Hastalık en yüksek prevalansa sonbahar aylarında (%13,25) sahipken en düşük ilkbaharda (%8,49) bulunmuştur. Atopilerin yaygın olduğu ilkbahar (%8,49) aylarından sonra yaz aylarında (%12,88) prevalans yükselmiştir. Benzer şekilde Mayıs (%10,88) ayından Haziran (%21,27) ayına geçişte prevalans anlamlı olarak artmıştır ( $P<0,05$ ). Sonuç olarak *P. jirovecii* immun sistemi sağlam hastalarda da ve immunsüpresif hastalar kadar yaygındır. Hastalığın teşhisi için alınan örnek alım metotlarından non-invaziv yöntemlerde oldukça invaziv yöntemler kadar başarılıdır. Hastalığın prevalansı atopilerin ardından arttığı düşünülmektedir.

**Anahtar kelimeler:** *P. jirovecii*, Real-Time PCR, Solunum örnekleri



## ABSTRACT

Pneumocystis pneumonia (PCP) is a lung infection caused by *Pneumocystis jirovecii* (*P. jirovecii*), which occurs especially in immunocompromised patients. In this study, The presence of *P. jirovecii cdc2* gene was investigated in respiratory samples (BAL, miniBAL, sputum, mouthwash, bronchiolar aspiration fluid, tissue, endotracheal aspiration and thorosynthesis fluid) taken from 732 patients with respiratory system problems who came to the Molecular Parasitology Laboratory of Ege University Faculty of Medicine between March 2009 and June 2019 by Real-Time PCR. As a result of Real-Time PCR, the prevalence of PCP was found to be 11.74% (86/732). The prevalence of *P. jirovecii* in men (12.21%) was found to be higher than the prevalence found in female patients (10.84%). While the prevalence of *P. jirovecii* in immunosuppressive patients was 13.92% (39/280), it was determined as 10.39% in patients with a healthy immune system. No significant correlation was found between *P. jirovecii* prevalence and immunity ( $P>0.05$ ). However, the frequency of *P. jirovecii* in HIV-positive patients (36.84%) was found to be higher than both other immunosuppressive patients and patients with a healthy immune system. According to sampling methods, the prevalence of *P. jirovecii* was determined as 11.82% in samples taken by invasive methods and 11.22% in samples taken by non-invasive methods. The disease has the highest prevalence in autumn (13.25%) and the lowest in spring (8.49%). After the spring (8.49%) months when atopies are common, the prevalence increased in the summer months (12.88%). Similarly, the prevalence increased significantly in the transition from May (10,88%) to June (21.27%) ( $P<0.05$ ). In conclusion, *P. jirovecii* is common in immunocompetent patients as well as in immunosuppressed patients. Of the sampling methods taken for the diagnosis of the disease, non-invasive methods are as successful as invasive methods. The prevalence of the disease is thought to increase following atopies.

**Keywords:** *P. jirovecii*, Real-Time PCR, Respiratory samples

**COMPARISON OF FUNCTIONAL WALKING, BALANCE AND FUNCTIONAL INDEPENDENCE IN CHILDREN WITH DIPLEGIC AND HEMIPLEGIC CEREBRAL PALSY**

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**ABSTRACT**

Cerebral palsy (CP) defines as a group of permanent movement and posture development disorders that cause limitation of activity attributed to non-progressive disorders which have occurred in the developing brain of the infant or child and it is the most common physical disability in childhood. Damage to the brain does not progress and occurs in areas of the brain that control muscle tone, gross and fine motor functions, balance control, reflexes and posture. Accordingly, patients' walking abilities, balance and success in functional activities are greatly affected. As a result, the objective of this study was to compare children with hemiplegia to children with diplegia at GMFCS levels I, II, and III, using multiple validated outcome tools to assess functional walking, balance, and functional independence. A quasi-experimental design study including 60 children with cerebral palsy was conducted at three hospitals in Wasit province, Iraq. 30 patients with diplegia and 30 patients with hemiplegia aged 0 to 18 years and classified as GMFCS level I-III had their demographic information recorded. Patients were evaluated with Gillette Functional Gait Assessment Questionnaire (FAQ), the Pediatric Balance Scale (PBS) and the Independence Measure for Children (WeeFIM). The statistical analysis showed a significant difference between the groups in FAQ and PBS ( $p<0.05$ ), although no significant difference in WeeFIM. The self-care and social cognition subgroups of WeeFIM showed a significant difference between the groups ( $p<0.05$ ). These findings show that children with hemiplegia had considerably better walking, balance and lower extremity function but worse upper extremity function than children with diplegia. Specialists should examine measures to improve the functionality of CP patients' compromised limbs in order to improve their daily performance.

**Keywords:** cerebral palsy, GMFCS, functional gait, balance, functional independence.

## ÜLKELERİN TOPLUMSAL GELİŞİMİŞLİK DÜZEYİ İLE MUTLULUK ARASINDAKİ İLİŞKİDE İNOVASYONUN ARACILIK ROLÜ

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### ÖZET

Toplumsal gelişme, bir toplumun bireylerinin temel anlamda öncelikli gereksinimlerini karşılması hem bireylerin hem de toplumların hayat kalitelerinin yükselmesi, bu yükselmenin sürdürülebilirliğine olanak sağlayan sistemlerin oluşturulması ve bireylerin sosyal gelişmeden yararlanmasına yönelik koşulların oluşturulması potansiyeli olarak ifade edilmektedir. Mutluluk ise insanın bütün bütün isteklerine eksiksiz bir biçimde ve sürekli olarak erişmekten duyduğu kıvanç durumudur. Mutluluk kavramı insan ömrü boyunca ulaşılmak istenen ve pek çok disiplin tarafından incelenen bir konu olmuştur. Yapılan incelemelerde devletlerin sağlık, eğitim, demokrasi, istihdam gibi topluma yönelik gerçekleştirilen harcamalarla toplumsal refahı böylece mutluluğun artacağı ön görülmüştür. Bu bağlamda, 21. yüzyılda insanların ve toplumların mutlu bir hayat sürdürmelerini sağlamak devletlerin, organizasyonların ve araştırmacıların araştırdıkları kritik bir konu olmuştur. Her ne kadar toplumların mutluluk düzeyleriyle toplumsal gelişim düzeyleri arasında pozitif ilişki bekleniyor olsa da bu ilişkinin yönü, gücü ve ilişkiyi etkileyen farklı değişkenlerin varlığı sorgulanması gereken konu olarak güncelliğini ve önemi korumaktadır. Bu doğrultuda günümüzde birçok ülke, daha fazla gelişme sağlamanın bir yolu olarak inovasyonu ekonomik büyüme stratejilerinin merkezine yerleştirmiştir. İnovasyon geniş anlamıyla hem ekonomik büyümenin temel itici güçlerinden biri olarak görülmekte hem de küresel ve sosyal zorluklarla başa çıkmanın bir yolu olarak ifade edilmektedir. Bu çerçevede bu çalışmada toplumların gelişmişlik düzeyi, mutlulukları ve inovasyon kapasiteleri arasındaki ilişkilerin incelenmesi amaçlanmıştır. Bu amaçla, küresel raporlardan toplumsal gelişmişlik, inovasyon ve mutluluk değişkenlerini kapsayan 119 ülkeye ait 2020 yılı verileri elde edilmiştir. Toplumsal gelişmişlik değişkenine ait veriler, The Social Progress Imperative tarafından hazırlanan “Sosyal Gelişim Endeksi 2020”den alınmıştır. Sosyal gelişimi, temel insan ihtiyaçları, refah altyapısı ve fırsatlar olmak üzere üç boyutta inceleyen endeks, 50 sosyal ve çevresel göstergiyi ölçmektedir. İnovasyon değişkenine ait veriler, Dünya Fikri Mülkiyet Örgütü’nün her yıl yayınlamış olduğu “Global Innovation Index 2020” raporundan alınmıştır. Ülkelerin mutluluk düzeylerini ölçen veriler ise Birleşmiş Milletler Sürdürülebilir Kalkınma Çözümleri Ağı tarafından hazırlanan “Dünya Mutluluk Raporu 2020”den alınmıştır. Söz konusu raporlardan elde edilen ikincil veriler aracılığıyla araştırma modeli SPSS 25 istatistik programı kullanılarak test edilmiştir. Yapılan Pearson korelasyon ve hiyerarşik regresyon analizleri sonucunda kavramlar arası pozitif ve anlamlı ilişkiler tespit edilmiştir. Bununla birlikte ülkelerin toplumsal gelişmişlik düzeyiyle mutlulukları arasındaki ilişkide inovasyonun kısmi aracılık rolü olduğu saptanmıştır. Araştırma sonuçları, inovasyonun toplumların mutluluğunu olumlu yönde etkileyen entelektüel ve endüstriyel bir süreç olduğunu göstermektedir.

**Anahtar kelimeler:** Toplumsal Gelişmişlik, İnovasyon, Mutluluk

## ACIL SERVİSİN YOĞUNLUK ANALİZİ: AKSARAY ÖRNEĞİ

### CROWD ANALYSIS OF THE EMERGENCY SERVICE: EXAMPLE OF AKSARAY PROVINCE

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#### ÖZET

**Amaç:** Ülkemizde acil servisler günün belli saatlerinde yoğun başvuru oranına sahip kliniklerdir. Bu yoğun zaman dilimleri hem sağlık çalışanlarını hem de hasta-hasta yakınlarını zorlamaktadır. Çalışmamızda bu yoğun zaman dilimleri tespit etmeyi amaçladık.

**Gereç ve Yöntemler:** Çalışmamızda Aksaray Eğitim ve Araştırma Hastanesi üçüncü basamak acil servisine 01.01.2019 ve 31.12.2019 tarihleri arasında başvuran tüm erişkin ve çocuk hastalar retrospektif olarak analiz edilmiştir. Hastaların demografik özellikleri, triaj sınıflaması, hastaneye başvuru şekilleri, başvuru oranları gün, saat, ay ve mevsimlere göre değerlendirilmiştir.

**Bulgular:** Başvuran hastaların %51,2 (n= 266221)'si erkek, %49,8 (n= 264175)'i bayandı. Hastaların %2,3 'ü ambulans ile hastaneye ulaştırılmıştır. Hasta başvurularının %51'i saat 16:00-00:00 arasında gerçekleşmiştir. Hastaların %19,2 (n= 100949)'si sarı alanda tedavi olurken %0,2(n=649) 'si kırmızı alanda tedavi olmuştur. En çok başvurunun yapıldığı gün pazartesi olduğu görülmüştür. Aylara göre hasta başvuruları incelendiğinde en sık başvuru 52414 toplam hasta sayısı ile Aralık ayında gerçekleşmiştir. Aylara göre kırmızı alana kabul edilen hastalar incelendiğinde ise 94 hasta ile Kasım ayında en çok hasta başvurusu gerçekleşmiştir.

**Sonuç:** Acil servislerde artan hasta başvurusu ile beraber sunulan hizmet kalitesinin devam etmesi iyi bir veri analizi ve alınacak tedbirlerle mümkün olabilir. Yoğunluk artışı olan zaman dilimleri için alınacak önlemler hem hastaların hem de sağlık çalışanlarının hayat konforunu artıracaktır.

**Anahtar kelimeler:** Acil Servis, Yoğunluk, Demografik Veriler

#### ABSTRACT

**Objektives:** In our country, emergency services are places with a high rate of admission at certain times of the day. These crowded time periods are tiring both health workers and patient-patient relatives. In our study, we aimed to identify these busy time periods.

**Material and Methods:** In our study, all adult and pediatric patients who applied to the tertiary care emergency department of Aksaray Training and Research Hospital between 01.01.2019 and 31.12.2019 were analyzed retrospectively. Demographic characteristics of the patients, triage classification, hospital admission ways, admission rates were evaluated according to day, hour, month and season.

**Result:** 51.2% (n= 266221) of the admitted patients were male and 49.8% (n=264175) were female. 2.3% of the patients were transported to the hospital by ambulance. 51% of the patients arrived at the hospital between 16:00 and 00:00. While % 19,2 (n= 100949) of the patients were treated in the yellow area, 0.2% (n=649) were treated in the red area. It was observed that the greatest number of patient are being admitted on Monday. When patient applications are analyzed by month, the most frequent application was in December with a total number of 52414 patients. The most patient admissions to the red zone were made in November with 94 patients. Season-wise, the highest number of patients were admitted in autumn, with 25.5% of the patients.

**Conclusion:** The continuation of the service quality provided with the increasing number of patient applications in emergency services may be possible with a good data analysis and precautions. The precautions for busy time periods will increase the life comfort of both patients and healthcare professionals.

**Keywords:** Emergency Service, Crowd, Demographic Data

## MİGREN HASTALARINDA VİTAMİN D DÜZEYLERİ VITAMIN D LEVELS IN MIGRAINE PATIENTS

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### ÖZET

**Amaç:** D vitamini eksikliği global bir halk sağlığı sorunu olarak kabul edilmektedir. Son gözlemler D vitamini eksikliğinin vücuttaki her sistemi etkileyebildiği yönündedir. Baş ağrısı; dünyadaki insanların %80'ini etkileyen bir sağlık problemidir. Çalışmamızın amacı; migren baş ağrısı ile serum 25 hidroksi D vitamini düzeyleri arasındaki ilişkinin değerlendirilmesidir.

**Yöntemler:** Migren tanısı ile takipli 57 hasta ve 44 sağlıklı kişinin laboratuvar verileri geriye dönük toplandı. Hasta grubumuz (yaş ortalaması: 31,23±9,61) 47 kadın (%82,5), 10 erkek (%17,5); kontrol grubumuz (yaş ortalaması:38,73±9,79) ise 30 kadın (%68,2), 14 erkek (%31,8)'ten oluştu. Çalışma grubunda yaş, cinsiyet, ten rengi, kilo, boy, BMI, eğitim durumu, medikal hikaye, vitamin ve mineral desteği öyküsü ve giyim şekli bilgileri kaydedildi. Hasta grubunda baş ağrısının ağırlık düzeyi, aylık atak sıklığı ve atak süresi kaydedildi. İstatistiksel analizler SPSS 16 programı kullanılarak yapıldı. Serum 25 OH vitD düzeylerine göre oluşturulan gruplar (<20 ng/mL: hipovitaminoz, 20-30 ng/mL: ara düzey ve >30 ng/mL: optimal düzey) arasındaki ilişki bağımsız t test ile değerlendirildi ve p<0,05 değeri anlamlı olarak kabul edildi.

**Bulgular:** 25 OH D vitamini düzeyi için kontrol grubunda istenen düzeyde 2 (%4,5); ara düzeyde 14 (%31,82) ve hipovitaminoz düzeyinde ise 28 (%63,68) kişi bulunmaktadır. Aynı oranlar hasta grubunda sırasıyla 4 (%7,02); 14 (%24,56) ve 39 (%68,42) şeklindedir. 25 OH vitamin D ile diğer değişkenler arasında yapılan korelasyon çalışmasında cinsiyet (p=0) ve giyim şekli (p=0,004) için anlamlı ilişki saptandı. Baş ağrısı günlük skoru (HDR: headache diary result); cinsiyet ile (p=0,011) ve 25 OH D vitamini düzeyi ile (p=0,001) güçlü ilişkili olarak bulundu.

**Sonuçlar:** Bizim çalışmamızda D vitamini düzeyi ile, migren arasında anlamlı ilişki bulunmazken HDR ile çok güçlü ilişki tespit edilmiştir. D hipovitaminozu hasta grubunda %68,42 ve kontrol grubunda ise %63,68 oranındadır. D vitamini eksikliğinin baş ağrısındaki rolü henüz net değildir. Bu nedenle daha geniş çaplı ve çok sayıda yeni çalışmaya ihtiyaç vardır.

**Anahtar kelimeler:** 25 hidroksi vitamin D, migren

### ABSTRACT

**Objective:** Vitamin D deficiency is accepted as a global public health problem. Recent observations are that vitamin D deficiency can affect every system in the body. Headache; It is a health problem that affects 80% of people in the world. The aim of this study is to evaluate the relationship between migraine headache and serum 25 hydroxy vitamin D levels.

**Methods:** Laboratory data of 57 patients with migraine and 44 healthy individuals were collected retrospectively. Our patient group (mean age: 31.23±9.61 years) consisted of 47 women (82.5%), 10 men (17.5%); Our control group (mean age: 38.73±9.79 years) consisted of 30 females (68.2%) and 14 males (31.8%). In the study group, age, gender, skin color, weight, height, BMI, educational status, medical history, vitamin and mineral supplementation history, and clothing style information were recorded. The severity of headache, monthly attack frequency and duration of attacks were recorded in the patient group. Statistical analyzes were performed using the SPSS 16 program. The relationship between the groups formed according to serum 25 OH vitD levels (<20 ng/mL: hypovitaminosis, 20-30 ng/mL: intermediate level and >30 ng/mL: optimal level) was evaluated by independent t-test and p<0.05 value was considered significant.



**Results:** In the control group; there are 2 people (4.5%) at the desired level; There are 14 (31.82%) people at the intermediate level and 28 (63.68%) people at the hypovitaminosis level. In the patient group's rates; respectively were 4 (7.02%), 14 (24.56%) and 39 (68.42%). In the correlation study between 25 OH vitamin D and other variables, a significant relationship was found for gender ( $p=0$ ) and clothing style ( $p=0.004$ ). Headache diary result (HDR: headache diary result); It was found to be strongly associated with gender ( $p=0.011$ ) and 25 OH vitamin D level ( $p=0.001$ ).

**Results:** In our study, there was no significant relationship between vitamin D level and migraine, but a very strong relationship was found with HDR. D hypovitaminosis was 68.42% in the patient group and 63.68% in the control group. The role of vitamin D deficiency in headache is not yet clear. Therefore, more large-scale and new studies are needed.

**Keywords:** 25 hydroxy vitamin D, migraine

## ÜNİVERSİTE ÖĞRENCİLERİNİN COVID-19 HASTALIĞI HAKKINDA BİLGİ DÜZEYLERİNİN VE AŞI YAPTIRMA TUTUMLARININ DEĞERLENDİRİLMESİ

EVALUATION OF UNIVERSITY STUDENTS' LEVEL OF KNOWLEDGE ABOUT COVID-19 AND  
THEIR ATTITUDES TO VACCINE

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### ÖZET

**Giriş:** Dünya Sağlık Örgütü tarafından 11.03.2020'de pandemi olarak ilan edilen COVID-19; SARS-CoV-2 virüsünün neden olduğu oldukça bulaşıcı akut solunum yolu hastalığıdır. COVID-19 hastalığı aşılar ile önenebilir bir hastalıktır. Çalışmamız üniversitemizde öğrenim gören öğrencilerimizin COVID-19 hastalığı, hastalık bulaşma ve korunma yolları ile ilgili bilgi düzeylerinin ölçülmesi, aşılar hakkında bilgi düzeyleri ve aşı yaptırma tutumlarını irdelemek amacıyla yapılmıştır.

**Materyal ve Metod:** Araştırmanın evrenini Alanya Alaaddin Keykubat Üniversitesi'nde örgün öğrenim görmekte olan öğrenciler oluşturmaktadır. Hazırlanmış olan anket internet tabanlı olarak öğrencilere ulaştırılmıştır. Araştırmanın verileri IBM SPSS Statistics versiyon 26 ile değerlendirilmiştir. Araştırma hipotezlerini test etmek amacıyla korelasyon, regresyon ve t-testi analizleri yapılmıştır.  $p < 0.05$  istatistiksel anlamlılık olarak kabul edilmiştir.

**Bulgular:** Hazırlanan ankete 155 öğrenci katılım sağlamıştır. Kadın katılımcıların oranı %54,8 ve erkek katılımcıların oranı %45,2 olarak tespit edilmiştir. Basit tesadüfi örnekleme yöntemi ile seçilen katılımcıların %3,9 ön lisans, %94,8 lisans, %1,3 yüksek lisans eğitimi almaktadır. Katılımcıların % 93'ü COVID-19 hastalığının belirti ve bulgu, bulaşma ve korunma yollarını bildiğini ifade etmiştir. Katılımcıların %95,5'i COVID-19 hastalığını yakınına ya da bir başkasına bulaştırmaktan korktuğunu, %67,1'i kendisinin ya da bir yakınının COVID-19 hastalığı geçirdiğini, %32,9'u ise yakalanmadığını belirtmiştir. Katılımcıların %88,4'ü aile fertlerinden herhangi birine aşı yaptırmayı düşündüğünü belirtmiştir. Ülkemizdeki mevcut COVID-19 aşılama durumunun yeterliliği konusunda katılımcıların %36,8'i aşılama düzeyinin yeterli olduğunu, %31,6'sı ise yetersiz olduğunu belirtmiştir. Katılımcıların %96,1'i COVID-19 pandemisinden psikolojik olarak etkilendiğini belirtmiştir. Katılımcıların %6,5'i COVID-19 pandemisi başlamadan önceki 2 yıl içinde grip aşısı yaptırdığını belirtmiş, yaşanan pandemi sürecinden sonra grip aşısı ile ilgili görüşleri sorulduğunda %19,4'ü yaptırmayı düşündüğünü belirtmiştir.

**Sonuç:** COVID-19 hastalığı ve aşılar hakkında bilgi düzeyi ne kadar yüksek olursa aşı yaptırma tutumu ve aşıya karşı olumlu yaklaşımın doğru orantılı olarak arttığı gözlenmiştir. Pandemi döneminde katılımcıların neredeyse tamamına yakını psikolojik olarak etkilendiğini belirtmiştir. Pandemi sürecinin oluşturduğu psikolojik etkilerin de aşı yaptırma düşüncesine olumlu katkıları olmuştur. COVID-19 pandemisi ile grip aşısı yaptırmayı düşünenlerin sayısında belirgin bir artış gözlenmiştir.

**Anahtar kelimeler:** COVID-19, hastalık, aşı, üniversite, öğrenci

### ABSTARCT

**Introduction:** COVID-19, declared as a pandemic by the World Health Organization on 11.03.2020; It is a highly contagious acute respiratory disease caused by the SARS-CoV-2 virus. COVID-19 is a vaccine

preventable disease. Our study was carried out in order to measure the knowledge levels of the students studying at our university about the COVID-19 disease, disease transmission and ways of prevention, to examine their knowledge levels about vaccines and their attitudes towards vaccination.

**Materials and Methods:** The universe of the research consists of students who are studying at Alanya Alaaddin Keykubat University. The prepared questionnaire was delivered to the students on the internet. The data of the research were evaluated with IBM SPSS Statistics V.26. Correlation, regression and t-test analyzes were performed to test the research hypotheses.  $p < 0.05$  was accepted as statistical significance.

**Results:** 155 students participated in the prepared survey. The rate of female participants was 54.8% and the rate of male participants was 45.2%. Participants selected by simple random sampling method; 3.9% had associate degree, 94.8% undergraduate, 1.3% postgraduate education. 93% of the participants stated that they knew the signs, symptoms, transmission and prevention ways of COVID-19 disease. 95.5% of the participants stated that they were afraid of infecting their relatives or someone else with the COVID-19 disease, 67.1% stated that they or one of their relatives had COVID-19 disease, and 32.9% did not catch it. 88.4% of the participants stated that they were considering vaccinating any of their family members. Regarding the adequacy of the current COVID-19 vaccination status in our country, 36.8% of the participants stated that the vaccination level was sufficient and 31.6% stated that it was insufficient. 96.1% of the participants stated that they were psychologically affected by the COVID-19 pandemic. 6.5% of the participants stated that they had a flu vaccine within 2 years before the start of the COVID-19 pandemic, and when asked about their opinions about the flu vaccine after the pandemic process, 19.4% stated that they were considering getting the flu vaccine.

**Conclusion:** It has been observed that the higher the level of knowledge about COVID-19 disease and vaccines, the more positive the attitude towards vaccination and the positive approach to vaccination. Almost all of the participants stated that they were affected psychologically during the pandemic period. The psychological effects of the pandemic process also contributed positively to the idea of getting vaccinated. With the COVID-19 pandemic, a significant increase has been observed in the number of people considering flu vaccination.

**Keywords:** COVID-19, pandemic, vaccine, university, student



**KIRŞEHİR BÖLGESİNDEN TOPLANAN SİNİR OTUNUN (*PLANTAGO LANCEOLATA* L.)  
ANTIOKSİDAN KAPASİTESİ**

ANTIOXIDANT CAPACITY OF RIBWORT PLANTAIN (*PLANTAGO LANCEOLATA* L.) COLLECTED  
FROM KIRŞEHİR REGION

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**ÖZET**

Bu çalışmada; Kırşehir bölgesinden toplanan ve “sinir otu, bağa yaprağı” olarak da adlandırılan *Plantago lanceolata* L. bitkisinden elde edilen metanol ekstraktlarının toplam fenolik ve flavonoid madde miktarı ve antioksidan kapasiteleri belirlendi. Ekstrak elde etmek için bitkinin toprak üzerindeki kısımları kullanıldı. Toplanan numuneler saf su ile yıkanarak fiziksel kirliliklerden arındırıldı ve daha sonra kurutuldu. Kurutulmuş bitki örnekleri öğütücü yardımıyla fiziksel olarak parçalandı ve metanol kullanılarak ekstrak elde edildi. Ekstraktın fenolik madde miktarı Folin-Ciocalteu metodu ile flavonoid madde miktarı ise alüminyum nitrat metodu ile belirlendi. Toplam fenolik ve flavonoid madde miktarları sırasıyla 15,20 mg GAE/g, ve 57,37 mg KE/g olarak bulundu. Serbest radikal giderim aktivitesi Blois metodu kullanılarak belirlendi. Serbest radikal olarak 1,1-Difenil-2-pikrilhidrazil (DPPH•) çözeltisi ve standart olarak 2,6-di-t-bütil-1-hidroksitoluen (BHT) kullanıldı. İndirgeme gücünün belirlenmesinde ise Oyaizu'ya göre yapıldı. Ekstraktın IC<sub>50</sub> değeri 103 µg/mL ve indirgeyici antioksidan gücü askorbik aside eşdeğer olarak 130 µg AAE/mL olarak hesaplandı. Sonuç olarak yetiştiği bölgede yaşayanlar tarafından yiyecek ve tıbbi amaçlı başta olmak üzere çok geniş kullanım alanına sahip *P. lanceolata* L. bitkisinin besleyici, tıbbi özelliğinin yanında antioksidan kapasitesinin olduğu tespit edildi. Bu nedenle yetiştiği bölgelerde yaşayan insanların antioksidan ihtiyacının bir kısmının karşılanması için tüketim ve saklama koşullarının belirlenmesi amacıyla yeni çalışmalara ihtiyaç olduğu sonucuna varılmıştır.

**Anahtar kelimeler:** Dar yapraklı sinir otu, *Plantago lanceolata* L., Antioksidan

**ABSTRACT**

In this study; the total amount of phenolic and flavonoid substances and antioxidant capacity of methanol extracts obtained from *Plantago lanceolata* L. plant which is collected from Kırşehir region and also called "sinir otu, bağa yaprağı", were determined. The above-ground parts of the plant were used to obtain the extract. The collected samples were washed distilled water in order to be purified from physical contamination and then dried. The dried plant specimen was ground in a grinder and extracted using methanol. The amount of phenolic substances of the extract was determined by the Folin-Ciocalteu method and the amount of flavonoid substances was determined by the aluminum nitrate method. Total phenolic and flavonoid substance amounts were found to be 15.20 mg GAE/g and 57.37 mg QE/g, respectively. The free radical scavenging activity was determined by using the Blois method. 1,1-diphenyl-2-picrylhydrazil (DPPH•) solution was used as the free radical and 2,6-di-t-butyl-1-hydroxytoluene (BHT) as a standard. The determination of the reducing power was made according to the method of Oyaizu. The IC<sub>50</sub> value of the extract was calculated as 103 µg/mL and the reducing antioxidant power was calculated as 130 µg AAE/mL. As a result, it was determined that *P. lanceolata* L., which has a wide range of uses, especially for food and medicinal purposes, by the people living in the region where it grows, has antioxidant capacity as well as nutritional and medicinal properties. For this reason, it has been concluded that new studies are needed to determine consumption and storage conditions in order to meet some of the antioxidant needs of people living in the regions where it grows.

**Keywords:** Ribwort plantain, *Plantago lanceolata* L., antioxidant.

## DNA LİGAS IV SENDROMU TANISI KONULAN HASTADA DİKKAT EKSİKLİĞİ VE HİPERAKTİVİTE BOZUKLUĞU KOMORBİDİTESİ

COMORBIDITY OF ATTENTION DEFICIT AND HYPERACTIVITY DISORDER IN A PATIENT DIAGNOSED WITH DNA LIGASE IV SYNDROME

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### ÖZET

**Giriş:** DNA Ligaz IV, 911 aminoasit ve 5'den fazla proteinden oluşan, hücre çekirdeğindeki bir enzimdir. Memeli hücrelerinde çift iplikli DNA sarmalının ana onarım mekanizmasında rol almaktadır. DNA ligaz IV eksikliği (OMIM 606593) Ligaz4 Sendromu (LIG4 Sendromu) olarak bilinen ve otozomal resesif geçiş gösteren oldukça nadir (Dünya çapında prevalansı <1/1000000) bir hastalıktır. Enzimin eksikliği kümülatif DNA hasarına neden olarak kemik iliği yetmezliği ve hematolojik maligniteye yol açmaktadır. Olgularda mikrosefali, dismorfik yüz özellikleri, iskelet malformasyonları, radyasyona duyarlılık, büyüme-gelişme geriliği, zeka geriliği ve kombine immün yetmezlik gibi çok çeşitli fenotipik özellikler görülebilmektedir. Hastalığın nadir görülmesi ve yaşam süresinin kısa olması nedeniyle literatürde Lig4 sendromundaki psikiyatrik bulgulara yönelik bilgiler kısıtlıdır. Bu makalede Dikkat Eksikliği ve Hiperaktivite Bozukluğu (DEHB) ve Hafif Düzeyde Zihinsel Yetersizlik tanıları konulan altı yaşında Lig4 Sendromlu bir erkek hasta sunulmuştur.

**Olgu:** Altı yaşında 1. Sınıf öğrencisi Lig4 Sendromu tanısı ile takip edilen erkek hasta Başkent Üniversitesi Çocuk ve Ergen Ruh Sağlığı ve Hastalıkları polikliniğine sinirlilik şikayeti nedeniyle getirildi. Anneden edinilen bilgidен çok hareketli olduğu, sınıf düzenini bozduğu, kolay sinirlendiği, ders çalışırken kısa sürede sıkıldığı, dikkatini veremediği, derslerinde zorlandığı öğrenildi. Olgu konuşma bozukluğu nedeniyle dört yıldır konuşma terapisi alıyordu. Psikiyatrik muayenede çocuk yaşından küçük gösteriyor, çekingen tavırlar sergiliyor, sorulan sorulara kısa yanıtlar veriyordu. Dikkati kolay dağılıyordu. Hareketli ve sabırsızdı. Artikülasyon sorunları nedeniyle konuşması net anlaşılıyordu. Yargılama ve soyutlama becerileri zayıftı. Duygulanımı düşünce içeriğiyle uyumlu, duygudurumu ise ötimikti. Fizik muayenesinde boy, kilo ve baş çevresi üç persentilin altındayken nörolojik muayenesi normal olarak değerlendirildi.

32 yaşındaki annenin üçüncü gebeliğinden üçüncü yaşayan olarak 38. hafta ve 2050 gram, sezeryan (mükerrer) ile doğan hasta, intrauterin 29. haftada fetal gelişim geriliği (IUGR) tespit edilerek yakın takibe alınmıştı. Doğum sonrası hafif solunum sıkıntısı gelişmiş, beş gün küvezde kaldıktan sonra taburcu edilmişti. Gelişim basamaklarında başını tutma, anneyi tanıma ve sosyal gülümsemesi ilk üç ay içinde ve yürümesi zamanında olurken, konuşması gecikmişti. Postnatal altıncı ayda mikrosefali nedeniyle olası kraniosinostoz açısından değerlendirmek için çekilen beyin tomografisi normal olarak raporlanmış, o dönem yapılan kan tetkiklerinde lökopeni ( $3930 / \text{mm}^3$ ) ve nötropeni ( $900 / \text{mm}^3$ ) saptanmıştı. Olgu 7 aylıken dil bağı nedeniyle opere olmuştu. Enfeksiyon nedeniyle hiç hastaneye yatırılmamıştı. 3 yaşında Tüm Eksom Dizileme ile DNA ligaz IV eksikliği teşhisi konulan hastanın soygeçmişinde ise özellik yoktu.

Yapılan psikometrik ve psikiyatrik değerlendirmeler neticesinde *hastaya* Hafif Düzeyde Zihinsel Yetersizlik ve Dikkat Eksikliği ve Hiperaktivite Bozukluğu tanıları konularak risperidone 0.5 mg/gün (bölünmüş dozlarda) başlandı. Takipte ilacı herhangi bir yan etki olmaksızın tolere edebildiği ve şikayetlerin gerilediği öğrenildi.

**Tartışma:** Lig4 Sendromu ilk kez akut lenfoblastik lösemili 14 yaşında bir erkek çocukta 1999 yılında tanımlanmıştır. O günden bu yana, literatürde 50'den az vaka bildirilmiştir. Bildirilen olgularda yaygın fenotipik heterojenite görülmektedir. Klinik ve immünojenetik belirtiler aynı mutasyona sahip kardeşler arasında bile büyük ölçüde değişiklik göstermektedir. 2019 yılında yayınlanan ve 41 Lig4 Sendromu olgusunu içeren makalede olguların çoğunluğunu kadınların oluşturduğu (%68); %80'inde mikrosefali, %70'inde büyüme

gelişme geriliği, %68’inde enfeksiyon, %86’sında radyosensitivite, daha az oranda kemik iliği yetmezliği (%44), dismorfik yüz özellikleri (%37), malignite (%24), deri tutulumu (%20), sindaktili/polisindaktili (%10) saptandığı bildirilmiştir. Bilindiği kadarıyla bu Lig4 sendromunda görülen ilk DEHB olgusudur. Bildirilen vakaların nadir görülen bu hastalıkların anlaşılmasına katkı sağlamasının yanında, olgudaki bulgular klinisyenlere, Lig4 sendromu tanısı konulan çocukların nörogelişimsel bozukluklar açısından rutin psikiyatrik takibi gerektiğini göstermektedir.

**Anahtar kelimeler:** DNA Ligaz IV, LIG4 Sendromu, DEHB, Hiperaktivite, Zeka Geriliği, Mental Retardasyon

## ABSTRACT

**Introduction :** DNA Ligase IV is an enzyme in the cell nucleus, consisting of 911 amino acids and more than 5 proteins. It plays a role in the main repair mechanism of the double-stranded DNA helix in mammalian cells. DNA ligase IV deficiency (OMIM 606593) is a very rare (worldwide prevalence <1/1000000) disease known as Ligase4 Syndrome (LIG4 Syndrome) with autosomal recessive inheritance. Deficiency of the enzyme causes cumulative DNA damage, leading to bone marrow failure and hematological malignancy. Various phenotypic features such as microcephaly, dysmorphic facial features, skeletal malformations, sensitivity to radiation, growth-development retardation, mental retardation, and combined immunodeficiency can be seen in the cases. Due to the rarity of the disease and the short life span, information on the psychiatric disorders in Lig4 syndrome is limited. In this article, a six years old male patient with Lig4 Syndrome diagnosed with Attention Deficit and Hyperactivity Disorder (ADHD) and Mild Intellectual Disability is presented.

**Case:** A six years old boy, who was followed up with the diagnosis of Lig4 Syndrome, was brought to Başkent University Child and Adolescent Psychiatry Outpatient Clinic with a complaint of nervousness. According to the information obtained from his mother, it was learned that he was hyperactive, disrupted the classroom order, got angry easily, got bored in a short time while studying, could not pay attention, and had difficulties in his lessons. The case had been receiving speech therapy for four years due to speech disorder. In his psychiatric examination, he looked younger than his age, displayed timid attitudes, and gave short answers to the questions asked. He was hyperactive and impatient. His speech was not clearly understood due to articulation problems. His judgment and abstract thinking were poor. His affect was compatible with his thought content, and his mood was euthymic. On physical examination, height, weight, and head circumference were below the three percentile, and neurological examination was normal.

The patient, who was born with a cesarean section at 38 weeks and 2050 grams, from the third pregnancy of a 32-year-old mother, was diagnosed with fetal growth retardation (IUGR) at the intrauterine 29th week and was followed closely. Postpartum mild respiratory distress developed and he was discharged after being in the incubator for five days. While holding his head, recognizing his mother, and socially smiling developed in the first three months, his speech was delayed. Brain tomography taken to evaluate for possible craniosynostosis due to microcephaly in the postnatal sixth month was reported as normal, and leukopenia (3930/mm<sup>3</sup>) and neutropenia (900/mm<sup>3</sup>) were found in the blood tests performed at that time. The patient had been operated on for a tongue tie when he was 7 months old. He had never been hospitalized for an infection. The patient, who was diagnosed with DNA ligase IV deficiency by Whole Exome Sequencing at the age of 3, was unremarkable in his familial history.

As a result of the psychometric and psychiatric evaluations, the patient was diagnosed with Mild Intellectual Disability and Attention Deficit Hyperactivity Disorder, and risperidone 0.5 mg/day (in divided doses) was started. In the follow-up, it was learned that he could tolerate the drug without any side effects and his complaints regressed.

**Discussion:** Lig4 Syndrome was first described in 1999 in a 14-year-old boy with acute lymphoblastic leukemia. Since then, less than 50 cases have been reported in the literature. Great phenotypic heterogeneity is observed in the reported cases. Clinical and immunological manifestations vary widely, even among siblings with the same mutation. In the article published in 2019 and including 41 cases of Lig4 Syndrome, the majority of the cases were women (68%); 80% microcephaly, 70% growth retardation, 68% infection, 86% radiosensitivity, bone marrow failure (44%), dysmorphic facial features (37%), malignancy (24%), skin



problems (20%), syndactyly/polysyndactyly (10%) were reported. To the best of our knowledge, this is the first ADHD case seen in Lig4 syndrome. In addition to the contribution of the reported cases to the understanding of these rare diseases, the findings of the case show clinicians that children diagnosed with Lig4 syndrome need routine psychiatric follow-up in terms of neurodevelopmental disorders.

**Keywords:** Lig4 Syndrome, DNA ligase IV deficiency, Ligase4 Syndrome, ADHD, Hiperactivity, Mental Retardation, psychiatric disorders

## TURKEY'S SINGLE EMERGENCY CALL NUMBER, 112

### TÜRKİYE'NİN TEK ACİL ÇAĞRI NUMARASI, 112

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#### ABSTRACT

In emergencies in Turkey; With the "112 Emergency Call Center Project", which was made while the fire department (Fire Warning) 110, ambulance (Sanitary Emergency) 112, AFAD 122, public order/traffic (Police Emergency) 155, coast guard 158 and forest fire warning 177 short code call numbers were reached, all emergency calls are combined in the short code number "112". A single emergency call number will not only make it easier to remember the emergency call number, but also will enable all public health teams to reach the scene as soon as possible.

Within the framework of harmonization with the European Union (EU) acquis, Turkey decided to allocate the short number "112" used for Sanitary Emergency calls as the Single Emergency Call Number in the National Scope in 2002, and determined the provinces of Antalya and Isparta as pilot implementation sites in 2005. Emergency call centers in these provinces started operating in 2009. As of this year, the transition continued in the provinces gradually, and as of 2021, the single number for emergency calls in Turkey became "112".

In emergency call centers, personnel from all public health units meet emergency calls in the same place. With this model, known as the co-location model; It provides the opportunity for coordination between public health teams. Receiving the call, following up and coordinating the events are carried out by the team members. Thanks to the coordination and cooperation of the relevant teams, it has made it easier for them to reach the scene together in emergency interventions. Thus, the public health teams were prevented from waiting for each other at the scene and provided a quick response to emergency calls.

**Keywords:** Turkey, 112, Emergency call

#### ÖZET

Türkiye’de acil durumlarda; itfaiye (Yangın İhbar) 110, ambulans (Sihhi İmdat) 112, AFAD 122, asayiş/trafik (Polis İmdat) 155, sahil güvenlik 158 ve orman yangın ihbar 177 kısa kod çağrı numaraları ile ulaşılmakta iken yapılan "112 Acil Çağrı Merkezi Projesi" ile tüm acil çağrılar "112" kısa kod numarasında birleştirilmiştir. Tek acil çağrı numarası acil çağrı numarasının hatırlanmasına kolaylaştırmasının yanı sıra ihtiyaç duyulacak tüm halk sağlığı ekiplerin en kısa sürede olay yerine ulaşmalarını sağlayacaktır.

Türkiye, Avrupa Birliği (AB) müktesebatına uyum çerçevesinde 2002 yılında Sihhi İmdat çağrıları için kullanılan "112" kısa numarasının Ulusal Kapsamda Tek Acil Çağrı Numarası olarak tahsis edilmesine kararlaştırmış ve 2005 yılında Antalya ve Isparta pilot uygulama illeri olarak belirlemiştir. Bu illerde acil çağrı merkezleri 2009 yılında faaliyete başlamıştır. Bu yıldan itibaren kademeli olarak illerde geçiş devam ederek 2021 yılı itibarıyla tüm Türkiye’de acil çağrıların tek numarası "112" olmuştur.

Acil çağrı merkezlerinde, tüm halk sağlığı birimlerine ait personeller acil çağrıları aynı mekânda karşılamaktadır. Co-location modeli olarak bilinen bu modelle; ekipler arasında koordinasyon imkânı sağlamaktadır. Çağrının alınması, olayların takip ve koordinasyonu bir arada bulunan ekip üyeleri tarafından yerine getirilmektedir. İlgili ekiplerin koordinasyon ve iş birliği sayesinde acil müdahalelerde olay yerine birlikte ulaşmalarını kolaylaştırmıştır. Böylelikle halk sağlığı birimlerinin olay yerinde birbirlerini beklemeleri önlenmiş ve acil çağrılara hızlı müdahale sağlamıştır.

**Anahtar kelimeler:** Türkiye, 112, Acil çağrı

## WHY IS FIRST AID IMPORTANT?

### İLK YARDIM NEDEN ÖNEMLİ?

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## ABSTRACT

The chain of survival is all of the applications from the beginning of an event that threatens the vital functions of the person to the hospital where the treatment is completed. It consists of three important rings in chain of survival. First aid at the scene, emergency care in the ambulance and emergency treatment in the hospital constitute these three rings. Although Turkey has widespread pre-hospital health services, the ideal response time of an ambulance is 10 minutes in urban areas and 30 minutes in rural areas, according to international standards. In the studies, it has been determined that 10% of the deaths in accidents occur within the first 5 minutes, and 50% within the first 30 minutes. These data show the importance of first aid at the scene until the professional medical team arrives.

First aid is the non-medicated applications made at the scene of an accident or life-threatening situation, without the need for medical equipment, with the available tools and equipment, in order to save life or prevent the situation from getting worse, until the help of the health personnel is provided. With first aid applications; It is aimed to eliminate the danger to life, to maintain vital functions, to prevent worsening of the situation and to facilitate recovery. For these purposes; In addition to reaching with first aid applications, it can be reached by preventing wrong applications and knowing in which cases ambulance services will be called. Similarly, knowing what to say in case of calling emergency call centers for ambulance services contributes to these purposes.

First aid is important because unnecessary emergency medical calls decrease and ambulances reach the scene with the necessary information transferred to the call center, as well as first aid applications increase the chance of survival of the sick and injured until professional health care is reached.

**Keywords:** First aid, Important, Survival

## ÖZET

Yaşam kurtarma zinciri, kişinin yaşamsal fonksiyonlarını tehlikeye neden olan bir olayın başlangıcından tedavinin tamamlandığı hastaneye kadar ki yapılan uygulamalarının tümüdür. Yaşam kurtarma zincirinin üç önemli halkadan oluşmaktadır. Olay yerinde yapılan ilk yardım, ambulans da yapılan acil bakım ve hastane de yapılan acil tedavi, bu üç halkayı oluşturmaktadır. Türkiye genelinde yaygın bir hastane öncesi sağlık hizmetlerine sahip olmasına karşın, uluslararası standartlara göre bir ambulansın ideal müdahale süresi kentsel alanda 10 dakika, kırsalda 30 dakikadır. Yapılan çalışmalarda, kazalarda ölümlerin %10'u ilk 5 dakika içerisinde, %50'si ise ilk 30 dakika içerisinde gerçekleştiği tespit edilmiştir. Bu veriler profesyonel sağlık ekibi gelene kadar olay yerinde yapılacak olan ilk yardımın önemini göstermektedir.

İlk yardım, herhangi bir kaza veya yaşamı tehlikeye düşüren bir durumda, sağlık görevlilerinin yardımı sağlanıncaya kadar, hayatın kurtarılması ya da durumun kötüye gitmesini önleyebilmek amacı ile olay yerinde, tıbbi araç gereç aranmaksızın, mevcut araç ve gereçlerle yapılan ilaçsız uygulamalarıdır. İlk yardım uygulamalarıyla; hayati tehlikenin ortadan kaldırılması, yaşamsal fonksiyonların sürdürülmesi, durumunun kötüleşmesinin önlenmesi ve iyileşmenin kolaylaştırılması amaçlanmaktadır. Bu amaçlara; yapılacak ilk yardım uygulamalarıyla ulaşmanın yanı sıra yanlış uygulamaları önleyerek, hangi durumlarda ambulans hizmetlerinin aranacağını bilerek ulaşılabilir. Benzer şekilde bu amaçlara, ambulans hizmetleri için acil çağrı merkezlerinin aranması halinde nelerin söyleneceğini bilmekte katkı sağlamaktadır.



Gereksiz acil sađlık ađruların azalmasına ve ađrı merkezine aktarılan gerekli bilgilerle de ambulansların olay yerine ulaşmasının hızlanmasının yanı sıra yapılan ilkyardım uygulamaları da profesyonel sađlık bakımı ulaşılncaya kadar hasta ve yaralıların hayatta kalma şansını artırmasından dolayı ilk yardım önemlidir.

**Anahtar kelimeler:** İlk yardım, Önemli, Kurtarma



**CONTRIBUTION TO THE KNOWLEDGE OF THE MYRMECOFAUNA  
(HYMENOPTERA: FORMICIDAE) OF POMORIE, BULGARIA**

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**ABSTRACT**

In July 2021, the myrmecofauna of Pomorie City (Bulgaria) was studied. From the Formicidae family 15 species were recorded: *Cardiocondyla bulgarica*, *C. elegans*, *Crematogaster schmidti*, *Formica cunicularia*, *F. sanguinea*, *Lasius niger*, *Messor barbarus*, *M. capitatus*, *M. structor*, *Plagiolepis pygmaea*, *Tapinoma erraticum*, *Temnothorax* sp., *Tetramorium caespitum*, *T. chefketi* and *T. ferox*.

**Keywords:** Pomorie, Black Sea, Formicidae, *Messor capitatus*.





**NEST SITE PREFERENCES OF RED-BACKED SHRIKE (*LANIUS COLLURIO*) IN VICINITY OF JAGODINA (SERBIA)**

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**ABSTRACT**

Red-backed Shrike in vicinity of Jagodina (Serbia) has generally preferences for specific plant species in terms of its nest location. This is contrary to other studies which found that Red-backed Shrike does not selectively choose specific plant species, but simply use the dominant plant species in the breeding area. However, *Prunus spinosa* has been described as an important nesting plant for Red-backed Shrike before together with *Rosa canina*, *Crataegus monogyna*, *Rubus fruticosus* and *Sambucus nigra*. During the nesting season, from May to August 2009 and 2010, the nesting site was surveyed. In the investigated area, 52 nests on 11 plant species were recorded. Most nests were recorded on *Prunus spinosa* - 16 (30,8 % of total), followed by *Sambucus nigra* - 11 (21,1 %), *Rubus caesius* - 6 (11,5 %), *Salix* sp. - 5 (9,6 %), per 3 nests (5,8 %) of *Rosa canina*, *Vitis vinifera* and *Lycium* sp.; 2 nests (3,8 %) on *Prunus insititia* and per 1 nest (1,9 %) of *Quercus cerris*, *Prunus persica* and *Populus alba*.

**Keywords:** Red-backed Shrike, Jagodina, nest, *Prunus spinosa*.



**THE HERPETOFAUNA OF JAGODINA REGION (SERBIA)**

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**ABSTRACT**

This paper presents mostly unpublished faunistic data on amphibians and reptiles in the region of Jagodina (Serbia). The main research was conducted in the period 2013-2015. 13 species of amphibians and 11 species of reptiles were registered. Zoogeographic analysis showed that herpetofauna of the studied area consists of nine chorotypes, with the Southern-European and Turano-European as the most dominant ones.

**Keywords:** Amphibians, Reptiles, Jagodina, Serbia.

**THERMODYNAMIC PREDICTION OF PRECIPITATION CONDITIONS IN THE MIXTURE OF ANIONIC AND AMPHOTERIC SURFACTANTS**

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**ABSTRACT**

A mixture of anionic and amphoteric surfactants, consisting of three components at intermediate pH levels: anionic, cationic (protonated amphoteric) and zwitterionic (non-protonated amphoteric) was studied. Knowledge of the composition of each surfactant in both monomer and micellar forms (monomer-micelle equilibrium) and in the form of a precipitate is important in applications using this mixture. The systems studied in this paper contain sodium dodecyl sulfate (*SDS*) and dimethyldodecylamine oxide (*DDAO*<sup>+</sup>), which are used in a wide range of consumer products. Dimethyldodecylamine oxide (*DDAO*<sup>+</sup>) is an amphoteric surfactant that may exist as a cationic or zwitterionic surfactant depending on the pH of the solution. The amine group of the surfactant *DDAO* can protonate in a similar manner to weak acids. By combining the use of the precipitate solubility product constant and the dissociation/protonation constant within the developed approach, taking into account all side reactions, a thermodynamic model was presented and used to predict the solid phase existence conditions. All the global Gibbs energy variation calculations were performed for the concentrations of both surfactants lower than their CMC values. Precipitation of mixtures of dimethyldodecylamine oxide and sodium dodecyl sulfate were studied at different pH levels. The protonated form of *DDAO*<sup>+</sup> carries a positive charge and precipitates with the opposite charged *DS*<sup>-</sup>. The precipitation areas of the compound *DDAO*<sup>+</sup>-*DS*<sub>(S)</sub> become narrower as the surfactant concentrations decrease. At the same time, when the concentrations of both surfactants decrease, the pH of the coexistence of the two solid phases shifts to its higher values, from a more acidic environment to a neutral one. The  $\Delta G(\text{pH})$  curve passes through a maximum, then decreases, due to the deprotonation of *DDAO*<sup>+</sup> and the formation of the neutral zwitterionic form of dimethyldodecylamine oxide, *DDAO*<sup>0</sup>. The developed thermodynamic model is in agreement with the existing experimental data at different pH levels.

**Keywords:** anionic and amphoteric surfactants mixture, dimethyldodecylamine oxide, dodecyl sulfate, Gibbs energy, precipitation, thermodynamics.

**THERMODYNAMIC STUDY OF THE PRECIPITATION PROCESSES OF ANIONIC SURFACTANTS BY CALCIUM AND MAGNESIUM IONS**

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**ABSTRACT**

Sodium dodecyl sulfate (*SDS*) is an anionic surfactant that has found application in personal care products, detergents, in cosmetics and cleaning products. An obvious disadvantage of using anionic surfactants as detergents is the formation of the precipitate with calcium ( $Ca^{2+}$ ) and magnesium ( $Mg^{2+}$ ) ions contained in hard water. Below the CMC level, the solubility of *SDS* as a function of  $Ca^{2+}$  or  $Mg^{2+}$  concentration is governed by the solubility product ( $K_s$ ) and decreases with increasing its concentration. Information on the solubility of surfactant salts, determined by the dissolution of pure substances, is of limited utility. Apparent  $K_s$  may be exceeded by orders of magnitude without the appearance of the solid phase, due to the surfactant association, the ion pairs formation, the complexation of the solutions, etc. In the paper, the equations for calculating the variation of the global Gibbs energy of the precipitation processes - dissolution of lauric acid and alkaline earth metal dodecyl sulfate were deduced. The elaborated  $\Delta G(\text{pH})$  diagrams offer the possibility to determine the areas of thermodynamic stability of the solid phases depending on the chemical composition and acidity of the system. If  $\Delta G > 0$ , then the compound precipitates and the system is biphasic, while for the values of  $\Delta G < 0$ , all components are soluble in water, i.e. there is a homogeneous, single-phase system. It has been shown that as the concentrations of the surfactant and the metal ion increase, the range of precipitate formation, either slightly soluble salt or slightly soluble acid, expands, in all cases by some pH units. Thus, the conditions can be established when the formation of precipitates is avoided. Using the developed thermodynamic model, the areas in which the solid phase is formed at the interaction of the anionic surfactant with the calcium and magnesium ions were determined.

**Keywords:** anionic surfactant, calcium ion, dodecyl sulfate, Gibbs energy, magnesium ion, precipitation.



## COMPARATIVE STUDY OF OIL ADSORBENTS USING CORN CHAFF AND COCONUT FIBRE

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### **ABSTRACT**

The issue of oil pollution has been an important concern to oil producing nations of the world due to its serious environmental impact; therefore, necessary actions need to be taken to prevent or reduce this type of pollution and their environmental consequence. Most materials used for solving the pollution menace are effective and very expensive to procure due to the limited or scarcity of starting material and the processes of transforming such precursor to useful adsorbent. Natural organic sorbents are emerging as proper choice of oil spill clean-up due to their availability, low cost and eco-friendliness. In this study, adsorptive capability of a functionalized low cost effective corn chaff and coconut fibre were investigated and compared. Batch adsorption experiment which provides data for large scale adsorption or continuous adsorption systems was adopted. The adsorptive capability of these materials were subjected to various tests which include checking of the effect of sorbent contact time and adsorbent particle size on oil adsorption capacity as evaluation for the pure crude oil and mixture of crude oil and water removal. The result showed that coconut fibre is more effective in oil spill clean-up than corn chaff. The physical characterization of the raw adsorbent was determined in the laboratory while the chemical characterization of the raw and functionalized adsorbent was done using Fourier Transform Infra-Red (FTIR) analysis. This research has shown that both corn chaff and coconut fibres are potential adsorbents for remediation of oil pollution in order to help maintain clean and serene environment where such challenges are prominent.

**Keywords:** Oil spillage, Adsorption, Corn chaff, Coconut fibre, FTIR analysis



**OPTIMIZATION AND CHARACTERISATION OF BIOLUBRICANT FROM NEEM SEED OIL**  
(*Azadirachta Indica*)

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**ABSTRACT**

The research studied the effect of process parameters on the production and optimization of biolubricant from neem seed oil. Extraction of the oil was first carried out followed by multiple transesterifications to neem methyl ester and then biolubricant. The resulting product obtained was characterized for its lubricating properties. The result of oil extraction from the neem seed showed that the neem seed contain 25.7% oil yield. The effect of process parameters such as reaction temperature, reaction time and catalyst concentration on the biolubricant yield was investigated using response surface methodology. The optimum conditions for biolubricant production were temperature of 110°C, reaction time of 80 minutes and catalyst concentration of 0.85 wt%, at these optimum condition yield of 84.5% was obtained. Statistical analysis revealed that the process parameters such as reaction temperature and catalyst concentration are significant of which the  $p < 0.0001$  value was less compare to  $p < 0.05$ . The model validation shows that the value of  $R = 0.9958$ ,  $R^2 = 0.9916$ ,  $AAD = 0.037$ , where the  $R$  determine the interaction between the process parameters,  $R^2$  determines the degree of fitness of the model while the value of  $AAD$  determines the predictability of the model. The biolubricant was also characterize or some lubricating properties such as flash point = 250°C , pour point of 1.1°C and the viscosity index = 387. The lubricant produced shows that it will be suitable in light gear applications and as a hydraulic fluid.

**Keywords:** optimization, characterization, neem, biolubricant, oil

**DISTILLED BIOMASS, A SUSTAINABLE RESOURCE FOR EXTRACTING BIOACTIVE COMPOUNDS FOR GREEN SYNTHESIS**

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**ABSTRACT**

Many essential oil-producing plants are grown worldwide, processed, and traded in national and international markets with billions of US\$. Although these plants are bursting with secondary metabolites (terpenes, phenolic compounds, flavonoids), most of the remaining distilled biomass is discarded after the distillation process. This by-product represents a valuable resource of phenolic compounds that are used in the green synthesis of metal nanoparticles, especially for gold and silver nanoparticles (NPs). Therefore, the purpose of this study was to obtain, analyse and use the extracts rich in bioactive compounds, to synthesize AgNPs with many potential applications (cancer, antimicrobial and antifungal treatments). Before the extraction process, the spent plant materials were dried and ground to ensure a maximum contact surface with the solvent (water). The extraction time and procedure were optimized, and the extracts were filtered before metal NPs synthesis. The chemical composition of the extracts was analysed by liquid chromatography coupled with a diode array detector, and the identified compounds (pyrogallol, gallic acid, quercetin, kaempferol) were like those reported by other studies. DPPH• and ABTS•+ assay methods were used to evaluate the extracts antioxidant activities and the recorded average inhibition was over 60%. The total phenolic content was determined through the Folin-Ciocalteu method, and flavonoids were determined through the AlCl<sub>3</sub> assay with remarkable results. Green AgNPs was successfully biosynthesised, as was demonstrated by UV-Vis, FT-IR spectroscopies, and SEM microscopy. Average AgNPs were spherical with less than 30 nm in diameter, having good bactericidal activity against Gram-positive and Gram-negative microorganisms.

**Keywords:** bioactive compounds, green synthesis, silver nanoparticles, waste materials.



**THE MODERATING ROLE OF GRATITUDE IN DETERMINING PSYCHOLOGICAL WELL-BEING THROUGH MARITAL SATISFACTION AMONG COUPLES IN KHYBER PAKHTUNKHWA**

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**ABSTRACT**

The aim of the present study was to find out the relationship between Marital Satisfaction and psychological well-being with Gratitude as the moderator. For this purpose first of all correlation between Gratitude and Marital satisfaction as well correlation between Marital satisfaction and Psychological well being was founded.. Secondly, the Hierarchal Regression analysis was done to observe the moderation effect of Gratitude on the relationship between Marital satisfaction and Psychological well-being. The sample (N=400) was selected using quota sampling technique. The sample include married couples (n=200) wives and (n=200) husbands. Our results indicated that Marital satisfaction was positively correlated with Psychological well-being ( $r=.446, p<0.01$ ). The Hierarchal Regression analysis showed a significant effect of marital satisfaction on psychological well being. The value of R-square was found 0.199 significant at  $F= 98.5$  indicated that 19.9% variation found in psychological well-being is due to marital satisfaction. In step 2 of Hierarchal Regression Model found that Gratitude act as moderator in relation with Marital satisfaction and Psychological well-being ( $F=108.3, p=0.000$  ). The result of  $R^2.020=$  of overall model of moderation indicates that there is 2% variance in the dependent variable due to Combined effects of Gratitude and Marital satisfaction. Thus, it is concluded that Gratitude act as moderator in relation with Marital Satisfaction and Psychological well-being.



**THE MINDFULNESS AND THE EMOTIONAL REGULATION SKILLS IN ITALIAN NURSES  
DURING THE COVID-19 PANDEMIC**

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**ABSTRACT**

**Background and Aim:** Starting from November 2019, the SARS-CoV-2 infection had radically changed the experience of all of us. Since then, literature had greatly increased its number of scientific publications on this topic, particularly on the psychological conditions of healthcare workers directly involved in the care of Covid-19 patients, as anxiety and depression conditions and furthermore the fear due to recorded high numbers of cases all over the world, too. Alongside these conditions health emergency had caused, it was equally important to consider evaluation on the perception of the self, on the ability to cope with the health emergency that the nurse had in his own being. Numerous scientific evidence supported that Mindfulness skills might ameliorate healthcare worker's well-being and reduced levels of anxiety and stress. Moreover, Mindfulness competencies were associated with emotion regulation improving well-being and fostering an approach aimed at decision-making rather than a static attitude. So literature defined Mindfulness as the potential "pathway to resilience and recovery" during the Covid-19 pandemic. The purpose of this study was to analyze differences in Mindfulness level and emotional regulation skills, as cognitive reappraisal and expressive suppression sub dimensions, according to sex and years of work experience in a sample of Italian nurses direct involved in the care of Covid-19 patients. Then, correlations were also performed in order to evidence relationships between the Mindfulness tendency and the emotional regulation skills, both in cognitive reappraisal and expressive suppression, too.

**Methods:** In June 2020 an on-line questionnaire was administered. Data relating to: sex and years of work experience, the Mindfulness Attention Awareness Scale (MAAS) and the Emotion Regulation Questionnaire (ERQ) in the cognitive reappraisal and expressive suppression sub dimensions were collected.

**Results:** 200 nurses were enrolled. Males recorded higher MAAS values compared to females ( $p=.001$ ). No significant differences were registered in the MAAS scores according to years of work experience and regarding the ERQ sub scales according to sex and work of experience, too. Also, any correlations were reported between MAAS and ERQ sub scales.

**Conclusions:** Future training on the basic principles of Mindfulness and Emotions Regulation were considered a priority in nurses to better self-modulate their own beings, particularly during the pandemic period.

**Keywords:** Emotion Regulation; Mindfulness; Nursing Personnel.



**SOME PSYCHOLOGICAL FACTORS AS PREDICTOR OF STUDENTS' ATTITUDE TOWARDS  
MATHEMATICS IN TECHNICAL AND VOCATIONAL INSTITUTIONS IN IBADAN, OYO  
STATE, NIGERIA**

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**ABSTRACT**

Mathematics serves as a strong reinforcement that enables the students develop logical, abstract thinking and the ability to recognise, formulate and evaluate problems in their different fields. The knowledge gained from mathematics is expected to be applied to the courses offered in technical and vocational institutions. This article examines the effect of some psychological factors on students' attitude towards mathematics. This was designed specifically to consider the effect of interest in mathematics, mathematics phobia, and perceived usefulness of mathematics on students' attitude towards mathematics. Data were collected using students questionnaire. A correlational analysis showed positive relationship among the variables of study. Result revealed that 77% of the variation in students' attitude towards mathematics was accounted by the independent variables (interest, mathematics phobia and perceived usefulness of mathematics). It is therefore recommended that all the psychological factors examined should be treated and made right in order to improve students' attitude towards mathematics in technical and vocational Institutions

**Keywords:** Interest, Mathematics phobia, Usefulness of mathematics, Attitude.



**GAMIFICATION AS A MEANS OF SOFT SKILLS DEVELOPMENT IN THE PROCESS OF  
EDUCATING HIGHER SCHOOL STUDENTS IN THE ONLINE MODE**

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**ABSTRACT**

Educating modern students in the online learning environment poses a number of tasks for teachers to develop students' interaction and teamwork skills. These skills are described as soft skills. In the context of online learning, this task acquires certain specific features. They are represented by the transfer of active interaction skills from the real world into the virtual and their exchange between students and teachers and students themselves. This interaction is possible due to the gamification method in the educational process. This method is used in the inter-faculty discipline "Pedagogy" (the bachelor's level), as well as in the discipline "Higher education pedagogy" (the master's level) for students of natural and humanitarian specialties. When studying the topic "The use of modern educational technologies in the learning process" as part of these disciplines, students are invited to perform project work. It can be either the individual or the team one. The essence of project activity is in students' developing and presenting their games based on the knowledge of the gamification of learning process (e.g. its design, mechanics, dynamics of the game, positive and negative consequences of the use of games). Important criteria for evaluating a group project (3-7 students in the team) are the scale of the game and the number of locations. The content of the game can cover any subject area (physics, chemistry, mathematics, biology, history, etc.) depending on the student's specialization and the range of his professional and personal interests. When creating a game students act according to a pre-defined algorithm. It was developed by the teacher and assumes a system of clear step-by-step actions. All consultations on the implementation of project work with students can be carried out in real time and online.

**Keywords:** gamification, project, teamwork, interaction, soft skills.



## **RELATIONSHIP BETWEEN ANXIETY, DEMOGRAPHIC CHARACTERISTICS AND RANKING IN DANCESPORT**

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### **ABSTRACT**

Emotions play a key role in the success of a competition. Anxiety is a negative state accompanied by emotions such as anger, worry, fear of failure, and this, can affect the result of competition performance. Therefore, the assessment of anxiety in the sport context is useful to understand and predict the major psychosocial factors that influence both the experience and performance of athletes prior to competition. Several studies have attempted to analyze the relationship between performance and anxiety and other associated factors. However, in the context of Dancesport, research is very limited. The aim of this study was to examine the anxiety levels of Dancesport athletes in terms of some demographic characteristics and the relationship of these variables to competition ranking. Thirty adolescent athletes, participating in regional Latin Category C competitions, were involved in the study voluntarily. Before the competition, the Italian version of the Competitive State Anxiety Inventory-2 (CSAI-2), an instrument that aims to measure three dimensions: cognitive anxiety, somatic anxiety, and self-confidence, was administered. Participants rated each item on a 4-point Likert scale ranging from one (not at all) to four (very much) with theoretical subscale scores ranging from 9 to 36. The questionnaire was collected from participants on the day of the competition to compare anxiety according to different demographic characteristics and competition rankings. Data were analyzed using SPSS package program with descriptive statistical techniques and Pearson's correlation test. The significance level was set at 0.05. Pearson's correlation test revealed that there was a significant negative correlation between training experience and state anxiety, ranking in Dancesport competition and state anxiety, and a positive correlation between training experience and ranking in Dancesport. The results have sensitive implications for coaches to try to better prepare their athletes by working not only on performance, but also on the psychological aspect.

**Keywords:** Latin dancers, performance, stress, correlation, teenagers.



**A MEDIATED MODERATION OF AFFECTIVE COMMITMENT AND PERSONALITY  
TEMPERAMENT WITHIN FRAMEWORK OF JD-R MODEL**

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**ABSTRACT**

Emotional exhaustion among service workers is prevalent due to high job demand and resources. A substantial body of researches suggested that affective commitment and personality temperament plays a significant role in controlling emotional exhaustion regardless of high job demand and resources. The present study aimed at to find out job demand & resource model based on work demands (qualitative workload, workload, role and feedback conflict), emotional exhaustion and contemporary support among service managers with meditating moderation of affective commitment and personality temperaments. For this purpose, a convenient sampling technique has been used, and data were collected from 278 participants to explore the relationship among targeted variables. Amos 21 was carried out to investigate the model fit about research proposition. The findings of the study indicated the substantial directional relationship emotional exhaustion and high work demand. The results also suggested that affective commitment partially mediate the relationship, whereas contemporaries support has a significant negative relationship with exhaustion. Moreover, temperaments; harm avoidance and Reward dependence are found to be moderating this meditational model, but no other temperament has found in impacting the state. The paper also highlights the concluding remarks, recommendation and implications of the present study regarding job demands and that would be helpful for future study.

**Keywords:** Workdemands, Emotional exhaustion, Affective commitment, Personality temperaments, Services Mangers

**DEVELOPMENT AND VALIDATION OF STABILITY-INDICATING HPLC METHOD FOR ESTIMATION OF DULOXETINE HCL IN BULK AND TABLETS: APPROACH TO PREDICT PHARMACOKINETIC, THERAPEUTIC AND TOXICOLOGICAL PROFILING OF ITS DEGRADATION PRODUCTS**

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**ABSTRACT**

A simple, accurate, precise and specific stability-indicating HPLC method was developed for the estimation of Duloxetine HCl in bulk and tablets. The drug was subjected to forced degradation studies and found susceptible to acid and alkali hydrolysis and also to the oxidative conditions. The formed degradation products were separated and resolved from the drug on C18 column (250 × 4.6 mm, 5 μ) using methanol: 20 mM phosphate buffer (pH 3.0) (70:30 %, v/v) in an isocratic mode at a flow rate of 1 mL/min. All eluents were detected using PDA detector at 289 nm. Validation experiments proved good accuracy and precision of the method. The assay of the tablet was in good agreement with the nominal amount of the drug. The European Pharmacopoeia (EP) 8.0 has reported seven impurities for Duloxetine HCl. Out of which Impurity C and Impurity E are the acid degradation and oxidative degradation products of Duloxetine HCl. Also, Impurity B and Impurity D are the alkali degradation products of Duloxetine HCl. The work was further extended to assess the pharmacokinetic and therapeutic abilities of major degradation product of Duloxetine HCl by computational approach. The result indicated that the major degradation product of Duloxetine HCl analyzed have good drug-likeness properties with acceptable ADMET/Tox values when predicted using Lipinski's rule of five and AdmetSAR tool, respectively. Pharmacological activities of forced degradation products were predicted using PASS server. The results of this studies depict that the major degradation product of Duloxetine HCl was having good pharmacokinetic profiles with several biological activities. The study can be further extended to *in vitro* and *in vivo* analyses for the discovery of novel preventive and therapeutic drug.

**Keywords:** Duloxetine HCl, in-silico profiling, HPLC, Forced Degradation.



**STUDY OF PHYSICAL, CHEMICAL AND PHARMACOTECHNOLOGICAL PROPERTIES OF CORN COLUMNS WITH STIGMAS FOR THE PURPOSE TO OBTAIN A DRY EXTRACT**

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**ABSTRACT**

The object of study – corn columns with stigmas. We used generally accepted standard, described in the literature methods and devices, and new methods of research of drugs that allow to objectively assess their quality, based on the obtained statistically processed results in conducting research.

The process of developing the technology of extraction preparations, it is necessary to know the values of technological indicators of crushed raw materials, on the basis of which in the future the optimal parameters of the technological process are selected.

It was found that the bulk density in the studied samples of medicinal plant raw materials was 0.17 g / cm<sup>3</sup>. This is an important parameter that is ensure uniform mixing of raw material components and prevent their stratification and is due to the fact that corn columns with stigmas occupy a large volume due to their structure.

The free volume of the layer was high, which indicates the need to use larger volumes of extractant to wet the medical plant material and compact it when loading into the extraction device.

The difference between specific and bulk density shows that the raw material occupies a large volume, so there is a need to take into account when calculating the ratio of medicinal plant raw materials and the finished product, the choice of extractor size, loading characteristics of raw materials and more.

To optimize the process of extraction, we conducted research to determine the coefficient of swelling and the degree of swelling using organic and inorganic solvents.

The defined indicators are qualitative parameters of technology estimate technological parameters of preparation of medicinal product.

**Keywords:** corn, dry extract, pharmacotechnological properties

**THE STATE OF UKRAINE'S READINESS FOR ESTABLISHMENT OBSERVATORIES FOR SUSTAINABLE DEVELOPMENT OF RESORT DESTINATIONS**

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**ABSTRACT**

Ukraine occupies one of the top places in Europe in terms of the level of natural, historical, and cultural resources, and the rapid development of tourism is only a matter of time. Our country's resort and recreational territories are about 9.1 million hectares, which is about 15% of the entire territory. However, according to the World Economic Forum, Ukraine uses less than a third of the available tourist and recreational potential.

In Ukraine, the tourism sector is one of the priorities for the development of the state. The strategy for the development of tourism and resorts for the period up to 2026, pays special attention to the development of resorts, recreation, health-improving, and medical tourism. Almost half of Europe's natural medicinal resources are concentrated in Ukraine, which, unfortunately, currently remain unrealized potential in practically all country regions. The implementation of the tasks of state policy in the field of tourism and resorts, which consists in observing the principles of sustainable development of the tourism and resort potential of Ukraine, is caused by the need to create systemic and complex prerequisites for the development of tourism and resorts in Ukraine. This strategy should become one of the priority areas for accelerating the country's economic growth, attracting investment, providing employment, improving the transport infrastructure of the regions, rational use of natural resources and environmental protection, structural modernization of the economy, and filling budgets all levels.

Taking into account the recommendations of the World Tourism Organization on the development and implementation of national priorities in the implementation of sustainable development goals in the tourism sector, it is necessary to emphasize the relevance for our country of goal 3 - "Good health and well-being". In particular, in the National Strategy for Reforming the Healthcare System in Ukraine for the period 2015-2020, it is noted: "The main function of the state in the field of public health should be the development of policies and strategies in the field of disease prevention, health care, and health promotion."

The analysis of the resort potential of Ukraine showed that the national priority in the implementation of the WTO initiative to create the Observatory for Sustainable Development is the development of a system of criteria and indicators, the creation and maintenance of an inventory of natural medicinal resources, the organization of observation and assessment (monitoring) of the state of resort and tourist destinations to develop recommendations policy of sustainable environmentally friendly development of health tourism.

The scientific base on which the Observatory for Sustainable Development of Resort Destinations in Ukraine can be created is the State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine". The Institute is the only institution in Ukraine that carries out systemic research of natural medicinal resources, monitoring and control over their condition, organizational,





methodological, and regulatory support of sanatorium-resort activities, scientific substantiation of directions for the development of resort territories.

**Keywords:** observatory, sustainable development, natural healing resources.

## USER ASSISTED MULTIPLE SEGMENTATION OF COLOR IMAGES VIA ROBUST HYPOTHESIS TESTING

RENKLİ GÖRÜNTÜLERİN KULLANICI YARDIMI

VE KARARLI HİPOTEZ TESTİ TEMELLİ YÖNTEMLE ÇOKLU KESİMLENMESİ

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### ABSTRACT

We consider multiple segmentation of color images by using tools from robust hypothesis testing. To ease this NP-hard problem, we allow the user to select certain regions over the image whose pixels are regarded as candidates from different labels. This selection process initiates the proposed algorithm, then the empirical histograms of the pixel densities are taken as nominal densities to be used in a robust hypothesis test. Specifically, we use the DGL test, due to Devroye et al.,

by adapting the test structure to include soft metrics gathered over the multi-dimensional color image. We show that the resulting algorithm is suitable for multi segmenting color images with low computational complexity. The proposed algorithm also provides performance advantages compared to other statistical methods such as K-means. We present simulations from popular segmentation databases that validates the performance improvements of the proposed method.

**Keywords:** Color Image Segmentation, Multiple Segmentation, Robust Hypothesis Testing, DGL Test

### ÖZET

Bu çalışmada renkli görüntülerin kararlı hipotez testi tabanlı yöntemlerle çoklu kesimlenmesini inceledik. NP-zorluğa sahip bu problemin çözümü için kullanıcı yardımıyla farklı etiketlerden gelen piksellerin kabaca seçildiğini farz ettik. Bu seçim süreci, önerilen yöntemin ilk aşamasını oluşturmaktadır, sonrasında seçilen bölgelerdeki piksellerin histogramları kararlı bir hipotez testinde kullanılan nominal dağılımlar olarak alınmaktadır. Kararlı hipotez testi olarak Devroye tarafından geliştirilen DGL testini, görüntünün çoklu boyutundan toplanan soft metrikleri işleyebilecek şekilde adapte ederek kullandık. Geliştirdiğimiz yöntem renkli görüntülerin çoklu kesimlenmesini düşük karmaşıklıkla yapabilmektedir.

Önerdiğimiz yöntem benzer istatistiksel yöntemlere, örneğin K-means, kıyasla daha iyi kesimleme performansını sunmaktadır. Bu performans avantajı popüler kesimleme veritabanlarında yapılan simülasyonlarla da doğrulanmıştır.

**Anahtar kelimeler:** Renkli Görüntü Kesimleme, Çoklu Kesimleme, Kararlı Hipotez Testi, DGL testi

**SENSORLESS CONTROL FOR MULTIPHASE INDUCTION MOTOR DRIVES BASED ON  
EXTENDED KALMAN FILTER OBSERVER**

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**ABSTRACT**

The major control law poses a problem which is the need to use a mechanical value sensor (speed, flux, load torque), and imposes an extra cost and increases the complexity of the process. To avoid this problem, an Extended Kalman filter EKF estimator has been detailed for the objective of reducing costs (no sensor to implement) or presented as a degraded but functional solution to applications with sensors in case of malfunction. The simulation results are presented to illustrate the performance of the proposed control approach associated with the Kalman filter.

In this work:

- The short exposition of the vector control equations by orientation of the direct rotor flux DFOC which will be use to define low of control.
- we use the control algorithm to synthesize a stabilizing control for the double stator asynchronous machine DSIM to control the speed and flux.
- The Kalman filter is proposed to reconstruct the speed, the flux, and the essentially as the resistive torque. In fact, the resistive torque is very necessary for the implementation of the all controls law, and in practice the value of the resistive torque (load) is unknown.
- The simulations results are presented in the end of paper with efficiency of this control and efficiency of replacing the sensors by the proposed EKE estimation approach.

**Keywords:** DSIM Motor, DFOC Control, Sensorless Control, Extended Kalman Filter EKF.



**A NEW CONTROL STRATEGY FOR HYBRID ENERGY STORAGE SYSTEMS IN  
STANDALONE MICROGRIDS**

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**ABSTRACT**

To improve the stability, supply reliability and power quality, a standalone multi-source renewable energy system requires an intermediate energy storage system. One of the most viable energy storage solution is the combination of supercapacitor with chemical batteries. However, the design of an effective power management and control scheme for hybrid energy storage systems remain a challenge for many researchers. This paper proposes a new control strategy for the DC bus voltage based on frequency decomposition of the reference power using low pass filter. This method exploits the characteristics of low pass filters to regulate the DC bus by keeping a balance between the power produced by renewable energy sources and the variable load. The role of the hybrid storage system is to stabilize power fluctuations by absorbing the excess of power or alternatively supplying the lack of power. The results obtained show that the proposed control scheme for the hybrid energy storage system offers low charge/discharge current battery rates, better control of voltage, increased battery life, lower levels of current stress on battery and hence an increased battery life.

**FAULT-TOLERANT CONTROL BASED ON SLIDING MODE CONTROLLER  
FOR DOUBLE-FED INDUCTION GENERATOR**

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**ABSTRACT**

This paper presents a fault-tolerant control (FTC) strategy for Double Fed Induction Generator (DFIG) subject to rotor faults. To steer the active and reactive power to their desired references, a nonlinear sliding mode controller (SMC) is proposed. The suggested SMC can't deal with the effects of fault which can achieve gentle system degradation, in order to obtain better results [1] [4].

The Double Fed Induction Generator (DFIG) has many faults that affect its performance, such as stator winding short-circuit faults, broken rotor bars faults and mechanical rotor faults, for this reason, there are a lot of benefit to design FTC based on Sliding Mode Control that compensates for the impact of this faults [2].

When the fault occur (BRB) in the double fed induction generator a ripple operation can be appear in the output of DFIG especially in the active and reactive power [3], so we increase the gain of the SMC control gradually to compensate the fault effect.

Simulation results are presented to show the effectiveness of the proposed FTC in terms of active and reactive power. The obtained results confirm that the proposed FTC has a better robustness against the BRB fault where the DFIG operates with acceptable performance in both active and reactive power Compared with sliding mode control.

**Keywords:** Fault tolerant control, Double Fed Induction Generator, Sliding Mode Control, broken rotor bar.



**ANALYSIS OF BUCKLING STABILITY BEHAVIOR OF ELCTRO-MAGNETORHEOLOGICAL ELASTOMER PLATE**

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**ABSTRACT**

In this article, we studied the instability phenomenon of plate buckling made of steel (E36-S355), and elctro-magnetorheological elastomer subject to compression loading. The study of the magnetic field intensity influence on the buckling instability of compressed hybrid plates is done by a mathematical development using the Ritz approach and by a numerical simulation under the Abaqus software. The obtained results show clearly that we can control the instabilities of the adaptive smart plate's behavior by the magnetic field, and the orientation angle of pseudo- fibers formed by the iron particles; depending on the variation of the angle direction of the magnetic field.

**Keywords:** Composite hybrid plate, Ritz approach, Numerical simulation, Magnetic field, Buckling stability.



**PERFORMANCE ANALYSIS OF HIGH GAIN DC–DC CONVERTERS FOR SOLAR PHOTOVOLTAIC SYSTEMS**

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**ABSTRACT**

Increase in the use of distributed power generation systems based on the renewable energy sources such as solar, fuel cells draws the more attention of high gain DC-DC converters. The purpose of the DC-DC converter is to interface the renewable energy sources to the load on a standalone or grid connected system. The appropriate selection of the DC-DC converter is very important because it plays a significant role in the overall performance of the renewable energy integrated system. A DC-DC converter can be classified into isolated and nonisolated converters. An isolated DC-DC converter uses transformer to provide an electrical separation between the input and output. Thus it helps to protect the converter from high power flow. A non-isolated DC-DC converter does not have an electrical separation between the input and output i.e., they are transformerless inverter. The main objective of this paper is to compare the performance of various non-isolated DC-DC converter topologies used for solar photovoltaic system. The various parameters chosen for the comparative analysis are the number of circuit components, efficiency of the converter topology, high voltage gain offered and the voltage stresses on the switching components. Simulation results are presented to validate the performance of the DC-DC converters.

**Keywords:** DC–DC converter, boost converter, solar photovoltaic systems, isolated

**INVESTIGATION OF STRESS CORROSION CRACKING IN TITANIUM ALLOY (Ti6Al4V)  
WITH AND WITHOUT CADMIUM COATING**

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**ABSTRACT**

Stress corrosion cracking (SCC) is a dangerous and complex form of cracking which is defined as the propagation of cracks due to the joint effect of tensile stress and a reactive environment. In the present article, Investigation of stress corrosion cracking phenomenon has been studied out on Ti6Al4V, which is a renowned grade of Titanium alloys and used widely in aerospace industry and marine environments. In the current study, Titanium Alloy (Ti6Al4V) is employed to investigate the tensile strength, microstructure, of non coated and coated specimens in the corrosive environment. For applying SCC conditions, a test fixture is developed. The static force of 1000 N is applied for both specimens with an environment having 3.5 % NaCl solution for time intervals of 468 hours. The scanning electron microscope (SEM) is used to investigate the microstructure of non coated and coated specimens. Both specimens had been tensile tested and stress-strain curves were analyzed. Surface of both specimens was analyzed by SEM and metallography to study the effects of aforesaid conditions in internal structure of both specimens. It is observed that due to the corrosive environment grains are damaged visibly in different areas of the specimen. Moreover, dimples, inter and transgranular cracks are found in the fractographic examination. It is concluded that 31.72 % increase in tensile strength and 41.58% increase in elongation of coated specimen as compared to non coated specimen. It is observed that due to the corrosive environment grains are damaged visibly in different areas of the non coated specimen while coated specimen also show small pits and grain damage.

**Keywords:** Titanium Alloy (Ti6Al4V), SCC, SEM, Microstructure, intergranular cracking



## **SWOT ANALYSIS OF WASTEWATER-TO-HYDROGEN ENERGY TECHNOLOGIES**

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### **ABSTRACT**

According to the data of 2020, the world population is approximately 7.8 billion. Industry and technology are developing rapidly due to the changing and increasing demands of human beings. As a result, various types of domestic and industrial wastewater are formed. Increasing world population and increasing industry also means increasing energy demand. It is estimated that by 2050, approximately 50% of the total energy demand will be composed of renewable energy sources. The main renewable energy sources are hydraulics, solar, wind and biomass. Biomass is an option that is not affected by weather conditions compared to others (Lim et al., 2020). Discharge of the wastewater without treatment causes soil, air, groundwater/surface water pollution and adverse effects on living beings. In our lives, on the one hand, an increasing amount of wastewater is formed and on the other hand, the need for energy increases. The increasing amount of wastewater should be reduced primarily with the conscious use of water and the use of high technologies in industries. After its conscious use, recycling/recovery should be done in order to use it again or to benefit from the substances it contains. Managing wastewater with these goals is a sustainable approach. Organic matter and water (which constitutes the majority of wastewater) in wastewater can be converted into hydrogen energy using appropriate treatment/disposal methods. The aim of this study is to present the SWOT analysis of wastewater-to-hydrogen energy technologies. Microbial fuel cells (MFC), supercritical water gasification (SCWG), dark fermentation (DF) and indirect photobioreactors (PBR) were selected as H<sub>2</sub> production technologies after literature review. SWOT analysis makes it possible to identify the strengths and weaknesses of each method, as well as opportunities and threats. So, SWOT analysis helps to choose the most suitable technology among the considered (Adar et al., 2016). As a result of SWOT analysis, DF was determined as the most suitable technology to produce hydrogen from wastewater. More R&D studies should be carried out in order to reduce the disadvantages of DF and to use it on an industrial scale.

**Keywords:** SWOT; hydrogen energy; wastewater, treatment technologies

## **LaNdB<sub>6</sub> ALLOY: RARE EARTH METAL HEXABORIDES**

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### **ABSTRACT**

The Nd doped LaB<sub>6</sub> and La doped NdB<sub>6</sub> was successfully synthesized from La<sub>2</sub>O<sub>3</sub>–B<sub>2</sub>O<sub>3</sub>–Mg blends by mechanochemical method. The Nd doping effects on crystal structure and electronic properties were investigated using DFT. The synthesis reaction was carried out by high-energy ball milling and was slowly investigated in terms of milling duration and process control material. The lattice constant, intra-octahedral bond, inter-octahedral boron bond and positional parameter(z) were calculated for LaB<sub>6</sub>, La<sub>7</sub>Nd<sub>1</sub>B<sub>6</sub>, La<sub>1</sub>Nd<sub>7</sub>B<sub>6</sub> and NdB<sub>6</sub>. The electronic properties results indicate that the lattice constant of La<sub>7</sub>Nd<sub>1</sub>B<sub>6</sub> and La<sub>1</sub>Nd<sub>7</sub>B<sub>6</sub> are increase when Nd doping. The PDOS of LaB<sub>6</sub>, B of LaB<sub>6</sub>, La<sub>7</sub>Nd<sub>1</sub>B<sub>6</sub>, B of La<sub>7</sub>Nd<sub>1</sub>B<sub>6</sub>, La<sub>1</sub>Nd<sub>7</sub>B<sub>6</sub>, B of La<sub>1</sub>Nd<sub>7</sub>B<sub>6</sub>, NdB<sub>6</sub> and B of NdB<sub>6</sub> were calculated. La d-electron bands crossing the Fermi energy, indicating typical conductor behavior. Also the charge density was studied. Thus, ternary REB<sub>6</sub> have good promising potential for many application. In this paper, we investigate the structure parameters and electronic properties of the binary and ternary hexaboride.

**Keywords:** Rare-earth hexaboride; Lattice constant; Pdos

**TÜRK TOPLUMUNDA AHİLİK VE AHİLİKTE HOŞGÖRÜ**  
AHI-ORDER IN TURKISH SOCIETY AND TOLERANCE IN AHI-ORDER

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**ÖZET**

Kültür ve medeniyetimizi şekillendiren önemli kurum ve kavramlardan birisi olarak Ahilik; Müslüman Türklerin Anadolu'daki uğradığı dini, sosyal, siyasi, kültürel değişim ve dönüşümlerin bir sonucu olarak görülmektedir.

Ayrıca yurt ekonomisinde temel ihtiyaç maddelerini en kaliteli, en ucuz biçimde üretmeyi öngören millî bir örgüt biçimi olarak işlev görmüştür. Eğitim öğretim faaliyetlerini kurum misyonlarının merkezinde tutan ahiler, ilk iş olarak mensuplarını eğitmekte, “terbiye” etmekte ve ileride meslekleriyle ilgili kazanacakları bilgi-becerilerin yanı sıra onları tavır-davranış bakımından da hayata hazırlamaktadırlar. Hoşgörü kavramı bu tavır-davranışların en önde gelen unsurlardan birisidir.

Anadolumuz, tarihi seyri içinde birçok sevgi ve hoşgörü kahramanları yetiştirmiştir. Yunus Emre'den, Mevlana'ya Hacı Bektaş Veli'den, Nasreddin Hoca'ya kadar birçok tarihi şahsiyetimiz sevgi ve hoşgörünün sembolü olmuşlardır. Ahiliğin kültür dinamiklerinin başında gelen Yunus'un birçok şiirlerinde bu anlayış açıkça görülür. Herkese bir gözle bakan Yunus, "Yaratılanı hoş gördük Yaratandan ötürü" diyerek, insana insan olmasından öte Yaratana saygının gereği olarak yaklaşarak hoş görmenin gerekliliğine ince bir hikmetle dikkat çekmiştir.

Sonuç olarak, Türklerin Ahilik toplumsal dönüşümünü tekrar uyandırması ve güncellenmiş olarak bu metotları gündeme getirmesi toplumu düşünmeye sürükleyecek ve toplumsal yüceliş hızlanacaktır. Ahi ocakları bu gelişimin dini ve ilmi temsilcileri olarak sivil toplumu güçlendirme mantığıyla toplumsal uyanışı sağlayacaktır.

**Anahtar kelimeler:** Ahi, Ahilik, Ahi Evran, Hoşgörü,

**ABSTRACT**

As it is one of the most important institutions and concepts that shape our culture and civilization, Ahi-order is seen as an outcome of the religious, social, political, cultural changes and conversions that Muslim Turks faced in Anatolia.

Besides, it functioned as a national organization form that predicted to produce the basic necessities in the highest quality and cheapest way in the domestic economy. Those Ahis, who kept education and training activities at the center of their institutions' mission, as their first job, educated their members, “disciplined” them and in addition to the knowledge and skills they would gain about their professions in the future, they also prepared them for life with regards to their attitude-behavior. The concept of tolerance was one of the most preminent elements of this attitude-behavior.

The Anatolia has grown many heroes of love and tolerance in the historical process. From Yunus Emre to Mevlana, from Hacı Bektaş Veli to Nasreddin Hodja, many historical personalities have become symbols of love and tolerance. This understanding can clearly be seen in many of the poems of Yunus, the leading personality in Ahi-order cultural dynamics. Saying “Love the created for the creator's sake”, Yunus, who looked equally to everyone, drew attention to the necessity of pleasing Creator by approaching a human being rather than beyond a human being.

As a result, reviving the social conversions of Turkish Ahi-order again and bringing these methods up to date will lead the society to think and accelerate the social climbing. Ahi-order, as religious and scientific



representatives of this development, will provide social awakening through the sense of empowering civil society.

**Keywords:** Ahi, Ahi-order, Ahi Evran, Tolerance

**TOKAT'IN MANEVİ ÖNDERLERİNDEN AHI MAHMUD VELİ (KEÇECİ BABA)**  
AHI MAHMUD VELİ (KEÇECİ BABA) ONE OF TOKAT'S SPIRITUAL LEADERS

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**ÖZET**

Anadolu'nun Türkleşmesi ve İslamlaşmasında Anadolu erenlerinin çok büyük etkileri olmuştur. Ahi Evran, Hacı Bektaş Veli, Sarı Saltuk gibi "Horasan Erenleri" ismi ile anılan bu tasavvufi şahsiyetlerin Anadolu'da yaşayan Türkmenlerin İslamlaşmasındaki rolü çok açıktır. Ahi Mahmud Veli, bugün yaygın kullanılan adıyla Keçeci Baba Anadolu'nun önemli manevi liderlerinden biridir. Keçeci Baba, Tokat'ın Erbaa ilçesinin sınırları içerisindeki Keçeci köyünde bilinen bir zattır. Keçeci Baba, Horasan erenlerinden olup XIII. yüzyılda Anadolu'ya gelmiş ve Erbaa'ya bağlı kendi adıyla anılan köyde ocak kurmuştur. Asıl adı Ahi Mahmud Veli bulunan Keçeci Baba, aynı zamanda bir Ahi lideridir ve Ahi Baba ismiyle anılmaktadır. Ahi Mahmud Veli, 19 yüzyılda Keçeci Baba adıyla anılan bir tekke kurmuştur.

Keçeci Baba'nın türbesi Tokat'ın Erbaa ilçesine bağlı bulunan Keçeci köyündedir. Keçeci köyü aynı zamanda Keçeci Baba Ocak merkezidir. Tokat bölgesinde yaşayan Alevî grupların büyük çoğunluğu Keçeci Baba Ocağı taliplerinden oluşmaktadır. Tokat'ın sahip olduğu dinî ve kültürel değerler Türk toplumunun sahip olduğu kültürel değerler ile büyük ölçüde paralellik arz etmektedir. Biz de bu çalışmamızda Tokat'ın manevi şahsiyetlerinden biri olan Keçeci Baba'nın hayatı, tarihi şahsiyeti, türbesi ve Tokat'ın sosyal ve kültürel yaşamındaki etkilerini din sosyolojisinin araştırma yöntemleri ile ortaya koymaya çalıştık.

**Anahtar kelimeler:** Tokat, Ahi Mahmud Veli (Keçeci Baba), Keçeci Köyü, Alevilik-Bektaşilik, Türbe

**ABSTRACT**

The Anatolian eren has been very influential in the Turkification and Islamization of Anatolia.

The role of these mystical figures, called Ahi Evran, Hacı Bektaş Veli, Sarı Saltuk, with the name "Horasan Erenleri" in Islamization of the Turkmen living in Anatolia is very obvious. Ahi Mahmud Veli with his commonly used name Keçeci Baba was one of important the spiritual leaders of Anatolia. One of these important figures is the Keçeci village, which belongs to Erbaa district of Tokat. Keçeci Baba, and Khorasan Dervishes, had come to Anatolia in XIII. Century and Erbaa township village, known by his name, established hearth. The real name of Ahi Mahmud Veli, Keçeci Baba, also a leader of Ahi, Ahi Baba is referred to by name. Ahi Mahmud Veli found a lodge called Keçeci Baba in the 19th century.

Keçeci Baba's tomb is in Keçeci village of Erbaa district of Tokat. Keçeci village is also the center of Keçeci Baba Ocak. The vast majority of the Alevi groups who live in the Tokat region are made up of quarrels from the Keçeci Baba Ocağı tales. The religious and cultural values in Tokat resemble majorly to the cultural values in Turkish community.

We will try to reveal the effects of Keçeci Baba's life, historical personality, turtles and Tokat's social and cultural life with one of the methods of religious sociology, which is one of the spiritual figures of Tokat in this work.

**Keywords:** Tokat, Ahi Mahmud Veli (Keçeci Baba), Keçeci Village, Alevism, Bektaşism, Tomb

**OSMANLI ŞEHİRLERİNDE KAPİTALİZM KALKANI: AHİLİK ZİHNİYETİ VE LONCALAR**  
**THE SHIELD OF CAPITALISM IN THE OTTOMAN CITIES: THE AHILIK MENTALITY AND THE**  
**GUILDS**

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**ÖZET**

Tarihsel olarak, ekonomi ve siyaset birbiri ile ilişki içerisinde olmuş ya da birbirlerinin gelişimini etkilemiş unsurlardır. Bu bağlamda, toplumlar, zamanın ekonomi ve siyaset koşulları çerçevesinde birbirini hatırlatan imgeler üretmiştir. Osmanlı şehirleri ve Batı medeniyetine yön veren imgeleri ekonomik parametrelerle açıklama çabası çalışmanın konusunu oluşturmaktadır. 13.yy'da Ahi Evran döneminde gelişen Ahilik kurumunun Anadolu'da kurulup gelişmesinde, "Fütüvvet" teşkilatının büyük bir etkisi vardır. Fütüvvet etimolojik olarak, mertlik, yiğitlik, gençlik, delikanlılık, cömertlik, el açıklığı, soy temizliği anlamına gelmektedir. Nitekim Osmanlı şehir medeniyetinde ahilik zihniyetini besleyen ona bir süreklilik ve dinamizm kazandıran şey toplumsal dayanışma, mesleki etik ve ahlaki yaşamdır. Türk Milleti'nin sosyo-kültürel tarihi içerisinde Ahilik anlayışının ve Ahilik teşkilatlanmasının önemli bir yeri vardır. Bu bağlamda ahilik zihniyetin ürünü olan loncalar, Osmanlı şehir ekonomisinin oluşumuna imkân veren ve geçmişin kültürel mirasıyla sentezlenen kurumlar olarak ön plana çıkmaktadır. Özünde birikmiş zenginlik barındıran kapitalizm, Batı'da yaşanan sanayi devrimi sonrasında mülkiyet ilişkilerini değişime uğratmıştır. Batı Avrupa'da ortaya çıkan, özellikle Sanayi Devrimi ile gelişmeye başlayan ve güç kazanan Burjuva sınıfı devrin sosyo-ekonomik yapısını yansıtmaktadır. Sanayi devrimi, ekonomisi büyük ölçüde tarıma dayalı Osmanlı şehirlerinde etkili olamamıştır. Osmanlı imparatorluğunda devletin piyasa mekanizmaları üzerindeki sıkı denetim yetkisinin olması, coğrafi keşifler sonucu yeni ticaret yollarının keşfi ve bunun sonucunda ipek ve baharat yollarının önemini kaybetmesi imparatorluğun gelirlerinin azalmasına neden olmuştur. Osmanlı imparatorluğunda, toplumsal sınıf ve burjuvazi oluşturulmak istenilmemesinin nedenini görmek için dönemin genel yapısına bakmak yeterli olacaktır. Ahilik zihniyetinde değer olarak görülen insan, burjuva zihniyetinde emeği meta olarak görülen öznedir. Bu bağlamda burjuva ve ahilik zihniyetinin tezatlık içermesi söz konusu olmuştur. İşgücü ve üretim arasında adalet ve dengeyi gözeten ahilik anlayışı, burjuva zihniyetinde haksız rekabet ve sömürgecilik olarak ortaya çıkmıştır. Buradan hareketle, çalışmada tarihsel sosyoloji çerçevesinde devlet ve mülkiyet ilişkilerinde kapitalizmin rolü, ahilik zihniyetinin ürünü loncalar ve Sanayi devriminin batı ve Osmanlı şehirlerine olan etkisi karşılaştırmalı olarak değerlendirilecektir.

**Anahtar sözcükler:** Ahilik Zihniyeti, Kapitalizm, Loncalar, Osmanlı İktisadı, Sanayi Devrimi

**ABSTRACT**

Historically, economy and politics are elements that have been in a relationship with each other or have influenced each other's development. In this context, societies have produced images that remind one another within the framework of the economic and political conditions of the time. The effort to explain the Ottoman cities and the images that shape the Western civilization with economic parameters is the subject of the study. The "Fütüvvet" organization had a great influence on the establishment and development of the Ahi organization in Anatolia, which developed during the Ahi Evran period in the 13th century. Fütüvvet etymologically means bravery, bravery, youth, youthfulness, generosity, generosity, genealogy. As a matter of fact, it is social solidarity, professional ethics and moral life that feeds the ahi-order mentality in the Ottoman urban civilization and gives it continuity and dynamism. In the socio-cultural history of the Turkish Nation, the understanding of the Ahi community and the organization of the Ahi have an important place. In this context, the guilds, which are the products of the ahi-order mentality, come to the fore as institutions that allow the formation of the Ottoman city economy and are synthesized with the cultural heritage of the past. Capitalism, which has accumulated wealth in its essence, has changed property relations after the industrial



revolution in the West. The Bourgeois class, which emerged in Western Europe and started to develop and gained power especially with the Industrial Revolution, reflects the socio-economic structure of the period. The industrial revolution could not be effective in Ottoman cities whose economy was largely based on agriculture. The fact that the state had strict control over market mechanisms in the Ottoman Empire, the discovery of new trade routes as a result of geographical discoveries, and the loss of importance of silk and spice routes as a result of this, caused a decrease in the income of the empire. It will be sufficient to look at the general structure of the period to see the reason why the social class and bourgeoisie were not wanted to be formed in the Ottoman Empire. The human being, who is seen as a value in the Akhism mentality, is the subject whose labor is seen as a commodity in the bourgeois mentality. In this context, there has been a contradiction between the bourgeois and Akhism mentality. The understanding of ahi-order, which observes justice and balance between labor and production, emerged as unfair competition and colonialism in the bourgeois mentality. From this point of view, the role of capitalism in the state and property relations within the framework of historical sociology, the guilds that are the product of the Akhism mentality, and the effect of the Industrial Revolution on the western and Ottoman cities will be evaluated comparatively.

**Keywords:** Ahi mentality, Capitalism, Guilds, Industrial Revolution, Ottoman Economy.

**DERS KİTAPLARI VE ÖĞRETİM PROGRAMLARINDA AHİ EVRAN VE AHİLİK**  
AHİ EVRAN AND AHİ-ORDER IN TEXTBOOKS AND TEACHING PROGRAMS

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**ÖZET**

Anadolu kültürünü şekillendiren manevi fatih ve mimarlardan olan Ahi Evran büyük bir halk düşünürü ve toplum önderidir. Ahi Evran, Arapların kurduğu, Fütüvvet teşkilatından esinlenerek Anadolu’da Ahilik teşkilatı kurmuştur. Ahilik teşkilatının, Anadolu’da sosyal ve kültürel hayatın gelişmesinde, erdemli ahlaklı değerlerine bağlı çalışkan bir toplumun oluşmasında, Anadolu’nun Türkleşmesinde önemli katkıları olmuştur.

Ahi Evran, dünyada yaşamak için bilgiye, ahlaka, sanata, esnaf ve sanatkârlar arasındaki dayanışmaya, ahiret hayatı içinde takva ve imana sınıksız sarılmayı kendisine rehber edinmiş bir şahsiyettir. Ahi Evran, Ahilik yapılanmasıyla, sosyal dayanışmayı, ulusal birliği ve ahlaklı yaşamı benimseyen, çalışkan bir toplum oluşturmayı amaçlamıştır. Bu amaçlar, aynı zamanda eğitim sistemimizin amaçları arasında da yer almaktadır.

Ahi Evran gibi önemli manevi önderlerin toplumsal yaşama, bilime, ahlaka, değerlere, sanata kısacası insanlığa yönelik görüş, fikir ve düşünceleriyle ilgili ifadelerinin, ders kitaplarında gerektiği kadar yer alması gelecek nesillerin iyi yetişebilmeleri adına bir gerekliliğe işaret etmektedir. Dolayısıyla ders kitaplarında Ahi Evran ve Ahilikle ilgili ifadelerin yer alma durumunun araştırılması, incelenmesi ve analiz edilmesi önem arz etmektedir. Geleceğimiz olan çocuklarımızın manevi önderlerimizin düşünceleri ile ders kitaplarında tanışabilmeleri, bu fikir ve düşüncelerin çocuklarımız tarafından anlaşılabilmesi, içselleştirilebilmesi adına bir gerekliliği ortaya koymaktadır. Ahi Evran’ın bilim, sanat, ahlak ve çalışma hayatıyla ilgili düşüncelerini yansıtan ifadelerin ders kitaplarında gerektiği kadar yer alması, toplumsal değerlere bağlı, ahlaklı, dürüst ve çalışkan nesillerin yetiştirilmesinde önemli katkılar sağlayacaktır.

Bu araştırmanın amacı, ders kitaplarını ve öğretim programlarını Ahi Evran ve Ahilikle ilgili ifadeler açısından incelemek ve gerekli değerlendirmeleri yapmaktır. Bu temel amaç çerçevesinde aşağıdaki sorulara cevap aranmıştır:

- 1.İlkokul ders kitaplarında Ahi Evran ve Ahilikle ilgili ifadeler ne sıklıkta yer almaktadır?
- 2.Ahi Evran ve Ahilikle ilgili ifadelerin yer alması açısından ilkokul ders kitapları arasında farklılıklar var mıdır?
- 3.Ortaokul ders kitaplarında Ahi Evran ve Ahilikle ilgili ifadeler ne sıklıkta yer almaktadır?
- 4.Ahi Evran ve Ahilikle ilgili ifadelerin yer alması açısından ortaokul ders kitapları arasında farklılıklar var mıdır?
- 5.Lise ders kitaplarında Ahi Evran ve Ahilikle ilgili ifadeler ne sıklıkta yer almaktadır?
- 6.Ahi Evran ve Ahilikle ilgili ifadelerin yer alması açısından lise ders kitapları arasında farklılıklar var mıdır?
- 7.Ders kitaplarında Ahi Evran ve Ahilik’le ilgili ifadeler hangi ünite/tema/konularda yer almaktadır?
- 8.Öğretim kademeleri arasında Ahi Evran ve Ahilikle ilgili ifadelerin ders kitaplarında yer alması bakımından farklılıklar var mıdır?
- 9.Öğretim Programlarında Ahi Evran ve Ahilikle ilgili ifadeler ne sıklıkta yer almaktadır?



10. Ahi Evran ve Ahilikle ilgili ifadelerin yer alması açısından öğretim programları arasında farklılıklar var mıdır?

Nitel bir çalışma olan bu araştırmada, veriler doküman incelemesi yöntemi kullanılarak elde edilmiş daha sonrasında ilkökul, ortaokul ve lise ders kitapları ile ilgili öğretim programları araştırmanın amacına uygun olacak şekilde analiz edilmiştir. Araştırmada, Ahi Evran ve Ahilikle ilgili ifadelerin ders kitaplarında yer alması açısından öğretim kademeleri ve dersler arasında önemli farklılıkların olduğu saptanmıştır. Ders kitapları arasında 7. Sınıf Sosyal Bilgiler ders kitabının, öğretim kademelerinde Lise öğretim kademesinin, Ahi Evran ve Ahilikle ilgili ifadelerin en fazla yer verildiği alanlar olduğu belirlenmiştir. Elde edilen veriler tablolarla ifade edilmiş, gerekli yorumlar yapılarak varılan sonuç ve önerilere yer verilmiştir.

**Anahtar kelimeler:** Ahi Evran, Ahilik, Ders Kitapları, Öğretim Programları.

## ABSTRACT

Ahi Evran, one of the spiritual conquerors and architects who shaped Anatolian culture, is a great public thinker and community leader. Ahi Evran, inspired by the Futuvel organization established by the Arabs, established the Ahi-Order organization in Anatolia. The Ahi-Order organization has made important contributions to the development of social and cultural life in Anatolia, the formation of a hardworking society committed to virtuous moral values, and the Turkification of Anatolia.

Ahi Evran is a person who has taken as a guide for himself to cling to knowledge, decency, art, solidarity between artisans and artisans, piety and faith in the hereafter life in order to live in the world. Ahi Evran aimed to create a hardworking society that embraces social solidarity, national unity and a moral life with the structuring of the Hereafter. These dec are also among the goals of our education system.

Ahi Evran as important as the spiritual leaders of social life, science, morality, values, art, in short, for humanity, opinions, statements about ideas and thoughts, to be placed as needed to make the best of textbooks indicates a necessity for future generations. Therefore, it is important to investigate, study and analyze the status of expressions related to Ahi Evran and Ahi-Order in textbooks. It is necessary for our future children to be able to get acquainted with the thoughts of our spiritual leaders in textbooks, so that these ideas and thoughts can be understood and internalized by our children. The fact that the expressions reflecting Ahi Evran's thoughts about science, art, morality and working life are included as much as necessary in the textbooks will make an important contribution to the upbringing of moral, honest and hardworking generations who are committed to social values.

The purpose of this research is to examine textbooks and teaching programs in terms of Ahi Evran and Ahi-Order related expressions and to make the necessary evaluations. Within the framework of this main objective, the answers to the following questions were sought:

1. How often are statements about Ahi Evran and Ahi-Order in elementary school textbooks included?
2. Are there any differences between primary school textbooks in terms of including statements about Ahi Evran and Ahi-Order?
3. How often do statements about Ahi Evran and Ahi-Order appear in secondary school textbooks?
4. Are there any differences between secondary school textbooks in terms of including statements about Ahi Evran and Ahi-Order?
5. How often do statements about Ahi Evran and Ahi appear in high school textbooks?
6. Are there any differences between high school textbooks in terms of including statements about Ahi Evran and Ahi-Order?
7. In which units/themes/topics are the statements about Ahi Evran and Ahi-Order included in the textbooks?
8. Are there any differences between the teaching levels in terms of the inclusion of statements about Ahi Evran and Ahi-Order in textbooks?
9. How often are statements about Ahi Evran and Ahi-Order included in Teaching Programs?



10. Are there any differences between the teaching programs in terms of the inclusion of statements related to Ahi Evran and Ahi-Order?

In this study, which is a qualitative study, the data were obtained using the document review method, and then the teaching programs related to elementary school, middle school and high school textbooks were analyzed in accordance with the purpose of the study. In the study, it was found that there are significant differences between the dec levels and the courses in terms of the inclusion of Ahi Evran and Ahi-Order related expressions in textbooks. Among the textbooks dec 7. It has been determined that the Classroom Social Studies textbook, the High School teaching level at the teaching levels, Ahi Evran and Ahi-Order related expressions are the areas where the most space is given. The data obtained are expressed in tables, the necessary comments are made and the conclusions and recommendations reached are given.

**Keywords:** Ahi Evran, Ahi-Order, Textbooks, Teaching Programs.

## AHI EVRAN VE AHİLİK ALANINDA YAPILAN LİSANSÜSTÜ TEZ ÇALIŞMALARINI ÜZERİNE BİR ARAŞTIRMA

A RESEARCH ON POSTGRADUATE THESIS STUDIES IN THE FIELD OF AHI EVRAN AND AHI-  
ORDER

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### ÖZET

Anadolu Ahilik Teşkilatı'nın kurucusu olan Ahî Evran, bir müddet Denizli, Konya ve Kayseri'de ikamet ettikten sonra birçok şehir ve kasabayı gezerek Ahilik teşkilâtının kuruluşunda ve yayılışında önemli bir rol oynamış, sonradan Kırşehir'e yerleşmiş ve vefatına kadar burada kalmıştır.

Ahilik kurumları, İslam kültür ve uygarlığı içerisinde toplumsal, ekonomik, dini ve ahlaki birçok yönden önemli roller üstlenmiştir. Ahiliğin temel misyonu; mükemmel bireyler yetiştirmek, mükemmel topluluklara ulaşmak, dünyayı düzene koymak ve bu biçimde insanlara ve insanlığa hizmet edebilmektir.

Ahî Evran gibi tarihi şahsiyetlerin yaşamları ile ilgili bilgilerin günümüze değin sağlıklı bir şekilde ulaşması, sadece onların yaşamlarındaki biyografik bilgileri değil aynı zamanda dönemlerine ait ekonomik, sosyal, siyasi ve kültürel değerlerinde öğrenilmesine ve günümüze yansımalarının tam olarak anlaşılmasına neden olmaktadır.

Bu araştırmada, Ahi Evran ve Ahiliği konu alan lisansüstü tezlerin bütüncül ve kapsamlı bir şekilde analiz edilmesi amaçlanmıştır. Araştırmada, amaca uygun olarak veri analiz türlerinden olan içerik analiz yöntemi kullanılmıştır. Araştırmanın evreni, Yükseköğretim Kurulu Ulusal Tez Merkezi'nin resmi internet sayfasında erişim izni olan "Ahi Evran ve Ahilik", içerikli 15.10.2021 tarihine kadar yayınlanan 152 lisansüstü tez oluşturmaktadır. Araştırmanın örneklemini ise amaçlı örnekleme türlerinden olan ölçüt örnekleme yoluyla belirlenen 73 lisansüstü tez oluşturmaktadır. Araştırmada ölçüt olarak tezlerin erişim izninin olması, temel konularının Ahi Evran ve Ahilikle ilgili olması ve Türkçe dilinde yazılmış olması kriterleri belirlenmiştir. Bu doğrultuda belirlenen 73 lisansüstü tez araştırmaya dâhil edilmiştir. Araştırma kapsamına dâhil edilen lisansüstü tezler, araştırmacılar tarafından oluşturulan "Tez İnceleme Formu" kullanılarak değerlendirilmiştir. Elde edilen araştırma verileri, içerik analizi ile çözümlenerek betimsel olarak tablolaştırılmış ve yorumları yapılmıştır. Varılan sonuçlara yer verildikten sonra gerekli öneriler geliştirilmiştir. Araştırmada, Ahi Evran ve Ahiliği konu alan lisansüstü tezlerin büyük çoğunluğunun yüksek lisans düzeyinde, nitel araştırma yöntemiyle hazırlanmış tezlerden oluştuğu ve tezlerin büyük çoğunluğunun son altı yıl içerisinde yayımlandığı tespit edilmiştir. Yapılan incelemeler sonucunda Ahi Evran ve Ahilik konusunda en fazla tezin Gazi Üniversitesinde yayımlandığı, tezlerde en fazla kullanılan anahtar kelimelerin "Ahilik, Ahi Evran, Esnaf ve Sanatkârlar ile Fütüvvet" kelimelerinin olduğu belirlenmiştir. Tarihimizde ve kültürümüzde Ahi Evran ve Ahilik gibi değerlerin şahsiyetleri ve gayretleri ile ilgili akademik çalışmaların yapılması, toplumsal bilincin oluşması ve aidiyet duygusunun gelişmesi açısından önem arz etmektedir.

**Anahtar kelimeler:** Ahi Evran, Ahilik, Lisansüstü Tezler.

## **ABSTRACT**

Ahi Evran, the founder of the Anadolu Ahi-Order Organization, after residing in Denizli, Konya and Kayseri for a while, visited many cities and towns and played an important role in the establishment and dissemination of the Ahi-Order organization, then settled in Kırşehir and stayed here until his death.

Ahi Organizations have assumed important roles in many ways socially, economically, religiously and morally within the Islamic culture and civilization. The basic mission of the Ahi Organizations is to raise excellent individuals, to reach excellent communities, to put the world in order and to serve people and humanity in this way.

The fact that information about the lives of historical figures such as Ahi Evran reaches the present day in a healthy way, not only their biographical information in their lives, but also their economic, social, political and cultural values of their periods, and their reflections on the present day are fully understood.

In this research, it is aimed to analyze the postgraduate theses on Ahi Evran and Ahi-Order in a holistic and comprehensive manner. In the research, content analysis method, which is one of the data analysis types, was used in accordance with the purpose. The universe of the research consists of 152 postgraduate thesis published until 15.10.2021 with the content of “Ahi Evran and Ahi-Order”, which are available on the official website of the National Dissertation Center of the Council of Higher Education, with access. The sample of the research consists of 73 postgraduate thesis, which are determined by criterion sampling, which is one of the types of purposeful sampling. As a criterion in the research, the criteria for obtaining access to theses, the main issues related to Moral and Moral Values, and the fact that they were written in the Turkish language were determined. 73 postgraduate thesis determined in this direction were included in the research. The postgraduate theses included in the scope of the research were evaluated using the “Thesis Review Form” created by the researchers. The research data obtained were analyzed by content analysis and descriptive tabulated and comments were made. After the results are included, the necessary recommendations are developed. In the research, it has been determined that the vast majority of the postgraduate theses on Ahi Evran and Ahi-Order consist of theses prepared at the master's level using a qualitative research method, and the vast majority of the theses have been published within the last six years. Ahi Evran and Ahi-Order the most about a result of the review and thesis, Gazi University, published in the most used keywords in the thesis of “Ahi-Order, Ahi Evran, Futuvcu craftsmen and artisans with the words” were. Conducting academic studies related to the personalities and efforts of values such as Ahi Evran and Ahi-Order in our history and culture is important for the formation of social consciousness and the development of a sense of belonging.

**Keywords:** Ahi Evran, Ahi-Order, Postgraduate Thesis

**О НАСЛЕДИЕ ТЮРКСКОЙ КУЛЬТУРЫ (НАСЛЕДИЕ МУДРОСТИ)- АХИЛИЧЕСКИЙ  
СОЮЗ**

TÜRK KÜLTÜRÜNÜN İRFAN MİRASI- AHİLİK BİRLİĞİ ÜZERİNE

ON THE HERITAGE (LEGACY OF WISDOM) OF TURKISH CULTURE-THE AKHILIC UNION

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**АННОТАЦИЯ**

Основы многих систем, используемых сегодня, заложены в древние времена. Одной из таких систем является организация Ахилик. Слово "Ах", происходящее от арабского происхождения, означает "брат" в общепринятом значении в литературе который используется как "мой брат" с добавлением суффикса принадлежности.

Ахилик, занимающий очень важное место в Туркско- Исламской цивилизации, олицетворяет Туркскую культуру и традиции мудрости, вытекающие из этой культуры. В целом общине Ахи удалось внедрить Исламские правила, которые составляют основу наследия мудрости, в повседневную жизнь. В этом контексте Ассоциация союза-Ахи, которая поддерживает Исламские правила и Туркскую культуру, также внесла свой вклад в историю мировой цивилизации, защищая универсальные правила Ислама. Кроме того, в настоящее время значительно необходимы подобные организации, которые поддерживают общественное принятие и традиционные размышления, связанные с духовно-нравственными ценностями. По этой причине были проведены исследования для создания моделей, которые будут отражать дух ордена Ахи на протяжении всей истории, а также для повышения осведомленности об учениях ордена Ахи.

Целью создания Ассоциации Ахи была защита и развитие Туркских мастеров и ремесленников в Анатолии и применение правил, основанных на Ордене Ахи, во всех сферах жизни. Ахи, которые связаны друг с другом чувством братства, отдавали приоритет религиозным и мудрым правилам и постановлениям, отдавая приоритет искренности. В целом ахи, которые пытались жить в соответствии с принципами Ислама, приняли своего рода пророческую мораль, пытаясь подражать Пророку. Фактически, видно, что души и сердца тех, кому удалось приспособить свою жизнь к обрезанию, всегда пребывают в мире. Чтобы преодолеть некоторые из текущих культурных и социальных проблем, Туркско-Исламский мир, который находится в бедственном положении и страдает, должен вернуться к своим собственным ценностям вместо того, чтобы полагаться на помощь Запада.

Собственно говоря, культура Ахи-ордена, достигая важных успехов, прежде всего в образовании людей и их интеграции в общество, в соответствии с условиями времени, в создании государства, если оно должно быть создано, в его поддержании, если он будет поддерживаться, в его создании, если есть потребность в солдатах, в его подготовке, если есть потребность в солдатах, в его обучении, если есть потребность в ремесленниках и мастерах, с искренностью, верой и искренностью. Видно, что он не стесняется делать то, что необходимо. В этом контексте необходимо оглянуться на общину ахи, которая внесла значительный вклад как в создание, так и в выживание Османской империи, и извлечь пользу из ее мудрого опыта.

Основная цель этого исследования- раскрыть основные учения мудрого наследия истории Исламской цивилизации- общины Ахи и передать эти ценности современной молодежи.

**Ключевые слова:** братство, Ислам, культура, Ахизм, наследие, история, нравственность.

## ÖZET

Günümüzde kullanılan sistemlerin birçoğunun temelleri antik çağda atılmıştır. Bu sistemlerden biri de Ahilik organizasyonudur. Arapça kökenden gelen "Ah" kelimesi, literatürde kabul görülen anlamıyla "kardeş" sözcüğüne mensubiyet eki ilave edilerek "kardeşim" olarak kullanılmaktadır.

Türk-İslam medeniyetinde çok önemli bir yer tutan Ahilik, Türk kültürünü ve bu kültürden doğan hikmet geleneklerini bünyesinde barındırmaktadır. Genel olarak Ahilik, hikmet mirasının temelini oluşturan İslami kuralları gündelik yaşam alanına taşımayı başarmıştır. Bu bağlamda İslami kurallar ile Türk kültürünü özleştiren Ahilik Birliği, İslam'ın evrensel kurallarına sahip çıkarak dünya medeniyet tarihine de katkı sağlamıştır. Ayrıca Ahiliğin manevi -ahlaki değerlerle ilişkilendirilen toplumsal kabulü ve geleneksel yansımalarını destekleyen benzeri kuruluşlara günümüzde de önemli ölçüde ihtiyaç duyulmaktadır. Bu nedenle tarih boyunca Ahiliğin ruhunu yansıtacak modeller oluşturmak için araştırmalar ve Ahilik öğretilerinin farkındalığına yönelik çalışmalar yapılmıştır.

Ahilik Birliğinin kuruluş amacı, Anadolu'daki Türk zanaat ve sanatkâr zümresini korunması, geliştirilmesi sağlamak ve Ahilik esasına dayanan kaideleri hayatın her alanında uygulamak olmuştur. Birbirlerine kardeşlik duygusuyla bağlı olan Ahiler, ihlas ve samimiyeti ön planda tutarak dini ve irfani kural ve nizamlara öncelik vermiştir. Genel olarak İslam ilkelerine göre yaşamaya ve yaşamaya çalışan ahiler Peygamber'i taklit etmeye çalışırken bir nevi peygamberlik ahlakını benimsemişlerdir. Nitekim hayatını sünnete uyarlamayı başaranların ruhları ve kalpleri her zaman huzur içinde olduğu görülmektedir.

Günümüzdeki kültürel ve sosyal alanda ki bazı sorunların üstesinden gelebilmek için, sıkıntı ve acı içinde olan Türk-İslam dünyasının Batı'nın yardımına bel bağlamak yerine kendi değerlerine dönmesi gerekmektedir. Nitekim Ahilik kültürü, öncelikle insanların eğitimi ve topluma kazandırılmasında önemli başarılarla imza atarken, zamanın şartları gereğinde, devlet kurulacaksa onun kurulmasında, yaşatılacaksa yaşatılmasında, asayiş sağlanacaksa onun tesisinde, askere ihtiyaç varsa onun hazırlanmasında, esnaf ve zanaatkara ihtiyaç bulunuyorsa onun yetiştirilmesinde samimiyetle, inançla ve ihlasla gerekeni yapmaktan geri durmadığını görülmektedir. Bu bağlamda Osmanlı Devleti'nin gerek kurulmasında gerekse yaşatılmasında önemli ölçüde katkı sağlayan Ahilik birliğine dönüp bakmak ve irfani tecrübesinden yararlanmak gerekmektedir.

Bu çalışmanın başlıca amacı, İslam medeniyet tarihinin irfan mirası-Ahilik Birliğinin temel öğretilerini ortaya çıkarmak ve bu değerler bütünü günümüz gençlerine aktarmaktır.

**Anahtar kelimeler:** kardeşlik, İslam, kültür, Ahilik, miras, tarih.

## ABSTRACT

The foundations of many of the systems in use today date back to ancient times. One such system is the Ahilik organization. The word "Ah", derived from Arabic origin, means "brother" in the conventional sense in the literature, which is used as "my brother" with the addition of the suffix of belonging.

Ahulik, which has a very important place in the Turkish-Islamic civilization, embodies the Turkish culture and the traditions of wisdom arising from this culture. In general, the Ahi community has succeeded in bringing the Islamic rules, which form the basis of the legacy of wisdom, into daily life. In this context, the Ahi-Order Association, which espouses Islamic rules and Turkish culture, has also contributed to the history of world civilization by protecting the universal rules of Islam.

For this reason, researches and studies are carried out to create models that will reflect the spirit of Ahism throughout history and studies have been carried out to raise awareness of Ahi-order teachings. For this reason, studies have been carried out to create models that will reflect the spirit of Ahi-order throughout history and to raise awareness of Ahi-order teachings.

The purpose of the establishment of the Ahi Association was to protect and develop the Turkish craftsmen and craftsmen in Anatolia and to apply the rules based on the Ahi-Order in all areas of life. The Ahis, who are connected with a sense of brotherhood, prioritized religious and wise rules and regulations by prioritizing sincerity and sincerity. In general, the Ahis, who tried to live and live according to the principles of Islam,



adopted a kind of prophetic morality while trying to imitate the Prophet. It is seen that the souls and hearts of those who succeed in adapting their lives to circumcision are always at peace.

To overcome some of the current cultural and social problems, the Turkish- Islamic world, which is in distress and suffering, needs to return to its values instead of relying on the help of the West. The Ahi-Order culture, while achieving important successes primarily in the education of people and their integration into society, by the conditions of the time, in the establishment of the state if it is to be established, in its maintenance if it will be maintained, in its establishment if there is a need for soldiers, in its preparation if there is a need for soldiers, in its training if there is a need for artisans and craftsmen, with sincerity, faith, and sincerity. It is seen that he does not hesitate to do what is necessary. In this context, it is necessary to look back at the Ahi community, which contributed significantly to both the establishment and survival of the Ottoman Empire, and to benefit from its experience of wisdom.

The main purpose of this study is to reveal the basic teachings of the wisdom heritage of the history of Islamic civilization-Ahi-Unity and to transfer these values to today's youth.

**Keywords:** brotherhood, Islam, culture, Achilles, heritage, history, morality.

**MESLEKİ EĞİTİM VE ÇALIŞMA AHLAKI ÜZERİNDEN AHİLİĞE BAKIŞ**  
A VIEW OF AKHISM THROUGH VOCATIONAL EDUCATION AND WORK ETHICS

**Gizem ŞAHİN**

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**ÖZET**

Anadolu ‘nun neredeyse her şehir, kasaba ve köylerinde dahi kurulan ahilik teşkilatı Türk-İslam sentezinin en somut ve en güzel örneklerinden biridir. Ahilik teşkilatı, Türk –İslam kültürünü sentezlemiş ve salt dünyevi hayata önem veren bir esnaf örgütü oluşturmamış, ahiret hayatına da önem veren “insan-ı kamil “ olarak bütüncü bir insan anlayışını oluşturmuştur. İnsana hem dünyada hem ahirette mutlu olmanın yolunu gösteren bu bütüncü anlayış, toplumun istikrarsız olduğu, devletlerin buhranlı dönemlerinde değersizleşmenin ve dağılmanın önüne geçmiş, insanlara ve topluma yön vermiştir. Ahiler, Selçuklu Devleti ‘nde yalnız bir esnaf ve sanatkâr birliği olmamış, devletin istilaya uğradığı kargaşa dönemlerinde kendi kendilerini yönetmişlerdir. Ayrıca Selçuklu Devleti yıkılırken ve Osmanlı İmparatorluğu’nun beylikten imparatorluğa geçiş aşamasında etkin bir rol oynamışlardır.

Ahilik, insanı temel alan bir düzendir. Ahi için mutlu olmanın en temel yolu insana hizmet vermektir. Ahilikte halka hizmet etmek, Hakk’a hizmet etmek anlamına gelir. Ahilik, zengin-fakir, emek-sermaye ve halk –devlet arasında iyi ilişkiler kurarak yaşa-yaşat amacındadır. Ahilik; ahlak kaideleriyle insanlığa hizmeti harmanlayarak, mutlu bir sosyal yapı kurma amacında olmuştur. Böylelikle sosyal adalet bir ahlaki düzen çerçevesinde gerçekleştirilir ve Dünya ‘da iken ahiret hayatı kazanılır.

Ahilik Teşkilatı ‘nda eğitim sisteminde Türk geleneğinin etkisi vardır. Türk geleneğinde önce vatan savunması ve bunun ardından meslek edinmek gerekirdi. Ahilik teşkilatının temel amacı da ferdin ahlaki ve mesleki bilgisini arttırmak ve onu topluma yararlı bir şekilde eğitmektir. Ahilik teşkilatı, sadece mesleki ilkelere dayanmaz, aynı zamanda ahlaki ilkelere de dayanan bir teşkilattır. Ahilik de üstün bir ahlaka sahip olmak son derece büyük önem taşır. Ahilik teşkilatında, kişi mesleğinde ne denli başarılı olursa olsun, eğer ahlaki değerlerden yoksunsa o kişi mesleğinden ihraç edilirdi

Ahilik teşkilatı, toplumsal yapıya yön veren, sosyo-ekonomik ve sosyo-kültürel etkiler yaratan evrensel bir kurumdur. Ahilik sahip olduğu bütüncül anlayışla istikrarsızlığın ve buhranın olduğu dönemlerden topluma yön vermiştir. Ahilik teşkilatı, dürüstlük, güvenilirlik, iş ve meslek ahlakına, hakka-hukuka uymaya büyük önem vermiştir. Bu çalışmada da ahilik teşkilatının mesleki eğitim ve çalışma ahlakına bakış açısı literatür taraması yapılarak değerlendirilmiştir.

**Anahtar kelimeler:** Ahilik, mesleki eğitim, çalışma ahlakı

**ABSTRACT**

The akhi organization, which was established in almost every city, town and village of Anatolia, is one of the most concrete and beautiful examples of Turkish-Islamic synthesis. The akhi organization has synthesized the Turkish –Islamic culture and has not created an artisan organization that cares only about earthly life, but has created a whole human understanding as perfect human being that also cares about afterlife. This holistic view which shows people the way to be happy both in the life and hereafter has prevented the devaluation and disintegration of society during the depression periods of states when society is unstable, has guided people and society. Akhis were not only an union of craftsman and artisan in Seljuk Empire, they ruled themselves during periods of turmoil when the state was invaded. In addition, they played an active role in the destruction of the Seljuk Empire and the transition of the Ottoman Empire from the principality to the empire.

Akhisim is a human-based order. The most basic way to be happy for Akhi is to serve a person. To serve the people in morality means to serve God. Akhisim aims to live and keep alive by establishing good relations





between rich-poor, labor–capital and the people-state. Akhism has aimed to establish a happy social structure by blending moral principles with service to humanity. In this way, social justice is carried out within the framework of a moral order and the Hereafter life is gained while in the world.

The Turkish tradition has an impact on the education system in the Akhi organization. In the Turkish tradition, it was necessary to defend the homeland first, and then to get a profession. The main purpose of the akhi organization is to increase the moral and professional knowledge of the individual and to educate him in a useful way to society. The organization of akhism is an organization that is based not only on professional principles, but also on moral principles. It is extremely important to have a superior morality in akhism. In the akhi organization no matter how successful a person in his profession if he lacked moral values, that person would be ostracized from profession.

The akhi organization is a universal institution that directs the social structure and creates socio-economic and socio-cultural effects. With its holistic view, akhism has guided the society from the periods of instability and depression. The akhi organisation attaches great importance to honesty, reliability, business and professional ethics and compliance with the law. In this study, the perspective of akhi organization on vocational education and work ethics was evaluated by literature review.

**Keywords:** Akhism, vocational education, work ethic

## KIRŞEHİR YÖRESİNDE DOĞAL OLARAK YETİŞEN KUŞBURNU MEYVELERİNİN POMOLOJİK ÖZELLİKLERİNİN BELİRLENMESİ

DETERMINATION OF POMOLOGICAL PROPERTIES OF NATURALLY GROWING  
ROSEHIP (*Rosa Canina* L.) FRUITS IN KIRŞEHİR REGION

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### ÖZET

Bu çalışma Kırşehir yöresinde farklı lokasyonlarda doğal olarak kendiliğinden yetişen kuşburnu meyvelerinin pomolojik özelliklerini saptamak amacıyla yapılmıştır. Kuşburnu meyvelerinde C, P, A, B1, B2, E ve K vitaminleri bulunmaktadır. Kuşburnu meyvelerinin içerdiği mineral maddeler (potasyum ve fosfor elementleri), vitaminler ile gıda sanayinde meyve ve sebze sularının zenginleştirilmesinde kullanılmaktadır. Kuşburnu düşük sıcaklıklara ve kuraklığa dayanıklılığı sebebiyle oldukça geniş bir yayılış alanı bulmuştur. Merkez, ilçe ve köylerde seleksiyon kriterleri göz önüne alınarak üstün özelliklere sahip kendiliğinden yetişen kuşburnu genotipleri saptanmış bunların içerisinde 50 genotipten meyve örnekleri alınarak pomolojik özellikleri belirlenmiştir. Genotiplerin coğrafi koordinatları saptanarak her genotipten 50-60 adet arasında meyve örneği alınmıştır. Genotiplerin meyve ağırlığı; 0.50-2.56 gr, meyve eni; 6.81-15.77 mm, meyve boyu; 8.45-25.99 mm, meyve eti oranı %31.85- 83.33, toplam çekirdek ağırlığı; 0.08-1.19 gr, çekirdek sayısı 4-38 adet, çekirdek boyu 2.4-6.91 mm, çekirdek eni; 1.18-3.53 mm ve suda çözünür kuru madde oranı; % 9.30-25.80 arasında değiştiği saptanmıştır. Ayrıca genotiplerin renk değerlerinin L değeri 57.29-80.94, a değeri 6.55-17.68, b değeri 2.37-6.31 arasında olduğu belirlenmiştir. Çalışmadaki meyve renkleri turuncu ile açık kırmızı arasında olduğu belirlenmiştir. Kırşehir bölgesindeki kuşburnu bitkisinin çok geniş bir varyasyonun gösterdiği saptanmıştır.

**Anahtar kelimeler:** Genotip, Kırşehir, Kuşburnu, Pomolojik özellikler

### ABSTRACT

This study was carried out to determine the pomological characteristics of naturally grown rosehip fruits in different locations in Kırşehir region. Rosehip fruits contain vitamins C, P, A, B1, B2, E and K. The mineral substances (potassium and phosphorus elements) contained in rosehip fruits are used to enrich fruit and vegetable juices in the food industry with vitamins. Rosehip has found a wide distribution area due to its resistance to low temperatures and drought. Considering the selection criteria in the center, districts and villages, self-growing rosehip genotypes with superior characteristics were determined, and fruit samples were taken from 50 genotypes and their pomological characteristics were determined. After the geographical coordinates of the genotypes were determined, from each genotype were taken 50-60 fruit samples. Fruit weight of genotypes; 0.50-2.56 g, fruit width; 6.81-15.77 mm, fruit length; 8.45-25.99 mm, fruit pulp ratio of 31.85%- 83.33%, total seed weight; 0.08-1.19 gr, seed numbers 4-38, seed length 2.4-6.91 mm, seed width; 1.18-3.53 mm and water soluble dry matter ratio; It was determined that it varies between 9.30-25.80%. In addition, it was determined that the color values of the genotypes were between 57.29-80.94 L, a value of 6.55-17.68, and b value between 2.37-6.31. Fruit colors in the study were determined to be between orange and light red. It has been determined that the rosehip plant in the Kırşehir region shows a very wide variation.

**Keywords:** Genotype, Kırşehir, Rosehip, Pomological features

**KIRŞEHİR'DE ARONYA (*ARONIA MELANOCARPA L.*) YETİŞTİRİCİLİĞİ**  
**BLACK CHOKEBERRY (*ARONIA MELANOCARPA L.*) GROWING IN KIRŞEHİR**

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**ÖZET**

Dünya nüfusunun hızla arttığı günümüzde, insanların sağlıklı beslenmeye olan ilgisi tarımsal üretimin ve gıdanın önemini her geçen gün arttırmaktadır. Özellikle yaşadığımız salgın hastalık nedeniyle, bu durum kendisini daha belirgin bir şekilde hissettirmiştir. Aronya ülkemizde henüz yetiştiricilik anlamında pek fazla tanınmamakta olup, üzümü meyve türlerinin antosiyanin bakımından zengin ve antioksidan kapasitesi yüksek olan önemli bir türüdür. İnsanların alternatif tıp ve doğal kaynaklara olan yöneliminin her geçen gün artması nedeniyle aronyanın popülerliği her geçen gün artmış ve süper/mucize bitki olarak anılmasını sağlamıştır. Bu çalışma; Kırşehir İlinde aronyanın Nero ve Viking çeşitlerinin performanslarının belirlenmesi amacıyla, hasada yakın dönemde 3 kez pomolojik özellikleri incelenmiştir. İncelenen pomolojik özellikler; meyve ağırlığı (gr), 100 meyve ağırlığı (gr), meyve eni ve boyu (mm), salkım sayısı (adet), salkımdaki meyve sayısı (adet), suda çözünen kuru madde miktarı (SÇKM), titre edilebilir asitlik (TA) ve pH değerleri incelenmiştir. Analizler sonunda, Nero çeşidinin Viking çeşidine göre daha iyi özellikler gösterdiği saptanmıştır.

**Anahtar kelimeler:** Aronya, Kırşehir, pomolojik özellikler

**ABSTRACT**

In today's world population is increasing rapidly, people's interest in healthy nutrition increases the importance of agricultural production and food day by day. Especially due to the epidemic we are experiencing, this situation has made itself felt more prominently. chokeberry is not widely known in terms of cultivation in our country, and it is an important type of berry fruit species rich in anthocyanins and high in antioxidant capacity. Due to the increasing tendency of people to alternative medicine and natural resources, the popularity of chokeberry has increased day by day and it has been referred to as a super/miracle plant. This study; In order to determine the performance of Nero and Viking varieties of chokeberry in Kırşehir province, pomological properties were examined 3 times in the near harvest period. Examined pomological features; fruit weight (gr), 100 fruit weight (gr), fruit width and length (mm), cluster number (piece), number of fruit in cluster (piece), soluble solids content (TSSC), titratable acidity (TA) and pH values were investigated. At the end of the analysis, it was determined that Nero variety showed better characteristics than Viking variety.

**Keywords:** Chokeberry, Kırşehir, pomological characteristics

**KIRŞEHİR İLİNİN BESİCİLİK POTANSİYELİ VE AHİ EVRAN VELİ'NİN DEBBAĞLIK ZANAATINA OLAN İHTİYAÇ**

**THE LIVESTOCK POTENTIAL OF KIRŞEHİR PROVINCE AND THE NEED FOR AHİ EVRAN VELİ'S LEATHER CRAFT**

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**ÖZET**

Kırşehir İli 252 bin baş büyükbaş ve 286 bin baş da küçükbaş hayvan varlığı ile Ülkemiz hayvancılığında önemli yere sahiptir. Büyükbaş hayvan varlığının yaklaşık 144 bini, küçükbaş hayvan varlığının ise yaklaşık 100 bini kesilerek Ülkemizin et ihtiyacının karşılanmasına önemli katkılar sunmaktadır. Bu hayvanlardan elde edilen et ve et ürünlerinin yanında önemli bir miktarda da deri üretimi söz konusudur. Üretilen bu deriler işlenmek üzere yurdumuzun değişik yerlerinde mevcut deri işleme fabrikalarına gönderilmekte ve işlenerek giyim, dekor ve aksesuar ürünlerine dönüştürülmektedir. Dericilik eski adıyla debbağlık Ahi Evran Veli'nin de zanaatıdır. Ahi Evran Veli Devlet'in de desteği ile debbağları (dericileri) ve diğer sanatkârları da içine alan büyük bir sanayi sitesinin kurulmasına ve esnaf-sanatkârların teşkilatlanmasına öncülük etmesi sebebiyle tarih boyunca debbağların Piri olarak tanınmıştır. Debbağlık, deri tabaklama, bir diğer adıyla sepilme, ham deriyi işleme yöntemidir. Ham derinin fiziksel ve kimyasal işlemler sonrası endüstriyel bir üretim malzemesi olarak kullanılabilir hale gelmesine tabaklama da denilmektedir. Bu yöntem sonucu elde edilen deri, istenilen şekil ve modele dönüştürülebilmektedir. Gerek hayvan varlığı gerekse de modern kesimhanelere sahip Kırşehir İlinde deriyi işleyecek herhangi bir tesis bulunmamaktadır. Kırşehir İl'ine deri işleme tesislerinin kazandırılması ile hem İl'in öz kaynakları İl'de değerlendirilecek hem de yetiştiricilere ek kazanç sağlanması mümkün olabilecektir. Bunu yapabilmek için Kırşehir ve çevre illerden elde edilecek derilerin usulüne uygun ve sağlıklı bir şekilde üretime kazandırılması milli ekonomiye katkı sağlama açısından önem arz etmektedir. Bu da uzman kişiler tarafından verilecek sertifikalı eğitimlerle mümkün olabilecektir. Bu yüzden; bu bildiri ile geçmişte Ahi Evran Veli'nin Kayseri'de başlattığı debbağlık zanaatının günümüzde Kırşehir'de uygulanabilirliğine dikkat çekilecektir.

**Anahtar kelimeler:** Ahi Evran Veli, Debbağlık, Besicilik

**ABSTRACT**

Kırşehir Province has an important place in animal husbandry in our country with 252 thousand head of cattle and 286 thousand head of small cattle. Approximately 144 thousand of the cattle and approximately 100 thousand of the sheep and goats are slaughtered, making a significant contribution to meeting the meat needs of our country. In addition to meat and meat products obtained from these animals, a significant amount of leather is produced. These leathers produced are sent to the existing leather processing factories in different parts of our country for processing and are processed into clothing, decor and accessory products.



Leatherwork, formerly known as tanning, is also the craft of Ahi Evran Veli. Ahi Evran Veli has been known as the Piri of the tanners throughout history, as he pioneered the establishment of a large industrial site including tanners (leather makers) and other craftsmen with the support of the State, and the organization of tradesmen and craftsmen. Tanning, leather tanning, also known as leatherworking, is a method of processing raw leather. The use of raw leather as an industrial production material after physical and chemical processes is also called tanning. The leather obtained as a result of this method can be transformed into the desired shape and model. There is no facility to process leather in Kırşehir Province, which has both livestock and modern slaughterhouses. With the acquisition of leather processing facilities in Kırşehir Province, both the own resources of the province will be evaluated in the province and it will be possible to provide additional income to the breeders. In order to do this, it is important to contribute to the national economy by bringing the leathers to be obtained from Kırşehir and the surrounding provinces to production in a proper and healthy way. This will be possible with certified trainings to be given by experts. That's why; With this paper, attention will be drawn to the applicability of the craft of tanning, which Ahi Evran Veli started in Kayseri in the past, in Kırşehir today.

**Keywords:** Ahi Evran Veli, Leatherwork, Fattening of Livestock

## YAYGIN MÜRDÜMÜK (*LATHYRUS SATIVUS* L.)’TE SİLİSYUM İLE TOHUM ÖN UYGULAMA ZAMANINIIN BELİRLENMESİ

DETERMINATION OF PRIMING APPLICATION TIME WITH SILICON IN COMMON GRASSPEA (*LATHYRUS SATIVUS* L.)

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### ÖZET

Silisyum (Si), bitkilerin büyümesini ve verimi iyileştirdiği, biyotik ve abiyotik strese karşı direnç sağladığı bilinen ve tohum ön uygulama çalışmaları için kullanılabilen bir elementtir. Bu çalışmada, yaygın mürdümük (*Lathyrus sativus* L.) tohumlarına silisyum ön (priming) uygulamalarında bekletme zamanının çimlenme üzerine etkilerinin belirlenmesi amaçlanmıştır. Araştırma Siirt Üniversitesi, Ziraat Fakültesi, Tarla Bitkileri Laboratuvarında, 25±1 °C kontrollü şartlar altında yürütülmüştür. Çalışmanın bitkisel materyalini Gürbüz-2001 yaygın mürdümük çeşidi oluşturmuştur. Laboratuvar çalışması, tesadüf parselleri deneme desenine göre 4 tekrarlamalı olarak petri kaplarında kurulmuştur. Araştırmada silisyumun 4 mM konsantrasyonunda, 0, 4, 8, 12, 16, 20 ve 24 saat süreyle tohum ön uygulamaları araştırmanın konusunu teşkil etmiştir. Mürdümük tohumlarına bekletme sürelerine göre önce priming uygulanmış, daha sonra tüm tohumlar 24 saat kurutulduktan sonra tüm uygulamalar aynı anda çimlenmeye bırakılmış olup, 7. günün sonunda çimlendirmeye son verilerek ölçümler yapılmıştır. Çalışmada; çimlenme oranı, ortalama çimlenme süresi, çimlenme üniformite katsayısı, çimlenme enerjisi, çimlenme indeksi, kökçük ve sapçık uzunlukları ve kalınlıkları parametreleri incelenmiştir. Araştırma sonuçları; çimlenme oranı %97.3-100.0, ortalama çimlenme süresi 1.07-1.77 gün, çimlenme üniformite katsayısı 55.90-93.78, çimlenme enerjisi 30.67-93.33, çimlenme indeksi 15.67-24.17, kökçük uzunluğu 7.05-10.95 cm, sapçık uzunluğu 4.55-7.00 cm, kökçük kalınlığı 0.142-1.63 cm ve sapçık kalınlığı 0.150-0.181 cm, arasında değişim göstermiştir. İncelenen parametreler bakımından, 16 ve 20 saatlik bekletme süreleri en iyi sonuçları verdiği ve bu iki bekletme zamanının, mürdümük tohumlarında yapılacak silisyum ile priming için en uygun bekletme süreleri olduğu sonucuna varılmıştır.

**Anahtar kelimeler:** Tohum ön uygulama süresi, silisyum, yaygın mürdümük, çimlenme oranı

### ABSTRACT

Silicon (Si) is an element known to improve plant growth and yield, provide resistance to biotic and abiotic stress, and can be used for seed priming studies. In this study, it was aimed to determine the effects of waiting time on germination in silicon priming applications to common grasspea (*Lathyrus sativus* L.) seeds. The research was conducted in Siirt University, Faculty of Agriculture, Field Crops Laboratory under controlled conditions of 25±1 °C. The plant material of the study was Gürbüz-2001 common grasspea cultivar. The laboratory study was set up in petri dishes with 4 replications according to the randomized plot design. In the research, seed priming applications at 4 mM concentration of silicon for 0, 4, 8, 12, 16, 20 and 24 hours constituted the subject of the research. Priming was applied to the grasspea seeds according to their waiting time, then all the seeds were dried for 24 hours and all applications were allowed to germinate at the same time, and at the end of the 7<sup>th</sup> day, germination was terminated and measurements were made. In the study; germination rate, average germination time, germination uniformity coefficient, germination energy, germination index, radicle and plumula lengths and thicknesses were investigated. Research results; germination rate 97.3-100.0%, average germination time 1.07-1.77 days, germination uniformity coefficient 55.90-93.78, germination energy 30.67-93.33, germination index 15.67-24.17, radicle length 7.05-10.95 cm,



plumula length 4.55-7.00 cm, radicula thickness 0.142-1.63 cm and plumula thickness 0.150-0.181 cm varied in ranges. In terms of the parameters examined, it was concluded that the 16 and 20 hour waiting times gave the best results and these two waiting times were the most suitable waiting times for priming with silicon to be made in grasspea seeds.

**Keywords:** Priming time, silicon, common grasspea, germination rate

**BAZI STANDART ARMUT ÇEŞİTLERİNİN MUŞ YÖRESİNE ADAPTASYON  
KABİLİYETLERİNİN BELİRLENMESİ**

DETERMINATION OF ADAPTATION CAPABILITIES OF SOME STANDARD PEAR VARIETIES TO  
THE MUŞ REGION

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**ÖZET**

Bu çalışma 2020-2021 yılları arasında Muş yöresi ekolojik koşullarında yetiştirilen Santa Maria, Etruşka, Deveci ve Ankara armutlarının farklı lokasyonlardaki performanslarını belirlemek amacıyla yürütülmüştür. Muş yöresinde yumuşak çekirdekli meyveler en fazla yetiştirilen grubu temsil etmektedir. Özellikle elma ve armut yetiştiriciliği yörede en fazla yetiştirilen meyvelerden olup yöre ekonomisine katkı sağlamaktadır. Çalışma Muş Merkez (dört lokasyon), Varto (iki lokasyon) ve Korkut ilçelerinde (bir lokasyon) yürütülmüştür. Çeşitler fenolojik, morfolojik, pomolojik ve kimyasal özellikler bakımından incelenmiştir. Elde edilen veriler incelemeye konu kriterler açısından analizleri gerçekleştirilmiştir. Aynı zamanda tartılı derecelendirme ile her bir çeşidin en iyi performans gösterdiği yerler belirlenmiştir. Araştırmada incelenen armut çeşitleri açısından Muş Merkez Kale Mahallesi öne çıkan lokasyon olmuştur. Araştırma sonucunda en iyi performansı ve çeşit özelliklerini yansıtan çeşit Etruşka onu takip eden çeşit Santa Maria olmuştur. Etruşka ve Santa Maria çeşitleri Muş ekolojisinde ekonomik olarak yetiştiriciliği yapılabilir niteliktedir.

**Anahtar kelimeler:** Standart armut çeşitleri, adaptasyon, Etruşka, Santa Maria.

**ABSTRACT**

This study was carried out between 2020-2021 in order to determine the performance of Santa Maria, Etruşka, Deveci and Ankara pears grown in ecological conditions in Muş region in different locations. Soft-core fruits represent the most grown group in the Muş region. Especially apple and pear cultivation is one of the most grown fruits in the region and contributes to the local economy. The study was carried out in Muş Center (four locations), Varto (two locations) and Korkut districts (one location). The varieties were examined in terms of phenological, morphological, pomological and chemical properties. The data obtained were analyzed in terms of the criteria subject to review. At the same time, the weighed rating determined the best performing places of each variety. In terms of pear varieties examined in the research, Muş Central Castle Neighborhood has been the prominent location. As a result of the research, the variety Etruşka, which reflects the best performance and variety characteristics, was the following variety Santa Maria. Etruşka and Santa Maria varieties can be grown economically in Muş ecology.

**Keywords:** Standard pear varieties, adaptation, Etruşka, Santa Maria.



## HAKKÂRİ YÖRESİNDE YABANİ ÜZÜM POTANSİYELİ WILD GRAPE POTENTIAL IN HAKKARI REGION

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### ÖZET

Bir yerin, bir bitkinin gen merkezi veya anavatanı olması için o yörede o bitkinin yabani formlarının da bulunmasını gerektirir. Ülkemizde yabani asma ile ilgili çalışmalar istenen ve arzu edilen miktarda değildir. Ülkemiz yabani asmanın (*Vitis vinifera* L. subsp. *silvestris*) gen kaynakları içinde bulunmaktadır. Çünkü ülkemizin pek çok yerinde doğada vadi içlerinde, korunaklı alanlarda ve dere kenarlarında kendiliğinden yetişmektedir. Günümüzde ekolojiyi insan unsurunun tahribatı çok şiddetli ve hızlı olmaktadır. Pek çok kaynakta yabani asma popülasyonlarının hızlı bir şekilde kaybolduğuna dair kayıtlar bulunmaktadır. Ülkemizde sınırlı sayıda yabani asmalar üzerinde çalışmalar yapılmıştır. Yabani asma varlığına sahip ülkelerde bu genetik potansiyel koruma tedbirleri kapsamına alınmıştır. Ülkemizde ise insan kaynaklı tahribatlar, hastalık ve zararlılar, iklimsel değişimler ve su kaynaklarının giderek azalması, düzensiz yapılaşma, aşırı hayvan otlatma vb. etkilerle bu potansiyelimizi hızla yitirmekteyiz. Ülkemizde bilhassa doğu ve güneydoğu Anadolu'da yabani asma varlığının olduğu rapor edilmiştir. Yapmış olduğumuz çalışmada 2019-2020 yılları arasında Hakkâri yöresinde geniş ve zengin yabani asma popülasyonları saptanmıştır. Bölgede bulunan yabani asmalar iki evcikli formdadır. Genel anlamda erkek formlar baskın konumda olup erdişi formda olanlar çok az yüzdeyi oluşturmaktadır. Yabani asma günümüzde yetiştirilen üzümlerin atası konumunda olması yönünden ıslah çalışmaları için önemli genetik bir potansiyeldir. Yabani asma popülasyonlarının bulunduğu alanlarda bu kaynakların tespiti, koruma altına alınması ve nihayetinde bu kaynaktan faydalanma anlamında harekete geçilmelidir. Yabani asma kaynaklarımız hızla yok olmakta olup koruma tedbirlerinin alınması kaçınılmaz görünmektedir.

**Anahtar kelimeler:** Yabani üzüm (*Vitis vinifera* L. subsp. *silvestris*), Gen kaynağı, Ampelografi, Hakkâri

### ABSTRACT

In order for a place to be the gene center or homeland of a plant, it requires the presence of wild forms of that plant in that region. Studies on wild vine in our country are not in the desired and desirable amount. Our country is the wild vine (*Vitis vinifera* L. Subsp. *silvestris*) is contained in gene sources. Because in many parts of our country, nature grows spontaneously in valleys, sheltered areas and creek edges. Today, the destruction of the human element of ecology is very severe and rapid. Many sources have records of the rapid disappearance of wild vine populations. In our country, a limited number of wild vines have been studied. In countries with wild vine presence, these genetic potential protection measures are included. In our country, human-caused destruction, diseases and pests, climatic changes and gradual reduction of water resources, irregular construction, excessive grazing, etc. We are rapidly losing this potential. In our country, especially in eastern and southeastern Anatolia, it has been reported that there is a presence of wild vine. In our study, large and rich wild vine populations were identified in Hakkari region between 2019 and 2020. Wild vines found in the area are in dioecious form. In general, male forms are dominant and those in the form they are in constitute very few percentages. Wild vine is an important genetic potential for breeding studies in terms of being the ancestor of grapes grown today. In areas where wild vine populations are present, action should be taken to identify,



protect and ultimately benefit from these resources. Our wild vine resources are rapidly disappearing and it seems inevitable that conservation measures will be taken.

**Keywords:** Wild grapes (*Vitis vinifera* L. *subsp. silvestris*), Gene source, Ampelography, Hakkari

## **TÜRKİYE’DE ŞARAPLIK ÜZÜM ÜRETİMİ, ŞARAP SEKTÖRÜNDEKİ GELİŞMELERİN DEĞERLENDİRİLMESİ VE ÖNGÖRÜLER**

**WINE GRAPE PRODUCTION IN TURKEY, EVALUATION OF DEVELOPMENTS IN THE WINE SECTOR, AND FORECASTS**

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### **ÖZET**

Türkiye sahip olduğu çok sayıda şaraplık üzüm çeşidi ve uygun ekolojisi ile küresel şarap pazarında rekabet potansiyeli olabilecek bir ülkedir. Türkiye’de üzüm üretim alanı 417.041 ha olup, üretilen üzüm miktarı ise 3,93 milyon tondur. Şaraplık olarak değerlendirilen üzüm miktarı toplam üretimin %12’sini oluşturmaktadır. 2015-2019 döneminde Türkiye’nin toplam şaraplık üretim miktarındaki artış oranı %6,49’dur. Türkiye’nin 2018 yılı şarap üretim miktarı 30.000 tondur. Şarap ihracatından sağladığı gelir 10 milyon \$ iken, şarap ithalatı için harcadığı döviz değeri de 10 milyon \$’dır.

Türkiye 64,3 milyon litre iç pazar hacmi ve 2,9 milyon litre ihracat hacmi ile dünya üretimindeki payı (%0,22) çok düşük olan bir ülke konumundadır. Türkiye’nin şarapta kendine yeterlilik oranı %100,44, ithalata bağımlılık endeksi %3,94 ve ihrac edilebilirlik endeksi %4,38 olarak hesaplanmıştır. Türkiye’de 2020-2028 döneminde gerçekleştirilecek şarap ithalat ve ihracat miktarını tahmin etmek amacıyla Box-Jenkins tahmin modelinden yararlanarak projeksiyon hazırlanmıştır. Elde edilen ARIMA sonuçları şarap ihracat miktarının yıllar itibarıyla azalacağını göstermektedir. Bu sonuçlara göre 2019 yılında şarap ihracat miktarı 4.252 ton olan Türkiye’nin ihracat miktarının 2020-2024 döneminde %5,73 oranında azalarak 3.833 tona düşmesi öngörülmektedir. Avrupa Birliği’nde prim ve müdahale ödemeleri gibi desteklemeler bulunurken Türkiye’de şaraplık üzüm üretimine yönelik destekler mevcut değildir. Şaraplık üzüm üreten işletmeler küçük ölçeklidir. Üreticiler, şaraplık üzüm satış fiyatı konusunda söz sahibi olamamaktadır.

Kaliteli ve şaraplığa elverişli üzüm çeşitlerinin ve özellikle uygun yerli üzüm çeşitlerinin miktarının artması, Türkiye’nin rekabet potansiyelini artıracaktır. Sektörün potansiyelini ve gıda sanayinin rekabet gücünü artırmak için hammadde üreticisine de prim uygulaması getirilmesi ve üreticinin özendirilmesi gerekmektedir.

Türkiye’nin yüksek turizm potansiyeli de düşünüldüğünde, şarap sektörünün vergi oranlarının hafifletilerek bağ rotaları, gurme turizmi ve sağlıklı yaş alma turizmi ile birleştirilmesiyle ülkedeki turizm hareketlenecek, ihracat artacak ve bu potansiyel değerlendirilmiş olacaktır. Şarap sektörünün şarap rotaları (Trakya-bağ şarap rotası, Urla bağ yolu), eko-turizm, gastronomi turizmi, sağlıklı yaş alma turizmi, bağ bozumu şenlikleri ve yurtdışında olduğu gibi şarap-peynir etkinlikleri ile entegre edilerek önünün açılması önemlidir.

**Anahtar kelimeler:** Şaraplık üzüm, şarap, ARIMA, ithalat, ihracat, denge analizi.

## ABSTRACT

Turkey is a country that has the potential to compete in the global wine market with its many wine grape varieties and suitable ecology. Grape production area in Turkey is 417,041 ha and the amount of grapes produced is 3.93 million tons. The amount of grapes considered as wine grapes constitutes 12% of the total production. In the 2015-2019 period, the increase rate in Turkey's total wine production is 6.49%. Turkey's wine production amount in 2018 is 30,000 tons. Turkey's wine production amount was 30 thousand tons in 2018. In addition, the income generated from wine export was \$10 million, while the foreign currency spent on wine import was also \$10 million. Turkey is a country with a very low share in world production (0.22%) with a domestic market volume of 64.3 million liters and an export volume of 2.9 million liters.

Turkey's self-sufficiency ratio in wine was calculated as 100.44%, Import Dependency Index as 3.94% and, Exportability Index as 4.38%. A projection of Turkey's wine import and export amounts in 2020-2028 period was prepared with Box-Jenkins estimation model. ARIMA results indicated that the amount of wine export would decline in years. Based on those results, While the export amount of wine was 4,252 tons in 2019, Turkey's wine export amount was estimated to decrease by 5.73%, reaching 3 833 tons in 2020-2024 period. While there are supports such as premium and treatment payments in the European Union, there is not any support for wine grape in Turkey. Wine grape producing enterprises are small sized. Producers cannot have a voice in determining sales price of wine grape.

Increase of amount of quality and wine grape varieties and especially suitable local grape varieties will enhance Turkey's competitiveness. In order to increase the potential and the competitiveness of the food sector, premiums should be given to the raw material producer and the producer should be encouraged.

Wine routes can be combined with gourmet tourism and healthy aging tourism by mitigating the heavy taxation in the sector. This can revive tourism. Mitigation of taxation burden can also increase export, It is essential for wine sector to allow promotions in integrated activities such as wine routes (Thracian-vineyard routes, Urla vineyard route), eco-tourism, gastronomy tourism, healthy aging tourism, vintage festivals and wine-cheese tasting events.

**Keywords:** Wine grape, wine, ARIMA, import, export, balance analysis.

**FINDIKLI'DA (RİZE) SEL VE TAŞKINA YOL AÇAN YEŞİLDERE ve ÇAĞLAYAN DERESİ  
HAVZALARININ HAVZA GEOMETRİSİ ÖZELLİKLERİ**

**BASIN GEOMETRY FEATURES OF THE YESILDERE AND CAGLAYAN STREAM BASINS  
HAVING CAUSED FLOOD AND OVERFLOW IN FINDIKLI (RIZE)**

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**ÖZET**

Havzaların dairesel, uzunlaması veya oval bir form göstermesi taşkın rejimi üzerinde etkili olmaktadır. Çünkü geometrik olarak farklı forma sahip olan havzalarda yan kolların ana akarsuya ulaşması aynı zamanda gerçekleşmemektedir. Dairesel havzalarda yan kollar ana akarsuya aynı zamanda ulaşırken, uzunlamasına havzalarda yan kollar ana akarsuya hemen katılmaz. Bu durum dairesel havzalarda taşkın doruğuna (pik) kısa sürede ulaşılmasına neden olurken, uzunlaması havzalarda da pik zamanının gecikmesine yol açmaktadır. Bu çalışmada Fındıklı'da (Rize) sel-taşkın olaylarına yol açan Yeşildere ve Fındıklı Çayı havzalarının geometrik olarak gösterdiği form sel-taşkın bağlamında değerlendirilmiştir. Doğal ve beşeri özellikleri nedeniyle Rize ülkemizde sel-taşkın olaylarının en fazla yaşandığı yerlerden biridir. 2021 yılında Fındıklı ilçesinde meydana gelen sel-taşkında can ve mal kayıpları yaşanmıştır. Havzaların sel-taşkın duyarlılığının yüksek olması ve literatürde havzalarla ilgili herhangi bir değerlendirme bulunmaması nedeniyle bu saha çalışma alanı olarak seçilmiştir. Çalışmada veri kaynağı olarak topoğrafya haritalarında elde edilen Digital Elevation Model (DEM) kullanılmıştır. Sel-taşkın olaylarının yaşandığı havzalar ArcGIS 10.1 programı ArcSWAT uzantısı ile belirlenmiştir. Çalışmada havza alanı, havza çevresi, maksimum havza uzunluğu, form faktör (Ff), uzama oranı (Re), dairesellik oranı (Rc), kompaktlık katsayısı (Kc) indisleri kullanılmıştır. Alan, çevre ve maksimum havza uzunluğu birbirine yakın olan her iki havzada form faktör Yeşildere için 0,02, Fındıklı Deresi için 0,01 olarak bulunmuştur. Uzama oranı değerleri iki havzada sırasıyla 0,16-0,13, dairesellik oranı değerleri 0,27-0,18, kompaktlık katsayısı değerleri 1,90-2,32'dir. Bulgulara göre Fındıklı Deresi Havzası, Yeşildere Havzası'na göre daha uzunlamasına bir şekil göstermektedir. İndis sonuçları birbirine yakın olan her iki havzada uzun süreli düşük akımların görüleceği taşkın rejimi etkili olmaktadır.

**Anahtar kelimeler:** Havza Geometrisi, Sel-Taşkın, Fındıklı, Yeşildere, Çağlayan Deresi.

**ABSTRACT**

Circular, elongated or oval forms of basins have an effect on flood regime. Because, in basins having geometrically different forms, it is not possible for the tributaries to reach the main stream at the same time. In circular basins, tributaries reach the main stream at the same time, while in elongated ones, they do not immediately join the main stream. This situation causes the flood peak to be reached in a short time, but a delay in the peak time for elongated basins. In this study, the geometrical forms of Yeşildere and Fındıklı Stream basins, which caused a flood-overflow event in Fındıklı (Rize), have been evaluated. Due to its natural and anthropic characteristics, Rize is one of the places where flood events have taken place the most in our country. The floods having occurred in Fındıklı district in 2021 resulted in loss of lives and property. The reason behind choosing the area as the study area is that the basins have a high risk of flood and the absence of any evaluation in the literature about these basins. In the study, Digital Elevation Model (DEM) obtained from topographic maps have been used as the data source. The basins, where flood-overflow events occurred, have been determined by the ArcSWAT, an extension of ArcGIS 10.1. In the study, basin area, basin perimeter, maximum basin length, form factor (Ff), elongation ratio (Re), circular ratio (Rc) and compactness coefficient (Kc) indices have been used. In the basins where area, perimeter and maximum length of basin are similar, the form factor was found to be 0.02 and 0.01 for Yeşildere and Fındıklı Streams, respectively. Values of the elongation ratio are 0.16 and 0.13, values of the circular ratio are 0.27 and 0.18, values of the compactness coefficient are 1.90 and 2.32 for the two basins, respectively. According to the findings, the Basin of Fındıklı



Stream shows a more elongated shape compared to that of Yeşildere Stream. In both basins, the index results of which are close to each other, the flood regime, where long-term low flows will be seen, is effective.

**Keywords:** Basin Geometry, Flood-Overflow, Fındıklı, Yeşildere, Çağlayan Stream.

**CO2 EMİSYONU, ENERJİ TÜKETİMİ VE EKONOMİK BÜYÜME ARASINDAKİ  
NEDENSELLİK İLİŞKİSİNİN ARAŞTIRILMASI: TÜRKİYE ÖRNEĞİ**

INVESTIGATION OF THE CAUSAL RELATIONSHIP BETWEEN CO2 EMISSIONS, ENERGY  
CONSUMPTION AND ECONOMIC GROWTH: THE EXAMPLE OF TURKEY

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**ÖZET**

Son yıllarda dünyada en çok tartışılan konuların başında küresel ısınma ve iklim değişikliği gelmektedir. Küresel ısınmanın nedenlerinden birisi de sera gazı salınımıdır. Havaya salınan sera gazları arasında en çok pay karbondioksittir (CO<sub>2</sub>). Karbondioksit salınımının artması da nüfus artışından, taşıt sayısının artmasından, orman alanlarının azalmasından, ekonomik üretimde ve ulaşıtımda fosil yakıtların (kömür, petrol, doğal gaz) kullanılmasından kaynaklanmaktadır.

Sera gazlarının atmosfere salınımının azaltılması için enerjinin tasarruf edilmesi, baca gazı arıtma tesislerinin kurulması ya da bacalara filtreler takılması, yenilenebilir enerji kaynaklarının daha çok kullanılmasının sağlanması, ulaşıtımda bireysel araçlar yerine motorlu taşıtların kullanılmasının özendirilmesi gibi çalışmalar yapılmaktadır.

Bu çalışmada Türkiye için kişi başına CO<sub>2</sub> emisyonu (metrik ton), birincil enerji tüketimi (kg-petrol eşdeğeri ve ekonomik büyümeyi temsil eden kişi başına Gayrı safi Yurtiçi Hasıla (2017 fiyatlarıyla ABD Doları) serileri arasındaki nedensellik ilişkisi araştırılmıştır. Kullanılan veriler yıllık olup 1990-2019 dönemini kapsamaktadır.

Kişi başına CO<sub>2</sub> emisyonu verileri Türkiye İstatistik Kurumu verilerinden alınarak, nüfusa oranlanarak araştırmacı tarafından hesaplanarak oluşturulmuştur. Enerji Tüketimi verileri enerji bakanlığı, enerji işleri genel müdürlüğü enerji denge tablaolatından elde edilmiştir. Son olarak kişi başına Gayrı safi Yurtiçi Hasıla (2017 fiyatlarıyla ABD Doları) serisi de dünya bankasının internet sitesinden elde edilmiştir.

Seriler arasındaki nedensellik ilişkisi araştırılmadan önce, incelenen serilerin durağan olup olmadıkları ADF ve PP birim kök testi ile araştırılacaktır. Tüm serilerin düzeyde mi yoksa birinci farkı alındıktan sonra mı durağan hale geldiği araştırılacaktır.

Daha sonra, incelenen zaman serileri arasında uzun dönemde ilişki olup olmadığını belirlemek üzere Johansen (1988) ve Johansen ve Juselius (1990,1992) eşbütünleşme analizi kullanılacaktır. Eşbütünleşme analizi sonucunda incelenen seriler arasında uzun dönemli bir ilişkinin olup olmadığı araştırılacaktır. Daha sonra seriler arasındaki nedensellik ilişkisinin varlığı incelenecektir.

**Anahtar kelimeler:** Enerji Tüketimi, Co2 Emisyonu, Ekonomik Büyüme, Nedensellik Analizi, Eşbütünleşme Analizi

**ABSTRACT**

Global warming and climate change are among the most discussed issues in the world in recent years. One of the causes of global warming is greenhouse gas emissions. Among the greenhouse gases emitted into the air, the largest share is carbon dioxide (CO<sub>2</sub>). The increase in carbon dioxide emissions is due to the increase in population, the increase in the number of vehicles, the decrease in forest areas, the use of fossil fuels (coal, oil, natural gas) in economic production and transportation.

In order to reduce the emission of greenhouse gases into the atmosphere, studies such as saving energy, installing flue gas treatment plants or installing filters in the chimneys, ensuring more use of renewable energy sources, encouraging the use of motor vehicles instead of individual vehicles in transportation are carried out.



In this study, the causality relationship between per capita CO<sub>2</sub> emissions (metric tons), primary energy consumption (kg-oil equivalent) and Gross Domestic Product per capita (US Dollars in 2017 prices) series representing economic growth) was investigated for Turkey. covers the 1990-2019 period.

Per capita CO<sub>2</sub> emission data was obtained from the data of the Turkish Statistical Institute and calculated by the researcher by proportioning to the population. Energy Consumption data was obtained from the energy balance sheet of the ministry of energy, general directorate of energy affairs. Finally, the series of Gross Domestic Product per capita (in 2017 prices in US Dollars) was obtained from the website of the world bank.

Before investigating the causality relationship between the series, whether the studied series are stationary or not will be investigated by ADF and PP unit root tests. It will be investigated whether all series become stationary at the level or after taking the first difference. Then, Johansen (1988) and Johansen and Juselius (1990,1992) cointegration analysis will be used to determine whether there is a long-term relationship between the examined time series. As a result of the cointegration analysis, it will be investigated whether there is a long-term relationship between the series examined. Then, the existence of a causal relationship between the series will be examined.

**Keywords:** Energy Consumption, Co<sub>2</sub> Emission, Economic Growth, Causality Analysis, Cointegration Analysis



**JENERATÖR KABİNLERİNİN AKIŞ ÖZELLİKLERİNİN SAYISAL OLARAK İNCELENMESİ**  
NUMERICAL INVESTIGATION OF FLOW PROPERTIES OF GENERATOR CABINETS

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**ÖZET**

Bu çalışma, kabinli jeneratör setinin akış özelliklerini sayısal olarak incelemeyi amaçlamıştır. Kabin tasarımı tamamlandıktan sonra, toplam basınç farkını önemli ölçüde etkilediği için, derinlik ölçüleri farklı üç panjur için sayısal analizler yapılmış ve bu analizler sonucunda en uygun panjur derinliği belirlenmiştir. Daha sonra, Jeneratör emiş bölgesi, atış bölgesi, emiş kesiti ve atış kesiti olarak dörde ayrılmış ve her bir bölgenin akış analizleri ANSYS FLUENT 19,2 yazılımında gerçekleştirilmiştir. Sayısal çalışmalar sonucunda radyatörün önünde ve arkasında 139,25 Pa toplam basınç farkı meydana gelmiştir. Bu basınç farkı değeri, 1104C-44TAG2 motoruna ait radyatörün izin verdiği basınç farkı değerinden 14,25 Pa yüksek çıkmıştır. Bu fark jeneratör setinin çalışabileceği maksimum ortam sıcaklığını etkileyeceği için, gelecekte yapılacak çalışmalara 14,25 Pa basınç farkının nasıl düşürüleceği yönünde önerilerde bulunulmuştur. Böylece, gelecek çalışmalara referans olmak amaçlanmıştır.

**Anahtar kelimeler:** “Jeneratör kabini”, “panjur”, “sayısal analiz”, “boyutsal karşılaştırma”, “had”

**ABSTRACT**

This study aimed to that numerically investigate the flow characteristics of the cabin generator set. After the cabin design, numerical analyses were made for three louvers with different depth dimensions, as that they significantly affect the total pressure difference. It was found the most suitable louver depth as a result of numerical analysis. After that, Flow analysis in ANSYS 19.2 is carried out on four areas of the generator, which are suction zone, discharge zone, suction section and discharge section. As a result of numerical studies, a total pressure difference in front of and behind the radiator of 139.25 Pa has occurred. This pressure difference value is 14.25 Pa higher than the pressure difference value allowed by the radiator of the 1104C-44TAG2 engine. This difference will affect the maximum ambient temperature at which the generator set can operate. Consequently, the study made recommendations regarding the reduction of the pressure difference. Thus, it is aimed to that be a reference for future studies.

**Keywords:** “Generator cabinet”, “louver”, “numerical analysis”, “dimensional comparison”, “cfd”



**GENELLEŞTİRİLMİŞ BİKOMPLEKS SAYILAR YARDIMIYLA TENSÖR ÇARPIM  
YÜZEYLERİNİN GAUSS DÖNÜŞÜMLERİ ÜZERİNE**

ON GAUSS MAP OF TENSOR PRODUCT SURFACES VIA GENERALIZED BICOMPLEX NUMBERS

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**ÖZET**

Bu çalışmada, genelleştirilmiş bikompleks sayıları kullanarak dört boyutlu genelleştirilmiş uzay  $E_{\alpha\beta}^4$  da çeşitli tensör çarpım yüzeyleri belirleyeceğiz ve bu yüzeylerin Gauss dönüşümleriyle ilgili çeşitli karakterizasyonlar elde edeceğiz.

**Anahtar kelimeler:** Bikompleks sayılar, Tensör çarpım yüzeyleri, Gauss dönüşümü

**ABSTRACT**

In this paper, by using generalized bicomplex numbers we determine some tensor product surfaces and obtain some characterizations about Gauss map of these surfaces in four dimensional generalized space  $E_{\alpha\beta}^4$

**Keywords:** Bicomplex numbers, Tensor product surfaces, Gauss map

## ÜÇ ADIMLI İTERASYON YÖNTEMİ İLE LİNEER FREDHOLM İNTEGRAL DENKLEMLERİN ÇÖZÜMLERİ

SOLUTIONS OF LINEAR FREDHOLM INTEGRAL EQUATIONS WITH THE THREE-STEP ITERATION METHOD

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### ÖZET

Bu çalışmada, ikinci tip lineer Fredholm integral denklemler için üç adımlı bir iterasyon algoritması inşa edilmiş ve bu algoritmadan elde edilen dizilerin söz konusu denklemlerin çözümüne yakınsak olduğu gösterilmiştir.

**Anahtar kelimeler:** Banach Sabit Nokta Teoremi, Fredholm İntegral Denklemler, Üç Adımlı İterasyon Yöntemi.

### ABSTRACT

In this study, a three-step iteration algorithm is constructed for the second type of linear Fredholm integral equations and it is shown that the sequences obtained from this algorithm converge to the solution of the mentioned equations.

**Keywords:** Banach Fixed Point Theorem, Fredholm Integral Equations, The Three-Step Iteration Process.

**KESİR MERTEBE İNTEGRO-DİFERANSİYEL DENKLEMLER İÇİN SABİT NOKTA  
YAKLAŞIMI**

FIXED POINT APPROACH TO FRACTIONAL INTEGRO-DIFFERENTIAL EQUATION

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**ÖZET**

Bu çalışmada, kesir mertbe integro-diferansiyel denklemler içeren başlangıç değer problemlerinin varlık ve tekliği için yeterli bir koşul elde edilmiştir. Varlık ve tekliği veren bir teorem ifade ve ispat edilmiştir. Bu yaklaşım, kesir mertbe integralleri içeren diferansiyel denklem problemlerini çözmek için sabit nokta iterasyon yöntemini kullanmamıza izin vermektedir.

**Anahtar kelimeler:** Başlangıç Değer Problemi, Kesir Mertbe İntegro-Diferansiyel Denklemler, Riemann-Liouville Türev, Riemann-Liouville İntegral, Sabit Nokta.

**ABSTRACT**

In this study, a sufficient condition for existence and uniqueness of Basset problem is obtained. The theorem on existence and uniqueness is established. This approach permits us to use fixed point iteration method to solve problem for differential equation involving integrals of nonlinear order.

**Keywords:** Initial Value Problem, Fractional Order Integro-Differential Equation, Riemann-Liouville Derivative, Riemann-Liouville Integral, Fixed Point.

## HİBRİT NANOKOMPOZİTLER VE BUNLARIN GERİLİM ALGILAMA ÖZELLİKLERİNİN İNCELENMESİ

HYBRID NANOCOMPOSITES AND THEIR STRESS SENSING BEHAVIOUR

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## ÖZET

Nanoteknoloji, polimerler, optikler, elektronikler, medikaller, tekstiller vb. dahil olmak üzere birçok alanda yeni bir trenddir. Nanoteknolojinin bu alanlarda popüler olmasının birçok nedeni vardır. Nanoteknolojinin en önemli katkısı, mekanik, termal, optik, elektrik vb. açıdan benzersiz özelliklere sahip sistemler tasarlamamızı ve üretmemizi sağlayan nano boyutlu malzemelerle ilgilenmesinden kaynaklanmaktadır. Polimerik malzemelerin nanoteknoloji uygulamalarına bakıldığında gıda ambalaj endüstrisinden tekstil endüstrisine, enerji depolamadan elektroniğe binlerce uygulama görülmektedir. Nanoteknoloji, elektronik ürünlerde devrim yaratmanın gelecek vaat eden bir yolu olduğundan, bu alandaki çalışmaların sayısı diğer alanlara kıyasla nispeten daha yüksek oranda artmaktadır. Elektronikler, metaller, yarı iletkenler, seramikler, polimerler ve her malzemenin kompozitleri dahil olmak üzere çeşitli malzemelerden üretilebilmektedir. Herhangi bir sistemin elektronik bileşeninin maliyeti, performansı, ağırlığı ve esnekliği denilince akla polimerler veya polimer kompozitler gelmektedir. Polimerler, daha düşük ağırlığa ve birçok farklı fonksiyonel özelliğe sahip makromoleküllerdir. Elektronik için kullanılan polimer grubu, polimer esaslı elektronikler veya polimer elektronikler olarak adlandırılmaktadır. Polimer elektronikler, düşük-yüksek elektriksel iletkenlik, yarı iletkenlik, düşük-yüksek dielektrik sabiti gibi çeşitli elektriksel fonksiyonlara sahip malzemelerdir ve iletken bir bileşen, aktüatör veya sensör olarak kullanılabilirler. Bu özellikler mühendislik polimerleri veya polimer kompozitler ile elde edilebilmektedir. Mühendislik polimerleri söz konusu olduğunda, polimerin yapısı buna göre tasarlanmaktadır ve sentezlenmektedir. Diğer bir yandan, polimer kompozitler için, istenen özellikleri ve performansı arttırmak için polimerik matrise ilave fonksiyonel dolgu maddeleri katılmaktadır. Tekli nanodolgular yaygın olarak kullanılmasına rağmen, son zamanlarda tek dolguların neden olduğu sorunları önlemek için hibrit dolgular kullanılmaktadır. Hibrit polimer nanokompozitler, en az iki farklı nano

dolgu maddesi içeren malzemelerdir. Bu çalışmada hibrit nanokompozitler tasarlanmış, üretilmiş ve bazı koşullar altında gerilim algılama davranışları analiz edilmiştir.

**Anahtar kelimeler:** Hibrit nanokompozitler, gerilim algılama, elektromekanik özellikler

Teşekkür: Proje TÜBİTAK 2211 Yurt İçi Lisansüstü Burs Programı 2210/C Yurt İçi Öncelikli Alanlar Yüksek Lisans Burs Programı ve Yalova Üniversitesi BAP Birimi (2020/YL/0013) tarafından desteklenmektedir.

## **ABSTRACT**

Nanotechnology is a recent trend in many areas including polymers, optics, electronics, medicals, textiles, and so on. There are many reasons for the popularity of nanotechnology in these areas. The most important contribution of nanotechnology stemmed from the fact that it deals with the nano-sized materials that enable us to design and fabricate systems with unique properties in terms of mechanical, thermal, optical, electrical, and so on. When the nanotechnology applications of polymeric materials are reviewed, thousands of applications can be seen from the food packaging industry to the textile industry and from energy storage to electronics. Since nanotechnology is a promising way to revolutionize electronic products, the number of studies in that area is increasing with a relatively higher trend compared to other areas. Electronics can be fabricated from various materials including metals, semiconductors, ceramics, polymers, and composites of each material. When the cost, performance, weight, and flexibility of the electronic component of any system, polymers or polymer composites come into mind. Polymers are macromolecules with lower weight and many functional properties. The group of polymers used for the electronics is referred as polymer-based electronics or polymer electronics. Polymer electronics are materials that have various electrical functions such as low-high electrical conductivity, semi-conductivity, low-high dielectric constant and they can be used as a conductive component, actuator, or sensor. These properties can be obtained by engineering polymers or polymer composites. In the case of engineering polymers, the structure of the polymer is designed and synthesized accordingly. On the other hand, for polymer composites, additional functional fillers are incorporated into the polymeric matrix to enhance the desired properties and performance. Although single nanofillers are commonly used, recently hybrid fillers are being used to prevent the problems caused by single fillers. Hybrid polymer nanocomposites are materials that have at least two different nanofillers. In this study, hybrid nanocomposites were designed, fabricated and their stress sensing behavior was analyzed under some conditions.

**Keywords:** Hybrid nanocomposites, stress sensing, electromechanical properties

Acknowledgement: This project was supported by The Scientific and Technological Research Council of Turkey (TUBITAK) 2210-C National Graduate Scholarship Program in High Priority Technological Areas and Yalova University, Turkey, BAP (Scientific Research Project) Project No: 2020/YL/0013.

**TEK VE HİBRİT DOLGULARDAN NANOKOMPOZİTLERİN ÜRETİLMESİ VE BU  
KOMPOZİTLERİN UYGULANAN KUVVETİN BELİRLENMESİNDE KULLANILMASI**  
NANOCOMPOSITES FROM SINGLE AND HYBRID FILLERS AND THEIR APPLICATION FOR  
DETERMINATION APPLIED FORCE

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**ÖZET**

Taşınabilir ve giyilebilir elektronikteki gelişmelere paralel olarak tüm dünyada farklı elektronik malzemeler tasarlanmakta ve üretilmektedir. Geleneksel malzemeler genellikle bu büyük talebe cevap verememekte ve bu yüzden yeni malzemelerin geliştirilmesi için araştırmalar yapılmaktadır. Polimer elektronikler, esnek, hafif elektroniklere olan talepteki yüksek artış nedeniyle malzeme biliminde çok popüler bir araştırma konusudur. Polimer elektronikler, doğal olarak iletken veya uyaranlara yanıt veren polimerler veya polimer kompozitler gibi fonksiyonel polimerler kullanılarak üretilebilmektedir. Doğal olarak iletken veya uyaranlara yanıt veren polimerler özel sentez yöntemleriyle üretildiğinden ve bu polimerlerin endüstriyel üretimi çok yaygın olmadığından, polimer elektronikleri elde etmenin en kolay yolu polimer kompozitlerin üretilmesidir. Elektronik uygulamalarda kullanılmak amacıyla polimerik bir kompozit malzeme geliştirebilmek için bileşenin işlevi ayrıntılı olarak bilinmeli, malzeme özellikleri istenilen özelliklere göre ayarlanmalı ve sınırlandırıcı faktörler göz önünde bulundurulmalıdır. Polimer kompozitler dolgu boyutuna göre sınıflandırılabilir ve nano dolgu içeren polimer nanokompozitler olarak adlandırılabilir. Polimer nanokompozitler, elektronik bileşenlerin performansını doğrudan etkileyen çeşitli avantajlara sahiptir. Nanodolgu malzemeleri nispeten geniş bir yüzey alanına sahip olduğundan, hedeflenen özelliklerin çoğu nispeten daha düşük dolgu konsantrasyonlarında elde edilebilmektedir. Düşük dolgu konsantrasyonunun bir sonucu olarak, kompozit morfolojisi ve mekanik özellikler dahil olmak üzere birçok özellik, mikro dolgu içeren kompozitlerde olduğu gibi değişmemektedir. Literatürde nanokompozitlerin çoğu tek bir nano boyutlu dolgu maddesine sahip olsa da, bazı özellikleri iyileştirmek için hibrit nanokompozitler üretilmektedir. Hibrit nanokompozitler, polimer esaslı elektronikler alanında nispeten yeni bir konudur. Hibrit nanokompozitlerde çeşitli dolgu maddeleri kullanıldığından bunların polimerik matris içindeki dağılımları elektriksel, mekanik ve elektromekanik algılama özellikleri açısından kritik öneme sahiptir. Bu çalışmada, nanokompozitler tek ve hibrit dolgu malzemelerinden özel bir karıştırma yöntemiyle üretilmiş ve dolgu malzemeleri her durumda polimerik matris içinde iyi bir şekilde dağılmıştır. Hibrit nanokompozitlerin elektronik işlevselliği

elektromekanik algılama özellikleri açısından değerlendirilmiş ve kuvvet algılama davranışları analiz edilmiştir.

**Anahtar kelimeler:** Tek dolgu, nanokompozit, algılama özellikleri

Teşekkür: Proje TÜBİTAK 2211 Yurt İçi Lisansüstü Burs Programı 2210/C Yurt İçi Öncelikli Alanlar Yüksek Lisans Burs Programı ve Yalova Üniversitesi BAP Birimi (2020/YL/0013) tarafından desteklenmektedir.

## **ABSTRACT**

Parallel with the developments in portable and wearable electronics, various electronic materials are being designed and fabricated throughout the world. Traditional materials generally can not respond that huge demand, and research has been carried out for the development of new materials. Polymer electronics is a very popular research topic in materials science because of the enormous increase in the demand for flexible, light electronics. Polymer electronics can be obtained by functional polymers such as inherently conducting or stimuli-responsive polymers or polymer composites. Since inherently conductive or stimuli-responsive polymers are obtained by special synthesis methods and industrial batch fabrication of these polymers is not very common, the easiest way to obtain polymer electronics is to fabricate polymer composites. In order to develop a polymeric composite material for electronics, the function of the component should be known in a detailed way and material properties should be tuned according to the required properties and limits should be considered. Polymer composites can be classified according to filler size and the ones that have nanofillers can be referred as polymer nanocomposites. Polymer nanocomposites have various advantages that directly affect the performance of electronic components. Since nanofillers have a relatively large surface area, most of the properties can be obtained at relatively lower filler concentrations. As a consequence of lower filler concentration, many properties including composite morphology and mechanical properties do not change as in micro filler-containing composites. Although in the literature most of the nanocomposites have one nano-sized filler, hybrid nanocomposites can be fabricated in order to improve some of the properties. Hybrid nanocomposites are a relatively new topic in polymer electronics. Since various fillers are used in hybrid nanocomposites, their dispersion in the polymeric matrix is of critical importance in terms of electrical, mechanical, and electromechanical sensing properties. In this study, nanocomposites were fabricated from single and hybrid fillers by a special mixing method, and fillers were well-dispersed in the polymeric matrix in all cases. The electronic functionality of the hybrid nanocomposites was evaluated in terms of electromechanical sensing properties and their force-sensing behavior was analyzed.

**Keywords:** Single filler, nanocomposites, sensing properties

**Acknowledgement:** This project was supported by The Scientific and Technological Research Council of Turkey (TUBITAK) 2210-C National Graduate Scholarship Program in High Priority Technological Areas and Yalova University, Turkey, BAP (Scientific Research Project) Project No: 2020/YL/0013.



**MANDALİNA (CITRUS RETICULATA) KABUĞU KURUMA KİNETİĞİNİN BELİRLENMESİ  
VE ENERJİ ANALİZİ**

**DETERMINATION OF KINETICS OF DRYING OF MANDARIN (CITRUS RETICULATA) PEEL AND  
ENERGY ANALYSIS**

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**ÖZET**

Yapılan çalışmada mikro denetleyici içeren arduino (uno) ile gıda kurutma fırınında (GKF) kurutma için önemli olan sıcaklık, ağırlık, nem içeriği, nem oranı, kuruma oranı gibi kurutma parametreleri belirlenmiş ve buna ek olarak özgül enerji tüketimi ve özgül nem çekme oranları belirlenmiştir. Fırının içinden kuru gıda ağırlığının ölçülüp eşzamanlı olarak bilgisayara veri (ağırlık, ısı ve bağıl nem) aktarımı yapabilen bir gıda kurutma fırınında Antalya ilinde yetişmiş mandalina kabuğu kurutulmuştur. Kurutma sıcaklıkları 60°C ve 70°C olmak üzere iki farklı değerde kurutulan mandalina kabuklarının kuruma süreleri sırası ile 330 dk ve 180 dk olarak belirlenmiştir. Kuruma süresince tüketilen elektrik enerjisi de kaydedilerek SEC ve SMER grafikleride elde edilmiştir.

**Anahtar kelimeler:** gıda kurutma, mandalina kabuğu kurutma, enerji analizi

**ABSTRACT**

In the study, drying parameters such as temperature, weight, moisture content, humidity, drying rate were determined with arduino (uno) containing microcontroller and drying rate in the food drying oven and specific energy consumption and specific dehumidification rates were determined. In a food drying oven, which was able to measure dry food weight from the oven and transfer data (weight, heat and relative humidity) to the computer simultaneously, the mandarin bark grown in Antalya was dried. Drying temperatures of 60 °C and 70 °C in two different values of drying time of the mandarin shells were determined as 330 minutes and 180 minutes respectively. The electrical energy consumed during the drying process was recorded and obtained in SEC and SMER graphs.

**Keywords:** food drying, mandarin peel drying, energy analysis

**ORTOTROPİK / PİEZOELEKTRİK PLAKA, VİSKOZ OLMAYAN AKIŞKAN VE RİJİT DUVARDAN OLUŞAN HİDROELASTİK SİSTEMİN ZORLANMIŞ TİTREŞİMİNİN İNCELENMESİ**

ON THE FORCED VIBRATION OF A HYDROELASTIC SYSTEM CONSISTING OF ORTHOTROPIC / PIEZOELECTRIC PLATE, INVISCID FLUID AND RIGID WALL

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**ÖZET**

Bu çalışmada ortotropik (a) ve piezoelektrik (b) plaka, viskoz olmayan akışkan ve rijit duvardan oluşan hidroelastik sistemin, zamana göre değişen harmonik mekanik kuvvet etkisiyle, yaptığı titreşim araştırılmıştır. Plaka malzemesi ortotropik (a) ve piezoelektrik (b) olarak kabul edilmiş, akışkan ise sonlu derinlikli viskoz olmayan akışkan olarak seçilmiştir. Plakadaki düzlemsel şekil değiştirme ile akışkanın düzlemsel akışı dikkate alınmıştır. Plakanın hareketi electro-elastodinamiğin kesin denklemleri kullanılarak, akışkan akımı ise doğrusallaştırılmış Navier-Stokes denklemleri ile tanımlanmıştır. Sistemin sınır, birleşme ve sızdırmazlık koşullarına plakanın uzunluğu yönündeki kordinata göre Fourier dönüşümü uygulanmıştır. Aranılan değerlerin sayısal olarak belirlenmesi için ise ters Fourier dönüşümü kullanılmıştır. Plaka malzemesi olarak PZT-2 ve akışkan olarak gliserin seçilmiştir. PZT plakasının piezoelektrik katsayıları sıfır kabul edilerek, plaka ortotropik hale getirilmiş ve her iki plaka için analizler yapılmıştır. Plakanın akışkan ile teması olmayan yüzeyinden uygulanan harmonik kuvvetin, plaka ve akışkan ara yüz düzlemindeki basınç, akışkan hızına nasıl etki ettiğine odaklanılmıştır. Plakanın ortotropik veya piezoelektrik olması durumunun incelenen parametreler üzerindeki etkisi tartışılmıştır. Sonuç olarak plakanın piezoelektrik özelliği olmasının, plaka akışkan ara yüz düzlemi basıncını ve akışkan hızını azalttığı gözlemlenmiştir. Böylece piezoelektrik plaka malzemesinin elektro mekanik etkisinin azaltıcı bir etkiye neden olduğu belirlenmiştir. Plakanın ortotropik olduğu durumda elektromekanik etki meydana gelmemiş ve ara yüz düzlemindeki basınç ve hız değerleri, piezoelektrik özellikli plakaya oranla daha büyük çıkmıştır. Diğer taraftan plakanın kalınlığı ve akışkanın derinliği/plaka kalınlığı oranı değiştirilerek, bu parametrelerin de incelenen değerler üzerinde etkisi olup olmadığı açıklanmıştır. Plaka kalınlığının artması, ara yüz düzlemi basıncı ve hızında artışa neden olmuştur. Akışkan derinliği/ plaka kalınlığı oranının ise, ara yüz düzlemi basınç değeri ile ters orantılı olduğu, ara yüz düzlemi hız değeri ile doğru orantılı olduğu tespit edilmiştir. Son olarak titreşim fazının da piezoelektrik veya ortotropik özellikli plakaların titreşimini nasıl etkilediği sorusu irdelenmiş ve iki farklı titreşim fazı için araştırma genişletilmiştir.

**Anahtar kelimeler:** piezoelektrik plaka, viskoz olmayan akışkan, ortotropik plaka, zorlanmış titreşim.

**ABSTRACT**

This study investigates forced vibration of the hydroelastic system consisting of orthotropic (a) and piezoelectric (b) plate, inviscid fluid and rigid wall by time varying harmonic mechanical force. The plate material is considered as orthotropic (a) and piezoelectric (b), and the fluid is selected as a finite depth inviscid fluid. Plane strain state of the plate and the plane flow of the fluid are taken into consideration. The motion of the plate is described by the exact equations of electro-elastodynamics and the fluid flow is described by linearized Navier-Stokes equations. The Fourier transform with respect to the coordinate in the direction of the length of the plate is applied to the boundary, contact and impermeability conditions of the system. The originals of sought values are determined numerically by using inverse Fourier transform. PZT-2 and glycerin are selected as plate material and fluid, respectively. The plate is converted orthotropic plate by assuming that



the piezoelectric coefficients of the PZT-2 plate are zero and analyzes are made for both plates types. This study is focused on influence of the harmonic force which is applied on the surface of the plate not contact with the fluid to pressure and fluid velocity in interface plane. Also the effect of the piezoelectricity of the plate on the investigated parameters is discussed. As a result it has been observed that the piezoelectricity of the plate reduces pressure and fluid velocity in interface plane. That is to say the electromechanical effect of the piezoelectric plate material caused a decreasing effect. Pressure and velocity values in the interface plane of orthotropic plate and fluid are higher than the piezoelectric plate's, because of there is no electromechanical effect. Moreover it is explained that effect of the parameters as thickness of the plate and fluid depth/plate thickness ratio to searched parameters. Increasing of plate thickness is resulted in rising of interface plane pressure and velocity values. On the other side it is determined that fluid depth/plate thickness ratio is inversely proportional to the interface plane pressure value and directly proportional to the interface plane velocity value.

**Keywords:** piezoelectric plate, inviscid fluid, orthotropic plate, forced vibration.



**THEORETICAL INVESTIGATION OF HYDROGEN STORAGE AND PHYSICAL PROPERTIES  
OF Be(BH<sub>4</sub>)<sub>2</sub>**

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**ABSTRACT**

In this study, Be(BH<sub>4</sub>)<sub>2</sub> (GHD is calculated as ~20.84 wt%) compound in the Fd-3m space group was investigated. The hydrogen storage, structural, electronic and mechanical properties of this hydride compound were calculated using a generalized gradient approach based on density functional theory. The atomic positions in equilibrium and the lattice constant were obtained within the scope of structural properties. Electronic band structures, total and partial state densities were calculated and plotted. Within the scope of mechanical properties, second order elastic constants, Bulk modulus, Young's modulus, Shear modulus, B/G ratio and Poisson's ratio of this hydride compound were obtained.

**Keywords:** Hydride, Electronic structure, Density Functional Theory



## CONSTRUCTION OF BLOCKS USING MULTIPLE REFERENCE BLOCKS IN VIDEO CODING

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### ABSTRACT

The importance of video coding standards increases with the growing usage of digital video transmission. Although High Efficiency Video Coding (HEVC) and its predecessor Advanced Video Coding (AVC) have many similarities, HEVC does a better job at digital video coding. Multiple reference frames can be used in inter prediction of HEVC. There are several different approaches that exist in the literature. Main idea of modern video coding techniques is to differential coding of blocks by referencing previously coded similar blocks so that less data is required to be sent. In this paper, multi reference blocks are used for inter prediction process. The method selects multiple reference blocks using SAD and creates predicted blocks via a weighted average of the selected references. Weights of the selected references were calculated with the least-squares approach. Candidate references are determined within a few blocks with lowest SAD values. Experimental results show that the proposed method leads to an increase in PSNR values.

**Keywords:** HEVC, motion vectors, block matching, multi reference, video coding



**INVESTIGATION OF EROSION CORROSION OF DIFFERENT BIOMATERIALS BY FINITE ELEMENT ANALYSIS**

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**ABSTRACT**

Biomaterials are natural or synthetic materials that are used to fulfill or support the functions of living tissues in the human body and that come into contact with body fluids (blood, etc.) periodically or continuously. Biomaterials are essential for the survival of people suffering from acute heart disease, arthritis, osteoporosis, and other joint complications, as well as corrosion of biomaterials. In this study, it is aimed to determine the effect of liquid fluid on erosion corrosion in 304 stainless steel, 316L stainless steel and Ti6Al4V elbow pipes using AnsysWorkbench Explicit Dynamics module which is computer aided and based on finite element. SolidWorks program was used for 3 dimensional studies considering elbow pipe design. Water properties and physical conditions were applied to the 3dimensional solid model in the pipe flow analysis. At the end of the analysis, erosion amounts of liquid fluid formed in pipes with different material properties were obtained and evaluations were made considering the changes in corrosion rate in elbow pipes.

**Keywords:** 304 stainless steel, Ti6Al4V, polyurethane, erosion corrosion, finite element analysis



**MICROSTRUCTURE ANALYSIS AND CHARACTERIZATION OF AZ91 BIOMATERIALS  
PRODUCED BY DIE CASTING**

**Levent URTEKİN**

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**ABSTRACT**

AZ91 is a magnesium-based alloy and has recently been preferred as a biomaterial. The main reason why it is preferred is that it is biodegradable. If other reasons; good biological behavior of magnesium an essential element for the body, superior mechanical properties compared to currently developed polymer and ceramic-based biodegradable implant materials to have, elasticity closest to bone tissue compared to titanium, stainless steel and cobalt-based implant alloys have the module. In this study, AZ91 biomaterial produced by pressure casting. Microstructure and pore analyzes of the samples produced in different parameters were performed. The change in grain structure was determined by changing the pressure, temperature and nozzle inlet velocity parameters. The most suitable production process was selected in terms of optimum process parameters and mechanical properties.

**Keywords:** AZ91, biomaterials, microstructure, mechanical properties

**UIC KOD 406 SIKIŞTIRMA YÖNTEMİ İLE HAT KAPASİTESİ DEĞERLENDİRİLMESİ:  
MALATYA-NARLI HATTI İÇİN UYGULAMA**

**EVALUATING LINE CAPACITY WITH UIC CODE 406 COMPRESSION METHOD: APPLICATION  
FOR MALATYA-NARLI LINE**

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**ÖZET**

Dünyaya paralel olarak ülkemizde de demiryoluna olan talep artmakta, kapasite kullanımı ve tahsisinin nasıl optimize edileceğine ilişkin çalışmalar devam etmektedir. Bu, sunulan hizmetlerin güvenilirliği ve kalitesini arttırmak anlamına gelmektedir. Demiryolu hatlarındaki tren trafiği hattın kapasitesine yaklaştığında, bu ölçütler hedeflenen değerlerden uzaklaşmakta, ortaya çıkan darboğaz etkileri kapasite tahsis sorunlarını beraberinde getirmektedir. Bu çalışmada, demiryollarında kapasite tahsis sürecine kısaca değinilmekte ve hat kapasitesi hesap yöntemi bir örnek problem yardımıyla açıklanmaktadır. Türkiye Cumhuriyeti Devlet Demiryolları (TCDD) 2013 yılında yapılan yasal düzenlemeyle demiryolu altyapı yöneticisi (AY) görevini üstlenmiştir. Yolcu ve yük trenlerini kamu adına işletmek üzere TCDD Taşımacılık A.Ş. adıyla bir şirket kurulmuştur. Yasal düzenleme özel şirketlerin de tren işletmeciliği yapmasına izin vermekte, bu şirketlere Demiryolu Tren İşleticisi (DTİ) adı verilmektedir. Bu şirketler işletecekleri trenler için TCDD'den kendileri için kapasite tahsis etmesini talep etmekte, yapılan düzenlemeye göre bu tahsisler gerçekleştirilmektedir. Kapasite tahsisi için hatların mevcut kapasitesinin bilinmesi gerekmektedir. UIC Kod 406 belgesinde anlatılan yöntemle göre bir kapasite hesabı örneği Malatya ve Narlı arasındaki tek hatlı demiryolu için yapılmıştır. Merkezi trafik kontrol sistemi (CTC) ve otomatik blok sinyallerine sahip bu hatta ağırlıklı olarak yük trenleri işletilmektedir. Günlük kapasite için trenlerin en uzun süre işgal ettiği hat kesimi belirlenmiş, sonra benzer tren gruplarını temsil eden model trenler seçilmiştir. Model trenlerin hesap kesimindeki blok işgal süresi basamakları oluşturulmuş, aynı ve zıt yönde hareket eden model trenler arasındaki en küçük izleme süreleri hesaplanmıştır. Onerdeki sıraya göre 47 model trenin işgal süresi basamakları sıkıştırılmak suretiyle, hattın günlük 1440 dakika içindeki toplam işgal süresi 703,80 dakika ve en küçük ortalama izleme süresi yaklaşık 18 dakika bulunmuştur. Buna göre hattın işgal oranı %48,88'dir. UIC Kod 406'da karma trafik hatları için önerilen ek (tampon) süre oranı %67 kullanıldığında, hattın kapasite tüketim oranı %81,62 olarak hesaplanmaktadır. Sonuç olarak Malatya-Narlı hattının kapasitesi bugün için yeterlidir.

**Anahtar kelimeler:** TCDD, UIC Kod 406, işgal süresi basamakları, kapasite tahsisi, kapasite hesabı

**ABSTRACT**

While demand for railway transportation in Turkey is in increasing trend parallel to the world, the studies to optimize capacity utilization and allocation has been continuing. This mean that the reliability and quality of train services should be improved. If the volume of train traffic approaches to the line capacity, these measures start to deteriorate, and the emerging bottleneck effects are observed along with capacity allocation issues. In this study, the capacity allocation process in railways is briefly explained and the line capacity calculation method is presented using a case study. Turkish State Railways (TCDD) has become the infrastructure manager (IM) since the amendment in 2013. An incorporation named TCDD Transportation A.Ş. has then been established to operate passenger and freight trains for public benefits. The legal regulation also allows the private companies to operate trains, named train operating companies (TOCs). These companies demand



capacity allocation for trains they would operate according to the regulation. The existing line capacities should therefore be known beforehand for the allocation. A capacity calculation is exemplified for the single-track railway line between Malatya and Narlı using the method in UIC Code 406. Mostly freight trains operate on the line having centralized traffic control (CTC) system and automatic block signal system. For daily capacity calculation, a line section, which has the longest occupation time by trains, is determined and model trains, which are representative for similar train groups, are selected. The blocking time stairways of model trains in the calculation section are established and then the minimum headway times between trains running in the same and opposite direction are calculated. The blocking time stairways of 47 trains in the order of timetable are compressed, the total occupation time is calculated as 703.80 min during the day (1440 min), and the mean headway is found approximately 18 min. This means that the occupation rate of the line is 48.88%. In UIC Code 406, the recommended additional (buffer) time for the mixed traffic lines is 67%, accordingly the capacity consumption rate becomes 81.62% (less than 100%). As a result, the existing capacity between Malatya and Narlı is currently sufficient.

**Keywords:** TCDD, UIC Code 406, blocking time stairways, capacity allocation, capacity calculation

**EXPONENTIAL STABILITY FOR A DELAY POROUS THERMOELASTIC SYSTEM WITH SECOND SOUND**

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**ABSTRACT**

In the present paper, we consider a porous thermo-elastic system with delay term in second sound,

$$\left\{ \begin{array}{l} \rho u_{tt} = \mu u_{xx} + by_x - \gamma \theta_x + \beta u_{txx}, \\ J y_{tt} = \delta y_{xx} - bu_x - \xi y - d \varrho_x + m \theta - \eta_1 y_t - \eta_2 u_t(x, t - s), \\ k \theta_t = l \theta_{xx} - \gamma u_t - m y_t - k_1 \varrho_x, \\ \alpha \varrho_t = -k_1 \theta_x - d y_{xt}, \end{array} \right. \quad (1)$$

Where,  $u(x, t)$  is the transverse displacement of the beam,  $x \in [0,1], t > 0$ .  $\eta_2 u_t(x, t - s)$  is the delay term.  $y$  is the angle of rotation, the function  $\theta$  is the difference temperature,  $\varrho = \varrho(x, t)$  is the heat flux, and  $k, k_1, \beta, \gamma, d, m, l, J, \delta, \xi, \alpha, \rho, \mu, b > 0$ .

We consider the following initial and boundary conditions:

$$\begin{aligned} u(\cdot, 0) = u_0(x), \quad u_t(\cdot, 0) = u_1(x), \quad \theta(\cdot, 0) = \theta_0(x), \quad \varrho(\cdot, 0) = \varrho_0(x), \quad y(\cdot, 0) = y_0(x), \quad y_t(\cdot, 0) = y_1(x), \\ u(0, t) = u(1, t) = \theta_x(0, t) = \theta_x(L, t) = y_x(0, t) = y_x(L, t) = 0 \quad \forall t \geq 0. \end{aligned} \quad (2)$$

$$\varrho(0, t) = \varrho(1, t) = y(0, t) = y(1, t) = \theta(0, t) = \theta(1, t) = 0, \quad \forall t \geq 0.$$

By using the energy method combined with multiplicative technique, we show the exponential stability of (1) under suitable condition on time delay.

**Keywords:** Porous system, Polynomial decay, Exponential Decay, Delay.

2010 Mathematics Subject Classification: 35B40, 35L70, 93D15, 93D20.



**A NEW METHOD OF DYNAMICAL STABILITY IN FRACTIONAL SYSTEMS**

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**ABSTRACT**

In this article, by using the Lyapunov second method, we study the stability of nonlinear generalized fractional system. Then, in order to illustrate the effectiveness and availability of the our result, we provide an example. Further, by employing numerical simulation, we depict the numerical value of the example and show that the zero solution of the nonlinear fractional dynamical system converges to the origin or equilibrium point of the system when the time tends to infinity.



**ADOMIAN DECOMPOSITION METHOD FOR SOLVING NONLINEAR ODES EQUATION  
USING MAPLE**

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**ABSTRACT**

In this paper, the adomian decomposition method (ADM) is applied to the nonlinear ordinary differential equations (ODE), applied to Maple. The adomian decomposition method (ADM) is a powerful technique for approximate analytic solutions and numerical simulations in applied sciences and engineering. The adomian decomposition (ADM) is applied using Maple to solve the nonlinear ordinary differential equations (ODE) by showing many examples. The results are shown through tables and graphics for several examples. For several examples, the findings are presented in the form of tables and graphs. The effectiveness of the solution using the Maple program, as well as the ease and speed with which it was obtained, can be seen in the comparison between the precise and numerical solutions.

**Keywords:** Adomian decomposition Method, Nonlinear ODEs, Maple.



**USING THE DISCRETE LOGARITHM PROBLEM TO IMPROVE THE SECURITY OF A  
PUBLIC KEY CRYPTOSYSTEM**

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**ABSTRACT**

The discrete logarithm problem is one of the hardest problem in Number Theory, that has many applications in cryptography. On the other hand, the study of cryptography has been interested cryptologists for long time because the necessity of transferring important information secretly established the existence of cryptosystems to allow receivers to interpret the exchanged data. In this manuscript, a modification of the well-known asymmetric cryptosystem called Taher cryptosystem is presented with the help of primitive roots and a symmetric cryptosystem called Vigenere Cipher. Since the security of the last cryptosystem is based on the difficulty of the discrete logarithm problem, because hacking or cracking this cryptosystem depends on identifying its private key, and that relies on solving discrete logarithm problem modulo a very large prime number. This manuscript suggests a modification of Taher cryptosystem that can make this cryptosystem having a higher security than its original. It focuses on increasing the number of the keys that are used in the decryption procedure from one to three keys and on modifying the traditional encryption and decryption algorithms in a professional way that increases the efficiency and security of it. This suggested cryptosystem can be listed as one of the asymmetric cryptosystem that has a public key and two private keys, an exchanged key, and it can be applied over messages or images. This cryptosystem has a better security than any existing public key cryptosystem since breaking it relies on finding three private keys; however breaking any public key cryptosystem depends on finding its only private key.

**Keywords:** Cryptography; Discrete logarithm problem; Vigenere Cipher.

## DERIVATIONS ON LIE AND JORDAN ON SEMIPRIME RINGS

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### ABSTRACT

*The derivation is a map on a ring  $R$  such that*

$$\delta(x + y) = \delta(x) + \delta(y) \text{ and } \delta(xy) = \delta(x)y + x\delta(y) \quad \forall x, y \in R.$$

*An additive map on  $R$  is said to be a left  $(\theta, \varphi)$ -derivation, where the maps  $\theta, \varphi$  of  $R$  such that*

$$\delta(xy) = \theta(x)\delta(y) + \varphi(y)\delta(x) \quad \forall x, y \in R.$$

*In this research we prove that if  $A \neq \{0\}$  is a Lie ideal and a subring of a semiprime ring  $R$  with  $\text{char} R \neq 2$  and  $\delta$  is a  $(\theta, \varphi)$ -derivation of  $R$  satisfies the condition*

$$\delta(ab) = \delta(ba) \quad \forall a, b \in A,$$

*implies that  $A \subseteq Z(R)$  and  $[R, R] \subseteq Z(R)$ .*

*Furthermore, if  $A \neq \{0\}$  is a Lie ideal of a prime ring  $R$  with  $\text{char} R \neq 2$  and  $a^2 \in A$ ,*

*$\forall a \in A$  and if  $\theta, \varphi$  are two automorphisms of  $R$  and  $\delta : R \rightarrow R$  is a left  $(\theta, \varphi)$ -derivation of  $R$  which is acting as a homomorphism (resp. an anti-homomorphism) on  $A$ , implies that  $\delta = 0$  or  $A \subseteq Z(R)$ .*

*In addition, we prove that if  $V \neq \{0\}$  is a Jordan ideal and subring of a prime ring  $R$  with  $\text{char} R \neq 2$  and if  $\theta, \varphi$  are two automorphisms of  $R$  and  $\delta$  is a left  $(\theta, \varphi)$ -derivation of  $R$  which is acting as a homomorphism (resp. an anti-homomorphism) on  $V$ , implies that  $\delta = 0$  or  $V \subseteq Z(R)$ .*

**Keywords:** Derivation, prime and semiprime ring, Lie Ideal, Jordan Ideal



**UNSTEADY FREE CONVECTION MOTION OF CASSON LIQUID PAST A SEMI-INFINITE VERTICAL POROUS PLATE ON NUMERICAL SOLUTION OF MHD, SORET, DUFOUR AND THERMAL RADIATION CONTRIBUTIONS**

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**ABSTRACT**

In this paper, unsteady motion of Casson liquid over a half-infinite vertical penetrable plate with MHD, Soret, Dufour and thermal radiation contributions have been explored numerically. In the physical geometry, the Casson liquid flows to the layer from the penetrable vertical plate. At the layer, Casson liquid is set into motion and the flow equations are illustrated using coupled partial differential equations (PDEs). These set of PDEs are simplified to form a dimensionless PDEs with the use of normal non-dimensional transformation. The effects of controlling parameters on the working fluid is extensively discussed on velocity, concentration, and temperature and presented graphically. Computational values of engineering quantities of interest such as local skin friction, Nusselt plus Sherwood number for controlling parameters are depicted in tabular form. Our findings show that an increment in the Casson term depreciates the velocity plot because of the impact of the magnetic parameter on the flow. The Soret parameter was found to accelerate the coefficient of skin friction along with the Sherwood number. An incremental value of Dufour parameter was detected to hike the skin friction alongside the Nusselt number. Results of this work were found to be in conformity with previously published work.

**Keywords:** Casson fluid, Soret and Dufour, plastic dynamic viscosity, Spectral relaxation method



**FLOW OF MHD CASSON FLUID OVER A VERTICAL POROUS SURFACE IN THE PRESENCE OF CHEMICAL REACTION AND RADIATION EFFECTS**

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**ABSTRACT**

The article is intended to examine the MHD Casson fluid flow under the impact of radiation as well as chemical reaction along with magnetic field through a vertical surface with porosity. The nonlinear system of PDEs is converted to ODEs by utilizing similarity analysis. The ensuing ODEs are solved successfully by applying 4<sup>th</sup> order R-K method. The attained outcomes are matched with the existing, good agreement with available standard results. The numerical outcomes are found for the various profiles like velocity, temperature and concentration, further, skin friction, Nusselt and rate of mass transfer coefficients for different values of critical constraints.

**Keywords:** Porous medium, Casson Fluid, Magnetic Field, non-Newtonian Fluid.





**GENERAL AND OPTIMAL DECAY FOR A NONLINEAR VISCOELASTIC EQUATION**

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**ABSTRACT**

In this paper, we study the stabilization of an axially moving viscoelastic structure. We obtain an asymptotic stability result of global solution, for certain class of relaxation functions. The proofs are obtained by using the multiplier technique. The obtained results improve certain previous results.

**Keywords:** General decay, multiplier technique, stability, Moving structure.

## TUNABLE THREE-DIMENSIONAL TERAJET CONTAINING DIRAC SEMIMETAL

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### ABSTRACT

The terajet (TJ) is a localized electromagnetic beam which is appeared in the shadow side of a dielectric scatterer with dimension larger than the incident wavelength [1]. In this study, we consider a cylindrical dielectric rod, which is coated by a layer of Dirac semimetal (DS). We investigate the formation of a photonic TJ by engineering the radius and height of the cylindrical dielectric rod and the thickness of the DS layer. The refractive index of the DS can be modulated by changing its Fermi energy ( $E_F$ ). Thus, the Fermi energy is considered as an adjustable parameter to tune the optical properties of TJ (focal distance ( $FD$ ), intensity ( $I$ ), full-width at half maximum ( $FWHM$ ), and length ( $L$ )) using the high-resolution finite-difference time-domain method. Here, we have considered the cylindrical dielectric rod to be high-density polyethylene HDPE with refractive index  $n_1 = 1.53$  in air background and the DS layer to be AlCuFe quasi-crystal. The simulations were performed by illuminating the structure with TE-polarized plane wave of frequency  $f = 7THz$ . We selected the radius and height of the rod and the thickness of the DS layer to be  $R = 300\mu m$ ,  $h = 180\mu m$  and  $d_{DS} = 1\mu m$ , respectively, as an optimum parameters. The optical peoperties of TJ were calculated at two different values of  $E_F = 10meV$  and  $E_F = 55meV$  and the corresponding numerical results are  $I = 28.87a.u.$ ,  $FWHM = 32.4\mu m$ ,  $L = 94\mu m$ ,  $FD = 369\mu m$ ;  $I = 40.75a.u.$ ,  $FWHM = 29.43\mu m$ ,  $L = 112.72\mu m$ ,  $FD = 360\mu m$ , respectively. It was demonstrated that the existence of the DS layer has substantial impact on the photonic TJ's properties. The TJ with tunable optical properties could have noticeable applications in optical devices, such as near-field imaging and scaninig.

**Keywords:** Photonic Terajet, Dirac semimetal, Fermi energy.

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**PARAMETERIZED CONTROL OF NATURAL AND FORCED CONVECTION IN A THREE-DIMENSIONAL ENCLOSURE**

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**ABSTRACT**

This work aims to numerically study the controlled cooling by natural or mixed convective exchange of an electronic component of square section placed in the middle of the straight wall in a cubic cavity and subjected to a constant thermal flux density. A flow of air maintained at a cold ambient temperature and entering through an inlet of rectangular section located at the bottom of the left wall cools the component in the case of low temperatures. For strong temperature gradients, a two velocities extraction system placed at the top of the right wall works to remove the dissipated heat. The other walls of the cavity are considered adiabatic. The Rayleigh number ( $10^3 \leq Ra \leq 10^6$ ) and the Reynolds number ( $0 \leq Re \leq 800$ ) are the parameters governing the problem. The optimal Reynolds number, corresponding to the second speed of the extractor, is determined for  $Ra = 10^3$ ,  $Re_{20} = 800$ . The two Rayleigh numbers allowing the operation with the two speeds are determined,  $Ra_1 = 4 \times 10^4$  and  $Ra_2 = 1.5 \times 10^3$ . Streamlines and isotherms were also presented in the cubical enclosure to visualize the details of the temperature and the flow distribution. The maximum temperature in the component is around the center in the coordinate area ( $X=1, 0.1956 \leq Y \leq 0.6, Z=0.5$ ).

**Keywords:** Numerical study, mixed convection, natural convection, controlled cooling, optimal parameters.

## **METAL KAPI İMALATINDA İŞ SAĞLIĞI VE GÜVENLİĞİ UYGULAMALARI, RİSK ANALİZİ VE ÇÖZÜM ÖNERİLERİ**

### **OCCUPATIONAL HEALTH AND SAFETY APPLICATIONS, RISK ANALYSIS AND SOLUTION SUGGESTIONS IN METAL DOOR MANUFACTURING**

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#### **ÖZET**

Bu çalışmada metal sektöründe faaliyet gösteren KIRIKER Metal Asansör Sanayi ve Ticaret Limited Şirketi İşletmesi içerisinde yer alan asansör kapısı üretim hatlarını içeren imalathane ile ilgili üretim süreci faaliyetleri esas alınarak iş sağlığı ve güvenliği uygulamaları, risk analizi ve çözüm önerileri araştırılmıştır. Üretim iş akışına bağlı olarak sınıflandırılmış ve süreç boyunca karşılaşılan ergonomik, fiziksel, kimyasal, biyolojik, iş ekipmanları kaynaklı, makine ve araç gereçlerin kullanımından doğan potansiyel tehlikeler tanımlanmıştır. Risk değerlendirme metodu olarak L tipi karar matrisi kullanılmıştır. Gerçekleştirilen gözlemler doğrultusunda ramak kala olay, iş kazası ve meslek hastalıklarının engellemek için alınması gereken tedbirler belirlenmiştir. Yapılan risk değerlendirmesi sonucunda risklerin kabul edilebilir seviyeye çekilmesi için iyileştirme önerileri oluşturulmuştur. Fabrikada geçmişe yönelik iş kazası incelemesi yapılmış olup, kök neden analizi yapılmıştır. Ayrıca, kazaların personelde ve firmada yarattığı olumsuzluklar, yaralanmalar araştırılmış çözüm önerileri geliştirilmiştir. İş kazalarının yaşanmasını engellemek adına alınması gereken tedbirler analizler ile ilgili firmaya sunulmuştur.

**Anahtar kelimeler:** Metal sektörü, İş güvenliği, Risk Değerlendirme, L Tipi Karar Matrisi

#### **ABSTRACT**

In this study, occupational health and safety practices, risk analysis and solution suggestions were investigated based on the production process activities related to the workshop, which includes the elevator door production lines in the KIRIKER Metal Elevator Industry and Trade Limited Company, operating in the metal sector. It has been classified depending on the production workflow and the potential hazards arising from the use of ergonomic, physical, chemical, biological, work equipment, machinery and tools encountered during the process have been defined. L-type decision matrix was used as the risk assessment method. In line with the observations made, measures to be taken to prevent near misses, work accidents and occupational diseases were determined. As a result of the risk assessment, improvement suggestions were made in order to reduce the risks to an acceptable level. A retrospective work accident investigation was carried out at the factory, and a root cause analysis was carried out. In addition, the negativities and injuries caused by the accidents in the personnel and the company have been researched and solutions have been developed. The measures to be taken in order to prevent occupational accidents were presented to the company concerned with the analysis.

**Keywords:** Metal Industry, Occupational Safety, Risk Assessment, L-Type Decision Matrix



**REPRODUCTIVE HEALTHCARE SERVICES AMONG COMMUNITY CLINICS IN RURAL BANGLADESH: SERVICES, SERVICE SATISFACTION AND SERVICE GAPS**

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**ABSTRACT**

The main research objective of this study was to investigate the reproductive health care services of the community clinics in Bangladesh and look the level of the satisfaction and its service gaps. Based on a mixed method approach, this study employed a multi-method data collection approach including face-to-face interviews, focus group discussions and key Informants' interviews. The study was conducted in the West Guzara Union of the Raozan Upazila in the Chattogram District in Bangladesh. Results showed that the rural women encountered multiple causes assorted with quality of healthcare services from community clinic. Lack of good quality medicine (78%), quality doctors (83%), lack of modern equipment (48%) and insufficient maternal and childbirth services (45%) were the predominated causes to get proper healthcare services from community clinics. Adequate coverage of reproductive healthcare services in community clinics remains poor in the study area. The service gaps were found in the content of reproductive and sexual healthcare contacts when women attend to these services. A sustained collaborative effort supported by political commitment, together with mobilization and rational allocation of resources, can bring a brighter future for sexual and reproductive health in the remote area in Bangladesh. Findings would be important guideline to the policy makers, health care practitioners, and service providers to increase the quality of reproductive health care services in the rural areas in Bangladesh and reduce service gaps for greater service satisfaction.

**Keywords:** Bangladesh; Rural area; Reproductive health care services; Community clinics, Service satisfaction; Service gaps.



**THE IMPACTS OF THE GREAT FINANCIAL CRISIS ON THE BANKING SECTOR OF A SMALL TRANSITION COUNTRY ON THE EXAMPLE OF BOSNIA AND HERZEGOVINA**

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**ABSTRACT**

The effects of the great financial crisis on the banking sector of a small transition country are pronounced and great. Essentially, on the example of a small transition country such as Bosnia and Herzegovina, the mere existence of a major economic crisis, ie the financial crisis of 2008, means a great impact on all economic events in it. The crisis that has affected all economies has no impact on the conduct of macroeconomic policy of all national economies. In essence, it can be said that all economies, regardless of their size, adapt to the great economic or financial crisis in different ways. Adapting to the new conditions is an ongoing process. In this paper, the author pointed out how the transition of countries with weak economies, ie Bosnia and Herzegovina, was adjusted. Namely, immediately after the financial crisis, measures were adopted: balancing the trade balance, controlled opening of the economy, changing the sources of financing the trade deficit, reducing the inflation rate, limiting budget spending, increasing financial discipline and more. Another characteristic of the adjustment that the author pointed out was the diversification of banks in terms of ownership in Bosnia and Herzegovina. The results clearly show the existence of diversification in terms of ownership of banks in Bosnia and Herzegovina, which is illustrated by the authors by showing the banks and their ownership structure.

**Keywords:** financial crisis, bank, economy, Bosnia and Hercegovina.

**DEVELOPMENT OF SOFTWARE APPLICATIONS IN TRANSITION COUNTRIES AT THE  
REQUEST OF TOP MANAGEMENT OF LARGE COMPANIES**

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**ABSTRACT**

The development of software solutions at the request of top management is performed by most software companies that undertake specific development for the needs of the company at the request of the customer. Software development methods are constantly changing and advancing in line with the development of software methodologies and information technologies. These requirements must essentially be met by a company that develops software for the needs of users.

Classical traditional methodologies in software architecture development are being upgraded in the form of new more reliable and flexible development techniques. Thus, the component based software development methodology (CBSDD), as one of the possible directions of the traditional software methodology, takes precedence in the software development industry. New methodological trends are represented by the so-called agile methodologies, which are more flexible and which prefer to direct towards the development of smaller segments of the software system, so-called software iterations. The authors point out in this paper that the requirement of top management basically for the development of new software solutions must be done, but also the company that develops software should point out to the customer the possible consequences or advantages in terms of software development. At the same time, the authors of this paper point out that the choice of software development methodology affects the quality of the software itself, which is delivered to the client in this case, a large company and whose requirements set by top management should basically be met.

**Keywords:** software development, large enterprise, desires of top management, management.



**THE IMPORTANCE OF CONNECTING THE WORK OF INTERNAL CONTROL AND  
INTERNAL AUDIT IN THE OPERATIONS OF ENTERPRISES IN TRANSITION COUNTRIES  
LIKE THE EXPERIENCES OF THE ECONOMY OF THE REPUBLIC OF SERBIA**

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**ABSTRACT**

The importance of linking the work of internal control and internal audit in the operations of companies in transition countries, and especially with respect for the practical experiences of the economy of the Republic of Serbia is reflected in the fact that it can significantly improve the overall business. At the same time, the work of internal control and internal audit can increase the quality of large business decisions of top management in companies. Another characteristic would be that their work can increase the overall security of business and work in the company. The third is that on the basis of such trends, the overall business in the economy can be increased and improved very quickly, but also within each business entity that has introduced internal control and internal audit in its regular operations. At the same time, the authors point out that the work of unified internal control and internal audit should take into account the existence of external factors that can definitely affect the company's operations, which are measurable in terms of business results achieved by the company. Business decisions should be made by top management, inter alia, based on the recommendations of internal auditors with prior consideration of the findings of internal control formed in the company. Both ways of control are formed by the decisions of the top management of the company. The goal of improving and better management, ie good corporate governance, is a permanent commitment of every well-intentioned top management in the companies in which it performs the function of management. In order to achieve this, or to achieve this goal, it is necessary to take into account the recommendations of internal auditors from the previous period of the company, but it is also necessary to take into account the views of internal control on internal control in the company in the previous observation period.

**Keywords:** internal audit, internal control, company, management.





**IMPLEMENTATION OF INTERNAL AUDIT IN LARGE ENTERPRISES WITH INFORMATION SYSTEM IN ALL SECTORS**

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**ABSTRACT**

The introduction of internal audit in transition countries such as the Republic of Serbia is essentially reversed so that its basic function is aimed at performing internal audit activities in all parts of the company. It is founded by the top management of the company with the aim of performing the most optimal audit of the system and by order of the top management of the company. Internal audit should, as realistically as possible, perform a real analysis of the situation in companies on the basis of orders issued by top management. On that occasion, two principles should be followed. The first is to do the entire job of internal audit within the set deadline. The second principle is that the confidential work should be done in an economical way and that the internal auditor's report should be submitted to the top management for approval, leaving the same enough time to comment on the draft report. The work of the internal auditor is greatly facilitated if the company already has a built-in information system in the company and if it is functional in all parts of the company. It is important to point out that the company's information system should be built in all sectors and departments in the company.

**Keywords:** internal audit, internal control, company, management.



**SOFTWARE METHODOLOGIES IN THE DEVELOPMENT OF SOFTWARE SOLUTIONS**

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**ABSTRACT**

Methods, models, and tools for software development are changing and advancing in line with the development of software methodologies and information technologies. Classical traditional methodologies are used as stable reliable development technologies, which in modern development models are supplemented by new technical and technological requirements and standards. The classical methodology, component-based software development (CBSD), during the last century, and even today, occupies a primary role in the software development industry. The quality of the developed software solution also depends on the chosen methodology for software development. New modern methodological trends are represented by flexible agile methodologies. With this paper we want to point out the directions of development of software methodologies, the possibility of their mutual combination and their role in achieving a certain level of quality in the development of software systems for the needs of small and medium enterprises.

**Keywords:** Component based software development, agile development, Object-oriented programming, software quality, iterative development, software solution generator, small and medium enterprises.

**EFFECTS OF ERGONOMIC CONDITIONS IN THE WORK ENVIRONMENT ON WORK  
PERFORMANCE AND PRODUCTIVITY**

**ÇALIŞMA ORTAMINDAKİ ERGONOMİK KOŞULLARIN İŞ PERFORMANSI VE VERİMLİLİĞE  
ETKİLERİ**

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**ABSTRACT**

Occupational working environmental circumstances-conditions are key components to the measure which environmental factors impact work productivity and work-employee health. Individuals' influences have ripple adverse and affirmative impacts on organizational productivity, helping the business an indirect impact on indicators of business performance and productivity. There are a lot of factors that can influence a working environment. These comprise noise, vibration, light, heat and cold, particulates in the air, gases, air pressures, gravity, etc. Three effects are usually considered; those on the health, comfort and performance of the occupants. The effects of total environments comprise the sum of the physiological, psychological and social sensations experienced via persons in or around buildings which follow from their use of the buildings. In this research, environmental effects are tried to defined over employees such as noise, lighting, climate and harmful matters as theoretical and with applications-case study in a manufacturing company via work analysis-method analysis, 5S and work study. This application-case study provides a perspective to increase productivity and performance in the business environment. Basically, the purpose of this research is to present a general understanding-overview about environmental ergonomics to improve work productivity and work performance with this way.

**Keywords:** business, environmental ergonomics, conditions, productivity, work analysis, work study, manufacturing

**ÖZET**

Mesleki çalışma çevre koşullar, hangi çevresel faktörlerin iş üretkenliğini-verimliliğini ve iş-çalışan sağlığını etkilediğinin ölçülmesinde temel bileşenlerdir. Bireylerin etkileri, kurumsal üretkenlik üzerinde olumlu ve olumsuz bir etkiye sahip olabilir, bu da işletmenin iş performansı ve üretkenlik göstergeleri üzerinde dolaylı yoldan bir etkiye sahip olması açısından yol gösterir. Çalışma ortamını etkileyebilecek birçok faktör vardır. Bunlar; gürültü, titreşim, ışık, ısı ve soğuk, havadaki partiküller, gazlar, hava basınçları, yerçekimi vb. içerir. Genellikle üç etki düşünülür; çalışanların sağlığına, konforuna ve performansına önem verir. Toplam çevrenin etkileri, binaların içinde veya çevresinde kişilerin binaları kullanmalarından kaynaklanan fizyolojik, psikolojik ve sosyal duyuların toplamını içerir. Bu araştırmada, bir imalat-üretim işletmesinde iş analizi- metot analizi, 5S ve iş etüdü yöntemleriyle gürültü, aydınlatma, iklim ve zararlı maddeler gibi çalışanlar üzerinden çevresel etkiler teorik ve uygulama-vaka çalışması ile tanımlanmaya çalışılmıştır. Bu uygulama-vaka çalışması, iş ortamında üretkenliği-verimliliği ve performansı artırmak için bir bakış açısı sağlar. Temel olarak bu araştırmanın amacı, kullanılan yöntem ile iş verimliliğini ve iş performansını artırmak için çevresel ergonomi hakkında genel bir bakış açısı sunmaktır.

**Anahtar kelimeler:** iş, çevresel ergonomi, koşullar, üretkenlik-verimlilik, iş analizi, iş etüdü, imalat.

**YÜKSEKÖĞRETİMDE KALİTEYE ULAŞMADA SİSTEMSEL BİR SORUNA ELEŞTİREL  
BAKIŞ: HER AKADEMİK YÜKSELMEDE YENİDEN ATANMA ZORUNLULUĞU**

**A CRITICAL LOOK AT A SYSTEMIC PROBLEM IN ACHIEVEMENT OF QUALITY IN HIGHER  
EDUCATION: REAPPOINTMENT OBLIGATION IN EVERY ACADEMIC PROMOTION**

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**ÖZET**

Son yıllarda, akademik işe alım ve yükseltmelerle ilgili yayımlanan ilanlarda işe alınmak ya da yükseltmek istenen personelin “akademik yetkinliğini” tanımlayan açıklamalara yönelik eleştiriler oldukça fazlalaşmıştır. Bu durum üniversitelerin toplum nezdindeki kurumsal itibarına gölge düşürmektedir. Bu olumsuz durumla birlikte, hak ettiği her akademik unvanda “ilk defa atanan bir akademisyenin yaşadığı tüm süreçleri” defalarca yeniden yaşayan akademisyenlerin maruz kaldıkları baskı, belirsizliğin getirdiği kaygılar, ekonomik kayıplar ve yaşanan stres ise akademisyenlerin performansına ve üniversitelerin verimliliğine olumsuz etkilerde bulunabilmektedir. Bu çalışmada, mesleğe ilk girişten itibaren hak ettiği akademik unvanların kadrosunu alabilmek için her seferinde yeniden kadro ilan edilmek ve yeniden atanmak zorunda kalan (yada kadro ilan edilmediği için yükseldiği kadroya atanamayan) akademisyenlerin durumu yükseköğretimde kalite yönetimi ölçütleri ve eleştirel kuram çerçevesinde değerlendirilmekte, eleştirel kuramın hegemonya teorisi çerçevesinde yükseltmelerin akademisyenler üzerinde kurulan bir hakimiyete dönüştüğü tespiti yapılmakta ve akademik yükseltme konusunun yol açtığı sorunlar irdelenmektedir. Çalışmada, üniversite kadrolarına bir kez atanan bir öğretim elemanının unvanı ne olursa olsun her akademik yükselmesinde, yükselme ile doğru orantılı, eş zamanlı ve sistematik olarak, herhangi bir uygun görme ya da ilan şartına gerek olmadan, yükseldiği kadroya atanması önerilmektedir.

**Anahtar kelimeler:** Akademik Yükseltme, Atanma ve Yükselme, Hegemonya Teorisi, Stratejik İnsan Kaynakları Yönetimi, Yükseköğretimde Kalite.

**ABSTRACT**

In recent years, in the advertisements published on academic recruitment and promotions, the criticism of the explanations describing the "academic competence" of the person hired or promoted has increased considerably. This situation casts a shadow on the institutional reputation of universities in the eyes of society. Along with this negative situation, the pressure that academics are exposed to, anxieties caused by uncertainty, economic losses and stress experienced by academics who repeatedly experience "all the processes experienced by an academic who is appointed for the first time in every academic title they deserve" can have adverse effects on the performance of academicians and the productivity of universities. In this study, the situation of academicians who have to be re-announced and reassigned every time in order to receive the academic titles they deserve from the first entry into the profession (or cannot be appointed to the position they were promoted to because the cadre was not announced) is evaluated within the framework of quality management criteria in higher education and critical theory; Within the framework of the hegemonic theory of critical theory, it is determined that promotions have turned into a dominance established over academics and the problems caused by academic promotion are examined. In the study, it is recommended that an academician who is appointed to a university staff once, regardless of his title, should be appointed to the position he has



been promoted to, in direct proportion to the promotion, simultaneously and systematically, without the need for any appropriate approval or announcement.

**Keywords:** Academic Promotion, Appointment and Promotion, Hegemony Theory, Strategic Human Resources Management, Quality in Higher Education.



**APPLICATION OF MAGNETIZED ORANGE PEELS FOR THE REMOVAL OF  
ORGANOCHLORINE PESTICIDES (CHLORPYRIFOS AND PENDIMETHALIN) FROM  
AQUEOUS RESOURCES**

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**ABSTRACT**

The present work is based on the uptake of organochlorine pesticides (chlorpyrifos and pendimethalin) from aqueous solution by new laboratory prepared magnetized iron coated orange peels. Iron oxide present on orange peels increased the removal capacity of pesticides from 78% to 83% for chlorpyrifos and from 72% to 90% for pendimethalin for dried peel to magnetize modified peels. This cost effective and eco-friendly adsorbent is prepared from abundantly available orange peels for the adsorption of pesticides from water. This in turn is very useful for solid waste management. The adsorbents were characterized with the help of Fourier transform infrared spectroscopy and scanning electron microscopy. Furthermore, the adsorption efficiency of dried fruit peels was compared with magnetized peels. The effect of time, pesticides concentration, temperature and adsorbent dose were investigated in batch adsorption studies. The experimental data shows an increase in adsorption with increase in the concentration of pesticides solution. The  $Q_e$  (mg/g) value for magnetized orange peels increased from 3.5 to 4.15 mg/g for chlorpyrifos and from 3.6 to 4.45 for pendimethalin.

**Keywords:** orange peels, solid waste management, adsorption, pesticides removal

## INFLUENCE OF pH ON ADSORPTION ONTO ZnO NANOPARTICLES SURFACE

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### ABSTRACT

ZnO nanoparticles are widely used in pharmaceutical sector that may be expanded via the better understanding the interaction between amino acids and nanoparticles. The adsorption of amino acids onto nanoparticles surface is known to depend on nanoparticles characteristics (shape, size, concentration, surface functionality), amino acids nature (concentration, acidity, functionality of groups), and environmental conditions (pH, other organic matter, electrolytes). Current data on nanoparticles' behavior do not allow predicting colloidal behavior of nanoparticles in a biologically relevant media and design the methods for the production of aggregately stable hydrosols of nanoparticles.

In our project we estimate what pH promotes the adsorption of arginine onto the surface of engineered ZnO nanoparticles. Briefly, we expose differently-shaped (spherical and fibrous) ZnO nanoparticles with nominal size about 30 nm in arginine solution with different pH values (4...10) prior to measuring arginine concentration in exposed supernatants by the photocolometry. The experimental data are used to calculate the adsorption efficiency of ZnO nanoparticles and to describe the adsorption kinetics.

It has been preliminarily shown that the removal efficiency of the amino acid increases in the solutions with non-neutral medium: maximum value of arginine is absorbed onto ZnO surface at the pH of 4 (29%), and less at the pH of 10 (25%) compared to 13% under the pH of 7. Moreover, the shape of chosen particles do not have much influence on the adsorption capacity, while spherical nanoparticles are able to absorb a bit more arginine in comparison with fibrous ones.

**Keywords:** ZnO Nanoparticles, Arginine, Adsorption, pH, nanoparticle shape, adsorption kinetics.



**BIOLOGICAL EVALUATION OF SCHIFF BASE TRANSITION METAL COMPLEXES  
DERIVED FROM SULPHA DRUG**

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**ABSTRACT**

In the two-step synthesis of Schiff base metal complexes, the molar ratio of reactants were fixed. After preparation different techniques were used for structure elucidation for Schiff base and metal complexes. The biological application of ligand and complexes were studied. The data obtained against *Escherichia coli*, *Enterobacter aerogenes*, *Staphylococcus aureus*, *Bacillus pumilus*, *Klebsiella oxytoca*, *Clostridium butyrium*, *Mucor* and *Aspergillus niger* cultures through agar well method. All compounds were found to be significantly active against bacterial and fungal strains when compared with ligand and reference drug.

**Keywords:** Schiff base, metal complex, drug, antibacterial, antifungal





**NOVEL PVC MEMBRANE POTENTIOMETRIC SENSOR FOR HIGHLY SELECTIVE DETERMINATION OF FEXOPHENADINE IN PHARMACEUTICALS AND SPIKED HUMAN URINE**

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**ABSTRACT**

This study describes the design, optimisation, validation and application of a novel polyvinylchloride (PVC) matrix assisted membrane sensor for selective determination of fexofenadine hydrochloride (FFH) using Alizarin Red S (ARS) as ion-pairing agent or ion-exchanger, nitrophenyl octyl ether (NPOE) as a plasticizer and  $\beta$ -cyclodextrin ( $\beta$ -CD) as ionophore. The PVC matrix assisted FFH-ARS sensor responses in <15s with super Nernstian behavior for FFH of the concentration range from  $2.5 \times 10^{-6}$  to  $1.25 \times 10^{-3}$  mol L<sup>-1</sup> in the pH range of 2.0 to 5.5. The regression coefficient for the calibration curve is obtained as 0.9921. The calculated Nernstian slope of the line is  $56.18 \pm 1.25$  mV/decade. The detection limit, LOD, of this sensor is found to be  $3.5 \times 10^{-7}$  mol L<sup>-1</sup>. Validation of the optimized sensor revealed its suitability for use to determine FFH accurately and precisely. The sensor is also a good one for robust and rugged function with mean RSD value of 4.39%. The interference study has been performed the results revealed non-interference of foreign ions or species while measuring the potentials. Statistical comparison of the results gives the inference of resemblance of results by the proposed analytical procedure with the reference method. From the analyses of tablets and spiked human urine using this FFH-ARS sensor the mean percentage recoveries of FFH are resulted as 98.56 and 95.61%, respectively, and this confirmed the selectivity of the solid state electrode for FFH determination.

**Keywords:** Fexofenadine, Alizarin Red S, Membrane electrode, Nernstian response, Assay, Pharmaceuticals



## THE ANTIMICROBIAL ACTIVITY OF LEAF EXTRACTS FROM EUCALYPTUS

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### ABSTRACT

Many plant species produce mixtures of odorous and volatile compounds known as essential oils (EOs). These mixtures play important roles in Nature and have been utilized by mankind for different purposes, such as pharmaceuticals, agrochemicals, aromatherapy, and food flavorants. Eucalyptus is a rich source of bioactive compounds with a variety of biological activities and is widely used in traditional medicine. Eucalyptus is cultivated for the production of essential oils. This study aimed to determine the chemical components, microbial inhibitory effect, and mechanism of action of leaf extracts from Eucalyptus, we review the latest information concerning the chemical composition and biological activities of Eucalyptus. We have focused on the antimicrobial hoping that such information will contribute to the development of research in this field. It is also intended that the information described in this study can be useful in the rationalization of the use of Eucalyptus extracts as components for pharmaceutical.

**Keywords:** Essential oils, Euglobals, 1,8-cineole, Antibacterial activity, Antifungal activity, Antiviral activity.



**POLYMERS-BASED LUMINOL: SYNTHESIS, CHARACTERIZATION AND APPLICATION**

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**ABSTRACT**

An addition polymerization method has been applied to prepare different polymers. Free radical polymerization technique was used in this work to polymerize three monomers acryloyl chloride, methacryloyl chloride and vinylpyrrolidone. All resulting polymers were polymerized using Azobisisobutyronitrile (AIBN) and Benzoyl Peroxide (BPO) as initiators, the yields of polymers were reasonably satisfied. The homopolymers have been processed using a post-polymerization modification to attach luminol inside chain as pendant group. Characterization of functionalized luminol polymers such as UV, NMR, IR have been reported. The effect of luminol pendant group will be investigated to study further properties such as chemiluminescence intensity, biological activity, catalytic reductions, and some applications.

**Keywords:** Addition Polymerization, Luminol, Chemiluminescence



**QSPR-NEURAL NETWORKS MODEL FOR THE PREDICTION OF THE REJECTION OF ANTI-INFLAMMATORY DRUGS BY MEMBRANES**

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**ABSTRACT**

The rejection of anti-inflammatory drugs by membranes has shown paramount importance in separation membrane processes such as nanofiltration and reverse osmosis (NF/RO) membranes for pharmaceutical industries. Therefore, the main objective of this paper is to use a neural network based on quantitative structure properties relationship (QSPR-NN) to model the rejections of anti-inflammatory drugs by nanofiltration and reverse osmosis (NF/RO) membranes using 300 experimental data points gathered from the literature. The approach of QSPR-NN model gives close results with a slight superiority of the neural networks model demonstrated by its correlation coefficient (R) and root mean square error (RMSE) values of 0.9930 and 1.8094% respectively. Sensitivity analysis by the weight method demonstrates that the most relevant variables that influence the rejection of anti-inflammatory drugs are: effective diameter of an organic compound in water "d<sub>c</sub>", molecular length, contact angle, and zeta potential. These input relevant variables have a significant contribution (relative importance superior to 10 %).

**Keywords:** QSPR; Neural Networks; Prediction; Rejection; Anti-inflammatory drugs; Membranes.



**GROWTH KINETICS OF FeB AND Fe<sub>2</sub>B LAYERS ON AIS 316 STEEL BY THE INTEGRAL METHOD**

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**ABSTRACT**

The present work aims at simulating the boriding kinetics of SAE 316 steel by using the integral method with consideration of boride incubation times. This kinetic approach is based on solving of DAE system resulting from the integral method in the temperature range 1123-1273 K. By using a simple approach based on a particular solution of DAE system, the values of boron diffusivities in the FeB and Fe<sub>2</sub>B layers were estimated. The values of activation energies for boron diffusion in SAE 316 steel were also determined. Finally, a comparison was made between the simulated thicknesses of FeB and Fe<sub>2</sub>B layers and the experimental values obtained at temperature of 1273 for a treatment time of 3 and 5h.

**Keywords:** Boriding, Incubation times, Fick's laws, Integral method, Kinetics.



## IS CATECHOL *O*-METHYLTRANSFERASE A MORPHEEIN PROTEIN?

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### ABSTRACT

Morpheein proteins interconvert between monomeric and homo-oligomeric forms under physiological conditions and can exist as equilibria of monomer and oligomers. This phenomenon is largely facilitated by domain swapping. Although no direct evidence in our research, occurrence of domain swapping in Catechol *O*-methyltransferase (COMT) has recently been reported with the subsequent formation of different homo-oligomers. In our study, the enzyme exists in different functional conformations that differ in reactivity toward the same substrate. These observations suggest that the enzyme is possibly a morpheein protein. Domain swapping and variations in reactivity and kinetic parameters are the common features of these proteins. The reported occurrence of domain swapping and the existence of catalytically active COMT as a monomer, dimer and homo-oligomer, with different activity and kinetic parameters, are therefore the characteristic features of morpheein protein.

**Keywords:** Morpheein, proteins, Catechol *O*-methyltransferase

## **AHİLİĞİN TEORİKTEN PRATİĞE GEÇİŞ YÖNTEM VE TEKNİKLERİ KONUSUNDA BİR DEĞERLENDİRME**

AN EVALUATION ON THE TRANSITION METHODS AND TECHNIQUES OF AHI ORDER FROM THEORY TO PRACTICE

**Hatice DÜLBER**

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### **ÖZET**

Ahilik; Türk kültürünü, K.Kerim ve Hz. Peygamber'in temel ilkeleriyle mezc edilmesinden oluşan önemli bir teşkilattır. Özellikle iş ve çalışma ahlakıyla ilgili prensipleri doğruluk, kaliteli üretim, diğerkâmlık, arabuluculuk, muhtaçlara yardım, menfaate dayalı doğru olmayan söz söylememe, israf yapmama, haysiyet gibi yabancılaştığımız değerlere verdiği önem, imanın ilimle beslenip çalışma ile şekillendirilmesi gibi prensipleri, günümüz insanının da muttasıf olması gereken ahlaki ilkeler olduğu aşikârdır. Ahiliğin en önemli özelliği önem verdiği bu prensiplerin sözde kalmamış, insanların hayatında bizzat uygulanmasında yatmaktadır. Bizim bu tebliğdeki konumuz, ahiliğin temel prensiplerini nasıl ve hangi yöntemle uyguladığı, uyguladığı yöntemler konusunda Hz. Peygamberin uygulamalarına yaptığı referansla ilgili bilgileri tespit ederek, günümüz insanının bu yöntem ve tekniklerden nasıl istifade edeceği konusunda değerlendirme yapmayı hedeflemektedir. Yalan ve aldatmanın yaygınlaştığı, para için her türlü değer yok sayıldığı, kimsenin kimseye güveni kalmadığı, bencilliğin tavan yaptığı bir toplumda daha insani bir yaşam ve daha üst bir ahlaki seviyeye çıkabilmek için bu yöntemlere çok ihtiyacımız olduğunu düşünüyoruz. Bu sebeple ahiliğin nasıl bir toplumsal mekanizmayla bunu başardığı ve bu konuda temel alınan referanslar incelenecek bu amaçla ahilik konusunda yeni bir okuma yapılacaktır.

**Anahtar kelimeler:** Ahilik, ahlak, yöntem, prensip, değer.

### **ABSTRACT**

Ahi order is an important organization formed by the combination of Turkish culture, Koran and Prophet Muhammed's (pbuh) basic principles. It is clear that the organization attaches importance to the values we forgot such as honesty, quality in production, generosity, mediation, helping needy people, economizing and dignity, which are related to particularly the principles of business and work ethics. And it is also obvious that these are the moral principles in which faith must be fed with knowledge and shaped with work, and the principles that today's people must possess. The most important feature of Ahi Order lies in the fact that these principles, which the organization attached importance, did not remain unfulfilled and were practiced in people's lives. In this paper, we aimed to make an analysis on how and in what ways the fundamental principles of Ahi Order were practised, and to make evaluations on how people in today's world will benefit from these methods and techniques by determining the information about the references made to the Prophet's practices on the methods the organization applied. We think that we need these methods for a more humane life and a higher moral level in a society where lies and deceit are prevalent, where all kinds of value are ignored for the sake of money, where no one trusts anyone, where self interest is growing. Therefore, the kind of social mechanism that the Ahi Order accomplished this and the references based on this issue will be examined, and a new research on the organization will be made for this purpose.

**Keywords:** Ahi order, ethics, methods, principles, values.

**AHI EVRAN VELİ VE ZİYARET KÜLTÜRÜ**  
**SOCIAL COMPLEX OF AHI EVRAN AND VISITING CULTURE**

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**ÖZET**

Ahilik teşkilatının kurucusu olarak bilinen Ahi Evran Veli İran'ın Batı Azerbaycan tarafında bulunan Hoy kasabasında doğmuştur. Daha sonra Anadolu'ya göçen Ahi Evran rivayetlere göre 1261 tarihinde Kırşehir'de vefat etmiştir. Günümüzde Kırşehir'de Ahi Evran Veli adında bir külliye bulunmaktadır. Külliye içindeki camide bulunan Ahi Evran kabri şehre gelen misafirler tarafından ziyaret edilmektedir. Ziyaret kavramı Türk kültürünün önemli zenginliklerindedir. Halk dindarlığının işareti olan ziyaret kültürü Diyanet İşleri Başkanlığı tarafından anlaşılammakta ve ziyaret pratikleri eleştirilmektedir. Diyanet İşleri Başkanlığı'nın bu tutumu ilmi anlamda doğru olsa da sosyolojik açıdan izah edilmesi gereken bir konudur.

**Anahtar kelimeler:** Ahi Evran Veli, ziyaret, halk dindarlığı, Diyanet İşleri Başkanlığı.

**ABSTRACT**

Ahi Evran Veli known as the founder of the Ahi organization, was born in the town of Hoy, located in the West Azerbaijan side of Iran. Ahi Evran who later migrated to Anatolia, died in Kırşehir in 1261 according to rumors. Today, there is a complex called Ahi Evran Veli in Kırşehir. The tomb of Ahi Evran located in the mosque inside the complex, is visited by the guests coming to the city. The concept of visit is one of the important riches of Turkish culture. Visiting culture which is a sign of public religiosity, cannot be understood by the Presidency of Religious Affairs and visiting practices are criticized. Although this attitude of the Presidency of Religious Affairs is scientifically correct, it is an issue that needs to be explained sociologically.

**Keywords:** Ahi Evran Veli, visiting, folk religiosity, Presidency of Religious Affairs.



## **SÜRDÜRÜLEBİLİR İNSAN KAYNAKLARI YÖNETİMİ BAKIŞ AÇISIYLA AHİLİK VE AHI EVRAN**

### **AKHISM AND AHI EVRAN FROM SUSTAINABLE HUMAN RESOURCE MANAGEMENT PERSPECTIVE**

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#### **ÖZET**

Ahilik teşkilatı, fütüvvet geleneğinin devamı olarak, Anadolu topraklarında ekonomik, siyasi, sosyal, eğitimsel ve ticari nitelikleri birlikte taşıyan bir yapı oluşturmuştur. Ahilik teşkilatı, özellikle istihdam politikaları, yöneltme, çalışma ilişkileri, kariyer gelişimi, çalışan geliştirme ve eğitim konularının çerçevesinde gelişen ve bu gelişmelerin temelinde insana verilen değer yer aldığı bir teşkilatlanmadır. Bu teşkilatlanma özellikle orta çağ döneminde Anadolu topraklarında yaşayan halka toplumsal ve kültürel olarak yön vermiş ve Anadolu'nun genç nüfusunun gelişiminde her zaman etkili olmuştur. Ahilik teşkilatında uygulanan eğitim, geliştirme ve istihdam politikaları, uzun vadeli planlar kapsamında yürütülmekte ve genel bir plan dahilinde hayata geçirilmektedir. Bu gelişme sayesinde uzun vadeli çalışanlar elde edilmekte ve istikrarsızlıkların önüne geçilmektedir.

Sürdürülebilir insan kaynakları yönetiminin temelinde de toplumsal çıkar ve ekonomik fayda odaklı personel çalıştırma, işe alma ve seçme, geliştirme ve eğitim kavramları önem taşımaktadır. Sürdürülebilir İKY, özellikle örgütsel performansın sağlanmasında insan kaynaklarının önemine dikkat çekmektedir. Özellikle bir işletmenin sürdürülebilir bir insan kaynağına sahip olması için ortaklıkların ve yardımlaşmaların önemi da aynı kapsamda ifade edilmiştir.

Bu kapsamda bu çalışmanın amacı, uzun yıllar boyunca Anadolu topraklarında faaliyetlerini sürdüren Ahilik teşkilatını sürdürülebilir insan kaynakları yönetimi bakış açısıyla incelemek ve ahilik teşkilatının uygulamaları ile sürdürülebilir İKY uygulamaları arasındaki benzerlikleri belirlemeyebilmektedir. Çalışmadan elde edilen bulgulara göre ahilik teşkilatının istihdam politikaları ile sürdürülebilir İKY kapsamında yürütülen istihdam politikaları benzerlik göstermektedir.

**Anahtar kelimeler:** Ahilik, Ahi Evran, Sürdürülebilirlik, Sürdürülebilir İnsan Kaynakları Yönetimi.

#### **ABSTRACT**

Ahi organization, as a continuation of the fütüvvet tradition, has created a structure that carries economic, political, social, educational and commercial qualities in Anatolian lands. The Ahi organization is an organization that develops within the framework of employment policies, management, labor relations, career development, employee development and training, and the value given to human is the basis of these developments. This organization gave direction to the people living in the Anatolian lands socially and culturally, especially in the medieval period, and has always been effective in the development of the young population of Anatolia. The education, development and employment policies implemented in the Ahi organization are carried out within the scope of long-term plans and are implemented within a general plan. Thanks to this development, long-term employees are obtained and instability is prevented.

On the basis of sustainable human resources management, the concepts of employing, hiring and selecting, development and training personnel based on social interest and economic benefit are important. Sustainable HRM draws attention to the importance of human resources, especially in ensuring organizational performance. In particular, the importance of partnerships and cooperation for a business to have a sustainable human resource has been expressed in the same context.



In this context, the aim of this study is to examine the Ahi organization, which has been operating in Anatolia for many years, from the perspective of sustainable human resources management, and the similarities between the practices of the Ahi organization and sustainable HRM practices may not be revealed. According to the findings obtained from the study, the employment policies of the Ahi organization and the employment policies carried out within the scope of sustainable HRM are similar.

**Keywords:** Ahilik, Ahi Evran, Sustainability, Sustainable Human Resources Management.

## AHÎ EVRAN'A GÖRE İMANIN PSİKOSOSYAL AHLÂKÎ İŞLEVİ

### THE PSYCHOSOCIAL MORAL FUNCTION OF FAITH ACCORDING TO AHI EVRAN

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#### ÖZET

Bu tebliğin amacı; Ahî Evran'ın imanın psikososyal ahlâkî işlevi konusunda görüşlerini incelemektir. Hem âlim hem de deri ustası olan Ahî Evran, kurmuş olduğu Anadolu Ahîlik teşkilatındaki usta, kalfa ve çırak gibi sanatkârların inanç dünyalarını inşa ve ihya etmek üzere “Metâliü'l-İman” adlı eser kaleme almıştır. Aklın işlevselliğinde gönülde oluşan imanın dışa yansımaları yani davranış ve ahlâkî boyutu önemlidir. Çünkü inançlar, hayatın her alanını şekillendirir. İnsanın maddî-manevî hayatını etkiler. Peygamberlerin hepsi tevhid ve inanç esaslarını insanlara öncelikle öğretmişlerdir. Bunları; Allah'a iman, peygamberlere iman ve âhirete iman olarak üç maddede özetler. Psikososyal ahlâkî ilkelerin akıl, özgür irade ve sağlam delillerle kalpte oluşan, sabırla devam eden hakikî iman ile yaşanabileceğini öngörür. Bu ilkeler; doğruluk, çalışkanlık, cömertlik, kendini halk yararına adanmak, herhangi bir sanat ya da zanaat sahibi olmak, hile yapmamak, kimseye kin ve düşmanlık beslememektir. Bunlar akıllı kişide olması ve takvâ ile devamlı yaşanması istenen imanın psikososyal ahlâk boyutu denilebilecek niteliklerdir. Dünya ve âhirette huzur ve mutluluğun anahtarı; insanın içten severek yaptığı, ilahî rızaya uygun, güzel, sağlam, estetik ve faydalı işlerde çalışmasıdır. Başkalarına yük olmamak için çalışmanın, iyi ve güzel işlerde zamanı değerlendirmenin, hoşgörülle canlıların mutluluğu için çabalamanın gerçek iman ve güzel ahlâk sahibi insanın doğasında var olan bir erdem olduğu söylenebilir. Her Peygamberin meşgul olup geçimini sağladığı bir mesleği vardır. İnsanlığın öğretmenleri olan peygamberler örnek alınmalıdır. Huzurlu ve mutlu yaşamak isteyenler gönülden severek güzel işler yapmalı, zamanını güzelce değerlendirmeli üretken olmalıdır. Türk-İslâm dünyasında fikir ve aksiyon bakımından derin iz bırakmış Ahî Evran gibi prototip bir şahsiyetin tanınması fikrî temellerinin bilinmesi ve gelecek kuşaklara aktarılması dini, ilmî, ahlâkî, kültürel görev ve sorumluluk olduğu söylenebilir. Onun imanın psikososyal ahlâkî işlevi hakkındaki görüşleri, bakış açıları dün olduğu gibi günümüzde de fert ve toplumların inanç ve ahlâk problemlerine çözüm önerileri şeklinde bakılabilir.

**Anahtar kelimeler:** Ahî Evran, Ahîlik, İnanç, İman, Ahlâk

#### ABSTRACT

The purpose of this communiqué is to examine Ahi Evran's views on the psychosocial moral function of faith. Ahi Evran, who is both a scholar and a leather master, has written a work called “Metali al-Iman” to build and build the worlds of faith of artists such as a master, journeyman and apprentice in the Anatolian Akhism organization he founded. The outward reflection of the faith formed in the functionality of the mind in the heart, that is, its behavioral and moral dimension, is important. Because beliefs shape every aspect of life. It affects the material-spiritual life of a person. All the prophets have taught the principles of monotheism (tawhed) and faith to people first of all. He summarizes these in three articles as believing in Allah, believing in the prophets, and believing in the hereafter. He predicts that psychosocial moral principles can be experienced with genuine faith, which is formed in the heart with reason, free will and solid evidence, and continues patiently. These principles are truthfulness, diligence, generosity, dedication to the benefit of the people, owning any art or craft, not cheating, not harboring hatred and hostility towards anyone. All these are qualities that can be called the psychosocial dimension of faith, which should be in a sane believer and constantly live with piety. The key to peace and happiness in the world and the Hereafter is that a person works in beautiful, sound, aesthetic and useful jobs that he does with sincere love, in accordance with divine consent. It can be said that working in order not to be a burden to others, evaluating time in good and beautiful works, striving for the happiness of living beings with tolerance is a virtue inherent in a person who has true faith and



beautiful morality. Every prophet has a profession in which he is busy, where he makes a living. Prophets who are the teachers of humanity, should be taken as an example. Those who want to live peacefully and happily should do beautiful things with sincere love, evaluate their time beautifully and be productive. It can be said that it is a religious, scientific, moral, cultural duty and responsibility to recognize a prototype personality such as Ahi Evran who has left a deep mark in terms of ideas and actions in the Turkish-Islamic world, to know the basics of the idea and to pass it on to future generations. His views and perspectives on the psychosocial moral function of faith can be viewed as solutions to the problems of faith and morality of individuals and societies today, as they were yesterday.

**Keywords:** Ahi Evran, Akhism, Belief, Faith, Morality.

**ÜNİVERSİTE ÖĞRENCİLERİNİN AHI EVRAN İLE İLGİLİ GÖRÜŞLERİNİN İNCELENMESİ**  
EXAMINATION OF UNIVERSITY STUDENTS' OPINIONS ABOUT AHI EVRAN

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**ÖZET**

13. yüzyılda Anadolu'ya gelerek Anadolu Selçukluları gibi önemli medeniyetlere ev sahipliği yapan Kırşehir'e yerleşen Ahi Evran, gerçekleştirmiş olduğu faaliyetleriyle Türk-İslam corafyasının ve tarihinin önemli şahsiyetlerinden biri olmuştur. Özellikle kurmuş olduğu Ahilik Teşkilatı ile başta iktisadi olmak üzere sosyal ve siyasi hayatı etkilemiş, Anadolu'da millî ruhun vücut bulmasına, Osmanlı Devleti'nin kuruluşuna önemli katkılar sağlamıştır. 2021 Yılı Cumhurbaşkanlığı tarafından Hacı Bektaş Veli, Yunus Emre ve Ahi Evran yılı ilan edilmiştir. Bu araştırma üniversite öğrencilerinin Ahi Evran ile ilgili algılarını tespit etmek amacıyla gerçekleştirilmiştir. Araştırmanın çalışma grubunu, 2020-2021 öğretim yılında farklı fakültelerde öğrenim gören üniversite öğrencileri oluşturmaktadır. Araştırma nitel araştırma desenlerinden olgu bilim araştırması olarak tasarlanmıştır. Araştırmada veri toplama aracı olarak yarı yapılandırılmış görüşme formu kullanılmıştır. Verilerin analizi devam etmekte olup elde edilen verilere nitel veri analiz yöntemlerinden içerik analizi uygulanmaktadır. Bu araştırma bu alanda yapılan ilk araştırmalardan biri olacağından büyük önem taşımaktadır. Araştırma ile üniversite öğrencilerinin Ahi Evran'ı bilim bilmedikleri ve biliyorlarsa ne kadar bildikleri de bu araştırma ile ortaya çıkacağı var sayılmaktadır. Bu anlamda katılımcıların Ahi Evran ile ilgili görüşleri literatürde yer alan benzer çalışmalarla karşılaştırmalı olarak sunulacaktır.

**Anahtar kelimeler:** Üniversite öğrencileri, Ahi Evran, Nitel Araştırma,

**ABSTRACT**

Ahi Evran, who came to Anatolia in the 13th century and settled in Kırşehir, which hosted important civilizations such as the Anatolian Selçuk, became one of the important figures of the Turkish-Islamic geography and history with his activities. Especially with the Ahilik Organization he founded, he affected social and political life, especially economic, and made important contributions to the emergence of the national spirit in Anatolia and the establishment of the Ottoman Empire. The year 2021 has been declared the year of Hacı Bektaş Veli, Yunus Emre and Ahi Evran by the Presidency. This research was carried out to determine the perceptions of university students about Ahi Evran. The study group of the research consists of university students studying in different faculties in the 2020-2021 academic year. The research was designed as a phenomenology research, one of the qualitative research designs. A semi-structured interview form was used as a data collection tool in the research. The analysis of the data continues and content analysis, one of the qualitative data analysis methods, is applied to the obtained data. This research is of great importance as it will be one of the first studies in this field. With the research, it is assumed that university students do not know Ahi Evran as science, and if they do, how much they know, with this research. In this sense, the opinions of the participants about Ahi Evran will be presented in comparison with similar studies in the literature.

**Keywords:** University students, Ahi Evran, Qualitative Research

## AHİLİK VE KOOPERATİFÇİLİK DÜŞÜNCESİ AHHISM AND COOPERATIVE THOUGHT

**Ertuğrul GÜREŞÇİ**

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### ÖZET

Karşılıklı yardımlaşma, dayanışma ve işbirliğine dayalı olan kooperatifçilik düşüncesinin geçmişi, oldukça eskilere dayanmaktadır. İnsanlık tarihi, geçmişte olduğu gibi günümüzde de bir arada yaşamanın varlığını devam ettirmede çok önemli olduğunun farkındadır. Bu yüzden bir arada yaşamanın yer yer kurallarını geliştirmiş ve bunlara uymanın toplumsal bir sorumluluk olduğu bilincine varmıştır. Bu yüzden kooperatifleşme düşüncesi, aslında insanlık tarihi kadar eski sayılabilecek bir düşüncedir. Kooperatifçiliğin kökeni ile ilgili bazı araştırmalar yapılmış ancak modern kooperatifçiliğin, Robert Owen'in öncülüğünde Sanayi Devrimi sonrası İngiltere'de başladığı kabul edilmektedir. Modern kooperatifçilik öncesi bu düşüncenin altyapısını oluşturan bazı uygulamaların olduğu konusunda da çeşitli yaklaşımlar vardır. Bunlardan birisi de Ahilik Kültürü ve bu kültürün şekillendiği Ahi Birlikleri olduğu söylenebilir. Anadolu coğrafyasında etkileri uzun yıllar devam eden Ahilik düşüncesi ve kültürünün, bir tür esnaf teşkilatı olduğu ancak bu teşkilatın ilkeler ile ayakta kaldığı da kabul edilmektedir. Ahilik ile kooperatifçilik arasında herşeyden önce bir düşünce bağı bulunmaktadır. Bu düşünce karşılıklı yardımlaşma, dayanışma ve işbirliğidir. Çoğu kez kooperatifçilik düşüncesinin kökenlerinin batı dünyası olduğu kabul edilmektedir. Çünkü Sanayi Devrimin bu düşüncenin gelişmesinde ki rolü elbette gözardı edilemez. Özellikle sanayişemenin oluşturduğu kapitalist düşünce ve uygulamalarının karşısında daha insan merkezli ve demokratik bir işleyişi olan bir karşı duruşun olması oldukça önemlidir. Bu konuda Ahiliğin merkezine insanı alması ve esnafların biribiri ile dayanışma içinde olmalarını ön görmesi bir tür kooperatifçilik düşüncesi olarak ele alınabilir. Ahilik teşkilatlarının varlıklarını devam ettirebilmesi halinde bu günkü kooperatifleşmenin belki bu isimle bile yeniden ele alınabileceği de söylenebilir. Bu çalışmada, kooperatifçilik düşüncesi ve Ahilik arasındaki bağlantı ve kooperatifçiliğin gelişmesinde ki olası katkısının tartışılması amaçlanmıştır. Bunun için gerek Ahilik gerekse kooperatifçilik ile ilgili yerli ve yabancı kaynakların taranarak çalışma için bir altyapı oluşturulması sağlanmıştır. Çalışmada, Ahilik ile kooperatifçilik arasında ilişkinin, özellikle kooperatifçilik öncesi düşünceleri tanımlaması bakımından oldukça önemli olduğu sonucuna varılmıştır. Ahilik konusunda daha çok çalışma yapılması ve kooperatifçilik düşüncesi ile olan ilişkinin bilimsel metotlarla ortaya konulması, kooperatifçilik düşünce ve uygulamalarına katkı yapabileceği tespit edilmiştir.

**Anahtar kelimeler:** Ahilik, Ahi Birlikler, kooperatifçilik düşüncesi

### ABSTRACT

The idea of cooperatives, which is based on mutualaid, solidarityandcooperation, has a longhistory. Thehistory of humanity is aware of thefactthat it is veryimportanttolivetogethertoday, as it was in thepast. Forthisreason, it has developed the rules of living together from place to place and has come to the awareness that it is a social responsibility to comply with them. Therefore, the idea of cooperativeness is actually an idea that can be considered as old as the history of humanity. Some research has been done on the origin of cooperatives, but it is accepted that modern cooperatives started in England after the Industrial Revolution under the leadership of Robert Owen. There are also various approaches that the rewere some practices that formed the infrastructure of this idea before modern cooperatives. It can be said that one of them is the Ahi Culture and the Akhi Unions in which this culture is shaped. It is also accepted that theAkhi-Order thought and culture, the effects of which have continued form any years in theAnatolian geography, is a kind of trades man organization, but this organization survives with the principles. First of all, there is a link of thought between theAkhicommunity and cooperatives. This idea is mutualaid, solidarity and cooperation. It is generally accepted that the origins of the idea of cooperatives are in the western world. Because, of course, the role of



the Industrial Revolution in the development of this idea cannot be ignored. It is very important to have a more human-center and democratic operation against the capitalis thoughts and practices created by industrialization. In this regard, it can be considered as a kind of cooperative idea that the Akhic ommunity puts people at the center and foresees the trades mento be in solidarity with eac hother. It can also be said that today's cooperatives can be reconsidered with this name, if the Akhi-order organizations can continue the irexistence. In this study, it is aimed to discuss the connection between the idea of cooperatives and theAkhi community and its possible contribution to the development of cooperatives. Forth is purpose, an infrastructure was created forthe study by scanning domesticand foreign resources related to both Akhis mand cooperatives. In the study, it was concluded that the relationship between Akhism and cooperatives is very important especially in terms of defining pre-cooperative thoughts. It has been concluded that more studies on Akhi community and revealing its relationship with the idea of cooperatives with scientific methods can contribute to the thoughts and practices of cooperatives.

**Keywords:** Akhism, AkhiOrganization, cooperative idea

## YEREL DEĞERLERLE YEREL KALKINMA: CEMELE BİBERİ

LOCAL DEVELOPMENT WITH LOCAL VALUES: CEMELE PEPPER (CEMELE BIBERI)

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### ÖZET

Yerel ürünler yerel kalkınmanın temel araçlarından biridir. Kesin bir tanımlamaya sahip olmamakla beraber coğrafi işaretli ürünler yerel ürünler içinde önemli bir yere sahiptir. Cemele Biberi, Kırşehir ilinde birçok yerde üretimi yapılan yerel bir dolmalık biber popülasyonudur. Söz konusu ürünün hem isminin hem de kalite özelliklerinin alana özgü olması nedeni ile asıl üretim merkezi Kırşehir İli Merkez ilçesine bağlı Çayağzı Köyü'dür. Çayağzı köyü Cemele Biberi'nin ana merkezi olarak bilinmekte ve bu alana özgülenmiş durumdadır. Türk Patent ve Marka Kurumu tarafından yayınlanan 16.08.2021 tarih ve 107 sayılı Resmi Coğrafi İşaret ve Geleneksel Ürün Adı Bülteni'nde "6769 Sayılı Sınai Mülkiyet Kanunu Kapsamında İncelenen Başvuruların Listesi" başlığı altında yayınlanmış olan söz konusu ürün bölge için önemli bir yerel değerdir. Bu çalışma ile Cemele Biberi'nin alan ile özgülendiği Çayağzı Köyü'nde üretime dayalı yerel kalkınma stratejisi oluşturma potansiyelinin ortaya konulması amaçlanmıştır. Bu amaçla Çayağzı köyünün iki mahallesinde (Merkez ve Terziali) 54 adet Cemele Biberi üreticisi ile yüz yüze görüşülmek suretiyle anket formları doldurulmuştur. Bu kapsamda biber üreten üreticilerin sosyo-ekonomik durumları ile biber üretim stratejileri içinde Cemele Biberi'nin yeri belirlenmeye çalışılmıştır. Sonuç olarak; Cemele Biberi üreticilerinin çoğunlukla küçük aile işletmesi şeklinde olduğu, ortalama Cemele Biberi üretim alanlarının 1,34 dekar olduğu, ailelerin %62,96'sının Cemele Biberi üretim alanının 1 dekar ve altında bir büyüklüğe sahip olduğu belirlenmiştir. Söz konusu ürünün üretiminde aile tüketimi toplam üretim içerisinde önemli bir yer tutmaktadır. Bunun yanı sıra ürün hem yaş hem de geleneksel yollar ile kurutulmuş pazara arz edilmektedir. Niş bir üretim ve pazarlama sistemine sahip ürünün bölgede yerel kalkınma değeri oluşturması için üreticiler arası işbirliği önem taşımaktadır. Dolayısıyla bölgede kurulan kooperatifin üreticileri yönlendirme, kaliteyi denetleme ve tescilin yayınlanması ile birlikte coğrafi işaret sistemini bölgeye iyi adapte etmesinin önemli olduğu sonucuna ulaşılmıştır.

**Anahtar kelimeler:** Coğrafi İşaret, Menşei İşareti, Yerel Kalkınma, Yerel Ürün.

### ABSTRACT

Local products are one of the main tools of local development. Although it does not have a full definition, geographical indication products have an important place among local products. Cemele Pepper (Cemele Biberi) is a local bell pepper population produced in many places in Kırşehir province. However, due to the fact that both its name and quality characteristics are specific to the area, the main center of its production is Çayağzı Village, which is connected to the Central district of Kırşehir Province. This village is known as the main center of this pepper and this area is specific to this pepper. This product, which was published under the title of "List of Applications Examined under the Industrial Property Law No. 6769" in the Official Geographical Indication and Traditional Product Name Bulletin, dated 16.08.2021 and numbered 107, published by the Turkish Patent and Trademark Office, is an important local value for the region. With this study, it is aimed to reveal the potential of creating a local development strategy based on this



pepper in Çayağzı Village, where Cemele Pepper is unique to the area. For this purpose, 54 Cemele Pepper producers were interviewed in 2 neighborhoods (Center and Terziali) of Çayağzı village. With this study, it was tried to determine the socio-economic status of the producers producing this pepper and the place of Cemele Pepper in the pepper production strategies of them. As a result, Cemele Pepper is mostly produced as a small family farming and the average Cemele Pepper production area of the families interviewed was calculated as 0,134 ha, and 62.96% of the families have a Cemele Pepper production area of 0,1 ha or less. Family consumption has an important place in the production of Cemele Pepper. In addition, this pepper is supplied to the market both as fresh and dried by traditional methods. Cooperation between producers is important for this pepper, which has a niche production and marketing system, to create local development value in the region. It has been concluded that it is important for the cooperative established for this purpose to adapt the geographical indication system well to the region with publishing the registration together with guiding the producers and controlling the quality

**Keywords:** Geographical Indication, Protected Designation of Origin, Local Development, Local Food

Bu çalışma Kırşehir Ahi Evran Üniversitesi Bilimsel Araştırma Projeleri Birimi tarafından desteklenen ZRT.A4.21004 No'lu proje sonuçlarından derlenmiştir.

## DÜŞÜK GÜBRE ORANINDA FARKLI PGPR KOMBİNASYONLARININ PAZAR-20 ÇAY KLONUNDA ETKİNLİKLERİNİN BELİRLENMESİ

DETERMINATION OF THE EFFICIENCY OF DIFFERENT PGPR COMBINATIONS AT REDUCED FERTILIZER RATE IN PAZAR-20 TEA CLONE

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### ÖZET

Bu çalışma Pazar-20 çay klonuna ait fidanlar ile kurulmuştur. Bu fidanlara, Doğu Karadeniz Bölgesi asidik çay topraklarından izole edilen 16 farklı izolat, (*Bacillus subtilis* RC28, *B. subtilis* RC63, *B. Subtilis* 39/3, *B. subtilis* 521, *B. megaterium* 12/1, *Paenibacillus polymyxa* RC05, *P. polymyxa* 24/3, *P. polymyxa* 28/3, *P. polymyxa* 68/3, *P. polymyxa* 66/6, *P. polymyxa* RC35, *Pseudomonas fluorescens* RC77, *P. fluorescens* 48/3, *P. Fluorescens* 51/2, *P. fluoroescens* 53/6 ve *B. atrophaeus* 36/10) ile hazırlanmış 6 farklı bakteri kombinasyonu, (K1, K2, K3, K4, K5, K6) ve biyolojik gübre uygulaması + 1/2 optimum NPK gübrelemesi, optimum NPK (1500 mg bileşik 25:5:10/fide) ve kontrol ile birlikte 9 uygulama yapılmıştır. (Uygulamalar 4 tekerrürlü ve her tekerrürde 6 fidan). Tüm uygulamalarda çay fidanlarında ölçülen bitki boyu, yaprak sayısı ve dal+yaprak ağırlığı değerleri kontrole göre önemli ölçüde artmıştır. Biyolojik gübre uygulamasında yaprak klorofil 1/2 kimyasal gübre miktarı ile birlikte uygulanan K1 ve K4 formülasyonları ve optimum NPK; 1/2 NPK+K4 formülasyonu ve optimum NPK uygulamaları ile kontrole göre antosiyanin miktarı istatistiksel olarak önemli ölçüde artmıştır. Antioksidan GR enzim aktivitesi açısından K3+1/2 NPK ve optimum NPK; GST aktivitesi 1/2 NPK+ biyolojik gübre; G6PD enzim aktivitesi 1/2 NPK gübrelemesi ile K1, K2 ve K3 formülasyonları ve 6PGD aktivitesi 1/2 mineral gübreye ek olarak K1 ve K5 biyolojik gübre formülasyonları en iyi sonuçları vermiştir.

**Anahtar kelimeler:** *Camellia sinensis* L., Biyolojik gübre, PGPR, NPK gübrelemesi

### ABSTRACT

This study was established with seedlings belonging to the Pazar-20 tea clone; 16 different isolates, that isolated from acidic tea soils of the Eastern Black Sea Region, (*Bacillus subtilis* RC28, *B. Subtilis* RC63, *B. Subtilis* 39/3, *B. Subtilis* 521, *B. Megaterium* 12/1, *Paenibacillus polymyxa* RC05, *P. Polymyxa* 24/3, *P. Polymyxa* 28/3, *P. polymyxa* 68/3, *P. Polymyxa* 66/6, *P. polymyxa* RC35, *Pseudomonas fluorescens* RC77, *P. fluorescens* 48/3, *P. Fluorescens* 51/2, *P. Fluoroescens* 53/6 and *B. Atrophaeus* 36/10) and 6 different combinations of bacteria, (K1, K2, K3, K4, K5, K6, which can be biological fertilizers) and a biological fertilizer application plus + 1/2 optimum NPK fertilization combined with optimum NPK (1500 mg compound 25:5:10/seedlings) and control, as a total of 9 applications, with 4 replications and 6 seedlings in each replication. In all treatments, plant height, leaf number and branch+leaf weight values measured in tea seedlings increased significantly compared to the control. In the application of biological fertilizer, K1 and K4 formulations and optimum NPK applied together with the amount of leaf chlorophyll 1/2 chemical fertilizer; The amount of anthocyanins increased statistically significantly with 1/2 NPK+K4 formulation and optimum NPK applications compared to the control. K3+1/2 NPK and optimum NPK in terms of antioxidant GR enzyme activity; GST activity 1/2 NPK+ biological fertilizer; K1, K2 and K3 formulations with G6PD enzyme activity 1/2 NPK fertilization, and K1 and K5 biological fertilizer formulations in addition to 6PGD activity 1/2 mineral fertilizer gave the best results.

**Keywords:** *Camellia sinensis* L., Biological fertilizer, PGPR, NPK fertilization.

**KABUKSUZ ÇEREZLİK KABAK (CUCURBITA PEPO VAR. STYRİCA) HATLARININ MEYVE ÖZELLİKLERİ VE TOHUM VERİMİ**

FRUIT CHARACTERISTICS AND SEED YIELD OF IN NAKED SEED PUMPKIN  
(*CUCURBITA PEPO VAR. STYRİCA*) LINES

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**ÖZET**

Seleksiyon ıslah yöntemi ile geliştirilen 24 adet kabuksuz çerezlik kabak hattı Kırşehir koşullarında meyve özellikleri ve tohum verimi yönünden incelenmiştir. Bitki başına ortalama meyve sayısı en yüksek 22'nolu hatta (5.29 adet) elden edilirken, en yüksek ortalama meyve ağırlığı ise 24'nolu hatta (4.070 kg) elde edilmiştir. 24 hattın meyve boyu 14.00-46.33 cm arasında değişirken, meyve çapı ise 8.87- 19.75 cm arasında değişmektedir. Islah hatların meyve eti kalınlığı ortalaması 2.65 cm iken, tohum evi genişliği ortalaması ise 14.00 cm olarak bulunmuştur. Meyve başına elde edilen en yüksek tohum verimi sırasıyla 7 (57.64 g) ve 24 (56.25 g) nolu hatlardan elde edilmiştir. 1000 tane tohum ağırlığı ortalaması ise 121.56 g olarak tespit edilmiştir. Bitki başına ortalama tohum verimi en yüksek 22'nolu hatta elde edilirken, dekara verim ise yine aynı şekilde 22' nolu hattın (116.34 kg) elde edilmiştir. Deneme sonucunda 3, 4, 7, 12 ve 22'nolu hatlar meyve ve tohum verimi yönünden öne çıkmıştır. Öne çıkan bu hatlar önümüzdeki yıllardaki ıslah çalışmalarında materyal olarak kullanılabilir.

**Anahtar kelimeler:** Tohumluk kabak, kabuksuz tohum, ıslah, seleksiyon, hat.

**ABSTRACT**

Twenty four naked seed pumpkin lines in developed by selection breeding method were investigated in terms of fruit characteristics and seed yield in Kırşehir conditions. The highest average fruit number per plant was obtained from the breeding line no. 22 (5.29 units), and the highest average fruit weight was obtained from the breeding line no. 24 (4.070 kg). Fruit length of 24 breeding lines varies between 14.00-46.33 cm, while fruit diameter ranged from 8.87 to 19.75 cm. While the average fruit flesh thickness of the lines was 2.65 cm, the average seedcavity width was found to be 14.00 cm. The highest seed yield per fruit was obtained from breeding lines 7 (57.64 gr) and 24 (56.25 gr), respectively. The average 1000 seed weight of the lines was 121.56 g. While the average seed yield per plant was obtained from the breeding line no. 22, the yield per decare was obtained from the breeding line no. 22 (116.34 kg) in the same way. As a result of the experiment, breeding lines 3, 4, 7, 12, 22 were found to be promising for investigated parameters. These prominent breeding lines can be used as materials in pumpkin breeding program for naked seed.

**Keywords:** Seed pumpkin, naked-seed, breeding, selection, line.

**KOLHİSİN UYGULAMASI İLE TETRAPLOİD SU KABAĞI (*LAGENARIA SICERARIA*)  
GENOTİPLERİNİN GELİŞTİRİLMESİ**

DEVELOPMENT OF ETTRAPLOİD BOTTLE GOURD (*LAGENARIA SICERARIA*) GENOTYPE BY  
THE APPLICATION OF COLCHICINE

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**ÖZET**

Fide döneminde 39-01 ve 70-07 su kabağı genotiplerine kolhisin (%0.5) uygulaması yapılmıştır. Diploid ve muhtemel poliploid (%0.5) bitkilerde stoma çapı ( $\mu\text{m}$ ), stoma uzunluğu ( $\mu\text{m}$ ), stoma yoğunluğu (adet  $\text{mm}^{-2}$ ), kloroplast sayısı belirlenmiş ve flow sitometre analizleri yapılmıştır. 39-01 genotipinde kolhisin uygulaması yapılan bitki sayısı 128 adet, kolhisin uygulaması sonucu yaşayan bitki sayısı ise 115 adettir. 70-07 genotipinde ise 120 adet bitkiye kolhisin uygulaması yapılmıştır ve 74 adet bitki hayatta kalmıştır. İki genotipte yapılan stoma incelemelerinde, diploid bitkilerde ortalama stoma çapı  $16.20 \mu\text{m}$ , stoma uzunluğu ise  $23.95 \mu\text{m}$  olarak ölçülmüştür. Buna karşılık poliploid bitkilerin ortalama stoma çapı  $22.85 \mu\text{m}$  ölçülürken, stoma uzunluğu ise  $33.53 \mu\text{m}$  ölçülmüştür. Poliploid bitkilerin stoma yoğunluğu diploid bitkilere göre yaklaşık iki kat azalmıştır. Ortalama kloroplast sayısı diploid bitkilerde 11.55 adet iken, poliploid bitkilerde 18.20 adet olarak sayılmıştır. Stoma ve kloroplast ölçümleri sonucunda iki su kabağı genotipinden toplam 37 adet bitki öne çıkmıştır. Flow sitometre analizi yapılan 37 bitkiden 11 tanesinin tetraploid olduğu doğrulanmıştır. Çalışmada kolhisin uygulamasının başarı yüzdesi  $5.82\%$  dir.

**Anahtar kelimeler:** Su kabağı, kolhisin, poliploid, tetraploid

**ABSTRACT**

Colchicine (%0.5) was applied to the bottle gourd genotypes 39-01 and 70-07 at first true leaf stage. Stomata diameter ( $\mu\text{m}$ ), stomata length ( $\mu\text{m}$ ), stomatal density (number  $\text{mm}^{-2}$ ), chloroplast number in guard cells measurements and flow cytometry analyzes were performed in diploid (0.0%) and possible polyploid (0.5%) plants. In the 39-01, the number of plants treated with colchicine is 128, and the number of living plants after colchicine application is 115. In 70-07, 120 plants were treated with colchicine and 74 plants survived. In the stoma examinations, the mean stomata diameter was  $16.20 \mu\text{m}$  and the stomata length was  $23.95 \mu\text{m}$  in diploid plants. On the other hand, the mean stomata diameter of possible tetraploid plants was measured as  $22.85 \mu\text{m}$ , while the stomata length was measured as  $33.53 \mu\text{m}$ . When the average stomatal density is considered, stomatal density in possible tetraploid plants has decreased approximately two fold compared to diploid plants. While the average number of chloroplasts was 11.55 in diploid plants, it was counted as 18.20 in possible tetraploid plants. As a result of stoma and chloroplast measurements, a total of 37 plants from the two gourd genotypes



were analyzed by flowcytometry. It was confirmed that 11 of 37 plants were tetraploid. In the study, the success rate of tetraploid plant production by colchicine application was %5.82.

**Keywords:** Bottle gourd, colchicine, polyploid, tetraploid

**LAVANDULA ANGUSTIFOLIA “SEVTOPOLIS” ÇELİKLERİNİN KÖKLENMESİ ÜZERİNE  
BEKLETME SÜRESİ VE FARKLI İBA DOZLARININ ETKİLERİ**

**EFFECTS OF HOLDING TIME AND DIFFERENT İBA DOSES ON ROOTING OF LAVANDULA  
ANGUSTIFOLIA “SEVTOPOLIS” CUTTINGS**

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**ÖZET**

Bu çalışma, Lavanta (*Lavandula angustifolia*"Sevtopolis") çeliklerinin köklenme oranlarına ve bazı köklenme parametrelerine çeliklerin soğukta muhafaza süresinin ve farklı indol-3bütrik asit dozlarının etkisini belirlemek amacıyla yapılmıştır. Çelikler, Aralık ayının başında alınmış ve ilk grup hemen dikilmiş ikinci grup ise soğuk hava deposuna konularak dikim için üç ay burada bekletilmiştir. Denemeler tesadüf blokları deneme desenine göre 3 tekerrürlü olarak ve her tekerrürde 20 çelik olacak şekilde dizayn edilmiştir. Çelikler, cam serada içerisinde, steril torf + perlit (3:1) ile doldurulmuş köklendirme tavalara dikilmişlerdir. Deneme süresince tavalara 22°C alttan ısıtma (sabit), ve üstten mistleme uygulanmıştır. Araştırma sonucunda, en yüksek köklenme oranı (%90) 1000 ve 2000 ppm İBA uygulanarak hemen dikilen ve 1000 ppm İBA uygulanarak üç ay soğuk hava deposunda bekletildikten sonra dikilen çeliklerden elde edilmiştir. Sürgün sayısı hariç, incelenen diğer bütün parametrelerde İBA dozlarının etkisinin istatistiki anlamda önemli ( $p<0.01$ ) düzeyde olduğu belirlenmiştir. Yapılan istatistiki analiz sonucunda bekletme sürelerinin köklenme oranları (%), sürgün yaş ağırlığı (g) ve sürgün kuru ağırlığı (g) üzerine etkisi istatistiki anlamda önemsiz bulunmuştur. Bekletme sürelerinin bitki boyuna (cm) etkisinin ( $p<0.05$ ) düzeyinde, sürgün sayısı (adet) ve kök sayısına (adet) etkisinin ise ( $p<0.01$ ) düzeyinde etkili olduğu belirlenmiştir. Ortalama sürgün yaş ve kuru ağırlığı en fazla olan (sırasıyla 4.71 ve 0.85g), en uzun boylu bitkiler (20.12 cm) ve ortalama en fazla kök sayısına (12.46 adet) sahip olan bitkiler 4000 ppm İBA uygulanan ve soğuk hava deposunda bekletilen çeliklerden elde edilmiştir.

**Anahtar kelimeler:** *Lavandula angustifolia*, bekleme süresi, İBA, köklenme

**ABSTRACT**

This study was carried out to determine the effect of cold storage time and different doses of indole-3butyric acid on the rooting rates and some rooting parameters of cuttings of Lavender (*Lavandula angustifolia*"Sevtopolis"). The cuttings were taken at the beginning of December and the first group was planted immediately, and the second group was put in the cold storage and kept there for three months for

planting. The experiments were designed according to the randomized blocks design with 3 replications and 20 cuttings in each replication. Cuttings were planted in rooting pans filled with sterile peat + perlite (3:1) in a glass greenhouse. During the experiment, 22°C bottom heating (constant) and top misting were applied to the pans. As a result of the research, the highest rooting rate (90%) was obtained from cuttings that were planted immediately by applying 1000 and 2000 ppm IBA, and planted after being kept in cold storage for three months by applying 1000 ppm IBA. Except for the number of shoots, the effect of IBA doses was found to be statistically significant ( $p<0.01$ ) in all parameters examined. As a result of the statistical analysis, the effect of waiting times on rooting rates (%), shoot fresh weight (g) and shoot dry weight (g) was found to be statistically insignificant. It was determined that the effect of the holding time on the plant height (cm) was effective at the level ( $p<0.05$ ), and the effect of the number of shoots (number) and root number (number) was effective at the level ( $p<0.01$ ). The plants with the highest average shoot fresh and dry weight (4.71 and 0.85 g, respectively), the tallest plants (20.12 cm) and the plants with the highest average root number (12.46) were obtained from cuttings applied 4000 ppm IBA and kept in cold storage.

**Keywords:** *Lavandula angustifolia*, waiting time, IBA, rooting

## **BİYOLOJİK GÜBRELER VE SÜRDÜRÜLEBİLİR TARIMDA ÖNEMİ**

### **BİOLOGICAL FERTILIZERS AND THEIR IMPORTANCE IN SUSTAINABLE AGRICULTURE**

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#### **ÖZET**

Biyolojik gübreler canlı materyallerdir. Besin elementi varlığı ve yararlılığını, toprak verimliliğini ve bitki beslenmesini artıran özel mikroorganizma gruplarından oluşturulmaktadır. Modern tarımsal uygulamalar, yüksek verimin sağlanması için yüksek miktarda mineral gübre girdisi ve ürünün patojen ve zararlılara karşı korunması için kimyasal pestisit kullanımı gerektirir. Bu uygulamalar günümüzde yeniden değerlendirilmekte ve aşırı gübre ve pestisit kullanımının sonuçları hakkında daha detaylı çalışmalar yapılmaktadır. Sürdürülebilir tarımda çevreye uyumlu ve toprak ekosisteminin uzun dönemde ekolojik dengesini muhafaza edecek tarımsal uygulamaların ortaya konulmasına gerek duyulmaktadır. Biyolojik gübreleme yöntemi, toprak besin maddesi yönetimi ve ekosistemin devamı için çevre dostu bir yaklaşım sunmaktadır. Günümüzde çevre sorunlarının başında küresel ısınma ve toprak kirliliği gelmektedir. Tarımsal faaliyetlerde kullanılan toplam kimyasal madde miktarı ve bunların ekonomik maliyetleri oldukça yüksektir. Özellikle kimyasal yolla toprağa ulaşan azot hızlıca nitrata dönüşmekte, akarsu ve deniz ekosistemini olumsuz etkilemektedir. Ayrıca denitrifiye olan azot miktarlarının küresel ısınma üzerine CO<sub>2</sub>'ten çok daha etkili olduğu belirlenmiştir. Bitkilerin topraktan en yüksek miktarda kaldırdığı azot, tarımsal faaliyetler için topraklara kimyasal veya doğal yolla ilave edilmek zorundadır. Doğal bir yöntem olan biyolojik gübreleme ise atmosferdeki azotu bitkilerin kullanımına sunmaktadır. Biyogübreler ekolojik, ekonomik ve güvenilir çözümler sunan iyi bir alternatiftir.

**Anahtar kelimeler:** Biyogübre, toprak sağlığı, toprak kirliliği, kimyasal gübreleme, küresel ısınma

#### **ABSTRACT**

Biological fertilizers are living materials. It is made from special groups of microorganisms that increase the presence and availability of nutrients, soil fertility and plant nutrition. Modern agricultural practices require a high input of mineral fertilizers to ensure high yields and the use of chemical pesticides to protect the crop against pathogens and pests. These practices are being reevaluated today and more detailed studies are being carried out on the consequences of excessive use of fertilizers and pesticides. In sustainable agriculture, it is necessary to introduce agricultural practices that are compatible with the environment and will maintain the ecological balance of the soil ecosystem in the long term. The biological fertilization method offers an environmentally friendly approach for soil nutrient management and the continuation of the ecosystem. Today, global warming and soil pollution are the leading environmental problems. The amount of chemicals used in agriculture on a world scale and their economic values are very high. Particularly, nitrogen reaching the soil by chemical means quickly turns into nitrate and adversely affects the river and marine ecosystems. In addition, it has been determined that the amount of denitrified nitrogen is much more effective on global warming than CO<sub>2</sub>. The most removed element from soil by plants is Nitrogen, has to be added to the soil by chemical or natural means for agricultural activities. Biological fertilization is natural and enables nitrogen in the atmosphere for plants. Biofertilizers are good alternatives presenting ecological, reliable and economical solutions.

**Keywords:** Biofertilizer, soil health, soil pollution, chemical fertilization, global warming





**RESEARCH OF FACTORS AFFECTING AQUACULTURE DEVELOPMENT KHANH HOA PROVINCE, VIETNAM**

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**ABSTRACT**

This study investigates the factors affecting aquaculture development in Khanh Hoa province, Vietnam, thereby providing policy implications for the development of this population. The research methods of descriptive statistics, reliability analysis Croback Alpha, exploratory factor analysis EFA, ANOVA were used in the study. The measurement results show that the scores of factors affecting aquaculture development in Khanh Hoa province, Vietnam are generally above average, but the gap is still very large, there is a difference between the factors of the study subjects. Regression results show that there are 6 factors affecting aquaculture development in Khanh Hoa province, Vietnam: Input conditions, Industry structure and competition, Demand conditions, Farming facilities aquatic products, Epidemic environment, Natural conditions; 3 factors do not affect the development of aquaculture in Khanh Hoa province, Vietnam: Support services, Working conditions, Government support. The results of analysis of differences in demographic variables ANOVA in assessing aquaculture development in Khanh Hoa province showed that there was no difference in stakeholders in this assessment.

**Keywords:** development, aquaculture, Khanh Hoa, Vietnam



## **A BIOALTERNATIVE TO NON-BENEFICIAL FLYING INSECTS IN AGRICULTURE**

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### **ABSTRACT**

Using an electrical approach in the field of agriculture can be one of the solutions in order to control harmful flying insects since it is considered both bio and selective. However, The adoption of chemical insecticides has led to the elimination of other non-target species and has affected both the environment and human health. Moreover, the intensification of chemical products has led to a significant change in insect populations and to the appearance of resistance layers. The principal of electrical approach consists of a lighting system to attract insect, an external metal wire meshes allowing the aimed insect to get inside and an electrified mechanism is connected to a potential difference by an electrical circuit to electrify insects from an electric discharge according to the inter-electrodes distance. Nevertheless, given the number of interactions between the species present, it makes it difficult to control only the targeted ones hence there is a need to review some parameters on the selectivity such as: optical parameter (light), electrical parameter (insect's behaviour to the current) and geometrical parameter (inter-electrode gap in which the insects will be electrified). **The issue under scrutiny** is the parameters that affect on the selectivity. In this regard, an experimental study was conducting on live locusts of same weight and size to discover the insect's behaviour to the current. The results showed that the threshold at which the insect is disturbed depends on its conductivity. This threshold is the criterion that is appropriate for different insect's reactions on electric current. It was concluded that there is a relationship between the insect's configuration and conductivity.

**Keywords:** Agriculture- Harmful Isects- Electric Discharge-Selectivity.



**MAPPING OF NEWLY DEVELOPED GENOMIC SIMPLE SEQUENCE REPEAT MARKERS TO THE LENTIL (*Lens culinaris* Medik.) GENOME**

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**ABSTRACT**

Lentil (*Lens culinaris ssp. culinaris*) is an autogamous diploid ( $2n = 2x = 14$ ), cool season food legume with a haploid genome size of 4063 Mbp. Its economic importance is not only owed to the rich protein content that provides nourishing diets to humans and animals but also the soil fertility management orchestrated by root nodulation and the symbiotic relationship with rhizobia for nitrogen fixation. This study reports the assigning of newly developed SSR markers to the lens genome using 71 F7 RIL plants developed from a cross between LR-39\_P-ESTON and LR-39\_PI320937. In total, 100 SSR markers were used for analysis, however, 12 of them showed polymorphism and were used for linkage mapping. Linkage analysis revealed that 10 SSRs mapped into two linkage groups (LGs) covering a total length of 19.2cM. LG-1 consisting of 8 markers spanned 4.8cM and LG-2 mapped a length of 14.4cM for 2 markers. Out of the 12 SSR markers, 2 SSR markers were found unlinked. The small number of markers used resulted into a map that partially represents the lentil genome. Whilst part coverage of the lens genome, this map could be used as a basis for further mapping studies, marker assisted selection and identification of QTLs linked to specific agronomic traits.

**Keywords:** Lentil, Linkage map, Simple Sequence Repeats, Recombinant Inbred Lines.

**Acknowledgement:** This study was supported by Erciyes University Scientific Research Unit (Project No: FCD-2021-10106).

**ITS2 (INTERNAL TRANSCRIBED SPACER 2) REGION: A VALUABLE MARKER TO LABEL AND DISCUSS GENETIC DIFFERENCES, *Astragalus* L. EXAMPLE**

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**ABSTRACT**

Molecular regions of DNA were often used to clarify the genetic relationships of plants in recent years. Particularly, the *ITS* (Internal Transcribed Spacer-*ITS1*+*ITS2*) region was mostly suggested for molecular phylogenetic studies due to its highly repeated in number in plant genomes and large copy numbers that support PCR amplification. At all taxonomic levels, *ITS2* indicates significant differentiation among species; so, it is used as an important marker in molecular systematics studies. Furthermore, not only primary sequences also secondary structure of *ITS2* region became valuable in species divergence and was used as a molecular morphological character. In the current study, different representative *Astragalus* species of different sections from Turkey were used as samples. The *ITS2* regions of the samples, which were approximately 220bp in length, were analyzed. Sequences were retrieved from NCBI data bank and sequences were aligned using ClustalW and Kimura-2 parameter to calculate the genetic distances. Phylogenetic tree was also constructed with Maximum Likelihood method with Kimura-2 parameter additionally with G (gamma) distribution at MEGA X software. Moreover, secondary structures of species were predicted via the tools from the *ITS2* database (<http://its2.bioapps.biozentrum.uni-wuerzburg.de/>) and mFOLD web server. According to the results, it was seen that both the overall genetic distances and the phylogenetic tree indicated section separations of *Astragalus* genus, and also *ITS2* secondary structure predictions were represented these genetic differences visibly like a morphological characters. For instance, *Chronopus* section was distinct than all others with *Tragacantha-Eustales* sections. Although all *Rhacophorus* section species were positioned with *Adiaspastus* section, only *A. gummifer* seemed different both at phylogenetic tree and also at secondary structure form. Conclusively, both primary sequences and secondary structures of the *ITS2* region will be used as an ideal marker for taxonomic classification and phylogenetic reconstructions at all taxonomic levels in molecular systematic studies.

**Keywords:** *ITS2*, DNA, Marker, *Astragalus* L., Systematics.



**INVESTIGATION OF GENETIC DIVERGENCE IN LOCAL SUNFLOWER HYBRIDS AND INBRED LINES  
BY APPLYING MORPHOLOGICAL MARKERS**

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**ABSTRACT**

Knowledge of genetic diversity is the basic requisite for any plant breeding program. Seventeen sunflower hybrids and fifteen inbred lines including ten Cytoplasm male sterile lines and five restorer lines were evaluated at the experimental area of National Agriculture Research centre, Islamabad, Pakistan during autumn-2011. The objective of study was to investigate the genetic diversity, categorize the proficient cross combiners and approximate characters association among sunflower hybrids and inbred lines. Data was estimated on i.e. flower initiation days, full flowering days, full developmental days, height of plant, disk diameter, stem thickness, leaves per plant, hundred achenes weight, achenes yield and oil content percentage. The maximum achenes yield was contributed by Hysun-33 2119 kg ha<sup>-1</sup>. Followed by SMH-0924 and SMH-0925, SMH-1028 and SMH-0926 were suggested as potential significant hybrids for future breeding plans to incorporate maximum achenes yield and oil content percentage. The CMS-11, CMS-25 and CMS-10 were long statured with vigorous stem and all the restorers were early maturing recommended for including in hybridization program to generate high heterotic factions. Cluster diagram based on Euclidean dissimilarity matrix grouped hybrids as well as inbred lines in four groups. The group I and IV consist of four whereas group II and group III have three and five hybrids respectively. All the restores were clustered in III and IV and CMS in I and II groups respectively. According to principle component analysis the first two components contribute 64% and 89% in total variation in hybrids as well as in inbred lines respectively.

**Keywords:** Sunflower, *Helianthus annuus* L, Genetic diversity, Cluster analysis, Principle component analysis.

**THE VOLATILE ORGANIC COMPOUNDS EMISSION FROM PLANTS IN THE FUTURE  
CLIMATE**

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**ABSTRACT**

The biogenic volatile organic compounds emission is playing an essential role in the global atmospheric chemistry. Plants usually emit many different compounds such as isoprene, C6, and C5 aldehydes and ketones, mono-, sesqui- and homo-terpenes, and other aromatic compounds. The change in carbon dioxide global concentration is expected to disturb those plants' emissions with unpredictable influence on air quality. In order to understand how volatile organic compound emissions from plants are influenced by the changes in carbon dioxide concentration, we grow plants from the *Salicaceae* family at 400, 800, and 1200 ppmv carbon dioxide. The emission of volatile organic compounds from those plants has been measured using the gas chromatography-mass spectrometry technique. As well, the photosynthetic parameters of plants have been monitored. Our results have been shown that the isoprene emission from different *Salix* varieties as *Salix alba*, *S. babylonica*, *S. viminalis*, and *S. purpurea* increases with the carbon dioxide concentration. In the same direction, monoterpene emission becomes important for *Salix viminalis* and *S. purpurea*, which have been grown at elevated carbon dioxide. The assimilation rates for all varieties increase drastically at elevated carbon dioxide while stomata conductance to water vapor has not been affected. In conclusion, the volatile organic compounds emission from vegetation could be influenced by future climate change.

**Keywords:** *Salicaceae*, volatile organic compounds, climate-changing, elevated CO<sub>2</sub>.

**Acknowledgment:** This work was supported by a grant of the Romanian National Authority for Scientific Research, CNCS – UEFISCDI, project number PN-III-P4-ID-PCE-2020-0410

## PLANT EXTRACTS AND THEIR BIOMOLECULES

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### ABSTRACT

Aromatic medicinal and cosmetic plants are an important source of biologically active compounds. The essential oils (EOs) and their corresponding hydrolates (HDs) obtained by steam distillation comprised a mixture of biomolecules that are found in various plant parts (roots, leaves, flowers, stems, etc.), which could be used in alternative and complementary medicine, cosmetics, for preserving food quality.

In the present work, we obtained EOs and HDs from leaves and/or inflorescences of diverse plants (such as *Artemisia dracunculus*, *Satureja* sp., *Thymus* sp.), harvested in the western part of Romania, in different years, by performing steam distillation. Thereafter, the products were separated and we determined the chemical composition by diverse methods: gas-chromatography coupled with mass spectrometry (GC-MS) for EOs and HDs; high-performanced liquid chromatography coupled with mass spectrometry (HPLC-MS) for HDs. The antioxidant activity of diverse types of essential oils and the corresponding hydrolates, respectively, was determined by two different spectrophotometric methods: DPPH and ABTS assays.

Then we tried to apply these products in health promoting applications. We used hydrolates incorporated in natural cosmetics such as hand cream. Its physic-chemical characteristics were determined, and the testing on volunteers is undergoing. Also, as aromatherapy is considered to have an important impact on the human health, we used several EOs in a clinical set-up and the patients used this method during hospitalization with good results.

Our study confirmed, once again, the huge potential of biomolecules from EOs and HDs on human promoting health applications.

**Keywords:** biomolecules, essential oils, hydrolates, chromatographic analyses, antioxidant activity, human health.

**Acknowledgment:** This work was supported by a grant of the Romanian National Authority for Scientific Research, CNCS – UEFISCDI, project number PN-III-P4-ID-PCE-2020-0410



**THE SITUATION AND SOLUTIONS FOR SUSTAINABLE POVERTY REDUCTION UNDER  
THE MULTIDIMENSIONAL APPROACH IN VIETNAMESE MEKONG DELTA RURAL  
AREA – A CASE STUDY IN A COMMUNE OF HAU GIANG PROVINCE**

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**ABSTRACT**

Poverty assessment through multidimensional poverty approach shows that households in Hoa An commune are poor in income and shortage basic social needs such as education, health care, housing, living conditions, and access to information. In the research area, low-income causes were severe or shortage of production means (residential land, production land), low education level, high dependency ratio, and without a job. The primary employment or, if any, focuses on farming with a precarious income. Households' shortage all essential social criteria for the five basic social needs, including education, health care, housing, clean water/sanitation, and access to information. Among them, shortages in health, housing, and education are most common. In general, most households are a real shortage of income criteria and basic social needs. However, the criteria of health and housing are the two criteria that need the most attention because of their highest proportion. In terms of health, households need to be appropriately aware of the importance of health insurance to protect their family members and must voluntarily participate in purchasing health insurance. Households need to raise awareness, invest, care about repairing the houses which deteriorated signs. Boost production to increase income and improve living conditions. The local government must promulgate policies to improve working skills, enhance providing vocational training for the rural labor force. Besides that, the solutions of public health care and education effectiveness increasing are essential in the long-term. The government has to support households with a small financial to establish a clean water supply connection and a hygienic toilet. Finally, encourage households to improve their capacity for information accessibility.

**Keywords:** Hau Giang province, the multidimensional approach of poverty assessment, poverty situation, sustainability of poverty reduction, Vietnamese Mekong delta.





**SYNTHESIS AND APPLICATIONS OF BIOCHAR-BASED CATALYSTS FOR EFFICIENT  
REMEDICATION OF EMERGING CONTAMINANTS**

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**ABSTRACT**

Biochar is a renewable value-added material obtainable from biomass-based sources. Renewed attention has been dedicated to Biochar-based catalysts (BBC) owing to environmental benefits towards achieving sustainable development and greener ecosystem. Porous carbons have been developed and used as heterogeneous catalytic materials in remediation as sustainable and economical alternative over non-renewable counterpart from petroleum-derived sources. Globally, environmental degradation is one of the major challenges the entire globe is facing recently both developed and developing countries face this issue, what distinguishes each country from one another lies in the approach of management with adoption of adequate remediation technologies with cost-effectiveness and accessibility to materials needed to carry out the process. The origin of renewable resources has been investigated by numerous researchers and found to be remarkable as a perfect replacement for conventional nonrenewable materials. Moreover, the rapid increase in the world population has been the primary driver for promoting novel green-driven technology and processes, whose products can reduce environmental pollution and its detrimental effect to our climate. Given this, green technology research has witnessed an upsurge in research progress ranging from pilot scale to industrial commercialization. Remediation of heavy metals and pharmaceutical contaminants is necessary as they tend to pose a great threat to human health and ecosystem if not treated properly. Owing to the positive impact of biochar derived materials on environment we present their catalytic applications toward removal of emerging contaminants to adequately achieve SDG #6.

**Keywords:** Biomass; Biochar; Catalysis; Remediation; Pollutants; Sustainability.

**ÜNİVERSİTE ÖĞRENCİLERİNİN E-SAĞLIK OKURYAZARLIK DÜZEYLERİ İLE SAĞLIKLI YAŞAM BİÇİMİ DAVRANIŞLARI ARASINDAKİ İLİŞKİ**  
**THE RELATIONSHIP BETWEEN UNIVERSITY STUDENTS' E-HEALTH LITERACY LEVELS AND HEALTHY LIFESTYLE BEHAVIORS**

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**ÖZET**

Topum sağlığının korunması ve geliştirilmesi her zaman önde gelen konulardan biri olmuştur. Sağlığın korunmasına yönelik çalışmalara bir süre sonra var olan sağlığı geliştirme çalışmaları da eklenmiştir. Dünya Sağlık Örgütü sağlığı, yalnızca hastalık ve sakatlığın olmayışı değil, beden, ruhen ve sosyal yönden tam bir iyilik halinde olmak şeklinde ifade etmiştir. Dönemin şartlarına göre sağlık anlayışı toplumun sağlığını koruyan ve geliştiren bir sağlık merkezli bakım yaklaşımını gerekli kılmaktadır. Bu anlayış bireyi kendi sağlığıyla ilgili sürece dahil ederek, bireyin sağlığını korumayı, sürdürmeyi ve geliştirmeyi amaçlayan davranışlar kazanmasına dayanmaktadır. Bu davranışların kazanılması sağlıklı yaşam biçimi davranışı olarak açıklanmaktadır. Bu davranışı yaşam biçimi haline getiren birey sağlığını korumak ve geliştirmek için etkili olabilmektedir. Sağlık anlayışında ve sisteminde meydana gelen değişimlikler sağlıklı yaşam biçimi davranışı sergilemek için gerekli olan yetkinlikleri de değiştirmektedir. Mevcut sağlık sistemine dahil olarak sağlığı korumak ve geliştirmek belli seviyede teknoloji kullanımını ve sağlık okuryazarlığını gerekli kılmaktadır. Sağlık sistemlerinde meydana gelen dijital dönüşümün gereği olan bu beceriler bireylerin sağlık durumlarındaki ilerleyişi anlama, analiz etme ve müdahale etmelerini kolaylaştırmaktadır. Bu sebeple günümüz şartlarında bireylerin sağlıklı yaşam biçimi davranışı gösterebilmeleri için yeterli seviyede e-sağlık okuryazarı olmaları beklenmektedir. Bu çalışmada üniversite öğrencilerinin e-sağlık okuryazarlığı düzeylerini belirlemek ve e-sağlık okuryazarlığı ile sağlıklı yaşam biçimi davranışı arasında ilişki olup olmadığını belirlemek amacıyla gerçekleştirilmiştir. Araştırmanın evrenini Kırıkkale Üniversitesi'nde 2018-2019 eğitim öğretim döneminde eğitim veren 10 fakültenin öğrencileri oluşturmaktadır. Fakültede eğitim gören öğrenci sayılarına göre tabakalı örneklem yöntemi uygulanmış ve 1583 öğrenci araştırmaya dahil edilmiştir. Öğrencilerin e-sağlık okuryazarlığı düzeylerini belirlemek için Norman ve Skinner (2006) tarafından geliştirilen ve Coşkun ve Bebiş (2015) tarafından Türkçe geçerlik-güvenirlik çalışması yapılan "E-Sağlık Okuryazarlığı Ölçeği (e-HEALS:The e-Health Literacy Scale)" kullanılmıştır. Öğrencilerin sağlıklı yaşam biçimi davranışlarını belirlemek için ise Walker ve arkadaşları (1996) tarafından geliştirilen ve Bahar ve arkadaşları (2008) tarafından Türkçe geçerlilik ve güvenilirlik çalışması yapılan sağlıklı yaşam biçimi davranışları ölçeği kullanılmıştır. Araştırma sonucunda e-sağlık okuryazarlığı düzeyleri ve sağlıklı yaşam biçimi davranışlarının fakülteye göre anlamlı farklılıklar gösterdiği ve e-sağlık okuryazarlığı ile sağlıklı yaşam biçimi davranışı arasında pozitif ve anlamlı bir ilişki olduğu sonucuna ulaşılmıştır.

**Anahtar kelimeler:** E-Sağlık Okuryazarlığı, Sağlıklı Yaşam Biçimi, Sağlık Davranışı

## ABSTRACT

Protection and improvement of public health has always been one of the leading issues. After a while, existing health promotion studies were added to the studies aimed at protecting health. The World Health Organization has defined health as not merely the absence of disease or infirmity, but a state of complete physical, mental and social well-being. According to the conditions of the period, the understanding of health necessitates a health-centered care approach that protects and improves the health of the society. This view is based on the acquisition of behaviors aimed at protecting, maintaining and improving the health of the individual by including the individual in the process of his own health. The acquisition of these behaviors is explained as a healthy lifestyle behavior. Individuals who make this behavior a lifestyle can be effective in protecting and improving their health. Changes in the understanding and system of health also change the competencies required to exhibit healthy lifestyle behaviors. Protecting and improving health by being included in the existing health system requires the use of technology and health literacy at a certain level. These skills, which are required by the digital transformation in health systems, make it easier for individuals to understand, analyze and intervene in the progress of their health conditions. For this reason, in today's conditions, individuals are expected to be e-health literate enough to show healthy lifestyle behaviors. This study was carried out to determine the e-health literacy levels of university students and to determine whether there is a relationship between e-health literacy and healthy lifestyle behavior. The population of the research consists of the students of 10 faculties providing education at Kırıkkale University in the 2018-2019 academic year. Stratified sampling method was applied according to the number of students studying at the faculty and 1583 students were included in the study. "E Health Literacy Scale (eHEALS)" which was developed by Norman and Skinner (2006) and adapted by Coşkun and Bebiş (2015) to Turkish, has been used to determine e health literacy level of students. The healthy lifestyle behaviors scale which was developed by Walker et al. (1996) and adapted by Bahar et al. (2008) to Turkish, has been used to determine healthy lifestyle behaviors of students. As a result of the research, it was concluded that e-health literacy levels and healthy lifestyle behaviors showed significant differences according to faculties, and there was a positive and significant relationship between e-health literacy and healthy lifestyle behavior.

**Keywords:** E-Health Literacy, Healthy Lifestyle, Health Behavior

**COVID-19 PANDEMİSİNİN SAĞLIĞA ETKİLERİNİ DERİNLEŞTİREN BİR FAKTÖR OLARAK  
SOSYAL SAVUNMASIZLIK**

**THE SOCIAL VULNERABILITY AS A DEEPENING FACTOR OF COVID-19'S IMPACTS ON  
HEALTH**

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**ÖZET**

COVID-19 pandemisi 2020 yılının başından bu yana devam eden önemli bir halk sağlığı krizidir. Tüm dünyada bugüne kadar yaklaşık 250 milyonu aşkın insanın hastalanmasına ve 5 milyondan fazla insanın da hayatını kaybetmesine yol açmıştır (WHO, 2021). Bununla birlikte pandeminin sadece tıbbî bir sorun olmadığı, aynı zamanda sosyal ve ekonomik sonuçlarının da olduğu vurgulanmaktadır (Banerjee & Bhattacharya, 2021). Pandeminin biyolojik etkisinin dışında yarattığı sosyal ve ekonomik sorunlar; toplumun sağlık sorunlarına ve sosyal problemlere karşı daha kırılgan olmasına ve savunmasız hale gelmesine yol açabilmektedir.

Sosyal savunmasızlık; çevresel ve sosyal değişikliklerle ilişkili stresörlerden olumsuz etkilenmeye daha yatkın olmak ve bu stresörlere uyum sağlama kapasitesinin olmaması şeklinde tanımlanmaktadır (Adger, 2006). Toplumda sosyal savunmasızlığın belirleyicileri; sosyoekonomik durum, demografik özellikler, konut ve hijyen olanakları, epidemiyolojik göstergeler ve sağlık hizmeti olanakları ile ilişkili göstergelere dayanarak belirlenmektedir (Acharya & Porwal, 2020). Toplumun ya da bireyin sosyal açıdan savunmasız oluşu; COVID-19 virüsü ile enfekte olma, COVID-19 bulaş önlemlerine uymama, aşı olmama ve COVID-19 nedeniyle ölme riskini artırabilmektedir.

Bu derlemenin amacı; sosyal savunmasızlık durumu ile COVID-19 hastalığına yakalanma, koruyucu önlemlere uyma, aşılama ve ölüm arasındaki ilişkiyi açıklamaktır.

**Anahtar kelimeler:** COVID-19, Pandemi, Sosyal Savunmasızlık, Sağlık Sonuçları

**ABSTRACT**

The COVID-19 pandemic is a major public health crisis that has been ongoing since the beginning of 2020. It has caused more than 250 million people to get sick and more than 5 million people to die all over the world to date (WHO, 2021). However, it is emphasized that the pandemic is not only a medical problem, but also has social and economic consequences (Banerjee & Bhattacharya, 2021). Social and economic problems created by the pandemic apart from its biological effect; It can cause the society to become more vulnerable and vulnerable to health and social problems.

Social vulnerability; is defined as being more prone to being negatively affected by stressors associated with environmental and social changes and not having the capacity to adapt to these stressors (Adger, 2006). Determinants of social vulnerability in society; socioeconomic status, demographic characteristics, housing and hygiene facilities, epidemiological indicators and indicators related to health care facilities (Acharya & Porwal, 2020). The social vulnerability of the society or the individual; being infected with the COVID-19



virus can increase the risk of non-compliance with COVID-19 transmission precautions, not being vaccinated, and dying from COVID-19.

The aim of the review; is to explain the relationship between social vulnerability and contracting COVID-19 disease, complying with protective measures, vaccination and death.

**Keywords:** COVID-19, Pandemic, Social Vulnerability, Health Consequences

## PANDEMİ DÖNEMİNDE TIBBİ DOKÜMANTASYONUN ÖNEMİ

### THE IMPORTANCE OF MEDICAL DOCUMENTATION DURING THE PANDEMIC PERIOD

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#### ÖZET

Hastaneler birden çok fonksiyonun bir arada yürütüldüğü karmaşık işletmelerdir. Hastane öncelikle bir işletmedir, daha sonra tıbbi hizmet veren bir kuruluştur, ayrıca otelcilik hizmeti vermektedir. Hastanelerde poliklinik hizmetleri, hekimler ve acil sağlık hizmetleri, eczane hizmetleri, hasta iletişim, istatistik, arşiv, klinik mühendislik, mutfak, ayniyat/ambar, hasta kabul/danışma, bilgi işlem, güvenlik hizmetleri, temizlik hizmetleri, ulaştırma, klinikler, acil servis, yoğun bakım, ameliyathane, anestezi, laboratuvar, radyoloji vb. olmak üzere birçok faaliyet yer almaktadır. Bu hizmetlerin etkili ve verimli bir şekilde sunulması ekip çalışmasını, etkin bilgi paylaşımını, bilgi yönetim sistemini ve işbirliğini zorunlu kılmaktadır. Bu işbirliği ise ortak bir platformda ve dinamik bir şekilde yapılmalıdır. Her bir birimin tüm süreçleri doğru dokümanite edilmeli ve bu dokümantasyona anlık olarak her bir yetkilinin aktif erişmesi gereklidir.

Doğru bir şekilde dizayn edilmiş tıbbi dokümantasyon sistemi sayesinde; hastanedeki tüm süreçlerin kayıt altına alınması sağlanır. Kurumlar, bilgi ve belgelerini yönetebildiği ve ihtiyacı olan veriye en hızlı şekilde erişebildiği ölçüde verimlidirler. Bu verimliliği sağlayabilmek için hızlı ulaşılabildiği gereken belgeler ve kayıplarında sıkıntı oluşturacak dokümanlar, elektronik ortama aktarılacak şekilde yönetilmelidir. Çalışmada Türkiye’de sağlık sistemindeki dijital arşive geçiş sürecinden bahsedilmiş ve tıbbi dokümantasyonun pandemi döneminde karar verme süreçleri açısından önemi incelenmiştir. Pandemi döneminin başladığı ilk dönemde riskli grupların hızlı bir şekilde belirlenip koruma altına alınabilmesi için hastane kayıtları ve daha önce düzenlenmiş olan sağlık raporları çok önemli bir gösterge sayılmıştır. Dijital ortamda aktarılan hasta sağlık verilerinin, basılı ortama göre taşınması, iletilmesi ve ulaşılabildiği ölçüde farklar incelenmiştir. Bu incelemelerin ortaya koyduğu en önemli sonuç; basılı ortam verisi uzun süre saklanması için gerekli koşulların oluşturulması, veri erişiminin ve verilerin bütünlüğünün korunmasının oldukça zor olmasıdır. Hastaneler genellikle binaların bodrum katlarında risk altında arşivlediğinden hasta dosyalarına pandemi döneminde erişilmesi ve fiziksel olarak aktarılmasında zorluklar yaşamıştır. Benzer şekilde bu basılı arşivin taramak suretiyle dijital arşivlere aktarılması ve talep durumunda sağlık görevlilerinin bilgisayar veya taşınabilir cihazlarına doğrudan iletilmesi hem süreci hızlanmasını sağlamak ile beraber hem de pandemi durumunda kişilere bağlı olan süreçleri önemli ölçüde azaltmaktadır. Dijital arşiv sayesinde sağlık çalışanları ve hastalar, HBYS üzerinden bir tık ile hastanın bütün tıbbi geçmişine ulaşabilir hale gelmiştir.

Dijital arşiv kullanan hastaneler ile kullanmayan hastanelerin incelenmesiyle özellikle Covid-19 ve bundan sonra oluşabilecek pandemilerde ve mevcut sistemin hızlanması için sağlık kayıtlarının en mükemmel şekilde tutulması, dijital arşiv altyapısının modernize edilmesi ve geliştirilmesi ve güvenlik alt yapısının artırılması gerektiği ortaya konmuştur.

**Anahtar kelimeler:** Tıbbi Dokümantasyon, Covid-19, Pandemi

#### ABSTRACT

Hospitals are complex businesses where multiple functions are carried out together. The hospital is primarily a business, then a medical service establishment, also providing hotel services. Outpatient clinic services in hospitals, physicians and emergency health services, pharmacy services, patient communication, statistics, archives, clinical engineering, kitchen, supplies/warehouse, patient admission/consultation, data processing, security services, cleaning services, transportation, clinics, emergency service, intensive care, operating room, anesthesia, laboratory, radiology etc. includes many activities. Providing these services effectively and efficiently requires teamwork, effective information sharing, information management system and

cooperation. This cooperation should be done on an associate platform and dynamically. All processes of each unit must be documented correctly and each official must have active access to this documentation.

Due to the properly designed medical documentation system; It is ensured that all processes in the hospital are recorded. Corporations are efficient to the extent that they can manage their information and documents and access the data they need in the fastest way possible. In order to achieve this efficiency, documents that need to be accessed quickly and documents that will cause problems in loss should be transferred to electronic media. In the study, the transition process to digital archive in the health system in Turkey and the importance of medical documentation in terms of decision-making processes during the pandemic period was examined. In the first period of the pandemic, patient records and previously issued health reports were considered a very important indicator in order to quickly identify and protect risky groups. According to the patient health data transferred in the digital environment of the printed media; differences are examined in terms of transportation, transmission and accessibility. The most important result of these investigations; It is very difficult to create the necessary conditions for long-term storage of printed media data, and to protect data access and integrity of data. Hospitals have generally had difficulties in accessing and physically transferring patient documents that they archive at risk in the cellar of buildings during the pandemic period. Similarly, transferring this printed archive to digital archives by scanning and transmitting it directly to the computers or portable devices of health officials in case of demand not only accelerates the process, but also significantly reduces the processes that depend on people in case of a pandemic. Through the digital archive, healthcare professionals and patients have become able to access the patient's entire medical history with one click on HBYS.

As a result of the examination of hospitals using digital archives and hospitals not using digital archives during the pandemic period, it was revealed that health records should be kept perfectly and a successful digital archive infrastructure should be established in order to accelerate the current system.

**Keywords:** Medical Documentation, Covid-19, Pandemic.

**ÇOCUK İSTİSMARI: DUYGUSAL YÖNÜYLE ÇOCUĞUN İSTİSMARI**  
CHILD ABUSE: CHILD ABUSE WITH EMOTIONAL ASPECTS

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**ÖZET**

Çocukların hem bedensel olarak hem de zihinsel olarak yaşam serüvenlerinde attıkları adımlarda, her zaman yetişkinlerin rehberliği ve sağlıklı davranış modellerine ihtiyacı vardır. Sağlıklı gelişimleri için oluşabilecek olumsuz durumlara karşı çocukları özenli bir koruma sistemi gerekmektedir. Çocuk istismarı ve ihmali, çocukların gelişimsel süreçlerini sağlıklı bir şekilde tamamlanmasını engellemekte olup etkileri uzun yıllar devam edebilmektedir. Çocuk istismarı farklı şekillerde ve farklı riskler ile karşımıza çıkmakta, her durum için ayrı tedbir ve önlemleri gerektirmektedir. Çocuğun öncelikle gelişimsel olarak tanınmasının ardından çocuk açısından olası riskleri ve durumları tanımlamak gereklidir. Bu risklerin oluşmasına zemin hazırlayan durumların erken aşamalarda fark edilip gerekli işlemlerin başlatılması, tedbirlerin alınması, ihmali ve istismarının önlenmesi açısından oldukça önemlidir. Bu sebeple çocukların kendilerini rahatlıkla ifade edebilecekleri sağlıklı iletişim modellerinin oluşturulması gerekliliği öne çıkmaktadır.

Bu çalışmada çocuk istismarı ve ihmali, çocuk istismarları arasında duygusal istismar konusu, duygusal istismarın çocuk üzerindeki etkileri ve duygusal istismarını önleyici tedbirler üzerine tartışılacaktır.

**Anahtar kelimeler:** İstismar, çocuk istismarı, gelişim, çocuk, duygusal istismar

**ABSTRACT**

Children always need the guidance of adults and healthy behavior models in the steps they take both physically and mentally in their life adventures. For their healthy development, a careful protection system is required for children against adverse situations that may occur. Child abuse and neglect prevent children from completing their developmental processes in a healthy way, and its effects can continue for many years. Child abuse occurs in different forms and with different risks, and requires separate measures and precautions for each situation. It is necessary to define the possible risks and situations for the child after the developmental recognition of the child first. It is very important to recognize the situations that pave the way for the formation of these risks at an early stage, to initiate the necessary actions, to take precautions, and to prevent neglect and abuse. For this reason, the necessity of creating healthy communication models in which children can express themselves easily comes to the fore.

In this study, child abuse and neglect, emotional abuse among child abuses, the effects of emotional abuse on children and preventive measures will be discussed.

**Keywords:** Abuse, child abuse, development, child, emotional abuse



**CALCULATION OF FULL ENERGY PEAK EFFICIENCY OF CsI(Tl) DETECTOR FOR POINT AND DISK GAMMA SOURCES BY FLUKA CODE**

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**ABSTRACT**

Scintillation detectors are one of the detector types commonly used in detecting gamma radiation. These detectors are produced in different crystals and different geometries depending on the field to be used. It is important to calibrate these detectors in order to determine the detection accuracy before the measurement to be made, as it defines the performance of the detector. The detector's full energy peak efficiency is required for quantitative analysis. In this study, the full energy peak efficiency of the 3x3 inch CsI(Tl) detector, which is a scintillation detector and used as a gamma spectroscopy system, was calculated with the FLUKA code. FLUKA is a Monte Carlo-based code developed for calculations of particle transport and interaction with matter, and it has wide applications in high energy and particle physics, accelerator physics, and nuclear physics. It is frequently used in nuclear physics, especially in detector design, dosimetry, and radiation shielding studies. To simulate the full energy peak efficiency of the CsI(Tl) detector with the FLUKA code, a 7.62x7.62 cm cylindrical detector was modeled. Point and disk gamma sources with isotropic distribution as radiation sources in the code have been defined at energies of 50, 80, 100, 300, 600, 1000, 1300, and 1500 keV. Maximum radius of the disk source was determined based on the width of the CsI(Tl) detector surface and disk sources were selected with the radius of 1, 2, 3, and 3.81 cm. Gamma sources were positioned at distances of 1, 2, 5, and 10 cm from the detector. The full energy peak efficiency of the CsI(Tl) detector was calculated depending on the changing source energy and source radius by simulations results. In addition, the effect of the variation of the distance between the gamma source and the detector on the full energy peak efficiency of the CsI(Tl) detector was determined.

**Keywords:** FLUKA code, 3x3 inch CsI(Tl) detector, Full energy peak efficiency, Point and disk sources, Monte Carlo simulation.

## **EVLİ ERKEKLERİN VE EVLİ KADINLARIN ERKEKLİK ALGILARINA DAİR SOSYOLOJİK BİR ARAŞTIRMA**

### **A SOCIOLOGICAL STUDY ON THE PERCEPTIONS OF MASCULINITY OF MARRIED MEN AND MARRIED WOMEN**

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#### **ÖZET**

Erkeklik olgusuna ilişkin algılar her bireyde farklı biçimlerde temayüz etmektedir. Bireylerin hayat görüşleri ve yaşayış tarzlarıyla da çokça ilintili olan bu durum erkeklik olgusunun toplumda kazanmış olduğu biçimlenmeleri görebilmek açısından son derece önemlidir. Kişilerin erkeklik algıları yaşadıkları toplumun dinamiklerini bir biçimde dile getiriyor olsa da aynı toplum içerisinde farklı sosyal gruplara mensup bireylerin farklı erkeklik algılarının olduğu da bilinmektedir. Bazen cinsiyet, bazen rol model, bazen aile bazense kültürel yapı bu faktörlerin başında gelmektedir. Tüm bu faktörler temelinde kadın veya erkek her bireyin erkekliğine ne olduğuna dair söyleyecek bir sözü vardır.

Çalışma doktora tezi için Sivas il merkezinde yaşayan evli bireylerle yapılmış bir nitel araştırmanın erkeklik algısı yönünü ele almaktadır. 10 erkek 10 kadın toplamda 20 katılımcıyla yapılan çalışmadan elde edilen veriler maxqda programıyla analiz edilmiştir. Bu çalışmada genel olarak Sivas'ta yaşayan evli bireylere yöneltilen sorular temelinde erkekte olması gereken en önemli vasıflar, bireylerin erkeklik algılarının oluşmasındaki etkili faktörler ve aynı zamanda ideal erkekliğe dair katılımcı görüşleri toplanan ve analiz edilen veriler ışığında tartışılacaktır.

**Anahtar kelimeler:** Cinsiyet, erkeklik, evlilik

#### **ABSTRACT**

The perceptions of the masculinity phenomenon stand out in different ways in each individual. Highly related to the world views and lifestyles of individuals, this phenomenon is immensely significant to notice the formations of masculinity in society. Even though people's perceptions of masculinity indicate the dynamics of the society in which they live, it is also known that individuals belonging to different social groups in the same community have different perceptions of masculinity. At times gender, role models, family, and cultural structure are among these factors. Based on all these factors, every individual, male or female, has something to say about masculinity.

This study investigates the masculinity perception of a qualitative study conducted with married individuals living in the city center of Sivas for a doctoral dissertation. The data obtained from this study conducted with 20 participants, consisting of 10 men and 10 women, were analyzed via MAXQDA software. In this study, based on the questions asked to married individuals living in Sivas, the most necessary qualities that men should have, effective factors in the formation of individuals' perceptions of masculinity, and participant views on ideal masculinity will be discussed in the light of the data.

**Keywords:** Gender, masculinity, marriage

**ÇOCUK GELİN EVLİLİKLERİNİN NEDENLERİNE İLİŞKİN SOSYOLOJİK BİR BAKIŞ:”  
ANNEMDEN EMDİĞİM SÜTÜN BİLE PARASINI ALDILAR”**

A SOCIOLOGICAL LOOK AT THE CAUSES OF CHILD BRIDE MARRIAGES: “THEY EVEN TAKEN  
MONEY FROM MY MOTHER FOR THE MILK I SUCK”

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**ÖZET**

Çocuk gelin olgusu geçmişte bir problem değilken günümüzde eğitim olanaklarının artması, kız çocuklarının okullaşma süreci, iş hayatına girmesiyle birlikte evlilik yaşının yükselmesi ve yine dünya genelinde çocuk tanımının daha net yapılması, çocuk gelin olgusunun sosyal bir problem halinde düşünülmesine olanak sağlamıştır. Çocuk gelin olgusu; sağlık, eğitim, ekonomi ve sosyal sermaye gibi alanlar içerisinde ele alındığında bir sosyal normun getirdiği dezavantajlar bağlamında toplumsal açıdan bir risk faktörünü ifade etmektedir. Bu nedenle çocuk gelin olgusu araştırılmak istenmiştir.

Bu çalışmada, Elazığ yöresinde çocuk yaşlarda evlenen kız çocuklarının çocuk gelin olmalarının ardındaki etkenlerin açık ve gizil nedenleri araştırılmıştır. Bu bağlamda, çocuk gelin evliliklerinin asıl nedenlerinin tam anlaşılmasını sağlamak adına sorular hazırlanmış ve sahaya inilmiştir. Sahada gerçekleştirilen derinlemesine mülakatlarda çocuk gelinlerin erken yaşlardaki evlilik etkenleri; kendileri, aileleri ve yaşadıkları toplum açısından değerlendirilmiştir. Yapılan çalışma MAXQDA 2020 Nitel Araştırma programında analiz edilerek daha önce yapılmış olan benzer çalışmalarla karşılaştırılıp analiz edilmeye çalışılmıştır. Çocuk gelin evliliklerinin nedenleri belirlenerek, bilimsel perspektifti içinde barındıracak bir sistemle çocuk gelin olgusunun yapısal nedenlerine ilişkin öneriler sunulmaya çalışılmış, konunun ehemmiyeti vurgulanmıştır.

**Anahtar kelimeler:** Çocuk Gelinler, Erken Evlilikler, Ataerkil Sistem

**ABSTRACT**

While the phenomenon of child bride was not a problem in the past, today the increase in educational opportunities, the schooling process of girls, the increase in the age of marriage with their entry into business life and the clearer definition of child throughout the world have enabled the phenomenon of child brides to be considered as a social problem. Child bride case; When considered in areas such as health, education, economy and social capital, it expresses a risk factor in terms of society in the context of the disadvantages brought by a social norm. For this reason, the phenomenon of child bride was wanted to be investigated.

In this study, the overt and latent causes of the factors behind the child brides of girls who got married in childhood in the Elazig region were investigated. In this context, questions were prepared and the field went down in order to ensure that the main reasons for child bride marriages are fully understood. In the in-depth interviews conducted in the field, the factors of early marriage of child brides; evaluated in terms of themselves, their families and the society in which they live. The study was analyzed in the MAXQDA 2020 Qualitative Research program and compared with previous similar studies. By determining the causes of child bride



marriages, suggestions were tried to be presented regarding the structural causes of the child bride phenomenon with a system that would include a scientific perspective, and the importance of the subject was emphasized.

**Keywords:** Child Brides, Early Marriages, Patriarchal System

This study was produced from the master's thesis on "Structural Reasons of Child Bride Case in Elazig Region".

## BİR ORTAÇAĞ KURUMUNDA TIP BİLGİSİNİN GELİŞİMİ

### DEVELOPMENT OF MEDICAL KNOWLEDGE IN A MEDIEVAL INSTITUTION

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#### ÖZET

Ortaçağ bilim ve bilimsel bilgide geri olan dönemi ifade eder. İnsanların her olumsuz durumda hedef aldıkları periyot olarak ortaya çıkar. Bu yönüyle Karanlık Çağ olarak tanımlanır. Bilimdeki bu gerilemenin ve Ortaçağ için dinsel, mistik konuların hastalık tanımlanmasında ortaya çıkışı aynı dönem içinde yer alır. Bilimsel bilgi ve bilimdeki gerileme Ortaçağ Hıristiyanlığının Antik Roma'dan almış olduğu anlayışı uzun bir süre sürdürmüş olmasından kaynaklanır. Tıbbi bilginin yetersiz olması, hastalık tanımlanışı ve psikiyatrik bilgideki eksiklik hastalık ve sağlık arasındaki ilişkinin tanımlanışında Hıristiyanlık etkisiyle dinsel bakış açısının gelişimine neden olmuştur. Ortaçağ Avrupa'sı bilimsel bilginin gelişimi açısından, İslam Uygarlığının gerisinde kalmıştır. İslam Uygarlığı yetiştirdiği Farabi, İbn-i Sina gibi isimler düşünüldüğünde oldukça ileri bir noktada yer alır. Bu dönem için bilimsel çalışmalarda Avrupa'nın zayıflığı ele alındığında, toplumun bilimsel bilgiye verdiği değeri önemli hale getirir. Bu dönem Ortaçağ Avrupası'nda İncil'de yer alan hükümler mutlak olarak değerlendirilip, üzerinde değişiklik yapmak imkansız olarak görülmüştür. Reform dönemini uzun bir süre beklemek zorunda kalmışlardır. Bilim adamları çalışmalarında İncil'e göre rasyonel çıkarım yaparak hareket etmişlerdir. Ortaçağ ve psikoloji arasındaki ilişki teolojiyle ilişkili olarak varlığını sürdürmüştür. Karanlık dönem olarak tanımlanan Ortaçağ'ın hataları psikiyatrik sorunlarla ilgili uygulamalara yansımış ve ilkel mistik düşünce yeniden hayat bulmuştur. Tıp ve biyoloji bilgisinin zayıflığı anatomi çalışmalarını etkilemiş bu yüzden hastalıkların tedavisi rahiplere devredilmiştir.

Rönesansla birlikte kilise hakimiyetini kaybetmeye başlamıştır. Kilisenin katı uygulamalarına karşılık bilim ve sanatta ilerleme, düşünce akımlarının gelişimi ortaya çıkmıştır. 17. ve 18. yüzyıllar için psikiyatri içinde delilik kavramının modern ve modern öncesi arasındaki beden ve ruh ayrımı doğrultusunda oluşturulduğu ifade edilir. Bu dönem için doğrudan hasta bedeni hedef alınmıştır. Hasta bedenin hedef alındığı uygulamalar, anatomi bilgisinin zayıflığını ön plana çıkartır. Bu yüzden Ortaçağ'dan günümüze dek varlığını sürdürmüş kurumları önemli hale getirir. Bethlem gibi bir kurumun zaman içindeki sürekli farklı fonksiyonlarla, manastırdan tıbbi bir kuruma dönüşümü bunun bir örneğini oluşturur. Psikiyatrik bilginin bu kurumun gelişimine eş zamanlı 18. Yüzyıl içindeki gelişimi, kurumun psikiyatrik bilgiyle hareket edişini ortaya çıkarır. 19. Yüzyılla birlikte Sanayi Devrimi, kentlere göç, yapılaşma gibi sebepler çeşitli sorunlar yaratmıştır. Bu sorunlar psikiyatrik kurumlara yönelik artışı beraberinde getirmiştir.

Bu çalışmada Ortaçağ temelinde tıbbi bilginin kurumsal yapılarıdaki gelişimini açıklamak amaçlanmıştır.

**Anahtar kelimeler:** Ortaçağ, Tıp, Bilgi, Psikiyatri

#### ABSTRACT

Medieval refers to the backward period in science and scientific knowledge. It emerges as the period that people target in every negativitiy. In this respect, it is defined as the dark age. This decline in science and emergence of religious and mystical subjects for the Middle Ages in the definition of illness take place in the same period. The decline in scientific knowledge and science is due to the fact that medieval Christianity continued the understanding it had taken from Ancient Rome for a long time. The inadequacy of medical knowledge, the definitions of illness and inadequacy in psychiatric knowledge led to the development of a religious perspective with the influence of Christianity in definition of relationship between illness and health. Medieval Europe lagged behind Islamic Civilization in terms of the development of scientific knowledge. Considering the names such

as Farabi, İbn-İ Sina, whom the Islamic Civilization raised is act a very advanced point. For this period Considering the weakness of Europe in scientific studies, it makes the value that society attaches to scientific knowledge important. In this period, the provisions in the Bible in Medieval Europe were evaluated as absolute and it was seen as impossible to change them. They had to wait a long time for the reform period. Scientists have acted in their studies by making rational inferences according to the Bible. The relationship between the Middle Ages and psychology continued in relation to theology. The mistakes of the Middle Ages, defined as the dark period, were reflected in practices related to psychiatric problems and primitive mystical thought was revived. The weakness of knowledge of medicine and biology was affected in the anatomy studies, so the treatment of disease was handed over to the priests.

With the Renaissance, the church began to lose its dominance. In response to the strict practices of the church, the development of ideas of progress in science and art emerged. It is stated that the concept of insanity in psychiatry for the 17th. and 18th. centuries was created in line with the body and soul distinction modern and pre-modern. For this period, the patient's body is targeted directly. Practices targeting the patient's body highlight the weakness of anatomy knowledge. In this way, it makes important institutions that have survived from Middle Ages to present. An example of this is the transformation of an institution like Bethlem from a convent to a medical institution, with continuous different functions over time. The development of psychiatric knowledge in the 18th. century, concurrent with the development of this institution, reveals the the institutions action with psychiatric knowledge. With 19th. Century reasons such as Industrial Revolution, migration to cities and construction created various problems. These problems have brought about an increase in psychiatric institution.

In this study, it is aimed to explain the development of medical knowledge in institutional structures on the basis of the Middle Ages.

**Keywords:** Medieval, Medical, Knowledge, Psychiatry

**BİLİŞSEL TEMELLİ DUYGUSAL ZEKÂ PSİKO-EĞİTİM PROGRAMININ ORTAOKUL ÖĞRENCİLERİNİN BOYUN EĞİCİ DAVRANIŞLARI, BENLİK SAYGILARI, SOSYAL BECERİLERİ VE OKULA UYUM DÜZEYLERİ ÜZERİNDEKİ ETKİSİ**

EFFECT OF A COGNITIVE-BASED EMOTIONAL INTELLIGENCE PSYCHO-EDUCATIONAL PROGRAM ON SUBMISSIVE BEHAVIOR, SELF-ESTEEM, SOCIAL SKILLS AND SCHOOL ADJUSTMENT LEVELS OF MIDDLE SCHOOL STUDENTS

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**ÖZET**

Fiziksel ve bilişsel gelişim alanında olduğu gibi duygusal ve sosyal gelişimlerinde de hızlı değişim yaşayan ergenler için duyguları tanıma, değerlendirme ve yönetebilme becerileri birçok sosyal ve kişisel kazanımı beraberinde getirmektedir. Bu araştırmanın amacı; bilişsel temelli duygusal zekâ psiko-eğitim programının ortaokul öğrencilerinin boyun eğici davranışları, benlik saygıları, sosyal beceri ve okula uyum düzeyleri üzerindeki etkiliği sınamak olarak belirlenmiştir.

Yarı deneysel desene göre tasarlanan bu araştırmanın çalışma grubu; deney, plasebo ve kontrol gruplarına seçkisiz olarak atanmış 45 ortaokul öğrencisinden oluşmuştur. Deney grubu, plasebo ve kontrol gruplarının her birinde 15'er öğrenci yer almıştır. Deney grubundaki öğrencilere 12 oturum süren bilişsel temelli duygusal zekâ psiko-eğitim programı uygulanmıştır. Araştırmanın verileri, deney, plasebo ve kontrol gruplarındaki öğrencilere uygulanan ön test, son test, izleme ölçümleri (birinci izleme ve ikinci izleme) ile elde edilmiştir. Veri toplama araçları olarak Kişisel Bilgi Formu (KBF), Boyun Eğici Davranışlar Ölçeği (BEDÖ), İki Boyutlu Benlik Saygısı Ölçeği (Kendini Sevme ve Öz-Yeterlik Ölçeği-KSÖYÖ), Walker-McConnell Sosyal Yeterlik ve Okul Uyum Ölçeği (WMC-SYOUÖ) kullanılmıştır. SPSS 23.0 paket programına aktarılan verilerin analizinde Tek Yönlü Varyans Analizi, Karışık Ölçümler İçin İki Yönlü Varyans Analizi ve Bonferroni Çoklu Karşılaştırma Testinden yararlanılmıştır.

Araştırma bulguları deney, plasebo ve kontrol ön-test, son-test ve izleme testleri ölçümlerinden elde edilen boyun eğici davranışlar (Pillai's Trace=.80,  $F_{(3, 40)}= 56.18$ ,  $p<.05$ ,  $\eta^2=.80$ ), benlik saygısı (Pillai's Trace=.62,  $F_{(3, 40)}= 22.56$ ,  $p<.05$ ,  $\eta^2=.62$ ), sosyal beceri ve okula uyum puan ortalamalarının (Pillai's Trace=.75,  $F_{(3, 40)}= 40.94$ ,  $p<.05$ ,  $\eta^2=.75$ ) ölçüm (zaman) temel etkisine bağlı olarak istatistiki olarak anlamlı farklılıklar gösterdiğini ortaya koymaktadır. Araştırmadan elde edilen bulgulardan bir diğeri grup etkisinin öğrencilerin sosyal beceri ve okula uyum puan ortalamaları ( $F_{(2,42)}= 1.44$ ,  $p>.05$ ,  $\eta^2=.064$ ) dışında, boyun eğici davranış ( $F_{(2,42)}= 4.80$ ,  $p<.05$ ,  $\eta^2=.18$ ) ve benlik saygısı puan ortalamaları ( $F_{(2,42)}= 11.46$ ,  $p<.05$ ,  $\eta^2=.35$ ) üzerinde istatistiki olarak anlamlı olduğuna yöneliktir. Tüm bunlara ek olarak ölçüm\*grup ortak etkisinin öğrencilerin boyun eğici davranışları (Pillai's Trace= .47,  $F_{(6, 82)}= 4.23$ ,  $p<.05$ ,  $\eta^2=.23$ ), benlik saygısı (Pillai's Trace= .75,  $F_{(6, 82)}= 8.320$ ,  $p<.05$ ,  $\eta^2=.37$ ) ve sosyal beceri ve okula uyum puan ortalamaları (Pillai's Trace=1,29  $F_{(6, 82)}= 24.96$ ,  $p<.05$ ,  $\eta^2=.64$ ) üzerinde istatistiki olarak anlamlı olduğu bulgulanmıştır.

Araştırma sonuçları bilişsel temelli duygusal zekâ psiko-eğitim programının öğrencilerin boyun eğici davranışlarını azaltmada, benlik saygısı, sosyal beceri ve okula uyum düzeylerini artırmada etkili bir program olduğunu ortaya koymuştur. Müdahale programının boyun eğici davranışlar ile sosyal beceri ve okul uyum düzeyleri üzerindeki etkililiğinin 1 ay ve 3 aylık süre zarfında kalıcılık göstermediği, programın benlik saygısı üzerindeki etkisinin kalıcılığının 1 aylık süre ile sınırlı kaldığı bulgusuna ulaşılmıştır. Araştırmadan elde edilen

sonular, ilgili alan yazının sunduėu bilgiler ışığında tartiřılmış ve ileride yapılacak alıřmalara ynelik neriler sunulmuřtur.

**Anahtar Kelimeler:** Duygusal zekâ psiko-eėitim programı, boyun eėici davranıřlar, benlik saygısı, sosyal beceri ve okula uyum.

## ABSTRACT

Just as adolescents experience change in the physical and cognitive development areas, they experience rapid change in emotional and social development bringing many social and personal acquisitions in emotional recognition, assessment and management skills. The aim of the research was to test the efficacy of a cognitive-based emotional intelligence psycho-educational program on submissive behavior, self-esteem, social skills and school adjustment level of middle school students.

The study group for this research, designed according to the semi-experimental pattern, comprised 45 middle school students randomly assigned to experiment, placebo and control groups. The experiment, placebo and control groups each included 15 students. Students in the experiment group underwent a cognitive-based emotional intelligence psycho-educational program lasting 12 sessions. Research data were obtained with pre-test, post-test and follow-up measures (first follow-up and second follow-up) applied to students in the experiment, placebo and control groups. Data collection tools included the personal information form (PIF), Submissive Behavior Scale (SBS), Two-Dimensional Self-Esteem Scale (Self-Liking/Self-Competence Scale, SLSCS), and Walker-McConnell Scale of Social Competence and School Adjustment (WMC-SSCSA). Data were uploaded to the SPSS 23.0 program and analyses used one-way analysis of variance, two-way variance analysis for mixed measures and Bonferroni multiple comparison test.

The research findings revealed statistically significant differences linked to the basic measurement effect (time) for mean values for submissive behavior (Pillai's Trace=.80,  $F_{(3, 40)}= 56.18$ ,  $p<.05$ ,  $\eta^2=.80$ ), self-esteem (Pillai's Trace=.62,  $F_{(3, 40)}= 22.56$ ,  $p<.05$ ,  $\eta^2=.62$ ), and social competence and school adjustment (Pillai's Trace=.75,  $F_{(3, 40)}= 40.94$ ,  $p<.05$ ,  $\eta^2=.75$ ) for experiment, placebo and control pre-test, post-test and follow-up test measures. Another finding obtained in the research is that for the group effect, apart from mean points for social competence and school adjustment of students ( $F_{(2,42)}= 1.44$ ,  $p>.05$ ,  $\eta^2= .064$ ), mean points for submissive behavior ( $F_{(2,42)}= 4.80$ ,  $p<.05$ ,  $\eta^2=.18$ ) and self-esteem ( $F_{(2,42)}= 11.46$ ,  $p<.05$ ,  $\eta^2=.35$ ) were statistically significant. In addition, the common measure\*group effect was documented to be statistically significant for submissive behavior (Pillai's Trace= .47,  $F_{(6, 82)}= 4.23$ ,  $p<.05$ ,  $\eta^2=.23$ ), self-esteem (Pillai's Trace= .75,  $F_{(6, 82)}= 8.320$ ,  $p<.05$ ,  $\eta^2=.37$ ) and social competence and school adjustment (Pillai's Trace=1,29  $F_{(6, 82)}= 24.96$ ,  $p<.05$ ,  $\eta^2=.64$ ) mean points of students.

The results of the research determined the cognitive-based emotional intelligence psycho-educational program was an effective program to reduce submissive behavior, and increase self-esteem, social skills and school adjustment levels of students. The efficacy of the intervention program for submissive behavior, social skills and school adjustment levels was not permanent in the 1-month and 3-month durations, while the permanence of the effect of the program on self-esteem remained limited to 1 month. The results obtained in the research are discussed in light of the literature and recommendations are made for future studies.

**Keywords:** Emotional intelligence psycho-educational program, submissive behavior, self-esteem, social skills, school adjustment



**YAŞAMDA ANLAM VE UMUT, PSİKOLOJİK OLARAK DAHA ESNEK OLMAMIZI  
SAĞLAYABİLİR Mİ? İLİŞKİSEL BİR İNCELEME**

**CAN MEANING IN LIFE AND HOPE MAKE US PSYCHOLOGICALLY MORE FLEXIBLE? A  
RELATIONAL ANALYSIS**

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**ÖZET**

Bu çalışmanın genel amacı, yaşamda anlam, umut ve psikolojik esneklik arasındaki ilişkilerin incelenmesidir. Bu kapsamda çalışmada yaşamda anlamın alt boyutları olan anlam arayışı ve anlamın varlığı ile sürekli umudun alt boyutları olan alternatif yollar düşüncesi ve eyleyici düşüncenin psikolojik esnekliği yordayıp yordamadığı incelenmiştir. Çalışmanın katılımcılarını Türkiye’de bir üniversitenin lisans programlarında öğrenim gören ve yaşları 18 ile 38 arasında değişen 306 (207 kadın, 99 erkek) öğrenci oluşturmaktadır. Çalışmanın verileri Yaşamın Anlamı Anketi, Sürekli Umut Ölçeği ile Kabul ve Eylem Ölçeği-II aracılığı ile toplanmıştır. Veriler “IBM SPSS Statistics 22” paket programı aracılığı ile analiz edilmiştir. Korelasyon analizi sonuçları psikolojik esnekliğin yaşamda anlamın varlığı ( $r=-.31, p<.01$ ), alternatif yollar düşüncesi ( $r=-.18, p<.01$ ) ve eyleyici düşünce ( $r=-.30, p<.01$ ) ile olumsuz yönde; buna karşın anlam arayışı ( $r=.27, p<.01$ ) ile olumlu yönde anlamlı bir ilişkiye sahip olduğunu göstermiştir (Bu bulgu yorumlanırken Kabul ve Eylem Ölçeği-II’den alınan puanların yükselmesinin psikolojik esneklik düzeyinin düştüğüne işaret ettiği dikkate alınmalıdır). Aşamalı regresyon analizi sonuçlarına göre 1. Model’de yaşamda anlamın varlığı psikolojik esneklikteki varyansın %10’unu, 2. Model’de yaşamda anlamın varlığı ve yaşamda anlam arayışı birlikte psikolojik esneklikteki varyansın %13’ünü ve son modele (3. Model) göre yaşamda anlamın varlığı, yaşamda anlam arayışı ve eyleyici düşünce birlikte psikolojik esneklikteki varyansın %16’sını anlamlı bir şekilde açıklamaktadır ( $F_{(3,305)}= 18.71, p<.001$ ). Sonuç olarak bulgular psikolojik olarak daha esnek olabilmek için yaşamda anlam ve umudun önemli birer belirleyici faktör olduğunu göstermektedir.

**Anahtar Kelimeler:** Umut, Yaşamda Anlam, Psikolojik Esneklik.

**ABSTRACT**

The main purpose of this study is to examine the relationships between meaning in life, hope, and psychological flexibility. In this context, this study has examined whether the sub-dimensions of meaning in life (presence of, and the search for, meaning in life) and the sub-dimensions of dispositional hope (actuating thinking and alternative ways thinking) significantly predict psychological flexibility or not. The participants of the study consist of 306 (207 female, 99 male) students aged between 18 and 38, studying in undergraduate programs of a university in Turkey. The data were collected through the Meaning in Life Questionnaire, the Dispositional Hope Scale, and the Acceptance and Action Questionnaire-II. The data were analyzed using the “IBM SPSS Statistics 22” package program. Correlation analysis results showed that psychological flexibility indicated a significant negative relationship with presence of meaning in life ( $r=-.31, p<.01$ ), alternative ways thinking ( $r=-.18, p<.01$ ), and actuating thinking ( $r=-.30, p<.01$ ). On the other hand, there was a positive and significant relationship between psychological flexibility and the search for meaning in life ( $r=.27, p<.01$ ). (While interpreting this finding, it should be taken into account that higher scores on the the Acceptance and Action Questionnaire-II indicate a lower level of psychological flexibility). According to the results of the stepwise regression analysis, presence of meaning in life explained the 10% of the variance in psychological flexibility at Model 1, the presence of meaning in life and the search for meaning in life together explained the 13% of the variance in psychological flexibility at Model 2. According to the final model (Model 3), it was understood that the presence of meaning in life, the search for meaning in life, and actuating thinking together



significantly explained 16% of the variance in psychological flexibility ( $F_{(3-305)}= 18.71, p<.001$ ). In conclusion, meaning in life and hope are significant predictors to be more flexible psychologically.

**Keywords:** Hope, Meaning in Life, Psychological Flexibility.

**APPLICATION OF BIO-EXTRACT ON THE GOWTH AND YIELD OF TWO VARIETIES  
YARDLONG BEAN**

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**ABSTRACT**

The decline in the production and quality of yard-long beans [*Vigna unguiculata* ssp. *sesquipedalis* (L.) Verdc] was caused by the excessive use of inorganic fertilizers and not using superior varieties. This study aims to determine the effect of high yielding varieties and organic extract on the growth, production and quality of yard-long beans. The treatments were arranged in a factorial (2x5) in a Randomized Block Design with 3 replications. The first factor is the Canton Tavi variety and the Pertiwi variety. The second factor was organic extract which consisted of control, Moringa leaf extract, Lamtoro leaf extract, vermicompost extract, and chicken manure extract. The results showed that the responses of the two varieties were different to the application of organic extracts. The effect of chicken manure extract resulted in the heaviest plant dry weight (156.2 g), the most root nodules (14.66), and the heaviest production per hectare (1413.8 kg ha<sup>-1</sup>). Vermicompost extract produced the highest number of stomata (120 mm<sup>-2</sup>), carotenoids (10.95 mg ml<sup>-1</sup>), leaf greenness (63.06 units), and longest pod length (15.1 cm); and Moringa leaf extract produced the highest number of trifoliolate leaves (21.73 leaves) and the highest plant height (228.78 cm). The application of extract vermicompost and Pertiwi varieties produced the best chlorophyll (18.70 mg ml<sup>-1</sup>) and leaf greenness (63.06 units). The effect of the chicken extract was better than another extracts because it had the best number of root nodules and yields per hectare.

**Keywords:** chicken manure, vermicompost, moringa leaf extract, lamtoro leaf extract



**REVIEW ON IMPACT OF COVID 19 ON AGRICULTURE SECTOR AND FOOD SUPPLY CHAIN**

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**ABSTRACT**

The covid-19 pandemic is a global health crisis that is already having devastating impacts on the world economy. Enough food is available globally, but covid-19 is disrupting supply and demand in complex ways. The covid-19 pandemic is having an impact on international relationships for beyond the agricultural food sectors and labor forces. Explore co-operative global solution to address the needs of poorest countries and ensure that covid-19 does not result in a food crisis in these countries. Considering the food supply change, one of the most important sectors of the economy, it has been that covid-19 has an impact on the whole process from the field to the consumer. Facilities should change the working conditions and maintain the health and safety of the employers by alerting safety measures. Take measures to ensure the health and safety of workers, given that close working conditions in field. FAO (Food and Organization) is playing a role in assessing and responding to its potential impacts on people's life and livelihoods, global food trade, markets, food supply chains and livestock. WHO (World Health Organization) is playing a role in increase the access to personal protective equipment such as masks and gloves. The WHO and FAO collaborate on the Codex Alimentarius Commission, guidelines and recommendations concerning food. In Conclusion, each country must realize the severity of the situation and sometimes should tight and loose the measures according to the spread of the pandemic. The purpose of the review is to evaluate the impact of covid-19 on the agriculture and food sector and to summarize the recommendations required to reduce the effect of the pandemic.

**Keywords:** Covid-19, Agriculture food sector, Food supply chain, FAO (Food and Agriculture Organization), WHO (World Health Organization), Livestock, Facilities, CAC.



**DESIGN AND FABRICATION OF MULTIPURPOSE AGRICULTURE VEHICLE**

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**ABSTRACT**

The main aim of the project is to develop multi-purpose agricultural vehicle, for performing major agricultural operations like ploughing, seeding, harvesting. The modification includes fabricating a vehicle which is small, compact in size. The project is about a machine design which makes cultivation much simpler. The design of the chassis of the vehicle is made in such a way that it is suitable for the operations. The design for automatic seed sowing equipment is made. The plough is designed and modified the currently available plough tool in such a way that it withstands the load. The harvester (cutter) is designed and working by scotch yoke mechanism.

**Keywords:** Ploughing, Seed sowing, Harvester, Cutter, Chassis, Scotch yoke mechanism, Cultivation, Agriculture, Operation, Design

**EFFECTS OF DIETARY INCLUSION OF PROCESSED AND RAW SWEET LUPIN SEED (LUPINUS ANGSTIFOLIUS) ON GROWTH AND CARCASS PERFORMANCES OF BROILER CHICKENS**

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**ABSTRACT**

The experiment was conducted with the objectives to evaluate the effect of substitution of soybean meal as partial replacement of processed and raw (whole) lupin (*Lupinus angustifolius*) seed meal (LSM) on performance of Cobb 500 breed of broilers. Two hundred unsexed day old chicks with similar weight were randomly assigned to four treatment diets in completely randomized design with 5 replicates. Four dietary treatments were 0% lupin seed meal (T1), 15% raw lupin seed meal (T2), 15% heat treated dehulled lupin seed meal (T3) and 15 % heat treated lupin seed meal (T4). The dietary treatments were formulated to have similar CP contents. The CP content of SM, RLSM, HDLSM, and HLSM were 43.13, 33.48, 37.08, and 35.38 %, respectively. The daily dry matter (DM) intake (72.51, 67.87, 70.45, 68.01g/day for T1, T2, T3, and T4, respectively) was significant difference ( $P < 0.0001$ ) among the treatments. The intake of crude protein, ether extract, and metabolizable energy was significantly ( $P < 0.0001$ ) higher for T3 (15% HDLM) compared with other lupin diets T2 (15% RLSM) and T4 (15% HLSM). This could be due to the combined effect of heat treatment and dehulling gives nutrient dense product. The final body weight, average daily gain (ADG) and total body weight gain were higher for T1 and T3 and lower for T2 and T4. The mean values of ADG were 36.17, 33.62, 34.43, and 33.46 g/head/day for T1, T2, T3, and T4, respectively. Dressing percentage were 69.56, 66.04, 68.00 and 66.38 % for T1, T2, T3, and T4, respectively. Thus, substitution of SM with HDLM could be used as alternative source of protein in our country where SM is scarce and unavailable for feeding Cobb 500 broiler chickens.

**Keywords:** *Lupinus angustifolius*, growth performance, feed intake, carcass characteristics, nutrient intake

**APPLICATION OF MULTIVARIATE ANALYSIS TO DIFFERENTIATE THE HARARGHE  
HIGHLAND GOAT POPULATIONS REARED IN THREE AGROECOLOGIES OF WEST  
HARARGHE ZONE, ETHIOPIA**

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**ABSTRACT**

The study was conducted to characterize the Hararghe highland (HH) goat populations reared in three agroecologies based on their morphometric traits by applying the multivariate analysis. Fourteen morphometric traits were collected from 450 goats (123 males and 327 females) reared in three agro-ecological zones of the West Hararghe zone. The live body weight of HH goats was predicted using stepwise multiple linear regression analysis from other morphometric traits. Stepwise discriminant analysis was applied to determine the discriminating power of the variables. Multivariate canonical discriminant analysis in combination with cluster and discriminant analysis was applied to identify the combination of variables that best differentiate the three agroecology goat populations. Results indicated that all the morphometric traits were ( $p < 0.05$ ) significantly affected by age. The cluster analysis indicated that two main groups in which the midland agroecology goats were included in one group while group two included the highland and lowland agroecology goats under one sub-cluster. The stepwise discriminant analysis indicated that tail length followed by rump height was the most discriminating variables to separate the studied goat populations. The canonical discriminant analysis identified two canonical variables (CAN) of which CAN1 and CAN2 accounted for 68.2 and 31.8% of the total variation, respectively. The quadratic discriminant analysis correctly assigned the respective goat populations of 71.3, 77.3 and 81.3% of the lowland, midland and highland agroecologies into their source populations with an overall 76.7% of accuracy rate. The Mahalanobis distance verified that the lowland and highland agroecology goats are the closest while the midland and highland agroecology goats were relatively the furthest. However, the canonical discriminant analysis indicated a visible overlapping between the three goat populations indicating the existence of homogeneity among them. In conclusion, multivariate analysis identified 11 morphometric traits as the most imperative traits to differentiate the HH goat populations effectively.

**Keywords:** agroecology; canonical discriminant analysis; cluster analysis; morphometric traits

**IMPLEMENTATION OF AI (ARTIFICIAL INTELLIGENCE) IN DRIP IRRIGATION SYSTEM  
USING SOLAR ENERGY IN AGRICULTURE FIELDS**

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**ABSTRACT**

Drip irrigation (or) trickle irrigation is type of micro-irrigation system; it has the potential to save water and nutrients. Through this drip irrigation one can able to do multi tasks. Main aim of this investigation is to decrease the effort of the farmer. A solar powered water pump works by attaching a solar panel to a charge controller and then to a battery. It is much easier for farmer benefits and eco-friendly. The implementation of agriculture in AI the farmer can analyze weather conditions, temperature, water usage and soil conditions. The system designed a smart irrigation solution based on AI.it can be used for prediction soil moisture content and the moisture requirements of the crop to make the entire process of irrigation automatic. It can be in agriculture fields for farmer economic feasibility.

**Keywords:** Drip irrigation, Solar panel, AI, Charge controller.





**PERSPECTIVE GENOTYPES FROM CHAENOMELES SP. LINDL FOR FRUIT PRODUCTION**

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**ABSTRACT**

Japanese quince (*Chaenomeles sp.* Lindl) is fruit-medicine plant that is getting attention in the last years in Bulgaria. It has valuable nutritional, dietary and medicinal qualities and deserves to be introduced into culture in Bulgaria. The experiment was conducted in the three-year period (2017-2019) in the collection of RIMSA-Troyan, Bulgaria. The reproductive characteristics of the perspective for fruit production genotypes were studied with an average yield higher than 3.5kg per plant. They were followed also by fruit weight and biochemical compounds. During the period of the study genotype 9p1 was with the highest average yield (9.75 kg), followed by 4p9 (7.35kg). The genotype 1p1 is with the lowest yield (3.64kg).

**Keywords:** *Chaenomeles sp.* Lindl, Japanese quince, Biochemical compounds, Bulgaria



## **DEVELOPMENT OF AUTOMATIC AND SEMI-AUTOMATIC ONION TRANSPLANTER**

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### **ABSTRACT**

The Objective of this study to review the research activity and developments on transplanting mechanisms for onion cultivation. Mechanization is needed to raise productivity in rain-fed lands and to increase cropping intensity in irrigated farms. The literature was reviewed for automatic and semi-automatic onion transplanting devices used a simple structure mechanism consisting of two jaws pivoted at the bottom of the seedling guide tube and can be open and close by pressing the land lever. Fully automatic onion transplanters consist of seedling picking and planting mechanisms. Finger type and plug type transplanting mechanisms commonly used in semi-automatic onion transplanter. These mechanisms are comprise by grippers, manipulators and end effectors. The wheel type, rotary type and linkage type planting mechanisms have been developed to deposit the onion seedlings into the soil.

**Keywords:** Automatic and semi-automatic transplanting, picking mechanism, planting mechanism.



**ROLE OF INSTRUCTIONAL MATERIALS IN AGRICULTURE EXTENSION SERVICES FOR  
THE RURAL WOMEN IN NIGERIA**

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**ABSTRACT**

Instructional materials have assumed importance in the process of disseminating new innovations in agriculture and in many other technical fields. Today, the need of revamping the agricultural sector is one of the greatest challenges in the developing countries. Part of the strategies to squarely face these challenges is to improve instructional and communication capabilities of which instructional materials are a major part. Instructional materials provide powerful tools for making agricultural teaching more effective. This is because they help in highlighting key points, gaining learners' attention by using the three categories of instructional materials. Effective communication within and without the research extension linkage system is critical to radical improvement of agricultural production in Nigeria. Information is needed by rural women farmers on new farming technologies, management of breeds, and spawning, storage, processing, marketing, and financing. For increased agricultural productivity, rural women farmers need to access information. However, women farmers are generally illiterate and lack agricultural information from traditional prints and library based methods. They lack formal sources of agricultural information like extension stations, libraries. This is the modern day of information and communication technologies (ICTs), adequate and reliable agricultural information can be provided through telecasters, such information on pest control; weed control; new farming techniques, and better methods of cultivation, disease control, improved seedlings, fertilizer application, and new techniques in livestock production can be distributed. Rural radio otherwise called traditional media for rural women farmers can be noticed in areas where there are fewer constraints in agricultural information. Pictures, group discussions, exhibitions, and demonstrations, films, video, prints, slides, dance, television, meetings, are ways by which agricultural information or messages can be delivered to rural women farmers. Rural women farmers are very active in the areas of food production, marketing, and processing of agricultural produce, but constraints and barriers both social and economic in nature are bottlenecks around them debarring them from accessing technological and scientific agricultural information. Rural women farmers lack technical knowhow needed for them to use farm inputs productively to achieve optimum yields.

**Keywords:** agriculture; extension; rural women; information; Nigeria



## **IMPACT OF AGRICULTURAL EXTENSION EDUCATION ON NIGERIANS FOOD SECURITY**

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### **ABSTRACT**

Agricultural extension education (AEE) remains critical for the prompt reaction, to guarantee speedy appropriation of safe practices, maintain food safety along the value chain, and help distinguish and react to issues influencing the natural way of life coherence. Moreover, ranchers need fast warning administrations to rapidly adjust their frameworks and practices to adapt to delays in access or inaccessibility of inputs, labour, money, and markets. Extension education is conveyed through various channels, for example, rancher field schools, field days, exhibit plots, trade visits, and multi-partner stages. Nigeria is in a crisis food and nourishment unreliable circumstance, as per a September 2020 report by the Food Security Information Network (FSIN) and Global Network Against Food Crises (WFP, 2020), the circumstance would have been deteriorated without instructive help through AEE in the previous years. Subsequently, this paper inspected the impact of AEE on Nigerians Food Security. This investigation adopted a cluster sampling technique to select two ADP Zones (Abeokuta and Ijebu-Ode) from which 65 agricultural extension workers were randomly chosen. An organized poll was managed through telephone interviews in adherence to the COVID-19 guidelines of limiting close contact to lessen transmission. Data were entered to Statistical Package for Social Sciences (SPSS) version 17 for analysis. Even though discoveries showed that lack of funds (91.7%) and inadequate extension workers (80.3%) affect the extension coverage and service delivery, agricultural education has been distinguished by 89.1%, 67.8%, 78.1%, and 61.5% of the ranchers as significant driven power to advance and support Crop Production and Management, Cassava cultivation, Poultry production, and Fishery and Aquaculture individually. It tends to be reasoned that AEE assumes a basic part in building ranchers' abilities to keep up good agricultural practices (GAP), including control of crops and animals, pests and infections, and in connecting ranchers to sources of input, administrations and markets; these are pointers to expanded farm productivity and food and sustenance security.

**Keywords:** agriculture, demonstration plots, education, extension, farmer field schools, food security

**EFFECT OF BIO STIMULANTS ON THE GROWTH OF EGGPLANT  
(*SOLANUM MELONGENA* L.) GROWN UNDER NaCl INDUCED SALINITY**

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**ABSTRACT**

Biostimulants have been applied to enhance the growth and yield of various vegetables under saline conditions which hampered the yield potential. A pot (12x30 cm) study was conducted to assess the mitigation response of two different biostimulants (*Quantis* and *Seamax*) on eggplant (Black Diamond) grown under different NaCl induced salinity levels (4 dS m<sup>-1</sup>, 6 dS m<sup>-1</sup> and 8 dS m<sup>-1</sup>) along with control (1.5 dS m<sup>-1</sup>) at University of Agriculture, Faisalabad-Pakistan. Four different concentration of each biostimulants (0, 4, 6, 8, and 10 ppm) were used to evaluate its response toward different morpho-physiological parameters of eggplant under saline environment. This experiment was done under completely randomized design (CRD) and data was analyzed statistically to check the significance among treatments with Tukey HSD (P < 0.05) with Statistix 8.1. After 15 days of foliar application of biostimulants, it revealed that at lower salinity levels of 4 dS m<sup>-1</sup> and 6 dS m<sup>-1</sup> both the biostimulants showed results at par. *Quantis* performed better at plant height and spread at higher concentrations of 8 ppm and 10 ppm than *Seamax*. On overall basis *Seamax* with 6 mm resulted in high yield at control (1.5 dS m<sup>-1</sup>). At higher salinity level of 8 dS m<sup>-1</sup>, *Seamax* showed overall better performance than *Quantis* with. Fruit weight was highest when *Quantis* was foliarly applied at control (1.5 dS m<sup>-1</sup>). Maximum number of fruits per plant were seen in 4 ppm (*Quantis*) at control and 6 ppm (*Seamax*) with 13.80 and 13.73, respectively. It was concluded that biostimulant overall enhances the ability of eggplant to response against salinity.

**Keywords;** Solanum melongena, Quantis, Seamax, Biostimulants, salinity

## REVIEW ON FARMING AGRICULTURE ROBOTS

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### ABSTRACT

Robotics is playing a significant role in agriculture production and management there is a need for autonomous and time saving technology in agriculture to have efficient farm management. The agricultural robots have been researched and developed principally for harvesting, chemical spraying, picking fruits, and monitoring of crops. Robots like these are perfect substitute for manpower to a great extent as they deploy unmanned, sensing and a machinery system. The prime benefits, of development of autonomous, and intelligent agricultural robots are to improve repeatable precision, efficacy compaction and drudgery. Major operations in open arable farming includes tilling, soil analysis, seeding, transplanting, crop scouting, pest control, weed removal and harvesting where robots can assist in performing all of the tasks. Each specific operation, requires, axillary devices and sensors with specific functions. While robots are becoming the inseparable parts of the modern farms, results showed that the robots travelled with a maximum lateral error of 47 minutes and sprayed with a productivity of 16-20 plants/minute. Also, weeding action was taken in time. It can work 20 hours/day. so far, the robots are 61% accuracy in picking ripe fruits. The designed robot has adaptability, versatility because the different operations can be archived on the same platform. Our conclusion is that it is not realistic to expect an entirely automated farming system in the future.

**Keywords:** Precision farming, Agricultural robots, task-based agricultural robots, soil analysis, seeding, weed detection, harvesting, productivity, adaptability, versatility.



**EFFECT OF FERTILIZER APPLICATION ON FUNAABOR 1 IN THE INLAND VALLEY  
DURING THE DRY SEASON**

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**ABSTRACT**

This experiment was carried out in the inland valley bottom at the Federal University of Agriculture, Abeokuta, Ogun state, Nigeria to evaluate the effect of fertilizer application rates on FUNAABOR 1 (Ofada) rice variety during the dry season. The experiment was laid out in a randomized complete block design (RCBD) with four levels of fertilizer (0, 30, 60 and 90 kg NPK/ha) and replicated three times. Data were collected on growth parameters, yield and yield components of FUNAABOR 1 (Ofada). The data were subjected to analysis of variance using GenStat 12<sup>th</sup> editions. The fertilizer rates did not significantly influence ( $p < 0.05$ ) any of the parameters collected in the study.

**Keywords:** Plant Physiology; Fertilizer rate (NPK), FUNAABOR 1 (Ofada), Inland Valley, Dry Season Nigeria



## REVIEW ON SOLAR WEEDER CUM SPRAYER

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### ABSTRACT

India is a Largest Populated Country, Which Contains 65% Populations depending on agriculture. It contributes around 17-18% GDP to our country. Generally Indian farmer use Traditional way i.e., Sprayer carry on their back and weeding is done by bulls. Which become time consuming and costly weeding and spraying operations are more effective to increasing the production of the farmer. Every farmer faces the weeding problem, weeds are the unwanted plants which grows faster than the major crop in the field. Every year, in India, an average of 1980 crores Rupees is wasted due to weeds. Our country faces the total loss of 33% of H/S economy from weeds, a part from this spraying is also an important operation for farmers economy, on Indian farms, knap sack sprayer are very commonly used by small and marginal farmers for pest control because of affordability and ease of operation but with lower output. These two operations i.e., weeding and spraying are costlier and time consumption process. And in India most of the farmers are marginal land holders. To overcome this problem, we introduced both weeding and spraying operations into one machine. The aim of this paper is to design, construct and test the weeder cum sprayer to provide the best opportunity for the crop to establish itself after planting and to grow vigorously up to the time of harvesting by using solar power. It reduces the drudgery of the farmer. Maintenance is less as compared to other machine and it gives the effective result.

**Keyword:** Weeding, Spraying, Marginal, Affordability, Drudgery, Testing





**FERTILITY, HATCHABILITY, AND GROWTH PERFORMANCE OF INDIGENOUS, SASSO AND INDIGENOUS\*SASSO CROSS CHICKEN GENOTYPES IN SIDAMA REGION, ETHIOPIA**

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**ABSTRACT**

The aim of this study was to evaluate fertility, hatchability, and growth performance of three chicken genotypes. A total of 1550 (600 of indigenous, 450 of Sasso, 500 of crossbred) eggs were labelled and incubated. Growth performance was recorded on-station and on-farm in week interval of W0-W7 and W7-W20 respectively from the same population. Relatively higher proportion of fertility was observed for the eggs collected from Sasso (89.6%) followed by crossed eggs (72.8%). Likewise, hatchability was higher for Sasso. Body weight of DOC was 27.9g (indigenous), 36.8g (Sasso), and 32.4g (crossbred). Body weight was increased from 27.9g to 321.7g for indigenous, 36.8g to 431.2g for Sasso, and 32.4g to 353.4g for crossbred from W0 to W7. On-farm growth performance evaluation across the three agro-ecologies was started since their 7<sup>th</sup> weeks age. Body weight performance of the indigenous and crossbred male chickens were significantly ( $p < 0.05$ ) higher in midland until W15, however Male Sasso chickens in W15 was significantly higher in lowland. W20 body weight showed significant difference for male Sasso and crossbred chickens in different agro-ecologies. Male crossbred chickens performed significantly lower body weight in lowland (1057g) than both midland (1270g) and highland (1204g) in W20. Higher proportion of indigenous (22%) and Sasso (24%) birds were died in highland in between W7-13, however higher proportion of crossbred birds were lost in lowland for same week interval. Considering the most parameters of chickens, midland agro-ecology is more promising for their production. This is because, better feed resources, climatic condition, and awareness of farmers how to manage their birds.

**Keywords:** Fertility, hatchability, incubation, growth performance, mortality



**CHARACTERIZATION OF INDIGENOUS CHICKENS REARED IN THREE AGRO-  
ECOLOGIES OF HADIYA ZONE OF ETHIOPIA BASED ON THEIR MORPHOMETRIC TRAITS  
USING A MULTIVARIATE ANALYSIS APPROACH**

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**ABSTRACT**

This study was conducted to differentiate the indigenous chicken populations at different agro-ecologies based on morphometric traits by applying multivariate analysis. Morphometric data were collected from 520 (130 male and 390 female) adult indigenous chickens. Traits scored were live body weight (LBW), body length (BL), breast circumference (BC), wingspan (WS), shank length (SL), shank circumference (SC), comb length (CL), wattle length (WL), earlobe length (ELL) and beak length (BkL). Ten quantitative traits for both sexes were subjected to the stepwise discriminant analysis, of which five (wingspan, live body weight, comb length, shank circumference and body length) in females and three of them (shank length, wingspan and earlobe length) in males were identified as the best discriminating variables. Two canonical variables CAN1 and CAN2 were extracted with 61.5% and 38.6% of the total variation in females, respectively and CAN1 (89.3%) and CAN2 (10.7%) of the total variation in parameters of male chicken populations. The higher classification rates were obtained in lowland agro-ecology both for female (56.6%) and male (50%) chickens. Cross-validation with the split-sample indicated that 62.7%, 39% and 59.3% success rate in highland, lowland and midland, respectively. The longest pairwise Mahalanobis distances was observed between midland and highland in male chickens and between lowland and highland in females, whereas the shortest distance was observed between the lowland and highland in male and female chicken populations. The variations obtained in chickens of different agro-ecologies and sex, considered as opportunities for genetic improvement of indigenous chicken genetic resources. Therefore, developing breeding plan is important for conservation and genetic improvement of indigenous chicken genetic resources.

**Keywords:** agro-ecology; Ethiopia; indigenous chicken; morphometric traits, multivariate



## A NEW THEORY FOR VISUALIZING MUSIC

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### **ABSTRACT**

Music has long been an important medium for fulfilling and expressing emotional needs. In fact, music can become a powerful tool to create emotional responses in humans, such as happiness, sadness, awareness, as we see in recent decades in cinema, social media and advertisement. Today, a combination of different media is used to arouse our emotion and feeling, but often music has been used to accompany a visual realization, rather than vice versa. In my work I explore new modes of communication between people and sound by transfiguring music notation to a visual graphic. The scope and scale of my work ranges from miniature individual components to artworks the size of a room. Through my realization, the technique that I use permits me to play with images in the way that musicians play with sounds. In this paper, I introduce this new language, which is an art form based on unlimited combinations of simple elements that can express a broad range of human emotion and experience.

**Keywords:** Music, Emotion, Communication, Music Notation, Visual Graphic, Human Emotion, Experience



**RECOMMENDATIONS FOR PHYSICAL ACTIVITY IN PERIODS OF SOCIAL DISTANCING  
DUE TO COVID-19 PANDEMIC**

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**ABSTRACT**

The SARS-CoV-2-caused COVID-19 pandemic has resulted in a devastating threat to human society in terms of health, economy and lifestyle. Social distancing is an effective way to manage a pandemic by preventing the spread of COVID-19. However, social distancing can lead to adverse psychological and physiological effects. Social distancing reduces social interaction, limits physical activity, and home isolation can lead to increased rates of health problems, depression and anxiety. Physical activity and health related quality of life. Regular physical activity can reduce potential feelings of anxiety, boredom, and depression resulting from social distancing. By using mixed methods by research synthesis and literature review analysis to make recommendations for physical indoors and outdoors activities. Thereby encouraging regular physical activity combined with a healthy lifestyle. Regular physical activity will bring many benefits, helping to improve physical and mental health during social distancing due to COVID-19 pandemic. Do exercise is encouraged during the pandemic. But how to do exercise while most people have to stay at home to follow the Prime Minister's Directive 16 of social distancing is a difficult question for many people. By synthesizing and analyzing materials from a variety of sources, including forums, the Ministry of Health of Vietnam's health information website, the Center for Disease Control and Prevention, and the World Health Organization, effective physical activity recommendations are provided in this study.

**Keywords:** social distancing, Covid-19 pandemic, physical activity.



**EXPLORING NATURAL ADVANTAGES  
TO DEVELOP SPORT TOURISM PRODUCTS IN QUANG BINH PROVINCE**

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**ABSTRACT**

Tourism has become one of the major sectors within the economy of Vietnam in recent years. With over 3000 kilometers of coastline, pristine beaches, dynamic growing cities, mountainous highlands, and diverse cultural and historic sites, Vietnam's tourism industry continues to rank amongst the fastest-growing tourist destinations in the world. In 2019, Viet Nam, for the first time, welcomed 18 million international visitors, a year-on-year increase of 16.2%. In the period from 2015 to 2019, the number of international visitors to Vietnam increased 2.3 times (from 7.9 million to 18 million), the average growth rate reached 22.7% per year. Vietnam is constantly in the group of countries with the fastest tourist growth rate in the world. In 2019, Viet Nam was honored as the World's Leading Heritage Destination and the World's Best Golf Destination. Viet Nam also won Asia's Leading Heritage Destination, Asia's Leading Cultural Destination and Asia's Leading Culinary Destination 2 times in a row. Phong Nha - Ke Bang National Park was twice recognised as world natural heritage sites by UNESCO in 2003 and 2015, is really a paradise for cave explorers. Son Doong, located in the heart of the Phong Nha – Ke Bang Nation Park, is the largest of its kind in the world recognised by three international organisations, namely Guinness (based in the UK), the Association World Record (based in Hong Kong) and WorldKings (based in the US and India). These tourist attractions are located in Quang Binh province. Quang Binh is a province with diversified nature including hills, steep passes, caves, rapids, lakes, rivers, sand dunes, beaches, bays, etc., which are favorable conditions for sport tourism development. However, the development of this typical tourism product is not commensurate with the potentials. This paper introduces a number of basic issues about the development of sport tourism products, analyzing the natural advantages, the situation of exploiting advantages and proposing orientations and solutions for developing sport tourism in Quang Binh.

**Keywords:** sport tourism, natural potential, tourism products, Quang Binh.

## **CORRELATION BETWEEN PERCEIVED EFFORT AND INTERNAL TRAINING LOAD**

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### **ABSTRACT**

The ability to perform sports is mainly developed by the stimuli of movement; if these stimuli are dosed in such a way as to determine a training effect and therefore to contribute to the development, maintenance and consolidation of the training state, we are talking about training load. The training load is distinguished in external and internal.

The external load represents the physical work prescribed in the training program, that is, it is the set of training stimuli administered to the athlete. The internal load is instead represented by the individual functional reaction of the athlete to the external load.

Since the external load is an objectively measurable element through conventional quantities and measurement systems, its monitoring is simpler than the size of the internal load. The latter, in fact, is a subjective parameter of perception of effort that can be influenced by multiple variables that also affect the emotional and psychological state of the athlete.

The aim of the study is to highlight the possible relationships between the Ratings of Perceived Exertion (RPE) and the state of physiological fatigue in order to provide sports training professionals with more useful evidence for planning and programming the training process, which translates into the correct administration of external loads of training (intensity, volume, density).

This goal was pursued through the consultation of scientific articles selected through the use of the PRISMA method. 50 scientific publications were consulted through search engines: Google Scholar, PubMed and Scopus. From this total, 20 articles were selected based on established inclusion criteria: year of publication, topic, keywords. In particular, variables related to Ratings of Perceived Exertion and heart rate levels after sports training sessions were considered.

The results of the research showed that in the various selected studies, weak to moderate, albeit significant, correlations between perceived exertion and heart rate values after training were found.

**Keywords:** Training load, perception of exertion, heart rate and training, internal load, sport performance and internal load.



**DEVELOP CREATIVITY AND LEADERSHIP OF YOUNG PEOPLE FROM THE PANDEMIC**

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**ABSTRACT**

Creativity is something that sounds familiar to our ears. Although it sounds familiar, creativity is very important for everyone, not only from the elderly, but creativity is very much aimed at the millennial generation. At this time we are faced with a pandemic that never ends, it is hoped that young people will be able to develop their creativity from all aspects. The data collection method used in this research is to use a literature study on creativity. This event will illustrate the importance of creativity and innovative spirit for the millennial generation, especially in the midst of a pandemic. There is a lot of creativity that can be done during a pandemic, this can be used as an opportunity to find out what advantages we have. It is also the right step to create generations full of innovations and ideas that can bring good changes to the younger generation. Based on the results of data analysis, it can be concluded that creativity and the current pandemic situation. Technology and information are also very influential in the formation of creativity in the power and style of innovation, so that it can be adapted to the times and the digital era that is better and superior at this time, technology and information as a supporting tool in increasing the creativity of the community, especially young people which will certainly make the growth of creativity and productivity fast and rapid. In increasing creativity, human resources are needed who are curious about what abilities they have and also have a passion for making good changes for the future.

**Keyword:** creativity, leadership, young people and pandemic

**TÜRK DİZİLERİNDE ZENGİN-FAKİR ÜNİVERSİTE ÖĞRENCİSİ TEMSİLLERİ:  
“SOL YANIM” DİZİSİ ÖRNEĞİ**

REPRESENTATIONS OF RICH-POOR UNIVERSITY STUDENTS IN TURKISH TV SERIES: THE  
EXAMPLE OF "SOL YANIM" TV SERIES

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**ÖZET**

Türk sinemasında ve Türk dizilerinde eski Yeşilçam filmlerinden itibaren süregelen bir zengin-fakir karşıtlığından söz etmek mümkündür. Bu temsiller çoğu zaman gerçek olamayacak kadar dramatize edilmiş şekilde bir siyah-beyaz karşıtlığı gibi sergilenmektedir. Özellikle popüler kültür ürünü olan film ve dizilerde bu tarz stereotiplere sıklıkla başvurulduğu görülmektedir. Son dönemde yapılan dizilerde yer alan üniversite öğrencisi temsillerinde de benzer zengin-fakir karşıtlıklarına sıklıkla rastlanmaktadır. Bu çalışmada 26 Kasım 2020 – 17 Şubat 2021 tarihleri arasında toplamda 12 bölüm yayınlanmış olan “Sol Yanım” dizisi ideolojik film çözümleme yöntemiyle incelenmektedir. Bu dizinin seçilmesinde güncel bir örnek olması ve çalışmada incelenen zengin-fakir temsillerinin karşıtlığı üzerinden ilerleyen bir senaryoya sahip olması örneklem olarak seçilmesinde etkili olmuştur.

Görüntülerin giderek daha fazla önem kazandığı günümüz toplumunda, insanların algılarını şekillendirmede görüntülerin seçimi ve kullanımı büyük bir öneme sahiptir. Seyirciler bunun bilincinde olsa da, olmasa da televizyon ekranında yer alan görüntüler yapılandırılmış görüntülerdir. Dolayısıyla izlenen, salt bir gerçeklik sunumu değildir. İzlenen, televizyonun kendi kültürü içerisinde çıkan, dünyanın var olan gerçekliğiyle değil de belirli ideolojik çerçeveler dahilinde sunulduğu bir gerçekliktir.

Bir film veya bir televizyon dizisi, -kültürel bir meta olarak- yaratım sürecinden izleyiciye sunulduğu ana kadar devam eden süreçte birtakım ticari kaygıları da içerisinde barındırarak şekillenmektedir. Her ticari ürün gibi bu kültür ‘ürününden’ de kâr elde etme gereksinimi, film/dizi içeriklerinin de mümkün olduğu kadar çok seyircinin ilgisini çeken, mümkün olduğu kadar geniş bir kitlenin zevklerine hitap eden “popüler” içerikler olarak üretilmesine yol açmıştır. Yapılan yatırımlarını kâra dönüştürmek isteyen büyük sermaye grupları, filmlerin ve dizilerin izlenirliğini arttırmak için birçok farklı yöntemlere başvurmuşlardır. Bunların başında halk tarafından kabul görmüş hikâyeleri farklı şekillerde tekrar tekrar izleyiciye sunarak, risk almadan hedeflenen izleyici kitlesine ulaşma isteği gelmektedir. Bu durum zaman içerisinde tekrar eden ve seyirciye adeta ezberletilen temsillerin, stereotiplerin ve klişelerin oluşmasına zemin hazırlamaktadır.

Bu çalışmada, film ve dizilerde sıklıkla karşılaşılan klişelerden olan “zengin-fakir” karşıtlığı üzerinden ilerleyen bir senaryoya ve bolca stereotipe sahip olan “Sol Yanım” dizisindeki farklı statü temsillerini ve ideolojik konumlandırmalarını ortaya çıkarabilmek adına ideolojik bir analiz yapılmaya çalışılmaktadır. Söz konusu dizide yer alan temsiller, görseller ve söylemler üzerinden yapılan incelemeler yordamıyla filmin hakim söylemi, filmde verilmek istenen açık ve örtük anlamlar ortaya çıkarılmaya çalışılarak bir çözümleme gerçekleştirilmeye çalışılmaktadır.

**Anahtar kelimeler:** Türk Dizileri, Temsil, Popüler Kültür

**ABSTRACT**

It is possible to talk about an ongoing rich-poor contrast in Turkish cinema and Turkish TV series since the old Yeşilçam films. These representations are often presented as a black-and-white contrast, too dramatized to be true. It is seen that such stereotypes are frequently used, especially in movies and TV series that are products of popular culture. Similar contrasts between rich and poor are frequently encountered in the representations of university students in recent TV series. In this study, the TV series "Sol Yanım", which was published as 12 episodes between November 26, 2020 - February 17, 2021, is analyzed with the method of



ideological film analysis. The fact that this series is a current example and that it has a scenario that proceeds through the contrast of rich-poor representations examined in the study was effective in choosing it as a sample.

In today's society, where images are gaining more and more importance, the selection and use of images is of great importance in shaping people's perceptions. Whether the audience is aware of this or not, the images on the television screen are structured images. Therefore, what is watched is not just a presentation of reality. What is watched is a reality that emerges from television's own culture and is presented within certain ideological frameworks, not with the existing reality of the world.

A film or a television series -as a cultural commodity- is shaped by including some commercial concerns in the process from the creation process to the moment it is presented to the audience. The need to make a profit from this cultural 'product', like every commercial product, has led to the production of film/series contents as 'popular' contents that attract the attention of as many viewers as possible and appeal to the tastes of a wide audience as much as possible. Large capital groups, who want to turn their investments into profit, resort to many different methods to increase the watchability of movies and TV series. At the forefront of these is the desire to reach the targeted audience without taking risks by presenting the stories accepted by the public in different ways to the audience again and again. This situation paves the way for the formation of representations, stereotypes and clichés that are repeated over time and made the audience memorize.

In this study, an ideological analysis is tried to be made in order to reveal the different status representations and ideological positionings in "Sol Yanım" series, which has a scenario that proceeds through the contrast of "rich-poor", which is one of the stereotypes frequently encountered in movies and TV series. An analysis is tried to be carried out by trying to reveal the dominant discourse of the film, the explicit and implicit meanings that are intended to be given in the film, through the analysis made on the representations, visuals and discourses in the series in question.

**Keywords:** Turkish Series, Representation, Popular Culture

**BETA KATSAYILARININ KANTİL REGRESYON İLE TAHMİNİ: MSCI- İSLAMİ BORSA ENDEKSLERİ ÜZERİNE BİR İNCELEME**

**ESTIMATING THE BETA COEFFICIENTS BY QUANTILE REGRESSION:  
A STUDY ON MSCI-ISLAMIC STOCK INDICES**

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**ÖZET**

Sermaye Varlıkları Fiyatlama Modeli (SVFM) zaman serisi modellerinden iki aşamalı regresyonlara ya da panel veri yöntemlerine varıncaya kadar birçok değişik üst düzey ekonometrik metodoloji ile test edilmiştir. Ancak bütün bu yöntemler borsaların içinde bulunduğu ekonomik koşulları dikkate almamaktadır. Koenker ve Bassett (1978) tarafından geliştirilen dilim (kantil) regresyon modeli ise borsa endeksinin yükseliş ve düşüş periyotlarını da dikkate alarak bu açığı kapatmaya çalışmaktadır. Bu çalışmada İslami borsa endekslerinin beta katsayıları kantil regresyon modeli ile tahmin edilmiştir. Sonuçlar beta katsayıları bütün kantiller boyunca değiştiğini, diğer bir anlatımla, endeksin durumuna göre beklenen getirilerin değiştiğini göstermiştir.

**Anahtar kelimeler:** Beta katsayısı, Kantil regresyon, MSCI- İslami Borsa Endeksleri

**ABSTRACT**

The Capital Asset Pricing Model (CAPM) has been tested with many different high-level econometric methodologies, from time series models to two-step regressions or panel data methods. However, all these methods do not take into account the economic conditions of the stock markets. The quantile regression model developed by Koenker and Bassett (1978) tries to close this gap by taking into account the rising and falling periods of the stock market index. In this study, beta coefficients of Islamic stock market indices were estimated by quantile regression model. The results showed that the beta coefficients changed throughout all quantiles, in other words, the expected returns changed according to the state of the index.

**Keywords:** Beta coefficients, quantile regression, MSCI-Islamic stock indices

**BİG DATADAN SMALL DATAYA GEÇİŞ: TÜKETİCİ DAVRANIŞLARINI  
ANLAMLANDIRMAK**

**TRANSITIONING FROM BIG DATA TO SMALL DATA: MAKING SENSE OF CONSUMER  
BEHAVIOR**

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**ÖZET**

Endüstri 4.0 devrimi ile hayatımıza yeni uygulamalar girmiş ve bu uygulamalar ile birlikte tüketicilerin istek ve ihtiyaçları doğrultusunda ürün ve hizmetler üretilmeye başlanmıştır. Bu yeni devrim, beraberinde veriye dayalı pazarlama stratejilerini ortaya çıkarmış ve bu veriler ile tüketicilerin istek ve ihtiyaçlarının daha rahat analiz edilmesine olanak tanımıştır. Yeni dönemde değişen ve gelişen pazarlama stratejileri ile beraber big data (büyük veri) ve small data (küçük veri) gibi yeni kavramlar ortaya çıkmıştır. Bu çalışma, tüketicilerin değişen ve gelişen istek ve ihtiyaçlarına cevap vermek adına markaların ortaya koymuş oldukları çalışmalarını, yeni teknolojinin süzgecinde nasıl evirildiğini göstermeyi amaçlamaktadır. Bu bağlamda ilk aşamada big data ve small data hakkında teorik bilgi verilmiştir. İkinci aşamada ise markalar nezdinde big data ve small datanın kullanımının yansımaları ele alınmıştır. Araştırma kapsamında betimsel araştırma yönteminden yararlanılmıştır. Araştırma neticesinde, markaların pazarlama stratejileri sürecinde small data teknolojilerini etkin ve verimli bir biçimde kullandığı tespit edilmiştir.

**Anahtar kelimeler:** Big Data, Small Data, Tüketici Davranışı

**ABSTRACT**

With the Industry 4.0 revolution, new applications have entered our lives and with these applications, products and services have begun to be produced in line with the demands and needs of consumers. This new revolution has brought with it data-based marketing strategies, and this data has made it possible to analyze the demands and needs of consumers more easily. Along with the changing and developing marketing strategies in the new era, new concepts such as big data and small data have emerged. This study aims to show how the works of brands have evolved in the filter of new technology to respond to the changing and developing demands and needs of consumers. In this context, in the first stage, theoretical information about big data and small data is given. In the second stage, the reflections of the use of big data and small data on brands are discussed. Within the scope of the research, a descriptive research method was used. As a result of the research, it has been determined that brands use small data technologies effectively and efficiently in the process of their marketing strategies.

**Keywords:** Big Data, Small Data, Consumer Behaviour

## **İNSANİ BİR KRİZ OLARAK KORONAVİRÜS SALGINININ ORTAYA ÇIKIŞI İNSAN KAYNAKLARI YÖNETİMİNDEKİ KÖTÜYE GİDİŞİ DURDURABİLİR Mİ?**

**CAN THE EMERGENCE OF THE CORONAVIRUS OUTBREAK AS A HUMANITARIAN CRISIS STOP THE ABUSE IN HUMAN RESOURCES MANAGEMENT?**

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### **ÖZET**

2020 yılının ilk aylarında şiddetli solunum yetmezliğine sebep olan Covid-19 bulaşıcı hastalığı iş dünyasında köklü değişikliklere sebep olmuştur. Hem tüketiciler hem de işletmeler virüse yakalanma ihtimaline karşı tutum ve alışkanlıklarını değiştirmeye başladıkça milyonlarca çalışan işini kaybetmiştir. İşletmeler 21.yüzyıl dünyasında her ne kadar rekabet edebilmek için mekanik yapıdan organik bir yapıya geçmiş olsalar da böylesine uzun soluklu bir kaosa hazırlıklı değillerdi. 21.yüzyıl yönetim biliminin paradigmaları daha ilk çeyreğini tamamlamadan ilk kez yaşanan insani bir krizde tökezlemiş ve artık geleneksel olarak adlandırılabilir yönetim metotlarının bu yüzyılda sürdürülebilirliğini yitireceğinden kuşku kalmamıştır. Milyonlarca çalışan iş yeri koşullarını evlerine taşıyarak çalışma şekillerini kökten değiştirmiştir. Diğer taraftan çalışma koşullarını ev ortamına taşıyamayan kişilerse salgınla burun buruna yaşama zorunluluğuyla hayatlarını devam ettirmek durumunda kalmıştır. Geleneksel insan kaynakları yönetimi teorisyenleri ve uygulayıcıları salgının neden olduğu maliyetleri çalışma hayatına adaletsiz bir şekilde dağıttığını anlamak ve bu gerçekle yüzleşmek mecburiyetindedir. Koronavirüs pandemisinin olumsuz sosyoekonomik sonuçlarının sorumluluğunu sadece insan kaynakları yönetimi uygulamalarına yüklemek çok da doğru olmayacaktır. Halkın refahından sorumlu devlet yöneticilerinin yetersiz öngörüye sahip olmaları ve kaliteli politika üretmemeleri virüsle alakalı tıbbi bilimsel çalışmalarla ters orantılı olduğu ortadadır. Ancak insan kaynakları yönetimi (İKY) ile ilgilenen, öğreten ve uygulayanlar için bu insani krizden ders çıkarmamak ve yenilikler için çabalamamak kötü olan durumun gelecekte daha da kötüleşmesine katkıda bulunacaktır. İnsan kaynakları yöntemi 1980'lerden beri süregelen paradigma değişiklikleriyle çalışan refahından, verimlilikten ve disiplinden öteye geçerek daha hayati bir işletme işlevi haline dönüşmüştür. İnsan kaynakları yönetimi artık operasyonel mükemmelleşmeyle de ilgilenmektedir. Bürokrasinin ve prosedürlerin insan kaynakları yönetiminin işlev hızını yavaşlattığı da bir gerçektir. Yapay zeka teknolojisinin sosyal ve ekonomik değişimler üzerindeki etkileri üzerine yapılan çalışmalar Koronavirüs salgınıyla ilgili araştırmaların seyrini değiştirmiştir. Bu değişim insan kaynakları yönetimi için yapılan işin ve yapma biçiminin yeniden gözden geçirilmesi için adeta bir fırsat olduğu söylenebilir. Fırsatı kaçırmamak adına insanın yeniden işletmenin bir fonksiyonu olan insan kaynağı yönetimine geri döndürülmesi gerekliliğinin altı çizilmelidir. Zira Covid-19'un etkisi kalıcı olacaktır. Bugün artık Koronavirüs salgınından etkilenmeyen bir organizasyon ya da kimse kalmamıştır. Salgın sürecinde örgütlerin uyguladığı insan kaynakları yönetimi metotları ve bu İKY uygulamalarının Koronavirüs salgınına cevap verebilirliğinin araştırılması çok acil öneme sahiptir. Bu çalışmanın amacı; salgının işgücü piyasasında ortaya çıkardığı derin eşitsizlikleri araştırmak ve geleneksel insan kaynakları yönetimi uygulamalarının distopik bir hayat düzenine neden olduğunu savunmaktır.

**Anahtar kelimeler:** Salgın hastalık, İnsan Kaynakları, Paradigma değişikliği.

### **ABSTRACT**

The Covid-19 contagious disease, which caused severe respiratory failure, has caused radical changes in the business world in the early months of 2020. Millions of employees have lost their jobs as both consumers and

businesses begin to change their attitudes and habits towards the possibility of contracting the virus. Although businesses had switched from a mechanical structure to an organic structure in order to compete in the 21st century world, they were not prepared for such a long-term chaos. The paradigms of the 21st century management science have stumbled upon a humanitarian crisis for the first time of their meeting before completing its first quarter. And there is no doubt that the management methods that can be called as traditional and that methods will lose their sustainability in the 22nd century. Millions of employees have radically changed the way they work by moving workplace conditions to their homes. On the other hand people who could not bring their working conditions to the home had to continue their lives living face to face with the epidemic. Traditional human resource management theorists and practitioners are obliged to realize that the epidemic has unfairly distributed the costs to working life and they have to face with this reality. It would not be right to blame only human management practices for the negative socio-economic consequences of the coronavirus pandemic. It is obvious that the insufficient foresight of the state administrators responsible for the welfare of the people and their inability to produce quality policies are inversely proportional to the number of scientific publications related to the virus. However, for those who are interested in teaching and practicing HRM, not learning from this humanitarian crisis and not striving for innovations will contribute to the worsening of this bad situation in the future. Human resources management has transformed into a more vital business function by going beyond employee's welfare, productivity and discipline with the ongoing paradigm changes since the 1980s. HRM is now also concerned with operational excellence. It is also a fact that bureaucracy and procedures slow down the rate of function of HRM. Studies on the effects of artificial intelligence technology on social, economic and social changes have changed the route of the studies with the coronavirus epidemic. It can be said that this change is almost an opportunity to reconsider the work that is done and the way of doing it for HRM. In order not to miss the opportunity, it should be underlined that the human being should be returned to human resource management, which is a function of the business. Because the effect of Covid-19 will be permanent. Today, there is no organization or person left unaffected by the coronavirus epidemic. It is very urgent to investigate the human resource management methods applied by organizations during the epidemic process and the responsiveness of these HRM practices to the coronavirus epidemic. The aim of this study; to investigate the deep inequalities caused by the epidemic in the labor market and to argue that traditional HRM practices cause a dystopian life order.

**Keywords:** Epidemic, Human Resources, Paradigm change.

**A COMPARATIVE ANALYSIS OF EFFECTS OF FINANCAL RATIOS ON PROFITABILITY: AN EMPIRICAL ANALYSIS ON BIST LISTED FABRICATED METAL PRODUCTS MANUFACTURING FIRMS**

**FİNANSAL ORANLARIN KÂRLILIK ÜZERİNDEKİ ETKİSİNİN KARŞILAŞTIRILMALI ANALİZİ: BIST METAL EŞYA FİRMALARI ÜZERİNE BİR UYGULAMA**

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**ABSTRACT**

The main purpose of all for-profit businesses is to continue their activities profitably, to achieve sustainable growth and to increase the current market value of the business as a result of all these. In this context, businesses need to earn sufficient profits in order to continue their activities without interruption and to reach their growth targets in the long term. Businesses ought to have some predictions for the continuousness of their activities and advantage of competition.

According to the TURKBESD (Turkish White Appliances Manufacturers Association) report, the white appliances sector is one of the rare sectors that exports approximately \$4.5 billion in a year and has a foreign trade surplus around \$4 billion. On the basis of quantity, 76% of the production and 50-55% of it are exported on the basis of value. Being the largest production base in Europe, Turkey has the second largest white appliances industry in the world after China. The primary exporting market is European Union. The sector ranks 7<sup>th</sup> in the world in exporting and exports to more than 100 countries. With a total production of 29.1 million units in product groups consisting of refrigerators, freezers, washing machines, dryers, dishwashers and ovens in 2020, the white appliances sector strengthened the industrial power of Turkey (TURKBESD, 2020: 2-3).

Approximately 72% of the white appliances exports are exported to the European Union. The white appliances imports of the European Union from Turkey reached a share of 15.1% in total imports as of 2019 by increasing over the years. 50% of exports are made to 5 European countries. These countries respectively in terms of size are; United Kingdom, France, Germany, Italy and Spain (TURKBESD, 2020: 9).

The Covid-19 epidemic, which took the first place on the world agenda in 2020, primarily affects countries and economies along with the health extent. The Turkish white appliances sector is also affected by the Covid-19 outbreak, as in similar economies. Impact of the epidemic is particularly felt on the supply chain, sales channels, consumer behavior and habits, employees and working order. Depending on the intensity of the epidemic and the content of the measures that are taken by the state, it is thought that some effects will be temporary and some will be permanent (TURKBESD, 2020: 10).

According to the sector report of the Ministry of Industry and Technology, the automotive sector in the world is a sector that is developing day by day and its importance is consistently increasing for the national economies. In this sector, competition among companies is increasing rapidly, and accordingly, factors such as effective use of resources, productivity growth, administrative and technical organization gain great value. Within this framework; elements such as investment in R&D, qualified labor force employment, quality management, application of flexible production methods, cooperative relations between the key and sub-industry and effective marketing are the elements that determine to become prominent in competitiveness. In our country, the automotive sector is among the leading sectors in the manufacturing industry when its share in production and its economic contribution are evaluated. The domestic values created by the sector (the use of domestic inputs and the total value added) have a crucial place in the economy. It was also emphasized in

the report that the sector is one of the sectors in which the world's largest investments are made. (Ministry of Industry and Technology 2020 Automotive Sector Report, 5).

World automotive production decreased from 97 million in 2018 to 92.5 million in 2019, and from these figures to 78 million with the effect of the pandemic. In Europe, production, which was 18.4 million in 2019, decreased to 17 million at the end of 2020. Factories that were partially opened in the following period had difficulties in production by remaining well below their capacities due to physical distance. The sector, which entered the last quarter of the year with the hope of vaccine as well as low sale figures, faced an unexpected obstacle such as the chip crisis this time. (KPMG 2021 Automotive Sector Report, 3-4).

Vehicle sales, which were 90.4 million in 2019 in the world, remained at the limit of 78.0 million in 2020. The 14% decrease in sales was felt more deeply in Europe, which is closely related to our country's export. The EU automotive market, which completed 2020 with a shrinkage of more than 20%, returned to the figures of the 1950s. (KPMG 2021 Automotive Sector Report, 5).

Turkey differentiated from Europe on the basis of the domestic market in 2020. The huge demand for the automobile increased the market from 400 thousand to 800 thousand units. On the other hand, production and exports were adversely affected by the epidemic and declined. The Turkish automotive sector completed 2020 with a total production of 1,336,000 units, domestic sales of 796,000 units and exports of 930,000 units with a total value exceeding 26 billion USD. In 2020, while sales were increasing by 62%, production decreased by 11% and exports by 27%. Automotive production of Turkey had a current account surplus of 6.8 billion USD in 2020. (KPMG 2021 Automotive Sector Report, 7).

In this study, it is aimed to determine the relative importance of the effect of the financial ratios of the companies operating in the BIST Metal Goods Machinery Electrical Equipment and Transportation Vehicles sector on the return on assets for the years 2004-2020. For this purpose, it will be tried to determine the relationship and importance level by revealing which of the financial ratios is more effective on the return on assets. In the application part of the study, the relationship and relative importance will be determined by using the standardized panel regression method with standardized variables. The standardization of the series is done by standardization. The standardization process is done by subtracting the arithmetic mean of the series from the level values of the series and dividing the difference obtained by the standard deviation of the series in order to eliminate the effect of the measurement differences of the variables. As a result of the analysis, the relative importance of the financial ratios specific to the enterprises on the return on assets of the enterprises will be determined.

**Keywords:** Standardization, Profitability, BIST Metal Goods Sector, Ratio Analysis.

## ÖZET

Bütün kâr amacı güden işletmelerin temel amacı faaliyetlerini kârlı bir şekilde devam ettirmek, sürdürülebilir büyümeyi gerçekleştirmek ve bütün bunların sonucunda işletmenin bugünkü cari piyasa değerini artırmaktır. Bu bağlamda işletmelerin faaliyetlerini aksatmadan devam ettirebilmeleri için ve uzun dönemde büyüme hedeflerine ulaşabilmeleri için yeterli seviyede kâr elde etmeleri gerekmektedir. İşletmelerin faaliyetlerinin devamlılığı ve sektörde rekabet edebilmeleri için bazı öngörülere sahip olmaları gerekmektedir.

TURKBESD (Türkiye Beyaz Eşya Sanayicileri Derneği) raporuna göre beyaz eşya sektörü yılda yaklaşık 4,5 Milyar \$ ihracat yapan ve 4 milyar \$ civarında dış ticaret fazlası veren az rastlanır sektörlerden biridir. Üretimin miktar bazında %76'sı ihraç edilirken, değer bazında %50-55 seviyesinde ihraç edilmektedir. Avrupa'daki en büyük üretim üssü konumunda olan Türkiye, Çin'den sonra dünyadaki ikinci en büyük beyaz eşya sanayisine sahiptir. Ana ihracat pazarı Avrupa Birliği'dir. Sektör ihracatta dünya sıralamasında 7. sırada olup 100'den fazla ülkeye ihracat gerçekleştirmektedir. 2020 yılında çamaşır makinesi, kurutucu, buzdolabı, derin dondurucu, fırın ve bulaşık makinesinden oluşan ürün gruplarında toplam 29,1 milyon adetlik üretim gerçekleşen beyaz eşya sektörü Türkiye'nin sanayi gücüne güç katmıştır (TURKBESD, 2020: 2-3).

Beyaz eşya ihracatının yaklaşık %72'sini Avrupa Birliği'ne gerçekleştirilen ihracat oluşturmaktadır. Avrupa Birliği'nin Türkiye'den yapmış olduğu beyaz eşya ithalatı ise yıllar içinde artış göstererek 2019 yılı itibarıyla toplam ithalatın içinde payı % 15,1 olmuştur. Toplam İhracatın %50'si 5 Avrupa ülkesine yapılmaktadır.

İhracat büyüklüğü göz önünde bulundurulduğunda bu ülkeler sırasıyla; Birleşik Krallık, Fransa, Almanya, İtalya ve İspanya'dır (TURKBESD, 2020: 9).

2020 yılındasağlık boyutunun yanı sıra ülkeleri ve ekonomileri birincil olarak etkileyen Covid-19 salgını, dünya gündeminin ilk sırasına yerleşti. Diğer ekonomilerdeki gibi Türkiye beyaz eşya sektörü de salgından oldukça fazla etkilenmektedir. Salgının en fazla tedarik zinciri olmak üzere, satış kanalları, tüketici davranış ve alışkanlıkları, çalışanlar ve çalışma düzeni üzerine etkisi hissedilmektedir. Salgının yoğun etkisiyle beraber devlet tarafınca yapılan önleme çalışmalarının içeriğine göre bazı etkilerin geçici, bazılarının ise kalıcı olacağı düşünülmektedir (TURKBESD, 2020: 10).

Sanayi ve Teknoloji Bakanlığı sektör raporuna göre, otomotiv sektörü Dünya'da her geçen gün gelişen, ülke ekonomilerine katkı sağlayan ve ekonomiler için önemi oldukça fazla olan bir sektördür. Firmalar arası rekabetin hızla yükseldiği bu sektörde rekabete bağlı olarak kaynakların etkin kullanımı, verimlilik artışı, idari ve teknik organizasyon gibi unsurlar büyük değer kazanmaktadır. Bu kapsamdarekabette öne çıkmayı belirleyen unsurlar: Ar-Ge'ye yatırım, nitelikli iş gücü istihdamı, kalite yönetimi, esnek üretim yöntemlerinin uygulanması, ana ve yan sanayi arasında işbirliğine dayanan ilişkiler ve etkin pazarlamadır. Türkiye'de ise otomotiv sektörü, ekonomik katkı oranı ve üretim içindeki payı ele alındığında, imalat sanayi içinde ilk sıralarda yer alan sektörler arasındadır. Sektörün yurtiçinde yaratmış olduğu girdi kullanımı ve katma değer toplamı gibi değerler ekonomide çok önemli bir yere sahiptir. Raporda sektörün dünyanın en büyük yatırımlarının gerçekleştiği sektörlerden biri olduğu konusu üzerinde de durulmuştur (Sanayi ve Teknoloji Bakanlığı Otomotiv Sektör Raporu, 2020: 5).

Dünya otomotiv üretimi 2018 yılında 97 milyon düzeyinde gerçekleşirken 2019 yılında bu rakam 92,5 milyon olmuştur. 2020 yılında pandeminin de etkisiyle otomotiv üretimi 78 milyona geriledi. Avrupa'da ise 2019 yılında 18,4 milyon seviyesinde olan üretim 2020 yılında 17 milyon olarak gerçekleşti. İlerleyen dönemlerde kısmen açılan fabrikalar fiziki mesafe gereği kapasitelerinin çok altında kalarak üretimde sıkıntı yaşadılar. Yılın son çeyreğinde düşük rakamların yanı sıra aşım umudu olan sektörü, bu kez de beklenmedik bir şekilde çip krizi etkiledi (KPMG Otomotiv Sektör Raporu, 2021: 3-4).

Dünyada 2019 yılında 90,4 milyon olarak gerçekleşen araç satışı 2020 yılında 78,0 milyon sınırında kaldı. Satışlarda gerçekleşen düşüş %14 olurken, bu durum Avrupayı daha derinden etkiledi. 2020 yılını %20'nin üzerinde küçülme ile tamamlayan AB otomotiv pazarı, 1950'li yılların rakamlarına geri döndü (KPMG Otomotiv Sektör Raporu, 2021: 5).

İç pazar bazında Avrupa'dan ayrılan Türkiye'de otomobile yönelik yoğun talep, 400 bin adet seviyesinde olan pazarı 800 bin adetlere yükseltti. Üretim ve ihracat ise bu durumun aksine salgından oldukça olumsuz etkilendi ve geriledi. 2020 yılına Türk otomotiv sektörü açısından bakıldığında, 1.336.000 adet toplam üretim, 796.000 adetlik iç satış gerçekleştirilmiştir. Ayrıca toplam ederi 26 milyar USD' yi aşan 930.000 adet ihracat satışı gerçekleşmiştir. Bu rakamlar ışığında 2020 yılında satışlar %62 artış gösterirken, üretim %11 ve ihracat %27 azaldı. 2020 yılında Türkiye otomotiv üretimi 6,8 milyar USD cari fazla verdi (KPMG Otomotiv Sektör Raporu, 2021: 7).

Bu çalışmada 2004-2020 yılları için, BİST Metal Eşya Makine Elektrikli Cihazlar ve Ulaşım Araçları sektöründe faaliyet gösteren firmaların finansal oranlarının aktif kârlılık üzerindeki etkisinin nispi önem sırasının belirlenmesi amaçlanmıştır. Bu amaç doğrultusunda finansal oranlardan hangilerinin aktif kârlılığı üzerinde daha etkili olduğu ortaya konularak ilişki ve önem derecesi belirlenmeye çalışılacaktır. Çalışmanın uygulama kısmında Standardize edilmiş değişkenlerle standartlaştırılmış panel regresyon yöntemini kullanılarak ilişki ve nispi önem derecesi tespit edilecektir. Serilerin standardize edilmesi standartlaştırma ile yapılmaktadır. Standartlaştırma işlemi, değişkenlerin ölçüm farklarının etkisini ortadan kaldırmak için serilerin düzey değerlerinden serilerin aritmetik ortalamasının çıkartılarak elde edilen farkın serinin standart sapmasına bölünmesi şeklinde yapılmaktadır. Analizler neticesinde işletmelerin aktif kârlılığı üzerinde işletmelere özgü finansal oranların nispi önem sırası belirlenmiş olacaktır.

**Anahtar kelimeler:** Standartlaştırılmış Değişkenlerle Regresyon, Kârlılık, BİST Metal Eşya Sektörü, Oran Analizi.



**BELEDİYELERİN KURUMSAL SOSYAL SORUMLULUK UYGULAMALARI:  
GEMLİK BELEDİYESİ ÖRNEĞİ\***  
CORPORATE SOCIAL RESPONSIBILITY PRACTICES OF MUNICIPALITIES: GEMLİK  
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**ÖZET**

Kurumsal iletişim kapsamında yer alan, kurumsal imaj yaratmak ve geliştirmek açısından önemli bir niteliğe sahip olan Kurumsal Sosyal Sorumluluk (KSS) faaliyetleri, toplumsal fayda sağlamak amacıyla gerçekleştirilen uygulamalarla, kurumlara değer katmaktadır. Özel kurumlar kadar kamu kurumları ve yerel yönetimler KSS uygulamalarına önem vermektedir. Yerel yönetimlerin önemli bir birimi olan belediyeler de, uyguladıkları KSS faaliyetleri ile toplumun huzur ve refahına katkı sağlamayı, çalışanlarının motivasyonunu arttıracak çalışma ortamı sağlamayı hedeflemekte, imajlarını güçlendirmeye çalışmaktadırlar. Belediye yönetimleri, halkoyuları ile göreve geldikleri için, halkın desteğinin devamının sağlanması ve imajlarını güçlendirebilmeleri açısından son derece önemlidir. Özel kurumların KSS faaliyetlerini ele alan çok sayıda çalışma mevcuttur, ancak belediyelerin KSS projeleri ile ilgili çalışmalar sınırlıdır. Belediyelerin, özel kurumlardan farklı yapısal özellikleri, farklı faaliyet alanları gereği; KSS uygulamalarının değişen toplumsal koşullar/çevresel etkilerle şekillenmesi nedeniyle güncel KSS projelerinin değerlendirilmesi önemlidir. Ayrıca Covid-19 pandemi koşullarının belediyelerin KSS faaliyetlerini ne şekilde etkilediği de bilinmemektedir. Çalışma bu açıdan da önem taşımaktadır.

Bu çalışmanın amacı, Türkiye’de yerel belediyelerin KSS faaliyetlerini hangi alanlarda ve ne tür uygulamalarla gerçekleştirdiklerinin değerlendirilmesi ve özelliklerinin açıklanmasıdır. Çalışmada örneklem olarak seçilen Gemlik Belediyesi tarafından 2015-2020 yılları arasında gerçekleştirilen KSS projelerine içerik analizi uygulanmıştır. Bu kapsamda KSS projelerinin; süreleri, alanları, türleri, hedef kitleleri analiz edilmiş ayrıca 5 yıl kesintisiz şekilde sürdürülen projeler değerlendirilmiştir.

Araştırma sonucu elde edilen bulgular doğrultusunda Gemlik Belediyesi’nin beş yıllık süre içinde 75 KSS projesi uyguladığı görülmüştür. Bu projelerin 28’i, 1 yıl devam etmiş, 16 projenin kültür/sanat alanında, 13’ünün kamu yararına, 11’inin çevre, 9’unun ise eğitim alanında gerçekleştirildiği sonucuna ulaşılmıştır. Spor alanında herhangi bir projeye rastlanmamıştır. Projelerin 30’u sponsorluk, 11’i ise gönüllülük faaliyeti olarak gerçekleştirilmiştir. 5 yıldan uzun süreyle devam eden 4 proje bulunmaktadır; bunlardan 3’ü çevreye yönelik ve gönüllü uygulamalardır. Yine KSS kapsamında Gemlik Belediyesi tarafından Covid-19 pandemisi nedeniyle testi pozitif olan hastaların talebi halinde evleri dezenfekte edilmiş ve ihtiyaç sahiplerine gıda desteği sağlamıştır. Bir ilçe belediyesi olmasına rağmen Gemlik Belediyesi’nin önemli sayıda KSS projesi gerçekleştirdiği söylenebilir. Bu tür projeler devam ettirilmeli, uzun süreli projelerin ve pandemiden kaynaklı sorunlar için çözüm üreten projelerin sayısı artırılmalıdır.

**Anahtar sözcükler:** Kurumsal iletişim, Kurumsal sosyal sorumluluk, Gemlik Belediyesi

\* Kalkan, Ç. (2021). Basılmamış Dönem Projesi, Anadolu Üniversitesi Sosyal Bilimler Enstitüsü, Kurumsal İletişim Tezsiz Yüksek Lisans

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## **ABSTRACT**

Corporate social responsibility (CSR) activities, which are in the scope of corporate communication and are an important factor on creating and improving a corporate image, are adding value to corporations with practices carried out with the aim of benefiting the society. Both private and state corporations/ local governments are giving weight to CSR activities. Municipalities, important units of local governing, are aiming to contribute to societal well-being, strengthen their image and create an environment, which increases their worker's motivations and with the CSR activities they do. Since municipalities come to office by public votes, it is of vital importance for them to keep the support of the public and strengthen their image. There are plenty of researches that tackle the CSR activities of private corporations; however, the ones on the municipalities' CSR activities are limited. It is important to evaluate the current CSR projects of municipalities because of municipalities' different structural features from private corporations, their different fields of activity and the fact that CSR activities change depending on the societal/environmental conditions. Additionally, the effects of the COVID-19 pandemic on the CSR activities of municipalities are not known. This study is also important in this respect.

The aim of this study is to evaluate the kinds and fields of CSR activities carried out by the municipalities in Turkey and to explain their features. Content analysis is applied to the CSR projects done by the Gemlik Municipality, is chosen as the sample, between 2015-2020. The durations, fields, kinds and the target audiences of the CSR projects are analysed. Furthermore, the projects that have continued uninterruptedly for 5 years are evaluated.

According to the findings obtained by the research, it is found that Gemlik Municipality have carried out 75 CSR projects. It is also found that 28 of these projects went on for 1 year, 16 of them were in the field of culture/art, 13 of them were for the public interest, 11 of them were in the field of environment and 9 of them were in the field of education. No project in the field of sports were found. 30 of the projects were sponsored and 11 of them were voluntary. There are 4 projects that went on for more than five years, 3 of which are environmental and voluntary. The houses of those who were COVID-19 positive were disinfected by their request and food supplies were given to those in need by the Gemlik Municipality in the scope of CSR. It can be said that Gemlik Municipality did a considerable number of CSR projects despite being a district municipality. These projects should be continued and the number of projects that are long-term and are aiding the problems caused by the pandemic should be increased.

**Keywords:** Corporate Communication, Corporate Social Responsibility, Gemlik Municipality

## YÖNETİCİLERİN LİDERLİK TARZLARI İLE ÇALIŞANLARIN İŞ TATMİNİ ARASINDAKİ İLİŞKİNİN BELİRLENMESİ<sup>1</sup>

DETERMINING THE RELATIONSHIP BETWEEN LEADERSHIP STYLES OF MANAGERS AND EMPLOYEES' JOB SATISFACTION

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### ÖZET

İş tatmini, çalışanların verimli, başarılı ve istekli olarak çalışmaları olarak tanımlanabilir. Farklı motivasyon stilleri ve liderlik tarzları, her çalışmada farklı etkiye neden olur ve artan iş performansı ve iş tatmini ile sonuçlanabilmektedir. Örgüt yöneticilerinin sahip oldukları liderlik tarzları çalışanların iş tatminlerini olumlu ya da olumsuz etkileyebilmektedir. Liderlik görevi iyi düzeyde yapılandırılmışsa ve liderin çalışanlarla iyi bir ilişkisi varsa, örgütte çalışanların etkinlik ve verimliliği artabilecektir. Bu açıdan yöneticilerin benimsedikleri liderlik tarzları çalışanların iş tatminleri üzerinde etkili olabilmektedir. Bu çalışmada da yöneticilerin benimsedikleri liderlik tarzlarının çalışanların iş tatminleri üzerinde nasıl bir etkiye sahip olduğu araştırılmaya çalışılmıştır. Bu amaçla çalışmada yöneticilerin benimseyebileceği otokratik, demokratik, temsilci, dönüşümcü ve etkileşimci liderlik tarzları ile çalışanların iş tatminleri arasındaki ilişki belirlenmeye çalışılmıştır. Çalışmada amaçsal örnekleme yöntemi kullanılarak bir örneklem belirlenmiş ve çalışma bu örneklem üzerinden yürütülmüştür. Çalışmanın örneklemini KKTC (Kuzey Kıbrıs Türk Cumhuriyeti)'de bankalarda çeşitli görevlerde çalışan 429 banka çalışanı oluşturmaktadır. Çalışmada veri toplama yöntemi olarak anket yöntemi kullanılmıştır. Çalışmada çalışanların iş tatmin düzeylerini belirleyebilmek için Minnesota İş Tatmin Ölçeği ve yöneticilerin benimsedikleri liderlik tarzlarını belirleyebilmek için Liderlik Tarzı Davranışı Ölçeği kullanılmıştır. Yöneticilerin liderlik tarzları ile çalışanların iş tatminleri arasındaki ilişkiyi belirlemek amacıyla korelasyon analizi gerçekleştirilmiştir. Çalışma sonuçlarına göre temsilci, dönüşümcü ve etkileşimci liderlik özellikleri ile iş tatmini arasında anlamlı bir ilişki bulunamamıştır. Otokratik liderlik özellikleri ile iş tatmini arasında negatif yönlü ilişki olduğu tespit edilmiştir. Son olarak demokratik liderlik özellikleri ve iş tatmini boyutları arasında anlamlı ve pozitif yönlü bir ilişki olduğu saptanmıştır. KKTC bankacılık sektörü dikkate alınarak yapılan bu çalışmadan hareketle, demokratik liderlik tarzını benimsemiş yöneticilerin çalışanların iş tatminini pozitif yönde etkilediği söylenebilir. Otokratik liderler ise çalışanların iş tatminini demokratik liderliğin tam tersi şekilde olumsuz etkilemektedir.

**Anahtar kelimeler:** Liderlik Tarzları, Minnesota İş Tatmin Ölçeği, İş Tatmini.

### ABSTRACT

Job satisfaction is defined as working efficiently, successfully and willingly. Different factors such as the type of work done, co-workers, managers or subordinates, salary can affect job motivation and satisfaction. Different motivational and leadership styles have a different impact on each employee and result in increased job performance and job satisfaction. Therefore, job satisfaction is an essential element in any organization that motivates employees and encourages them to achieve better results. Leadership styles of organizational managers can affect the job satisfaction of employees positively or negatively. Leadership is defined as a process of social influence in which the leader seeks the voluntary participation of his subordinates to achieve the organizational goals he is in. It is an inevitable reality that today's organizations need effective leaders who

<sup>1</sup> Bu çalışma Yüksek Lisans öğrencisi Lütfi Emirsoyu'nun Dönem Projesinden hazırlanmıştır.

understand the complexities of the rapidly changing global environment. If the leadership task is well structured and the leader has a good relationship with the employees, the productivity and efficiency of the employees will be high. In this respect, the leadership styles adopted by the managers can be effective on the job satisfaction of the employees. In this study, it has been tried to investigate how the various leadership styles adopted by the managers have an effect on the job satisfaction of the employees. For this purpose, the relationship between the autocratic, democratic, representative, transformational and interactionist leadership styles that managers can adopt and the job satisfaction of the employees was tried to be determined in this study. In the study, a sample was determined using the purposive sampling method and the study was carried out on this sample. The sample of the study consists of 429 bank employees working in various positions in banks in the TRNC (Turkish Republic of Northern Cyprus). Questionnaire method was used as data collection method in the study. In the study, Minnesota Job Satisfaction Scale was used to determine the job satisfaction levels of the employees and the Leadership Style Behavior Scale was used to determine the leadership styles adopted by the managers. Correlation analysis was conducted in order to determine the relationship between the leadership styles of the managers and the job satisfaction of the employees. According to the results of the study, no significant relationship was found between representative, transformational and transactional leadership characteristics and job satisfaction. It has been determined that there is a negative relationship between autocratic leadership characteristics and job satisfaction. Finally, it was determined that there is a significant and positive relationship between democratic leadership characteristics and job satisfaction dimensions. Based on this study, which took into account the TRNC banking sector, it can be said that managers who have adopted the democratic leadership style affect the job satisfaction of the employees positively. Autocratic leaders, on the other hand, negatively affect the job satisfaction of their employees in the opposite way of democratic leadership.

**Keywords:** Leadership Styles, Minnesota Job Satisfaction Scale, Job Satisfaction.

## **PLAK ŞİRKETİ'NDEN MÜZİK MARKET'E: İŞLETME TARİHİ BAĞLAMINDA BİR ÖRNEK OLAY İNCELEMESİ**

**FROM THE PLAK COMPANY TO THE MUSIC MARKET: A CASE STUDY IN THE CONTEXT OF BUSINESS HISTORY**

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### **ÖZET**

Geniş anlamda işletme tarihi, bireysel firmaların tarihinden, bütün işletme sistemlerinin geçmişine kadar her konunun ele alınmasıdır. İşletmelerin, girişimcilerin ve iş sistemlerinin evrimlerinin; politik, ekonomik ve sosyal çevre ile etkileşimleri de işletme tarihi alanında incelenmektedir. Literatüre bakıldığında, işletme tarihi alanında yapılacak çalışmalarda sadece işletmelerin tarihinin değil, işletmelerin içerisinde bulunduğu politik, ekonomik ve sosyal bağlamın incelenmesinin önemine vurgu yapıldığı görülmektedir. Teknolojik fırsatlar ve piyasa koşullarının yönetsel yapıyı şekillendirdiği de bilinmektedir. Bahsi geçen önemden yola çıkılarak bu çalışmada, müzik endüstrisindeki bir işletmenin, içerisinde bulunduğu ekonomik, politik ve teknolojik bağlam ile etkileşimi incelenmektedir. Özellikle teknolojik dönüşümlerin müzik endüstrisi üzerindeki etkileri, Şenses Müzik Market örneği üzerinden analiz edilmektedir. Bu amaçla örnek olay incelemesi ve tarihsel anlatı yöntemlerine başvurulmaktadır. Çalışmada birincil ve ikincil kaynaklardan faydalanılmaktadır. Çalışmanın birincil kaynağını Şenses Müzik Market'in sahibi ile yapılan görüşmeler ve konu ile ilgili elde edilen dokümanlar oluşturmaktadır. Çalışmada yarı yapılandırılmış görüşme gerçekleştirilmiştir. İkincil kaynaklar ise işletmenin web sitesindeki bilgiler ve yerel gazetelerde yer alan haberlerdir. Çalışmanın güvenilirliği açısından, yazılı dokümanlardaki bilgiler ile görüşmede elde edilen bilgiler karşılaştırılarak, tümevarım ve tümdengelim muhakeme yöntemi bir arada kullanılmaktadır. Sonuç olarak Şenses Müzik Market'in tarihinden yola çıkılarak ele alınan bu çalışmada, mikro düzeydeki bir müzik perakendecisinin, makro düzeydeki ekonomik, politik, teknolojik ve kültürel bağlamlardan etkilendiği açıkça görülmektedir. Teknolojik gelişmeler her dönemde farklı ses kayıt cihazlarının ve bu sebeple farklı müzik tarzlarının ortaya çıkışına sebep olmuş; bu da müzik perakendecilerinin sürekli güncel gelişmelere adapte olmasını gerekli kılmıştır. Toplumun ekonomik durumu, maliyet açısından düşük olan kasetlerin tüketimini bir dönem artırmış, Türkiye'de bu durum kasetlerle birlikte Arabesk müziği popüler kültür ögesi haline getirmiştir. Siyasi yönelimler de müzik zevklerini etkilemiş, Cumhuriyetin kuruluş yıllarında Batı Müziğine dönük yönelim, çok partili dönemde ise Türk Müziğine doğru kaymıştır. Bu yönelim ise Türk albüm yapımcılarının işlerini önemli oranda artırmıştır. Bu dönemde Şenses Müzik Market'in de bant kayıt stüdyosu olmuştur. 2000'li yıllara geldiğinde hem ekonomik kriz hem de dijitalleşmenin sebep olduğu dönüşüm tüm plak/kaset yapımcı ve perakendecilerini olumsuz etkilemiş, müzik endüstrisindeki birçok işletme ürün çeşitlendirmeye başlamış, bazı plak yapımcıları arşivlerini dijital ortamlara aktarmaya başlamıştır. “Şenses Plak”ın da “Şenses Müzik Market”e dönüştüğü dönem bu dönemdir. Genel olarak dijital ortama geçiş yapan endüstri “dijital müzik endüstrisi” olarak varlığını sürdürmeye devam etmiştir. Bu çalışma, makro ölçekteki etkenlerin müzik endüstrisi üzerindeki etkisini, mikro ölçekte, Şenses Müzik Market örneği üzerinden analiz etmiş olup, işletme tarihi alanındaki boşluğu doldurması açısından önem arz etmektedir.

**Anahtar kelimeler:** İşletme tarihi, örnek olay incelemesi, tarihsel anlatı, müzik endüstrisi, mikro ölçek, makro ölçek.

### **ABSTRACT**

In a broad sense, business history is the study of everything from the history of individual firms to the history of entire business systems. The interactions of the evolution of businesses, entrepreneurs and business systems with the political, economic and social environment are also examined in the field of business history. In previous research it is seen that the importance of examining not only the history of the enterprises but also

the political, economic and social context in which the enterprises are located is emphasized for the studies to be conducted in the field of business history. It is also known that technological opportunities and market conditions shape the administrative structure. Based on the mentioned importance, this study examines the interaction of a business in the music industry with the economic, political and technological context. In particular, the effects of technological transformations on the music industry are analyzed through the example of Senses Music Market. For this purpose, case study and historical narratives methods are used. Primary and secondary sources are used in the study. The primary source of the study is the interviews with the owner of Senses Music Market and the documents obtained. A semi-structured interview was conducted in the study. Secondary sources are information on the company's website and news in local newspapers. In terms of the reliability of the study, inductive and deductive reasoning methods are used together by comparing the information in the written documents with the information obtained in the interview. As a result, in this study, which is based on the history of Senses Music Market, it is clearly seen that a music retailer at the micro level is affected by the economic, political, technological and cultural contexts at the macro level. Technological developments have led to the emergence of different sound recording devices and therefore different music styles in every period. This has made it necessary for music retailers to constantly adapt to current developments. The economic situation of the society has increased the consumption of cassettes, which are low in cost, for a while, and this situation in Turkey has made Arabesque music an element of popular culture along with cassettes. Political orientations also affected music tastes, the orientation towards Western Music in the founding years of the Republic shifted to Turkish Music in the multi-party period. This orientation has significantly increased the business of Turkish album producers. During this period, Senses Music Market also have owned a tape recording studio. By the 2000s, both the economic crisis and the transformation caused by digitalization had a negative impact on all record/cassette producers and retailers, many businesses in the music industry began to diversify their products, and some record producers began to transfer their archives to digital media. This is the period when "Senses Plak" turned into "Senses Music Market". In general, the industry that transitioned to digital media continued to exist as the "digital music industry". This study has examined the impact of macro-scale factors on the music industry, through a micro-scale example of the Senses Music Market. Therefore this study is important in terms of filling the gap in the field of business history.

**Keywords:** Business history, case study, historical narratives, music industry, micro context, macro context.

## TEKNOLOJİK GELİŞMELERİN GENÇ İŞSİZLİK ÜZERİNE ETKİLERİ

### THE EFFECTS OF TECHNOLOGICAL DEVELOPMENTS ON YOUTH UNEMPLOYMENT

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#### ÖZET

Geçmişten günümüze sürekli ilerleme kaydeden teknoloji, her geçen gün hayatımızın bütün alanlarını etkilemeye devam etmektedir. 18. yüzyılın sonlarına doğru ortaya çıkan, birinci sanayi devrimi ile başlayan dönüşüm süreci, ikinci ve üçüncü sanayi devrimlerinden sonra 2011 yılı olarak kabul edilen temelde inovasyonun olduğu sanal varlıklarla fiziksel varlıkların birleştiği Endüstri 4.0 olarak adlandırılan dördüncü sanayi devrimi ile birlikte büyük bir ivme kazanmıştır. Teknolojik gelişmelerin üretimde kullanımının artmaya başlaması ile üretim sürecinde emeğin yerini makineler almaya başlamıştır. Teknolojinin özellikle üretim ve istihdam üzerinde önemli etkileri bulunmaktadır. Her sanayi devriminde olduğu gibi teknolojik gelişmeler emek verimliliğini, işgücü piyasasını, çalışma hayatını ve toplumsal yapıyı derinden etkilemektedir. Teknoloji, dünya ekonomisinin geleneksel olarak ifade edilen birçok sektördeki istihdamı olumsuz etkilerken; yeni çalışma alanları yaratmaktadır. Devrim niteliğindeki teknolojik değişimler, geçmişte niteliksiz çalışanlar için yeni iş imkânları yaratırken, günümüzde özellikle bu grup için aynı düzeyde fırsatlar oluşturmamaktadır. Literatür incelendiğinde, teknolojik gelişmelerin iş gücü piyasası ve istihdam üzerinde yaratacağı etkiler ile ilgili farklı görüş ve sonuçların yer aldığı görülmektedir. Karamsar görüşe göre, teknolojik gelişmelerin kısa vadede teknolojik işsizliğe yol açarak, istihdamı daraltan bir etki yaratacağı savunulmaktadır. İyimser görüşte ise, teknolojik gelişmelerin uzun vadede yeni iş alanları ile işgücünün niteliğinin gelişimi üzerindeki olumlu etkisine dair çalışmalar mevcuttur. Teknolojinin gelişimi ve kullanım alanlarının yaygınlaşmasıyla, işgücünün niteliğinin artacağı üzerinde durulmaktadır. Ayrıca eğitim olanaklarına erişim fırsatlarının yaratılarak, emeğin atıl kullanılmasının önüne geçileceği belirtilmektedir. Emek arz ve talebinin bulunduğu, işgücü piyasasının ihtiyaç duyduğu, emeğin niteliğine ve çalışma şekillerine yönelik politikaların üzerinde durulması gerekliliği de bir diğer önemli unsur olarak görülmektedir. İşgücünün üretkenliğini arttıran teknolojik gelişmeler, işgücünün tasarrufunu sağlamasıyla üretim yöntemlerini arttırmaktadır. Bunun sonucunda ortaya çıkabilecek işsizlik sorununun üzerinde önemle durulması gerekmektedir. Bu çalışma ile geçmiş yıllarda teknolojik gelişmeler, teknolojinin iş gücü piyasası ve istihdam üzerinde meydana getirdiği etkilere değinilmekte ve özellikle genç işsizliği özelinde, işgücü piyasasına olan muhtemel etkilerin araştırılması amaçlanmaktadır. Bu amaç doğrultusunda, 2000 sonrasında genç işsizliğine ilişkin oranlar, farklı değişkenler göz önüne alınarak değerlendirilmektedir.

**Anahtar kelimeler:** Teknoloji, Endüstri 4.0, Genç İşsizlik.

#### ABSTRACT

Technology, which has made continuous progress from the past to the present, continues to affect all areas of our lives day by day. The transformation process, which emerged towards the end of the 18th century and started with the first industrial revolution, gained great momentum with the fourth industrial revolution called Industry 4.0, which is accepted as the year 2011 after the second and third industrial revolutions, in which virtual assets and physical assets are combined with innovation. With the increasing use of technological developments in production, machines have started to replace labor in the production process. Technology has significant effects especially on production and employment. As in every industrial revolution, technological developments deeply affect labor productivity, labor market, working life and social structure. While



technology negatively affects employment in many traditionally expressed sectors of the world economy; creates new workspaces. While revolutionary technological changes created new job opportunities for unskilled workers in the past, today they do not create opportunities at the same level especially for this group. When the literature is examined, it is seen that there are different opinions and results about the effects of technological developments on the labor market and employment. According to the pessimistic view, it is argued that technological developments will cause technological unemployment in the short run and have an effect that narrows employment. In the optimistic view, there are studies on the positive effect of technological developments on the development of new business areas and the quality of the workforce in the long run. It is emphasized that the quality of the workforce will increase with the development of technology and the spread of its usage areas. It is also stated that by creating opportunities for access to education opportunities, the idle use of labor will be prevented. Another important factor is the necessity of focusing on the quality of labor needed by the labor market, where labor supply and demand meet, and the need to focus on policies regarding working styles. Technological developments that increase the productivity of the workforce increase the production methods by saving the workforce. In this case, it is necessary to focus on the unemployment problem that may arise as a result. In this study, technological developments in the past years, the effects of technology on the labor market and employment are mentioned and it is aimed to investigate the possible effects on the labor market, especially for youth unemployment. For this purpose, the rates of unemployment after 2000 are evaluated by considering different variables.

**Keywords:** Technology, Industry 4.0, Youth Unemployment.



**DETERMINING THE IMPORTANCE LEVEL OF JOB SATISFACTION AND PERFORMANCE FACTORS**

**İŞ TATMINİ VE PERFORMANS FAKTÖRLERİNİN ÖNEM DÜZEYİNİN BELİRLENMESİ**

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**ABSTRACT**

Employee performance is closely related to business performance. It is extremely important to increase the performance of the business in order to increase the performance of the business, to gain a competitive advantage and to survive in tough competitive conditions. In order to increase the performance of the business, it is necessary to increase the satisfaction of the personnel. For this reason, it will be useful to know the factors of employee satisfaction and business performance and to determine their importance levels.

In this study, it was tried to determine the importance levels of the factors of employee satisfaction and business performance. For this, data were compiled and analyzed by face-to-face data collection method in the banking sector in Libya.

**Keywords:** Employee satisfaction, business performance, Libyan banking sector

**ÖZET**

İşgörenlerin performansı, işletme performansı ile yakından ilişkilidir. İşletme performansının yükseltilebilmesi, işletmenin rekabet avantajı elde edebilmesi ve zorlu rekabet koşullarında ayakta kalabilmesi için performansını artırması son derece önem arz etmektedir. İşletme performansının artırılabilmesi için de personel memnuniyetinin artırılması gereklidir. Bu nedenle işgören tatmini ve işletme performansı faktörlerinin bilinmesi ve bunların önem düzeylerinin belirlenmesi yararlı olacaktır.

Bu çalışmada işgören tatmini ve işletme performansı faktörlerinin önem düzeyleri belirlenmeye çalışılmıştır. Bunun için Libya'da bankacılık sektöründe yüzyüze veri toplama yöntemiyle veriler derlenmiş ve analiz edilmiştir.

**Anahtar kelimeler:** İşgören tatmini, işletme performansı, Libya banka sektörü

## YABANCI DİL KONUŞMA SINAVLARINDA UYGULANABİLECEK FARKLI DESENLERİN KARŞILAŞTIRILMASI

### COMPARING VARIOUS TASK DESIGNS IN SPEAKING TESTS

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#### ÖZET

Yabancı dil ölçümü yapanlar için öğrencilerin konuşma becerilerini test etmek, ölçme esnasında sorulan soruların içerikleriyle ilgili birçok hata meydana gelebileceğinden her zaman zor olmuştur. Konuşma sınavına giren aday sorulan bir soruyu yanıtlamada, değerlendirici sorduğu sorunun test etmeyi amaçladığı dil becerisinden başka şeyleri ölçmediğinden asla emin olamaz. Örneğin, konuşma sınavındaki bir öğrencinin “Sera etkisi hakkında ne düşünüyorsunuz?” gibi bir soruya cevabı “Bilmiyorum” ise, bu “bilmemenin” aslında neyi bilmemek olduğu nasıl belirlenebilir? Bu bilmemek “Sera Etkisi” terimi için mi, böylesi bir ısınmanın etkisi için mi yoksa bu sorunun ana dildeki karşılığı için mi dile getirildi? Bu sorunu çözebilmek için konuşma sınavlarında sınav içeriğine öğrencinin anadilinde hazırlanmış dinleme parçalarının veya okuma metinlerinin eklenmesi de dahil olmak üzere farklı test tasarımları, yaratıcı modeller eklenebilir. Böylece, yabancı dil konuşma becerilerinin değerlendirilmesinde sınavlara bazı bilişsel girdiler eklenerek daha geçerli ve anlamlı sınav içerikleri hazırlanabilir ve testler daha iyi sonuç verebilir hale getirilebilir. Bu çalışmada, öğrencilerin konuşma sınavlarında önce klasik yoldan (öğrencilere soruda geçen konu hakkında işitsel veya yazılı bilgi verilmeden) ardından bütünlük metotla (öğrencilere yazılı ve işitsel girdi sağlanarak) test edilmeleri ve ortaya çıkan yabancı dilde konuşma performanslarının karşılaştırılması amaçlanmıştır. Türkiye’deki bir devlet üniversitesinde eğitim gören ve çalışmaya gönüllü olarak katılan 29 düşük-orta seviye yabancı dil öğrencisinin konuşma sınavındaki sorulara verdikleri yanıtlar (29 klasik konuşma sınavı sorusu, 29 entegre konuşma sınavı sorusu) 6 uzman değerlendirici tarafından puanlanmıştır. Sonuçlar öğrenci puanlarının değerlendirme ölçeğinde yer alan organizasyon ve dilbilgisi gibi alt kategorilerde ayrı ayrı incelendiğinde farklı desenlerde önemli ölçüde değişmediğini, ancak toplam puanların entegre konuşma testi sorularında önemli ölçüde arttığını ve özellikle içerik ve kelime bilgisi kategorilerinde gözlemlenen puanların klasik yöntemle yapılan konuşma sınavında verilen puanlardan daha yüksek olduğunu ortaya koymuştur.

**Anahtar kelimeler:** Yabancı dil ölçümü, konuşma sınavları, geçerlik, klasik konuşma sınavları, entegre konuşma sınavları.

#### ABSTRACT

Testing language learners’ speaking skills has always been challenging for test designers since many task-relevant errors might occur during the assessment process. When a student cannot answer a speaking-test question, the rater could never be sure that the question measures nothing but the intended language skill. To illustrate, if a student’s answer is “I do not know.” to a question like “What do you feel about the Greenhouse Effect?”, how will we understand what this “not knowing” stands for? Is it for the term “Greenhouse Effect”, is it for the impact of this warming or is it for the meaning of this question in its native tongue? To be able to solve this problem, a number of testing designs could be used in oral-tests including the insertion of listening or reading skills. By this way, the assessment of foreign language speaking skills can be more valid and meaningful when some audial or written cognitive input is integrated to such tests. Thus, this study aimed to investigate students’ speaking performances first on independent tasks (no input for students) next on integrated tasks (written input is provided to students) to analyze whether raters’ scores assigned for speaking skills under different rubric components including content, organization, vocabulary and grammar change significantly. From the 29 low -intermediate level participants of this study (students of a language school of a state university in Turkey who participated in this study voluntarily) 58 responses (29 to an independent speaking task, 29 to an integrated speaking task) were scored by 6 expert graders. The results revealed that



students' overall speaking-test scores increased significantly in integrated speaking tasks. Moreover, it was observed that there were significant score differences in content and vocabulary components; whereas, no significant score difference was observed in organization and grammar components of the analytic rubric.

**Keywords:** Foreign language testing, speaking tests, validity, independent tasks, integrated tasks.

## ÇOK KÜLTÜRLÜ EĞİTİM ORTAMLARINDA ÜNİVERSİTE ÖĞRENCİLERİNİN YABANCI AKRANLARINDAN BEKLENTİLERİNİN KARŞILANMA DÜZEYİ

FULFILLMENT LEVELS OF THE EXPECTATIONS OF UNIVERSITY STUDENTS FROM THEIR FOREIGN STUDENT PEERS IN MULTICULTURAL EDUCATIONAL SETTINGS

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### ÖZET

Uluslararasılaşmış bireyler yetiştirmek, küreselleşmiş dünyanın eğitim alanına ilişkin en önemli gereklerinden biri olarak nitelenmektedir. Bu durumun, okul öncesi eğitimden yükseköğretime kadar her basamak açısından bir problem alanı olmakla birlikte, üniversalleşme kavramı ile yakın ilişkisinden dolayı özellikle üniversiteler açısından daha önemli bir sorun alanı oluşturduğu söylenebilir. Eğitim kurumlarının yapı ve işleyişi ile eğitim programlarına ve eğitim ortamlarına çok dillilik ve çok kültürlülüğün egemen olması, uluslararasılaşmış bireyler yetiştirmek açısından büyük önem arz etmektedir. Özellikle farklı dil ve kültürlerden gelen yabancı öğrencilerin birbiri ile iletişim ve etkileşimin nitelik ve niceliği, öğrencilerin uluslararası birey olma vasıflarını kazanmaları üzerinde önemli bir etken olarak değerlendirilmelidir. Bu çalışmanın amacı, uluslararası üniversitede öğrenim gören öğrencilerin yabancı arkadaşlarından beklentilerinin karşılanma düzeylerini belirlemektir. Böylelikle öğrencilerin uluslararası bireyler haline gelebilmelerinde üniversite eğitim ortamlarının katkısını artırabilmek üzere öğrenciler arası etkileşimin niteliğini iyileştirme doğrultusunda alınabilecek önlemlere ilişkin tespitlerde bulunmak amaçlanmıştır. Araştırma, nicel ve betimsel bir çalışma olup tarama modelinde yürütülmüştür. Uluslararası bir üniversite özelliği taşıyan Kırgızistan-Türkiye Manas Üniversitesinde lisans düzeyinde eğitim gören 260 öğrenci, araştırmanın örneklemini oluşturmaktadır. Veriler, araştırma kapsamında geliştirilen “Yabancı Öğrencilerden Beklentiler Ölçeği (YÖBÖ) Akran Değerlendirme Formu” ile toplanmıştır. Ölçek, 3 faktör altında toplanan 24 maddeyi içeren 5’li likert tipi bir veri toplama aracıdır. Ölçeğin güvenirlik katsayısı Conbach alpha 0,91’dir. Verilerin analiz edilmesinde aritmetik ortalama, standart sapma, bağımsız örneklem t testi, Anova ve Scheffe testi analizleri yapılmıştır. Anamlılık düzeyi açısından  $p < ,05$  düzeyi yeterli kabul edilmiştir. Araştırma sonunda ulaşılan sonuçlar şu şekilde özetlenebilir: (1) Öğrencilerin yabancı arkadaşlarından beklentileri 3 faktör açısından da orta düzeyde karşılanmakla birlikte değer verme ve yardımlaşma faktörü açısından karşılanma düzeyi daha düşüktür. (2) Erkek ve kadın öğrencilerin beklentilerinin karşılanma düzeyi yalnızca güven konusunda anlamlı düzeyde farklılaşmaktadır. Erkek öğrencilerin güven konusundaki beklentileri kadınlara göre daha az karşılanmaktadır. (3) Öğrencilerin öğrenim gördükleri fakülterlere göre beklentilerinin karşılanma düzeyleri farklılaşmaktadır. Beklentilerinin karşılanma düzeyi en düşük olan öğrenciler, Turizm ve Otelcilik Yüksekokulu öğrencileridir. (4) Öğrencilerin sınıf düzeylerine ve konuşabildikleri dil sayısına göre yabancı öğrencilerden beklentilerinin karşılanma düzeyi benzerlik göstermektedir. Araştırma sonunda bulgulardan yola çıkarak üniversite eğitim ortamlarının uluslararasılaşma ve öğrencilerin uluslararasılaşmasına daha fazla katkı sunabilmesine yönelik olarak üniversite yönetimine, öğretim elemanlarına ve diğer ilgililer ile farklı araştırmalara zemin oluşturmak üzere araştırmacılara yönelik önerilerde bulunulmuştur.

**Anahtar kelimeler:** Uluslararasılaşma, çok kültürlülük, üniversite, yabancı öğrenci, akran beklentisi

### ABSTRACT

Raising internationalized individuals is characterized as one of the most significant requirements of the globalized world regarding the field of education. Although this situation is a problem area in terms of all stages from pre-school education to higher education, it can be stated that it creates a more important problem area in particular for universities due to its close relationship with the concept of universalization. The structure and operation of educational institutions as well as the dominance of multilingualism and multiculturalism in educational programs and settings bear great importance in terms of raising internationalized individuals.



Particularly the quality and quantity of communication and interaction among foreign students coming from different cultures and speaking different languages should be considered as an important factor in students gaining the qualifications to become international individuals. Accordingly, this study aims to identify the level of the fulfillment of the expectations of students enrolled in an international university from their foreign peers. Therefore, in order to increase the contribution rate of higher educational settings to the ability of students to become international individuals, this study aims to identify the measures that can be taken in line with improving the quality of interaction among students. The study adopted a quantitative and descriptive research design and a screening model was used for the study. A total of 260 students studying at the undergraduate level at Kyrgyz-Turkish Manas University, which is an international university, participated in this study. Data came from the “Expectations from Foreign Students Scale (EFSS) Peer Evaluation Form” developed within the scope of this study. The scale is a 5-point Likert-type data collection tool including 24 items organized under 3 factors. Regarding the reliability coefficient of the scale, Cronbach’s alpha coefficient of internal consistency value was 0.91. Data were analyzed by performing arithmetic means, standard deviation, independent samples t-test, ANOVA and Scheffe tests. A significance level of  $p < .05$  was set for all the analyses. The findings of this study can be summarized as follow: (1) The expectations of students from their foreign friends are met at a moderate level in terms of 3 factors, yet the fulfillment level is lower in terms of the value and cooperation factors. (2) The fulfillment level of the expectations of male and female students differs significantly only in terms of the trust factor. The expectations of male students about trust are met less often than those of females. (3) The fulfillment level of students' expectations differs across faculties where they study. Those with the lowest level of satisfaction of their expectations are the students enrolled in the Tourism and Hotel Management School. (4) The fulfillment level of students' expectations from foreign students is congruent with regard to the grade levels and the number of languages they can speak. Based on the findings, suggestions are made for the university administration, faculty members, and other stakeholders to create the basis for future studies to contribute more to the internationalization of higher educational settings and the internationalization of students.

**Keywords:** Internationalization, multiculturalism, university, foreign student, peer expectation.

## PANDEMİ DÖNEMİNDE UZAKTAN EĞİTİM SONRASI YÜZ YÜZE EĞİTİM: ÖĞRETMEN GÖRÜŞLERİ

FACE-TO-FACE EDUCATION AFTER DISTANCE EDUCATION DURING THE PANDEMIC PERIOD: TEACHER OPINIONS

**Güler GÖÇEN KABARAN**

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### ÖZET

1 Aralık 2019'da Çin'in Wuhan kentinde ortaya çıkan ve ardından tüm dünyayı etkisi altına alan virüs, küresel bir salgın haline gelmiştir. Pandeminin olumsuz etkilerini artırmamak için eğitim sistemleri yüz yüze eğitime ara vermek zorunda kalmıştır. Türkiye'de de pandemi, yüz yüze eğitimin her düzeyde durmasına ve uzaktan eğitime devam edilmesine neden olmuştur. Pandeminin seyrine göre bazı seviyelerde birkaç günlüğüne yüz yüze eğitimler başlasa da bu geçişler uzun sürmemiştir. Ülkedeki vaka sayısındaki artış nedeniyle 2021-2022 eğitim öğretim yılına kadar genel olarak uzaktan eğitimle devam edilmiştir. Mevcut eğitim dönemi için ise tüm kademelerde yüz yüze eğitim tam zamanlı olarak başlamıştır. Ancak bunun eskisi gibi bir yüz yüze eğitim olmayacağı söylenebilir. Çünkü pandemi hala devam etmektedir ve uzun süredir uzaktan eğitimle yürütülen bir süreç sonunda yüz yüze eğitime geçilmiştir. Bu bağlamda uzun süredir devam eden uzaktan eğitimin ve salgın sürecinin devam ediyor olmasının bu süreci nasıl etkilediği merak konusudur. Bu durum araştırmanın problem durumunu oluşturmaktadır. Bu araştırmanın amacı, pandemi döneminde öğretmenlerin uzaktan eğitim sonrası yüz yüze eğitime ilişkin görüşlerini belirlemektir. Araştırma nitel araştırma yöntemlerinden biri olan durum çalışmasına dayalıdır. Araştırmanın katılımcıları Muğla ilinde görev yapan 12 sınıf öğretmenidir. Katılımcıları belirlemek için maksimum çeşitlilik örnekleme kullanılmıştır. Bu kapsamda her sınıf düzeyinden üçer öğretmen çalışmaya dâhil edilmiştir. Araştırma verilerini elde etmek için yazılı görüş formu kullanılmıştır. Bu kapsamda görüş formu soruları araştırmacı tarafından hazırlanmış ve sorular için uzman görüşü alınmıştır. Görüş formu öğretmenlere online olarak gönderilmiş ve veriler elde edilmiştir. Verilerin analizinde betimsel ve içerik analizi kullanılmıştır. Elde edilen bulgulara göre öğretmenlerin bir kısmının pandemi döneminde tam zamanlı yüz yüze eğitime geçme kararını olumlu bir kısmının ise olumsuz karşıladığı belirlenmiştir. Öğretmenlerin bu süreçte maske ile ders anlatımı, çocukların pandemi kurallarına uymaması, sınıf yönetimi problemleri, öğrencilerde okul kültürünün unutulması gibi birtakım sorunlar yaşadıkları sonucuna ulaşılmıştır. Bununla birlikte öğretmenler genel olarak yüz yüze eğitimin öğrenciler için daha faydalı olduğunu belirterek pandemi devam ettiği için ders sürelerinin azaltılması gerektiğini belirtmişlerdir.

**Anahtar kelimeler:** Yüz yüze eğitim, uzaktan eğitim, pandemi, covid-19.

### ABSTRACT

The virus, which emerged in Wuhan, China on December 1, 2019 and then affected the whole world, has become a global epidemic. In order not to increase the negative effects of the pandemic, education systems had to take a break from face-to-face education. In Turkey, the pandemic has caused face-to-face education to cease at all levels and to continue distance education. Although face-to-face training started for a few days at some levels according to the course of the pandemic, these transitions did not last long. Due to the increase in the number of cases in the country, distance education was generally continued until the 2021-2022 academic year. For the current education period, face-to-face education has started on a full-time basis at all levels. However, it can be said that this will not be a face-to-face training as it used to be. Because the pandemic is still going on, and after a long distance education process, face-to-face education has been started. In this context, it is a matter of curiosity how the long-standing distance education and the ongoing epidemic process affect this process. This situation constitutes the problem situation of the research. The aim of this research is to determine the opinions of teachers about face-to-face education after distance education during the pandemic period. The study was based on case study, one of the qualitative research methods. The participants of the



research are 12 classroom teachers working in Muğla. Maximum diversity sampling was used to determine the participants. In this context, three teachers from each grade level were included in the study. Written opinion form was used to obtain the research data. In this context, opinion form questions were prepared by the researcher and expert opinion was taken for the questions. The opinion form was sent to the teachers online and the data were obtained. Descriptive and content analysis were used in the analysis of the data. According to the findings, it was determined that some of the teachers welcomed the decision to switch to full-time face-to-face education during the pandemic period, and some of them negatively. In this process, it was concluded that the teachers experienced some problems such as lecturing with masks, children not following the pandemic rules, classroom management problems, and forgetting the school culture in students. However, teachers stated that face-to-face education is more beneficial for students in general and stated that lesson times should be reduced as the pandemic continues.

**Keywords:** Face-to-face education, distance education, pandemic, covid-19.

## İKİ DİLLİLİK EĞİTİM SÜRECİNDE BİR AVANTAJ MI?

### IS BILINGUALISM AN ADVANTAGE IN THE EDUCATIONAL PROCESS?

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#### ÖZET

Modern dünya koşullarında birden fazla dil bilmenin birçok alanda önemli bir ihtiyaç olduğu bilinmektedir. İş hayatı, akademik çalışmalar, turistik seyahatler, sosyal medya kullanımı gibi çeşitli alanlarda birden fazla dil bilmek kişiye kolaylık sunarken aynı zamanda kişinin bireysel gelişimini de desteklemektedir. Farklı bir dil bilmek aynı zamanda farklı bir kültürün de içine girmek ve dünyaya farklı bir pencereden bakabilmek işlevini yerine getirmektedir. Farklı bir dil bilmek, kişinin kendi sınırlarının dışına çıkarken aynı zamanda yeni bir gerçekliği keşfetme sürecidir. Bu süreç kişinin dünya görüşünün zenginleşmesi ve farklı toplumlardan bireylerle etkileşime girebilmesini, bilgi alışverişinde bulunabilmesini desteklemektedir. Kişinin dil aracılığıyla kendini doğru ifade edebilmesi, alıcılardan gelen mesajları doğru anlayıp yorumlayabilmesi toplum içinde de etkili, etkin ve başarılı iletişim kurmanın temel basamağı olarak kabul edilmektedir. Birden fazla dil bilen kişilerin sosyal ve iletişim becerilerinin tek dil bilenlere oranla çok daha gelişmiş olduğu kabul edilmektedir. Ancak birden fazla dil bilmenin her zaman avantaj sağlamadığı, hatta kişinin zorluklarla karşılaştığı alanların varlığı da göz ardı edilemez. Bu alanların başında öncelikli olarak eğitim ve öğretim karşımıza çıkmaktadır. İki dilli kişilerin, özellikle çocukluk döneminde ilköğretim basamağındaki okul ve eğitim hayatlarında birtakım zorluklar yaşadığı günümüzde bilinen bir gerçektir. Son yıllarda yapılan güncel alan yazın çalışmaları iki dilli çocukların eğitim ve öğretim süreçlerinde derslerde başarı oranı, derslere ilgi ve katılım, sınıf içi etkinliklerde gösterilen performans gibi konularda bazı zorluklar yaşadığını ortaya koymaktadır. Özellikle okulda eğitim aldığı dil ile okul dışında, aile içinde ve sosyal hayatta kullandığı dil farklı olan iki dilli çocuklar bu çerçevede öne çıkmaktadır. Bu çalışmanın amacı sözü geçen kategoride yer alan iki dilli çocukların küçük yaşlardaki eğitim süreçlerinde okulda yaşadığı zorlukların altını çizmek, bu zorlukların altında yatan nedenleri ortaya koymak ve bu duruma çözüm olabilecek uygulanabilir ve gerçekçi önerileri tartışmaktır.

**Anahtar kelimeler:** İki dilli çocuklar, eğitim ve öğretim.

#### ABSTRACT

It is known that in the modern world conditions, knowing more than one language is an important need in many fields. Knowing more than one language in various fields such as business life, academic studies, touristic travels, and the use of social media provides convenience to the person and also supports the individual development of the person. Knowing a different language also fulfills the function of entering a different culture and looking at the world from a different perspective. Using a different language is a process of discovering a new reality while going beyond one's own boundaries. This process supports the enrichment of one's worldview and the ability to interact and exchange information with individuals from different societies. The ability to express oneself correctly through language, to understand and interpret the messages received from the recipients correctly, is accepted as the basic step of effective, effective and successful communication in the society. It is accepted that the social and communication skills of people who speak more than one language are much more developed than those who speak one language. However, it cannot be ignored that there are areas where knowing more than one language is not always advantageous, and even where one encounters difficulties. Education and learning come first among these areas. It is a known fact that bilingual people experience some difficulties in their school and education life, especially during childhood. Recent literature studies reveal that bilingual children experience some difficulties in their education and learning processes, such as their success rate in lessons, interest and participation to lessons, and performance in classroom activities. In this context, bilingual children come to the fore in particular, whose language they





are educated in school is different from the language they use outside of school, in the family and in social life. The aim of this study is to underline the difficulties experienced by bilingual children in the aforementioned category during their primary education at school, to reveal the underlying causes of these difficulties and to discuss practical and realistic suggestions that can be a solution to this situation.

**Keywords:** Bilingual children, education and learning.

## ORTAÖĞRETİM ÖĞRETMENLERİNİN ÖRGÜTSEL SESSİZLİĞE YÖNELİK GÖRÜŞLERİNİN FARKLI DEĞİŞKENLER AÇISINDAN İNCELENMESİ

### EXAMINATION OF SECONDARY EDUCATION TEACHERS' VIEWS ON ORGANIZATIONAL SILENCE IN TERMS OF DIFFERENT VARIABLES

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#### ÖZET

İnsanlık zaman içinde birlikte yaşamanın gereği olarak örgütlenme ihtiyacı duymuştur. Zamanla insanların kurdukları bu örgütler önem kazanmış ve örgütlerin başarısı için çeşitli çalışmalar yapılmıştır. Örgütlenmenin içinde huzursuzluk verebilecek olan etkenler belirlenip bunları çözmek için çalışmalar yapılmıştır. Örgüt başarısını ve kalitesini arttırmak için önlenmesi gerekli görülen konulardan biri de örgütsel sessizlik olarak görülmüştür. Örgütsel sessizlik, örgüt içindeki işleyiş açısından önem arz eden bir duruma karşı gerekli olan tepkiyi göstermeme, çok, az veyahut hiçbir şey söylememe tutumunu ifade eder. Bu çalışmanın amacı ortaöğretim kurumlarında görev yapan öğretmenlerin örgütsel sessizliğe dair görüşlerinin farklı değişkenler açısından incelenmesidir. Nicel araştırma yöntemlerinden betimsel tarama modeli ile desenlenmiş olan bu araştırmanın örneklemini İstanbul ili Başakşehir ilçesinde görev yapmakta olan 322 öğretmenden oluşmaktadır. Uygulanan parametrik testler değerlendirildiğinde (i) cinsiyet açısından, kadın öğretmenlerin örgütsel sessizliğin geneli ile okul ortamı, duygu, sessizliğin kaynağı ve yönetim altboyutlarına yönelik görüşlerinin erkek öğretmenlerden istatistiksel olarak daha yüksek olduğu; (ii) medeni durum açısından, evli öğretmenlerin izolasyon altboyutuna ilişkin görüşlerinin bekar öğretmenlerden istatistiksel olarak daha yüksek olduğu; (iii) kadro türü açısından, kadrolu öğretmenlerin okul ortamı altboyutuna ilişkin görüşlerinin sözleşmeli öğretmenlerden istatistiksel olarak daha yüksek olduğu tespit edilmiştir. Bunların yanı sıra, (iv) öğretmenlerin izolasyon altboyutuna ilişkin görüşlerinin yaş değişkenine göre farklılaştığı görülse de uygulanan post-hoc testi sonucunda bu farkın anlamlı olmadığı görülmüştür. Ayrıca (v) öğretmenlerin görüşlerinin eğitim durumu ve kıdeme göre anlamlı farklılık göstermediği tespit edilmiştir. Bu durumda, kadın ortaöğretim öğretmenlerinin örgütsel sessizliğin varlığına ilişkin daha fazla görüşe sahip oldukları; evli olan ortaöğretim öğretmenlerinin sadece izolasyon boyutuna dair görüşlerinin diğerlerinden farklılık gösterdiği ve kadrolu ortaöğretim öğretmenlerinin, sözleşmeli ortaöğretim öğretmenlerine kıyasla okul ortamındaki sessizliğin varlığına dair daha fazla görüş bildirdikleri; ancak, farklı yaş, eğitim durumu veya kıdeme sahip ortaöğretim öğretmenlerinin örgütsel sessizliğe dair görüşlerinin farklılaşmadığı söylenebilir. Elde edilen bu bulgular alanyazın ile kıyaslandığında benzer farklı sonuçlar olduğu görülmüş ve çalışma sonuçlarına bağlı olarak gelecek araştırmalar için öneriler sunulmuştur.

**Anahtar kelimeler:** Ortaöğretim kurumu, öğretmen, örgütsel davranış, örgütsel sessizlik.

#### ABSTRACT

Humanity has felt the need for organization over time as a requirement of living together. Over the years, these organizations established by people have gained importance and various studies have been carried out for the success of organizations. Factors that may cause uneasiness in the organization have been determined and many studies have been carried out to solve them. One of the issues that seems to be necessary to prevent in order to increase the success and quality of the organization is seen as organizational silence. Organizational silence refers to the attitude of not showing the necessary reaction to a situation that is important for the functioning of the organization, not saying much, little or nothing. The aim of this study is to examine the

views of teachers working in secondary education institutions on organizational silence in terms of different variables. The sample of this research, which was designed with the descriptive survey model, which is one of the quantitative research methods, consists of 322 teachers working in Başakşehir district of Istanbul. When the applied parametric tests were evaluated, the following findings were determined: (i) In terms of gender variable, female teachers' views on organizational silence in general and on the sub-dimensions of school environment, emotion, source of silence and management were statistically higher than male teachers; (ii) in terms of marital status variable, married teachers' views on the isolation sub-dimension were statistically higher than single teachers; (iii) in terms of staff type, permanent teachers' views on the school environment sub-dimension were statistically higher than nontenured teachers. In addition to these, (iv) it was seen that the opinions of the teachers on the isolation sub-dimension differed according to the age variable, but as a result of the post-hoc test applied, this difference was not significant. Moreover, (v) it has been determined that the views of teachers do not differ significantly according to education level and seniority. In this case, it can be claimed that female secondary education teachers have more views on the existence of organizational silence; the opinions of married secondary education teachers only on the dimension of isolation differ from the others, and permanent secondary education teachers report more opinions on the existence of silence in the school environment compared to nontenured teachers; while the opinions of secondary education teachers of different ages, educational background or seniority on organizational silence do not differ from each other. When these findings were compared with the literature, it was seen that there were similar and different results and suggestions for future research were presented depending on the results of the study.

**Keywords:** Secondary education institution, teacher, organizational behavior, organizational silence.

## PANDEMİ DÖNEMİNDE UZAKTAN EĞİTİME YÖNELİK VELİ GÖRÜŞLERİNİN İNCELENMESİ

INVESTIGATION OF PARENTS' VIEWS ON DISTANCE EDUCATION DURING THE PANDEMIC  
PERIOD

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### ÖZET

Covid-19 (koronavirüs) pandemisi 2019 yılında Çin'de ortaya çıkmış ve 2020 yılı itibari ile nerdeyse tüm ülkeleri etkisi altına almıştır. Türkiye'de ilk koronavirüs vakası 11 Mart 2020 tarihinde ortaya çıkmıştır. Bunun üstüne Sağlık bakanlığı koordinesinde alınan kararlar ile Milli eğitim Bakanlığı 16 Mart 2020 tarihinden itibaren ilk, orta ve lise düzeyindeki okullarda yüz yüze eğitime iki hafta ara verilmesine karar vermiştir. Ancak sonrasında koronavirüs salgının artmasından dolayı eğitim-öğretim faaliyetlerinin bahar döneminin tamamen uzaktan eğitim aracılığıyla tamamlanmasına karar verilmiştir. MEB tarafından uzaktan eğitim sürecinde, Eğitim Bilişim Ağı (EBA) ana platform olarak seçilmiştir. Ayrıca üç TV kanalı üzerinden video dersler ile belli bir program çerçevesinde uzaktan eğitimi devam ettirmiştir. Bunlarla birlikte farklı tedbirler ve destekler sağlanarak sürecin sağlıklı işlemesi için çalışmalar yürütülmüştür. Hem öğretmenler hem öğrenciler hem de veliler sürece hazırlıksız yakalanmışlardır. Uzaktan eğitim sürecinde sahip olunan teknolojik imkânlar, teknoloji kullanım yeterliği, iletişim, anne-babaların çalışma durumları, sosyo-ekonomik düzey gibi birçok faktörden kaynaklı sorunlar ortaya çıkmıştır. Özellikle anne-babalar uzaktan eğitim sürecinde öğrencilerle sürekli bir arada bulunarak onların eğitimleri ile ilgilenmişler ve yaşanan sorunları çözmeye çalışmışlardır. Bu doğrultuda araştırmanın amacı, MEB tarafından yürütülen pandemi döneminde uzaktan eğitim sürecine ilişkin ilkokul velilerinin görüşlerinin incelenmesidir. Araştırmada, nitel araştırma yaklaşımlarından olgubilim deseni kullanılmıştır. Araştırmanın çalışma grubunda 16 Mart 2020 tarihinde yüz yüze eğitime ara verilip uzaktan eğitime başlayan ilkokul öğrencilerinin velisi olan 50 kişi yer almıştır. Araştırma verilerinin toplanmasında araştırmacılar tarafından oluşturulan online görüşme formu kullanılmıştır. Elde edilen verilerin analizinde içerik analizi yöntemi kullanılmıştır. Araştırmada elde edilen bulgular velilerin, pandemi döneminde ilkokullarda uygulanan uzaktan eğitim sürecine yönelik değerlendirmeleri, süreçte yaşanan sorunlar ve çözüm önerileri başlıkları altında toplanmıştır. Katılımcıların bazılarının evlerinde sadece akıllı telefon ve televizyon araçlarına sahip olduğu bazılarının ise evlerinde dizüstü bilgisayar veya tablet olmasına rağmen evde birden fazla çocuk olduğu için donanım sorunu yaşadığı belirlenmiştir. Veliler, pandemi sürecinde öğrencilerin eğitimlerinin aksamaması adına uzaktan eğitime geçişin etkili olduğunu ancak özellikle alt yapı yetersizliğinden dolayı canlı derslerde ve EBA'ya girişlerde sorunların yaşandığını belirtmişlerdir. Okulların kapanmasından sonra uzaktan eğitim ilk başta ağırlıklı olarak EBA TV kanalları aracılığıyla verilmiştir. Veliler özellikle tv üzerinden verilen eğitimlerin sürelerinin yeterli olmadığını belirtmişlerdir. Veliler uzaktan eğitim sürecinde yaşanan sorunların çözümü için internet alt yapısının güçlendirilmesini, öğrencilerin ve öğretmenlerin ücretsiz teknolojik araç-gereç ve internet paketleri ile desteklenmelerini, derslerin canlı yapılmasını, ölçme ve değerlendirme etkinliklerinin yapılmasını önermişlerdir. Çalışmada elde edilen bulgular dağrultusunda öncelikle uzaktan eğitimin verimli olabilmesi için tüm öğrencilere ve öğretmenlere gerekli teknolojik donanımın sağlanması, tüm eğitim paydaşlarının teknopedagojik bilgilerinin artırılması, TV üzerinden verilen eğitimlerde her sınıf düzeyi için ayrı bir kanal kurulması, derslerin canlı yapılması önerilebilir.

**Anahtar kelimeler:** Covid-19, uzaktan eğitim, ilkokul, veli.

## ABSTRACT

The Covid-19 (coronavirus) pandemic emerged in China in 2019 and has affected almost all countries as of 2020. The first coronavirus case in Turkey emerged on March 11, 2020. On top of that, with the decisions taken under the coordination of the Ministry of Health, the Ministry of National Education decided to suspend face-to-face education in primary, secondary and high school schools for two weeks as of 16 March 2020. However, due to the increase in the coronavirus epidemic, it was decided to complete the spring semester of education and training activities completely through distance education. The Education Information Network (EIN) was chosen as the main platform by the Ministry of National Education in the distance education process. In addition, it continued distance education within the framework of a certain program with video lessons over three TV channels. In addition to these, various measures and supports were provided and studies were carried out to ensure the healthy functioning of the process. Both teachers, students and parents were caught unprepared for the process. In the distance education process, problems have arisen due to many factors such as technological opportunities, technology use proficiency, communication, working status of parents, socio-economic level. Particularly, the parents were always together with the students during the distance education process, they were interested in their education and tried to solve the problems experienced. In this direction, the aim of the research is to examine the views of primary school parents on the distance education process during the pandemic period carried out by the Ministry of National Education. In this research, phenomenological research design, one of qualitative research approaches, is used for research model. The study group of the research included 50 parents of primary school students who stopped face-to-face education on March 16, 2020 and started distance education. As for data analysis, content analysis method was used in this study. The findings obtained in the study were gathered under the headings of parents' evaluations of the distance education process applied in primary schools during the pandemic period, problems experienced in the process and solution suggestions. It has been determined that some of the participants only have smart phones and television devices at home, while others have hardware problems because there are more than one child at home, although they have a laptop or tablet at home. Parents stated that the transition to distance education was effective in order not to disrupt the education of students during the pandemic process, but there were problems in live lessons and entrance to EIN, especially due to the lack of infrastructure. After the closure of schools, distance education was initially provided mainly through EBA TV channels. Parents especially stated that the duration of the training given on TV was not sufficient. The parents suggested that the internet infrastructure should be strengthened, students and teachers should be supported with free technological tools and internet packages, the lessons should be held live, and measurement and evaluation activities should be carried out in order to solve the problems experienced in the distance education process. In line with the findings obtained in the study, first of all, it can be recommended to provide all students and teachers with the necessary technological equipment in order for distance education to be efficient, to increase the technopedagogical knowledge of all education stakeholders, to establish a separate channel for each class of students in the trainings given over TV, and to conduct the lessons live.

**Keywords:** Covid-19, distance education, primary school, parent.

## ÖZEL GEREKSİNİMLİ BİREYLERİN BAĞIMSIZ YAŞAMA GEÇİŞLERİNDE VE KARIYER GELİŞİMLERİNDE EĞİLİMLER

### TRENDS IN TRANSITION TO INDEPENDENT LIVING AND CAREER DEVELOPMENT OF INDIVIDUALS WITH SPECIAL NEEDS

Caner KASAP

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#### ÖZET

Özel gereksinimli bireyler bilişsel, fiziksel ve duygusal özellikleri bakımından akranlarından farklılıkları olan bireylerdir. Zihin yetersizliği, otizm sepektrum bozukluğu, duygu durum bozukluğu, dikkat eksikliği ve hiperaktivite bozukluğu, işitme yetersizliği, görme yetersizliği, ortopedik yetersizlik gibi yetersizliklere sahip bireylerin yanı sıra üstün yetenekli bireyler de özel gereksinimli olarak tanımlanabilir. Söz konusu farklılıklarından dolayı özel gereksinimli bireyler özel desteğe gereksinim duymaktadır. Bu destekler özel gereksinimli bireylere sunulan etkili müdahaleler ve uyarlamalar şeklinde olmaktadır. Söz konusu desteklerin sağlanmasındaki nihai amaç özel gereksinimli bireylerin okul sonrası bağımsız yaşama geçişlerini kolaylaştırmaktır. Bağımsız yaşam, bireylerin bir başkasına muhtaç olmadan hayatını sürdürebilmesi için gerekli becerilere sahip olmasıdır. Bu doğrultuda özel gereksinimli bireylerin bağımsız yaşama hazırlanmaları okul dönemindeki amaçların temelini oluşturmaktadır. Bu dönemde gerçekleştirilen etkili uygulamalar ve belirlenen işlevsel amaçlar özel gereksinimli bireylerin bağımsız yaşama geçişlerine hizmet etmektedir. Bu noktada söz konusu uygulamaların ve amaçların ortaya koyulması alandaki uygulayıcılara yön göstermesi bakımından önemlidir. Bu doğrultuda bu araştırmanın amacı özel gereksinimli bireylerin bağımsız yaşama geçişleri ve kariyer gelişimleri konusunda önemli çalışmaların yayınlandığı “Career Development and Transition for Exceptional Individuals (CDTEI)” dergisinde son altı ayda en çok indirilen ve okunan araştırmaların incelenmesidir. Söz konusu dergi özel gereksinimli bireylerin bağımsız yaşama geçişleri ve kariyer gelişimleri konusunda çalışmaların yayınlandığı uluslararası hakemli bir dergidir. Alanda saygın bir noktada olması nedeniyle söz konusu dergi incelenmek üzere seçilmiştir. Söz konusu dergide Nisan ve Ekim 2021 tarihleri arasında en çok okunan ve indirilen 50 makale incelenmiştir. Bu doğrultuda incelenen toplam 50 araştırmanın 14’ünün araştırma makalesi olmamasından dolayı çalışma kapsamında alınmadığı söylenebilir. İncelenen 36 araştırmanın 19’u nicel/deneysel araştırma, yedisi sistematik derleme, dördü tek denekli araştırma, üçü nitel araştırma, üçü çok yöntemli araştırma türündedir. Araştırmaların konuları incelendiğinde dokuz araştırmanın destek eğitim programlarını, dokuz araştırmanın geçiş sürecinde var olan durumu belirlemeyi, yedi araştırmanın okul sonrası başarının yordayıcılarını ortaya koymayı, beş araştırmanın teknoloji kullanımını, üç araştırmanın kanıt temelli araştırmaları, üç araştırmanın personel desteğini konu aldığı görülmektedir. Sonuç olarak araştırmalarda özel gereksinimli bireylerin bağımsız yaşama geçişlerinde ve kariyer gelişimlerinde var olan durumların belirlenmesinin ve paydaşları desteklemeye yönelik programların geliştirilmesinin amaçlandığı ifade edilebilir.

**Anahtar kelimeler:** Özel gereksinimli bireyler, Bağımsız yaşama geçiş, Kariyer gelişimi.

#### ABSTRACT

Individuals with special needs are different from their peers in terms of their intellectual, physical and emotional characteristics. Individuals with intellectual disability, autism spectrum disorders, emotional disorders, attention deficit and hyperactivity disorders, hearing impairment, visual impairment and orthopedic disability and gifted ones can also be defined as individuals with special needs. These individuals need special support because of their differences. These supports are effective interventions and adaptations that are implemented to the individuals with special needs. The main purpose of these supports is to promote the transition process to the independent living for these individuals. Independent living can be described as having the skills which are essential for living without dependence on anyone else. In this direction, the preparation



of the individuals with special needs for independent living forms the basis of the goals in the school period. In this period, the effective practices carried out and the functional goals determined served the transition of the individuals with special needs to the independent living. At this point, it is important to determine the effective practices and and goals in terms of guiding the practitioners in the field. In this direction, the aim of this study is to examine the most downloaded and read articles in the last six months in the “Career Development and Transition for Exceptional Individuals (CDTEI)” journal, which publishes important studies on the transition to independent living and career development of individuals with special needs. The aforementioned journal is an international peer-reviewed journal in which studies on the transition to independent living and career development of individuals with special needs are published. This journal has been selected for review because it is at a respected point in the field. The 50 most read and downloaded articles between April and October 2021 were reviewed in this journal. Accordingly, it can be said that 14 of the 50 studies examined in this journal were not included in this study because they were not research articles. 19 of the examined 36 studies were quantitative/experimental research, seven were systematic review, four were single-subject research, three were qualitative research and three were multi-method study. When the subjects of the studies are examined, it can be said that nine studies are about support education programs, nine studies are about determining the situation in the transition period, seven studies are about determining the predictors of success after school, five studies are about the use of technology, three studies are about evidence-based research and three studies are about personel support. As a result it can be stated that the studies aim to determine the existing situations in the transition to independent living and career development of individuals with special needs, and to develop programs to support stakeholders of transition process.

**Keywords:** Individuals with special needs, Transition to independent living, Career development.

## ÇEVİRİMİÇİ KAVRAM ÖĞRETİM MATERYALİYLE BÜTÜNLEŞTİRİLEN ÖĞRETİM YÖNTEMLERİNİN MOTİVASYONA ETKİLERİ

### THE EFFECTS OF ONLINE CONCEPT TEACHING MATERIAL INTEGRATED TEACHING METHODS ON MOTIVATION

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#### ÖZET

İnsan sağlığını tehdit ederek eğitimin kesintiye uğramasına neden olan Covid-19 salgını, eğitimi teknoloji ile bütünleştirmenin oldukça gerekli olduğunu bir kez daha gözler önüne sermiştir. Öğretmenleri ve öğrencileri sanal bir öğrenme ortamında bir araya getiren öğretim materyallerine ve web tabanlı platformlara duyulan ihtiyaç giderek artmıştır. Bu ihtiyacın karşılanmasına fayda sağladığı alan yazındaki birçok çalışma ile ortaya konulan ÇİDKOM, çevrimiçi bir kavram öğretim materyali olduğu gibi aynı zamanda bir kavram haritalama aracıdır. Bu doğrultuda araştırmanın amacı farklı öğretim yaklaşımlarına (düz anlatım ve sorgulayıcı araştırma) dayanan yöntemlere bütünleştirilen ÇİDKOM'un fen bilimleri dersi "Basit Elektrik Devreleri" ünitesinde dördüncü sınıf öğrencilerinin motivasyonlarına etkisini incelemektir. Çalışmada nitel araştırma yöntemleri arasından çoklu durum çalışması deseni kullanılmıştır. Üç hafta boyunca Durum-3'te ÇİDKOM bütünleştirilmiş 5E modeliyle, Durum-2'de ÇİDKOM bütünleştirilmiş sunuş yoluyla öğretimle, Durum-1'de ise öğretim programında vurgulanan yöntemlerle öğretim yapılmıştır. Birincil nitel veriler sınıflarda toplam 64 saatlik video kaydı yapılarak gözlem yoluyla elde edilmiştir. Destekleyici nitel veriler toplanırken veri toplama araçları olarak gözlem kontrol listeleri ve yarı-yapılandırılmış görüşme formları kullanılmıştır. Elde edilen nitel veriler betimsel analiz yöntemiyle analiz edilmiştir. Elde edilen bulgular üç durumda da tüm motivasyon davranışlarının gözlenmesine rağmen farklı durumlarda gözlemlenen 10 motivasyon davranışı arasından uygulanan yöneme bağlı olarak farklı motivasyon davranışlarının ön plana çıktığını göstermektedir. ÇİDKOM'un 5E modeliyle bütünleştirilerek uygulandığı, öğrencilere tablet bilgisayarlardan bilgiye ulaşmalarına ve ÇİDKOM'daki multimedya içerikleri özgürce izlemelerine izin verildiği Durum-3'te öğrencilerin dersten daha fazla keyif aldıkları, birlikte çalışma ve araştırmaya daha çok motive oldukları ayrıca derse aktif katılım ve öğretmenle etkileşim davranışlarının daha sık gösterdikleri ortaya çıkmıştır. ÇİDKOM'un daha çok öğretmen merkezli bir yaklaşım olan sunuş yoluyla öğretim yöntemine bütünleştirilerek uygulandığı, öğrencilere kavramlar arasındaki ilişkilerin akıllı tahtadan gösterildiği Durum-2'de öğrencilerin bilgiyi hatırlama ve ilişkilendirme davranışlarını daha sık sergiledikleri görülmüştür. ÇİDKOM olmaksızın öğretim programında vurgulanan yöntemlerin kullanıldığı Durum-1'de ise daha çok öğretmen ile öğrenciler arasındaki sözel etkileşime dayalı motivasyon davranışları (dikkat, ilgide artış, açıklamaya isteklilik, soru sormaya isteklilik, söz hakkı alma isteği, okumaya isteklilik, cevaplama veya çözmeye isteklilik) gözlenmiştir. Sonuç olarak ÇİDKOM ile bütünleşik öğretim yöntemlerinin uygulandığı durumlarda öğrencilerin daha üst düzey motivasyon davranışları sergilediği söylenebilir.

**Anahtar kelimeler:** Çevrimiçi, Kavram Öğretimi, Motivasyon, Öğretim Yöntemleri

#### ABSTRACT

Covid-19 pandemic causing interruption of education by threatening human health has shown again integrating education with technology is quite necessary. The need for teaching materials and web-based platforms that bring teachers and students together in a virtual learning environment has gradually increased. ONACOM, which has been shown by many studies in the literature to meet this need, is an online concept teaching material



as well as a concept mapping tool. In this direction, the aim of this study is to examine the effect of ONACOM, which is integrated with methods based on different teaching approaches (expository and inquiry), on the motivation of fourth grade students in the Science course "Simple Electric Circuits" unit. Among the qualitative research methods, multiple case study design was used in the study. For three weeks, in Case-3 students were taught with the ONACOM integrated 5E model, in Case-2 with ONACOM integrated expository method, in Case-1 with the methods emphasized in the curriculum. Primary qualitative data were obtained through observation by totally 64 hours video recording in classrooms. While collecting supporting qualitative data, observation checklists and semi-structured interview forms were used as data collection tools. The qualitative data obtained were analyzed by descriptive analysis method. The findings show that although all motivational behaviors are observed in all three cases, different motivational behaviors come to the fore depending on the method applied among the 10 motivation behaviors observed in different cases. In Case-3, where 5E model is implemented by integrating with the ONACOM, students are allowed to access information from tablet computers and watch the multimedia content in ONACOM freely, it was found that students enjoy the course more, are more motivated to work and research together, additionally they more frequently showed the behaviors of active participation in the course and interaction with the teacher. In Case-2, where ONACOM was applied by integrating with the expository method, which is a teacher-centered approach, and the relations between the concepts were shown to the students on the smart board, it was observed that the students showed the behaviors of remembering and relating information more frequently. In Case-1, in which the methods emphasized in the curriculum were used without ONACOM, motivation behaviors based on verbal interaction between the teacher and students (attention, increase in interest, willingness to explain, ask questions, talking, reading and answering or solving) were observed. As a result, it can be said that students showed higher level motivation behaviors in cases where ONACOM integrated teaching methods were applied.

**Keywords:** Online, Concept Teaching, Motivation, Teaching Methods

**NIETZSCHE'S IMAGE OF THE SUPERMAN AND THE IDEA OF MAN OF THE NOOSPHERE  
REALITY OF V. VERNADSKY**

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**ABSTRACT**

If in the early twentieth century, Nietzschean ideas about the superman troubled the enlightened minds of mankind, throughout the Soviet period, attitudes toward his philosophy were extremely negative - he was seen as a decadent and a forerunner of Nazism. Only in the mid-1980s in the USSR was the long-standing taboo on publishing his texts and researching his works lifted.

For F. Nietzsche, the superman is the result of cultural and spiritual improvement of man, a type that far exceeds modern man in its intellectual and moral qualities. F. Nietzsche thought the emergence of the superman as a long process of self-determination, as a celebration of the spiritual nature of man.

In the light of Nietzsche's doctrine of the superman, the latter is an image-metaphor, the author's heuristics. Therefore, to look for a finished portrait, as well as to guess it, instead of the author, does not make sense. The idea of the superman is an open project that gives space for the flight of thoughts, which do not give any ready-made thoughts.

From other positions, approached the assessment of the essential characteristics of the man of the future V. Vernadsky. At the heart of his doctrine of the man of the noosphere is naturalism, biological evolution and geological process, which determines almost all the parameters of man: his anatomy, physiology, nervous system, physical data, mental and labor. In other words, we are talking about *Nomo sapiens* as a species of animal world and part of living matter.

Highly appreciating the scientific thought by which man transforms the biosphere into the noosphere, V. Vernadsky at the same time considered this transition as a natural process, not paying much attention to conscious, strong-willed, purposeful human activity.

Comparing the scientific ideas about the perfect man F. Nietzsche and V. Vernadsky, we must recognize that both the teachings of one thinker and another does not exhaust the full characteristics of the man of the future.

In contrast to Nietzsche's image of the superman, V. Vernadsky's teaching presents a naturalistic view of human nature, which emphasizes the connection between inert and living matter, biochemical energy, the development of scientific thought of mankind as a planetary phenomenon.

Taking into account the social experience that humanity has accumulated, it can be argued that the one who has freedom of thought and independence of action really lives. Man has a purpose within himself, his goal is life, that is, his unrealized life program, his personal, individual, unique in the universe and not repeated.

**Keywords:** biological evolution, V. Vernadsky, man of the future, man of noosphere reality, naturalism, Nietzschean image of the superman, F. Nietzsche.

## NARRATIVE OF INDIGENOUS COMMUNITY IN CANADA

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### ABSTRACT

The reading of the topic is about First Nations, their lifestyles, community culture, educational systems, the tale of grief and grieving which has been discussed from its historical viewpoints to the modern day's scenarios. The scenarios of colonialism, racism, unfair practices, deprivation, unethical images, deletion of identities, many slurs' words (savagely) and offensive attitudes, exploitations are the features of the topic that had been historically performed by a colonial power to the original communities of their land. "Suppress the native culture as rapidly as possible and fashion a new generation of Indian children raised in isolation from their parents, in the image of white men" (p.47). the quote reflects racial and colonial supremacy through a sophisticated educational system by the colonial European power. Historically through the world views and values of dealings and agreements, the European settled their jurisdictions and thus set up their own identities through the formation of the schooling system. This is how they diverted a traditional, innocent community into a new European system. Modern days scenarios are similar through the government-led policy objective of infusing Aboriginal knowledge and perspectives into mainstream school programs and curriculum. The objective of the topic is to explore Canadian Indigenous People and their colonial history through various colonial narratives such as the 'schooling system'. The methodology has been done through documentary analysis. The outcome of the paper is about the understanding of Canadian Indigenous culture and norms through collective land ownership, schooling system and its annihilation by Indian act., residential school, school of missionaries etc. The feature question is how does European Canadians settle their supremacy over the Indigenous Community of Canada and turned into a mainstream community.

**Keywords:** Residential School, School of Missionaries, Collective Land Ownership, Mother Nature, Healing, Indigenous Norms

## SCIENTIFIC TOPICS IN MODERN UNIVERSAL MASS MEDIA

### НАУЧНЫЕ ТЕМЫ В СОВРЕМЕННЫХ УНИВЕРСАЛЬНЫХ МАСС-МЕДИА

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#### ABSTRACT

In the face of the pandemic audience attention focuses on scientific information.

This article presents conceptual insights as to the adequacy of mass communication and scientific activities; carefully analyzes international and national universal and popular science publications such as *NewScientist*, *Nature*, *Mirror Weekly*, *Korrespondent*, etc.; identifies common and different aspects at the formal, semantic, methodological, promotional and other levels; and reveals that the areas under research are organically very similar.

Studying the topic in depth we set a goal to examine modern mass communication activity and correspond it with the scientific one. It designed the following main objectives of the study such as to review source database, to study thoroughly websites of the most top-rated foreign and Ukrainian media, to compare their focuses, to define ways of content production and coverage of up-to-date scientific information, to compare genre possibilities of journalism with ways of presenting information in the field of science, to aim at considering the urgent issue of our time – Covid-19 pandemic in a broad media-scientific context, that involves, apart from the analysis of internet sites, representative expert sources, documentary film directing, audiovisual investigating reporting, messenger apps, social networks and other means of not only swapping information but active fake creative activities.

Methodology of the present research includes a method of analogy. Scientific and media discourses are compared as well as ways of information content in the Ukrainian and foreign mass media, chronotypes of scientific rigour, genre evocation etc. The content analysis turned out to be equally important involving defining the characteristics of various structural units in the texts of major publications. Our research has not been without modeling because the key concern of today is the pandemic and the subjects of our study, namely science and journalism are still in their infancy.

Findings. It has been found out that the main genre of scientific creativity that is a classic article is widely used and created with provision of all structural elements such as thesis statement, arguments, expert evaluations, conclusions and tips and also it is full of extensive citations, sociological representations, and results of research experiments, practical evaluation and links referring to identical information. We came to conclusions that it is the specific genre that enables media people and scientists to join their forces and efforts and to achieve the highest scientific results especially if a series of articles is turned into a longread.

**Keywords:** science, mass media, rationalism, scientism, article, genre, theory, thesis statement, arguments.

#### АННОТАЦИЯ

Сейчас научная и массовокоммуникационная деятельности неразделимы. Чтобы констатировать факты, удостоверить экспертизы, очерчивать диапазоны соображений и интерпретаций, журналистика вынуждена заимствовать весь набор научных ресурсов в сферах сбора, анализа, воплощения и распространения информации. Не случайно редакции ведущих медиа активно сотрудничают с учеными, используя их как штатных и специальных корреспондентов и экспертов. Поскольку ни одна деятельность уже не обходится без официальных сайтов, электронной почты, страниц в социальных сетях, гиперссылок на базы данных, то сотрудничество, очевидно, будет углубляться до ситуаций абсолютного «срастания» звеньев сложной глобальной системы.

Самое старое издание о науке – «Nature» (журнал исследования природы). Это британское научно-популярное медиа, выходит на английском с 1869 года, в 2018 получило числовой показатель цитируемости/импакт-фактор – 43.070. Издание производит исключительно положительное впечатление и может успешно конкурировать как со специализированными научными, так и универсальными медиа, и этим подтверждает предположение о родстве научной и журналистской деятельности в работе с фактами и экспертизой.

В Украине на пути совершенства «Зеркало недели» (ZN.UA) и ряд других СМИ, которые активно освещают и пытаются решить актуальные проблемы человечества.

Редакция ZN.UA оригинально формирует блоки информации из актуальных проблем. Самая интересная рубрика – «Коронавирус из Китая» (позже трансформирована в «Коронавирус в мире» и «Пандемия Covid-19») – наполнена огромным количеством публикаций. Медиа материалы очень разные по объему. К примеру, в публикации «МОЗ запустило чат-бот о коронавирусе» говорится о возможности исчерпывающе узнать о Covid-19 в Telegram-бот, указано, что постоянно работает Telegram канал DT.UA «Коронавирус\_инфо» «с оперативной текущей информацией о ситуации с вирусом COVID-19 в Украине». Отмечено также, что это единственный канал, верифицированный Министерством здравоохранения.

Мы предлагаем сравнительный анализ "Nature" и "Зеркала недели" в широком контексте научного освещения пандемии коронавирусной инфекции.

Прорабатывая тему, ставили целью проанализировать современную масовокоммуникационную деятельность как историческое явление и сравнить ее с научной. Для этого пришлось пересмотреть ключевую базу данных, изучить сайты рейтинговых зарубежных и украинских СМИ, сравнить их тематику, определить способы освещения сциентической информации, сопоставить жанровые возможности и в широком медийно-научном контексте рассмотреть пандемию Covid-19.

В исследовании задействована аналогия для сопоставления журналистской и научной деятельности; контент-анализ как метод анализа стабильных единиц; моделирования – для упрощения работы с коммуникационными процессами и тому подобное.

**Ключевые слова:** наука, журналистика, пандемия, факт, фейк, жанр, информация.

**TANIMLAMA SORUNLARI BAKIMINDAN “HURAFE” KAVRAMINA KRİTİK BİR BAKIŞ**  
A CRITICAL LOOK AT THE CONCEPT OF “SUPERSTITION” IN TERMS OF THE PROBLEMATIC  
OF DEFINITION

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**ÖZET**

Tanım, kişinin kendisini doğru ifade etmesi ve muhatabını doğru anlamasının ön koşulu olan doğru düşünmenin vasıtası olarak bilinen mantık ilminin önemli konularından biridir. Tanımın ve gözetilmesi gereken kurallarının bu ilimde başlı başına yer alıyor olması onun ehemmiyetini gösterir. Açıktır ki sağlıklı bir iletişim için, tanımlamada bulunan kimsenin, tanımın ilgili kurallarına riayet etmesi elzemdir. Aksi takdirde, eksik yahut yanlış tanımlamalardan dolayı, kavramlar ya belirsiz ve anlaşılabilir olur ya da yanlış anlatımlara ve yanlış anlamalara, dolayısıyla iletişimsizliğe yol açar. Tanımlama kaynaklı bir sorunun hem kişiyi hem de muhatabını alakadar etmesi bundandır. Bazı kavramlar vardır ki bir yönüyle ve bütünüyle bir uzlaşıya konu teşkil eder görünen kullanımlarının yanı sıra, kavram kargaşasına yol açacak boyutta sorunlu kullanımlara da konu olur. Çalışmamızda bahse konu etmekte olduğumuz gerek inanış gerekse uygulamalara yönelik olumsuz değer içeren bir kategorinin ifadesi olarak “hurafe” kavramı bunun bir örneğini oluşturur. Hem ontolojik hem de epistemolojik veçhesiyle “gerçeğe aykırı olan”ı ifade eden hurafe kavramının, olumsuzluk içeren bu kategorik kullanımıyla temel bir uzlaşıya konu olduğu inkâr götürmez. Zira, hurafe nitelemesini, hiç kimse olumlu anlamda kullanmamaktadır. Ancak, spesifik olarak bakıldığında, yüklenilen içerik ve yöneltildiği hedef bakımından, bu kavramı kullananların maksatlarının ciddi boyutta farklılık arz ettiği görülür. Günlük hayatta gözlemlenebilecek kullanımlardan ve ilgili kaynaklardan ele alacağımız birtakım veriler üzerinden, kısmen betimleyici ve çoklukla eleştirel bir bakış açısıyla ilgili kavramın kullanımlarını, problematik olarak irdeleyerek meselenin önemine dikkat çekmek amacındayız. Varmış olduğumuz netice, hurafe kavramının, keskin ayrımlara ve karşıtlıklara yol açacak boyutta farklılık arz eden kullanımlara konu olduğu ve bunun, birey bazında değişim ve dönüşüme kapalı olmayan, lakin kollektif bazda, bugüne kadar olandan farklı olmayacağı öngörülebilecek olan reel bir durum olarak görüldüğüdür.

**Anahtar kelimeler:** Din Felsefesi, Kavram, Tanım, Sorunsal, Hurafe.

**ABSTRACT**

Definition is one of the important subjects of the science of logic, which is known as the means of correct thinking, which is the prerequisite for a person to express himself correctly and to understand his interlocutor correctly. The fact that definition and its rules to be observed are included in this science on its own shows its importance. It is clear that for a healthy communication, it is essential for the person making a definition to comply with the relevant rules of definition. Otherwise, due to incomplete or inaccurate definitions, concepts will either be vague and incomprehensible, or lead to misinterpretations and misunderstandings, and thereby miscommunication. This is why a definition-based problem concerns both the person and the addressee. There are some concepts that, in addition to their use, which seem to constitute a subject of consensus in one aspect and completely, are also the subject of problematic uses that will lead to a conceptual confusion. The concept of "superstition", which this paper examines as the expression of a category that contains negative values for both beliefs and practices, is an example of this. It is undeniable that the concept of superstition, which expresses the "untruthful" in both its ontological and epistemological aspects, is the subject of a fundamental consensus with this categorical use of negativity. This is so because no one uses the term superstition in a positive sense. However, when looked specifically, it is seen that the aims of those who use this concept differ significantly in terms of the meanings given to it and the target to which it is directed. We aim to draw attention to the importance of the issue by problematically examining the usages of the concept from a partially



descriptive and mostly critical point of view, through some data that we will consider from the uses that can be observed in daily life and from related sources. The conclusion we have arrived at is that the concept of superstition is the subject of different uses that will lead to sharp distinctions and contrasts, and this appears to be a real situation that is not closed to change and transformation on an individual basis, but cannot be predicted to be different from what it has been up to now on a collective basis.

**Keywords:** Philosophy of Religion, Concept, Definition, Problematic, Superstition.

THOMAS AQUINAS'IN ERDEM ANLAYIŞI  
THOMAS AQUINAS' THEORY OF VIRTUE

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ÖZET

Thomas Aquinas ortaçağın en önemli düşünürlerinden biri olmasının yanı sıra Aristoteles'in en önemli yorumcularından birisidir. Aquinas, *Summa Theologica* adlı eserinde erdemler üstüne 14 (QQ[55-69] ana bölümden ve 65 alt bölümden oluşan kapsamlı bir inceleme sunar. Bu incelemenin ilk bölümünde [Q[55] Aquinas erdemün özünü ve tanımını açıklarken insan erdeminin iyi işlevsel alışkanlık oluşunu söyler. Aristoteles de *Nikomakhosa Etik*'de erdemün alışkanlık ve eğilim olduğunu açıkça söylemiştir. Erdemün alışkanlık olduğunu söylerken Aristoteles aynı eserde erdem sınıflandırması sunmuştur: düşünce erdemleri ve ahlak veya karakter erdemleri. Aquinas, *Summa Theologica*'da aynı sınıflamayı kabul etse de Aristoteles'den farklı olarak bu sınıflandırmayı genişletmiş bir üçüncü erdem kategorisini yani teolojik erdemler veya "ilham edilmiş erdemler" kategorisini sunmuştur. Aristoteles gibi Aquinas, insanın erdeminin yetkinliğinin insanı mutluluğa ulaştırdığını söyler ve mutluluğu da nihai erek olarak tanımlar. Ancak, Aquinas'ın mutluluk anlayışının Aristoteles'in mutluluk anlayışıyla aynı olduğunu söylemek yanlış olacaktır. Aristoteles'e göre, insanın ereği yani mutluluğu salt kendi doğası gereği olan işlevini gerçekleştirmekle mümkündür. Ancak Aquinas'a göre bu tür mutluluk salt sınırlı bir mutluluktur çünkü ilkesi sınırlı insan doğasına dayanır. Aquinas'a göre iki tür mutluluk vardır birincisi "insan doğası ile orantılıdır, insanın kendi doğal ilkeleriyle elde edebileceği bir mutluluk", ikincisi ise "insanın doğasını aşan ve insanın yalnızca Tanrı'nın gücüyle elde edebileceği bir tür Tanrılığın katılımıyla elde edebileceği bir mutluluk." Birinci tür mutluluk anlayışı Aristoteles'in mutluluk anlayışını içerse de Aquinas'ın ikinci tür mutluluk anlayışı Aristoteles'in mutluluk anlayışından oldukça farklıdır ve onun üçüncü bir erdem kümesi sunmasının ana nedenidir.

Aquinas'a göre düşünce ve ahlak erdemlerinin temel ilkesi insan doğasına dayanır. Bu erdemlerin edinilmesiyle insan ancak sınırlı bir mutluluğa sahip olabilecektir. Ancak teolojik erdemler veya ilham edilmiş erdemlerle insan salt sınırsız nihai mutluluğa erişebilir. Bu tür bir mutluluğun ilkesi insan doğası tarafından belirlenemez onun ilkesi Tanrı tarafından insana ilahi hukuk çerçevesinde "ilham edilir". Düşünce ve ahlak veya karakter erdemleri çerçevesinde düşünüldüğünde Aquinas'ın ahlak anlayışı klasik eyleyen temelli bir erdem anlayışıdır. Ancak "ilham edilmiş erdemler" kategorisi göz önüne alındığında Aquinas'ın ahlak anlayışına farklı bir boyuttan bakmak gerekir, yani ilahi yasalar çerçevesinde konan kuralların insan doğası ve mutluluğu üstüne etkisi boyutundan bakmak gerekir. Kısaca söylemek gerekirse kazanılmış ahlak veya karakter erdemleri insanın kendi doğasını gerçekleştirmesi ve kendi iyisini, kendi işlevini, kendinde doğası gereği bulunan eğilimleri gerçekleştirmesi sonucu ortaya çıkar. Bu gerçekleştirmenin ilkesi insanın kendinden, kendi doğasından kaynaklanır. Ancak ilham edilmiş erdemler insanın kendi doğasını aşan tarafından -ki bu Aquinas'a göre Tanrı ve Tanrısal Doğa'dır- insana verilmiş ve insanın kendi aklıyla uyum içerisinde eğilimlerini, tutumlarını, duygu ve arzularını gerçekleştirmeye yönelik konulan ilahi kuralları takip etmesine neden olan erdemlerdir.

Aquinas'ın ahlak kuramını çağdaş erdem ahlakı çerçevesinde değerlendirildiğinde ve Aristotelesçi temelleri düşünüldüğünde eyleyen temelli bir erdem ahlakı olduğu açıktır ancak onun ilham edilmiş erdem anlayışı onun erdem ahlakını eyleyen temelli kuram olmasının yanı sıra kural temelli ahlak anlayışının da nüvelerini içinde barındırdığı iddiasını da haksız kılmaz. Felsefe tarihinde Aquinas'ın erdem anlayışı üzerinde oldukça durulmasına rağmen onun "ilham edilmiş erdem" anlayışı çoğunlukla ihmal edilmiştir. İlham edilmiş erdemleri farklı erdemler olarak gerçekten düşünmek mi gerekiyor yoksa bunlar sadece kazanılmış erdemlerin geliştirilmiş türleri midir? İlham edilmiş erdem eylemleri edinilmiş erdem eylemlerine bir katkı sağlar mı? Bu erdemler sayesinde Aquinas'ın ahlak kuramı kural temelli bir perspektiften değerlendirilebilir mi? Aquinas'ın ahlak felsefesi çerçevesinde erdemün ne olduğunu ve neden ilk etapta üç ayrı erdem kategorisini öne sürdüğü



açıklanmadıkça, yukarıdaki sorulara açık bir cevap verilemez. Bu bildiri Aquinas'ın erdem sınıflandırması çerçevesinde ilham edilmiş ahlaki erdemlerin rolünü anlamaya ve ilham edilmiş ahlaki erdemler ile ahlak veya karakter erdemleri ya da onun terminolojisiyle "kazanılmış erdemler" arasındaki ilişkiyi açıklamaya çalışacağım.

**Anahtar kelimeler:** Thomas Aquinas, Erdem, Düşünce Erdemleri, Karakter Erdemleri, İlham Edilmiş Erdemler, Mutluluk

## ABSTRACT

Thomas Aquinas is one of the most important thinkers of the Middle Ages, as well as one of the most important commentators of Aristotle. In his *Summa Theologica*, Aquinas provides a comprehensive review of virtues, consisting of 14 (QQ [55-69] main sections and 65 subsections. In the first part of this review [Q [55]) Aquinas explains the essence and definition of virtue, saying that human virtue is a good functional habit. In *Nicomachean Ethics* Aristotle also clearly stated that virtue is a habit and a disposition and presents a classification of virtue as intellectual virtues and moral virtues. Although Aquinas accepts the same classification in the *Summa Theologica*, unlike Aristotle, he expands this classification and presents the third category of virtues, namely theological virtues or "infused virtues". Like Aristotle, he says that the perfection of human virtue leads to happiness and defines that happiness as the ultimate goal of human life. However, Aquinas' understanding of happiness is not the same as Aristotle's understanding of happiness in many respects. For Aristotle, the goal of human being happiness is only possible by realizing his function, which is because of his own nature. Aquinas claims that such happiness is only limited happiness because its principle is based on limited human nature. For him, there are two kinds of happiness, the first is "happiness that is proportional to human nature, a happiness that man can achieve by his own natural principles", and the second is "happiness that transcends man's nature and can only be achieved by the participation of a kind of Godhead by the power of God." Whereas the first type of happiness is consonant with Aristotle's view, the second type is unique to Aquinas and defines a third set of virtues.

Aquinas holds that the basic principle of the intellectual and moral virtues is based on human nature. With the acquisition of these virtues, a person can only have limited happiness. Only with the theological virtues or infused virtues can man attain only unlimited ultimate happiness. The principle of such happiness cannot be determined by human nature because its principle is "infused" by God to man within the framework of divine law. Considered within the framework of the intellectual and moral virtues, Aquinas' understanding of morality is a classical agent-based view. However, considering the category of "infused virtues", things are otherwise: For these kinds of virtues, there exist the effect of the rules set within the framework of divine laws on human nature and happiness. Acquired moral or character virtues emerge because of realizing one's own nature and his own good, his own function, and the dispositions inherent in him. The principle of this realization stems from man himself, his own nature. However, the infused virtues, being given to man by God, cause the man to follow the divine rules set for realizing his inclinations, attitudes, feelings, and desires in harmony with his own mind.

When Aquinas's moral theory is evaluated within the framework of contemporary virtue ethics and its Aristotelian foundations are considered, it is clear that he has agent-based virtue ethics. However, when we take his understanding of infused it is not wrong to claim that besides being an acting-based theory, his ethics also contains the cores of a rule-based morality.

In the history of philosophy, although Aquinas' understanding of virtue has been highly emphasized, his understanding of "infused virtue" has often been neglected. Do we really need to think of infused virtues as distinct virtues, or have they just enhanced variants of acquired virtues? Do infused virtue acts contribute to acquired virtue acts? Thanks to these virtues, can Aquinas' moral theory be evaluated from a rule-based perspective? A simple answer to the above questions cannot be given unless it is explained what virtue is within the framework of Aquinas' moral philosophy and why he put forward three different categories of virtue. In this presentation, I will try to understand the role of inspired moral virtues within the framework of Aquinas's



classification of virtue and explain the relationship between infused virtues and moral or character virtues, or "acquired virtues" in his terminology.

**Keywords:** Thomas Aquinas, Virtue, Intellectual Virtues, Moral Virtue, Infused Virtues, Happiness

## DAVID HUME'UN DUYGU KURAMI

### HUME'S THEORY OF EMOTIONS

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#### ÖZET

David Hume'un *İnsan Doğası Üzerine Bir İnceleme* adlı eserinde ortaya koymuş olduğu duygu anlayışı uzun yıllardır duygu felsefesi tartışmalarının merkezinde olmuştur. Bu tartışmaların ana amacı Hume'un duygu kuramının çağdaş duygu kuramlarının hangisi altında ele alınabileceğini belirlemektir. Çağdaş duygu kuramlarına baktığımızda iki ana kuramla karşılaşırız: (i) duyguların inançlar ve yargılar olduğunu söyleyen *bilişselci kuramlar* ve (ii) duyguların basit içsel duyular, hisler veya his grupları olduğunu ileri *duyuşsalcı kuramlar*. Bazı çağdaş duygu kuramcıları Hume'un "duygular izlenimlerdir" iddiasını temele alarak Hume'un duygu anlayışını duyuşsalcı duygu kuramı içerisinde değerlendirmişlerdir. Ancak, Hume'un duygu açıklamasının bilişsel öğeler içermediği tezi tüm çağdaş duygu felsefecilerince kabul görmez. Bazı çağdaş duygu felsefecileri de Hume'un kuramını bilişselci kuram içerisinde değerlendirmişlerdir.

Çağdaş duygu kuramcılarının sorduğu "Duygu nedir?" sorusunu Hume için sorarsak cevap açıktır: Duygular, "zihnin izlenimleridir". Zihnin iki tür izlenimi vardır "dış duyum izlenimleri" ve "iç duyum izlenimleri." Hume dış duyum izlenimlerini "herhangi önceleyen algı olmaksızın ruhta beden yapısından, cansızlardan ya da nesnelere dışsal organlar üzerine uygulanmasından doğan izlenimler" olarak tanımlar. Kaşınma, gıcıklanma vb bedensel haz ve acılar bu tür izlenimlerdir. Hume bunların incelenmesinin "anatomi ve doğa felsefesi bilimlerine" ait olduğunu kendi çalışmasının bu izlenimler değil de iç duyum izlenimleri ile sınırlı olduğunu açıkça söyler. İç duyum izlenimleri "bazı ilksel izlenimlerden ya dolaysızca ya da tasarımılarının araya girmesi yoluyla ortaya çıkan" insan zihninin izlenimleridir. Bu izlenimleri de *dingin* ve *şiddetli* izlenimler olarak ikiye ayırır. Dingin iç duyum izlenimlerine örnek olarak "eylemdeki, bileşimdeki ve dışsal nesnelereki güzellik ve biçim" duygularını örnek verirken şiddetli iç duyum izlenimlerine "sevgi ve nefret, keder ve sevinç, gurur ve kendini küçük görme" duygularını örnek verir. Hume çalışmasında şiddetli iç duyum izlenimlerinin yani duyguların "doğalarını, kökenlerini ve neden-sonuçlarını açıklayacağını" söyler.

Hume'un duygu açıklamasını salt duyuşsalcı kuram açısından okumak ister istemez Hume'un duygu açıklamasında duyguları salt duyularla ve öznel hisler ile özdeşleştirdiği dolayısıyla duyguların yönelimselliğini veya niyetselliğini açıklamada başarısız olduğu eleştirisini doğal olarak getirecektir. Ancak, Hume, özellikle sevgi ve nefret gibi duyguları açıklarken bu duyguların *nedeninden* (bu duyguları uyaran haz veya acı), yöneldikleri *nesnesinden* (sevilen veya nefret edilen bir kişi) ve erişmeye çalıştığı *amacından* (sevilen veya nefret edilenin mutluluğu veya mutsuzluğu) bahseder. Hume'a göre, bir duygu neden-nesne-amaç birlikteliğinden ortaya çıkar. Bu yüzden duyuşsalcı kuram çerçevesinde Hume'un duygu açıklamasını değerlendirip, bu duygu açıklamasının duyguların yönelimselliğine veya niyetselliğine yer vermediği iddiası haksız bir iddiadır.

Hume'un duygu açıklaması salt bir duygunun neliği açıklaması değildir. Hume aynı zamanda duygu deneyiminin kendisinin ve duygu bilgisinin kendisinin nasıl ortaya çıktığının temellendirmesini vermeye çalışır. Hume'un duygu açıklamasında duygular salt hisler ve duyular değil aynı zamanda eylemlerimizi ve seçimlerimizi etkileyen değer yüklü bilişlerdir. Bu yüzden Hume'un duygu açıklaması ne duyuşsalcı kuram perspektifinden ne de bilişselci kuram perspektifinden tam olarak temellendirilemez. Bu bildirinin temel amacı Hume'un *İnsan Doğası Üzerine Bir İnceleme* adlı eserinde adı geçen her iki çağdaş kuramın temel iddialarını bünyesinde barındıran daha bütüncül bir duygu kuramı ortaya koyduğunu göstermektir.

**Anahtar kelimeler:** David Hume, Duygu, Bilişselci Duygu Kuramı, Duyuşsalcı Duygu Kuramı, Hume'un Duygu Kuramı

## ABSTRACT

David Hume's account of emotion in his *A Treatise on Human Nature* has been at the center of main debates in contemporary philosophy of emotions for many years. The main question in this debate has focused on whether Hume's account falls under the cognitive or the feeling theories. For the contemporary theories of emotions (i) the cognitive theory of emotion holds that emotions are beliefs and judgments, and (ii) the feeling theory of emotion holds that emotions are simple inner feelings or group of inner feelings. Given Hume's claim that emotions are impressions, some contemporary emotion theorists have evaluated Hume's account of emotion within the feeling theory of emotion. However, all contemporary philosophers of emotion do not accept the thesis that Hume's account of emotion does not contain any cognitive element. Some have also evaluated Hume's theory within the cognitivist theory.

If we ask the question that the contemporary theories of emotion have raised, "What is an emotion?" the answer for Hume is very clear: Emotions are "impressions of the mind." According to him, there are two kinds of impressions of the mind, "sensation" and "reflexion." Hume defines impressions of sensation as "impressions arising in the soul from the structure of the body, from the spirits, or from the application of objects to external organs, without any prior perception". All the impressions of the senses, and all bodily pains and pleasures are among such impressions. Hume makes it clear that any study on such impressions belongs to the "sciences of anatomy and natural philosophy," and that his examination of impressions is limited to impressions of reflexion, not to these impressions.

Impressions of reflexion are impressions of the human mind that "proceed from some of these original impressions, either immediately or by the interposition of its ideas." He divides these impressions into two as calm and violent impressions. According to him, "the sense of beauty and deformity in action, composition and external objects" are the calm impressions of reflexion, while "the passions of love and hate, grief and joy, pride and humility" are the violent impression of reflexion. Hume says that in his work he explains "those violent emotions or passions, their nature, origin, causes and effects."

Reading Hume's account of emotion in terms of pure feeling theory will naturally bring the criticism that in Hume's accounts emotions are identified with subjective feelings, and therefore fails to explain the intentionality of emotions. However, when explaining emotions such as love and hate, Hume talks about the cause of these emotions (pleasure or pain that stimulates these feelings), the object to which they are directed (a loved or hated person), and the end they are trying to achieve (the happiness or unhappiness of the loved or hated). According to Hume, an emotion arises from the cause-object-end association. Therefore, the claim that Hume account of emotion does not include the intentionality of emotions is an unfair claim.

Hume's discussion of the causal antecedents of emotions is that if we understood the agency and valance or value ascribed to an object or event, then at least in principle we could reliably predict which of these emotions would arise. Hume's explanation of emotion is not just an explanation of what an emotion is. Hume also tries to give the main foundation of how the experience of emotion occurs and of from what the knowledge of emotion itself arise. In Hume's account of emotion, emotions are not just feelings and sensations, but value-laden cognitions that influence our actions and choices. Therefore, Hume's explanation of emotion cannot be fully grounded neither from the perspective of the feeling theory nor from the perspective of the cognitivist theory. The main purpose of this paper is to show that in his work, *A Treatise on Human Nature*, Hume puts forward a more holistic theory of emotion that includes the basic claims of both contemporary theories of emotion.

**Keywords:** David Hume, Emotion, Cognitive Theory of Emotion, Feeling Theory of Emotion

## THOMAS AQUINAS'IN REALİST EĞİTİM FELSEFESİNDE EĞİTİM, ÖĞRETİM VE ÖĞRETMEN

EDUCATION, TEACHING AND TEACHER IN THOMAS AQUINAS' REALIST PHILOSOPHY OF EDUCATION

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### ÖZET

Çağdaş eğitim yaklaşımları geleneksel idealist ve realist yaklaşımlardan pragmatik yaklaşıma doğru bir dönüşüm gösterse de ilk iki yaklaşımın eğitim sistemlerindeki etkisi belli ölçüde devam etmektedir. Felsefi yaklaşımların eğitim sistemlerindeki etkilerini tespit etmek çoğu zaman zordur çünkü idealist ve realist yaklaşımların birçok ortak görüşü bulunduğu gibi bazı uygulamalar da farklı yaklaşımlar tarafından olumlu karşılanmaktadır. Bu nedenle, eğitim felsefesi yaklaşımlarını öncü kuramcılarını aracılığıyla incelemek ve tanımak bu zorluğun giderilmesine katkı sağlayacaktır.

Bu bildirinin amacı Ortaçağın büyük düşünürlerinden Thomas Aquinas özelinde realist eğitim felsefesinin ayırıcı özelliklerini ortaya koymaktır. Aquinas'ın Platon'un idealizminden ziyade Aristoteles'in realizmini kendi amacına yakın bulmasının metafiziksel ve epistemik nedenleri tespit edildikten sonra bu temelde eğitim felsefesinin ilkeleri gösterilmeye çalışılacaktır. Aquinas'ın genel felsefi amacı Aristoteles felsefesi ile Hristiyan inançlarının bir uzlaşmasını sağlamak, ya da Aristoteles felsefesi yardımıyla Hristiyan inançlarını rasyonel olarak temellendirmektir. Bu nedenle, insanın madde ve zihin/ruh olmak üzere iki cevherden meydana gelmesi, insanın ayırıcı vasfının akıllı ve düşünen bir varlık olması, Tanrı'nın ilk hareket ettirici olması, bilginin duyuma ve soyutlamaya dayanması hususlarında Aristoteles'le aynı görüştedir. Ancak, Aquinas bir filozof olmanın yanı sıra aynı zamanda Hristiyan düşüncesini derinden etkilemiş bir din adamı olması nedeniyle onun realist felsefesi Aristoteles'in doğalcı realizminden farklılık göstererek dini realizm haline dönüşmüştür.

Aquinas'ın başyapıtlarından biri olan *Summa Theologica*'nın alt başlıklarından biri “Öğretmen Üzerine” olarak adlandırılmıştır. Bu kısmın temel tartışma konuları şunlardır: İnsan öğretebilir ve öğretmen olabilir mi, yoksa sadece Tanrı mı öğretir ve öğretmen olabilir? Bir kişi kendi kendinin öğretmeni olabilir mi? Melekler bir insana öğretebilir mi? Öğretme, bir düşünsel etkinlik mi yoksa aktif yaşam etkinliği midir? Metafizik, epistemik ve eğitimsel temelde bu dört soruya verilen cevaplar Aquinas'ın dini realizminin temel ilkelerini verir.

Aquinas' göre öğretme önceden belli bir kapasiteyi gerektirir. İnsanın öğrenmesi için şeylerin özelliklerini soyutlamak için bir doğal kapasiteye sahip olması gerekir. Bunun için insanın bir şeyin belli özelliklerine yoğunlaşması ve diğerlerini dışta tutması gerekir. Öğrenenin aynı zamanda akıl yürütmenin genel ilkelerine bağlı kalması gerekir. Realist eğitim felsefesinde varlığa ilişkin bilgimizin varlığın özelliklerinin duyu ve soyutlama aracılığıyla elde edilebileceğinin kabul edilmesi, aklın ilkeleriyle varlığın ilkelerinin örtüşmesi düşüncesi eğitimde bilimsel yöntem ile akılcı düşünmenin ön plana çıkmasını gerektirmektedir. Gerçekten de Aquinas'ın bilgi anlayışında aklın merkezi önemi onun öğrenme anlayışına da yansımıştır:

“Bilgi öğrenende bütünüyle pasif olarak değil, aktif anlamda önceden potansiyel olarak vardır. Yoksa, insan bilgiyi bağımsız olarak elde edemezdi. Bu nedenle, nasıl ki iyileşmenin iki yolu varsa, yani yardımcısız kendi doğal etkinliği ile ya da ilaç yardımıyla doğal olarak, bilginin elde edilmesinin de iki yolu bulunmaktadır. Birincisi, doğal aklın bilinmeyen nesnelerin bilgisine kendisinin ulaşması yoluyla olur ki bu keşif olarak

adlandırılır, diğeri ise birinin öğrenenin doğal aklına yardım etmesiyle olur, bu da öğretim yoluyla öğrenme olarak adlandırılır.”

Platon’un öğrenmenin bir hatırlama olduğu görüşüne açıkça karşı çıkan Aquinas her öğrenmenin yine de önceden var olan bilgiye dayandığını savunur. Ona göre bilginin temel kaynağı Tanrı olduğu için ilk öğretmen Tanrı’dır. Tanrı içsel olarak öğretendir. Bunun yanı sıra insan da başkasına öğrettiği için bir insan da öğretmen olarak adlandırılabilir. Bu noktada Aquinas, Augustine’in yorumunu açıklığa kavuşturur: “Augustine yalnızca Tanrı’nın öğrettiğini kanıtladığında insanın dışsal olarak öğretebileceğini dışlamayı değil, yalnızca Tanrı’nın içsel olarak öğretebileceğini amaçlamıştı.”

**Anahtar kelimeler:** Eğitim felsefesi, Realizm, Realist eğitim felsefesi, Aquinas

## ABSTRACT

Although contemporary educational approaches show a shift from the traditional idealist and realist approaches to pragmatic approaches, the influence of the first two approaches in education systems continues to a certain extent. It is often difficult to determine the effects of philosophical approaches in education systems because idealist and realist approaches have many common views, and some applications are welcomed by different approaches. Therefore, examining and recognizing the philosophy of education approaches through its leading theorists will help overcome this difficulty.

This paper aims to reveal the distinctive features of the realist philosophy of education, in particular, Thomas Aquinas, one of the brilliant thinkers of the Middle Ages. After determining the metaphysical and epistemic reasons Aquinas finds Aristotle's realism closer to his purpose rather than Plato's idealism, the principles of the philosophy of education will be tried to be shown on this basis. The general philosophical aim of Aquinas is to provide a reconciliation between Aristotelian philosophy and Christian beliefs or to rationally justify Christian beliefs with the help of Aristotelian philosophy. For this reason, he agrees with Aristotle on the fact that man comprises two substances, matter and mind/spirit, that man's distinctive feature is an intelligent and thinking being, that God is the first mover, that knowledge is based on sensation and abstraction. However, since Aquinas was a religious man who deeply influenced Christian thought and was a philosopher, his realist philosophy differed from Aristotle's naturalist realism and turned into religious realism.

One subtitle of *Summa Theologica*, one of Aquinas' masterpieces, is called "On the Teacher". The major discussion topics of this section are: Can man teach and be a teacher, or does God alone teach and be a teacher? Can a person become his teacher? Can angels teach a human? Is teaching an intellectual activity or an active life activity? The answers to these four questions on metaphysical, epistemic, and educational basis give the basic principles of Aquinas' religious realism.

According to Aquinas, teaching requires a certain capacity beforehand. For man to learn, he must have a natural capacity to abstract the properties of things. For this, one has to concentrate on certain features of something and exclude others. The learner must also adhere to the general principles of reasoning. In the realist philosophy of education, accepting that our knowledge of existence can be obtained through sense and abstraction, the idea of overlapping the principles of reason with the principles of existence requires scientific method and rational thinking to come to the fore in education. Indeed, the central importance of the mind in Aquinas' understanding of knowledge is also reflected in his understanding of learning:

“Knowledge is already potentially present in the learner in an active sense, not entirely passively. Otherwise, man could not obtain knowledge independently. Therefore, just as there are two ways to heal, there are also two ways of acquiring knowledge, unaided by its natural activity or naturally with the help of medicine. The first is through the natural mind's access to the knowledge of unknown objects, which is called discovery, and the other, when someone assists the learner's natural mind, which is called learning by teaching.”

Openly opposing Plato's view that learning is a recollection, Aquinas argues that all learning nevertheless rests on pre-existing knowledge. According to him, God is the first teacher, since the primary source of knowledge is God. God teaches inwardly. Besides this, a human being can also be called a teacher because he teaches



another. Aquinas clarifies Augustine's interpretation: "When Augustine proved that only God taught, he did not intend to exclude that man could teach externally, but that only God could teach internally."

**Keywords:** Educational philosophy, Realism, Realist education philosophy, Aquinas

## VAROLUŞÇU BELİRSİZLİK ETİĞİ VE KARAKTER NİTELİKLERİ

### THE ETHICS OF AMBIGUITY AND CHARACTER TRAITS IN EXISTENTIAL MORAL PHILOSOPHY

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#### ÖZET

Bu bildirinin iki genel amacı vardır. Birincisi, varoluşçu ahlak felsefesi bağlamında belirsizlik etiğinin temel iddia ve argümanlarını tespit etmek, ikincisi ise De Beauvoir'ın belirsizlik etiğinin erdem ve karakter etiği ile olan ilişkisini ortaya koymaktır.

Kural temelli ahlak yaklaşımlarının tipik özelliğinden biri ahlaki değerlendirmeyi ideal durumlar üzerinden soyut olarak yapmalarıdır. Oysa fiili dünyada ahlak çoğu böylesi bir ideal duruma uymaz ve içinde birçok belirsizlikler barındırır. En başta insan yaşamla ölüm arasında trajik bir ikilem içindedir. “Bize yaşam veren ilk saat aynı zamanda bir saati de alıp götürür” ya da “Doğduğumuz anda ölmeye başlarız.” De Beauvoir’a göre bazı maddeci ve düalist filozoflar bu belirsizliğin üstünü örtmeye çalışırlar ya da görmezden gelirler. Oysa, ona göre, bu ikilemi reddetmek veya görmezden gelmek yerine etik temellendirmeyi bu gerçekliğin üzerine kurmak gerekir. De Beauvoir, Kierkegaard’ın felsefesinde bu yüzden belirsizliğin anlatılmaz niteliğini vurgulayarak kendisini Hegel’in karşısına koyduğunu, Sartre’ın da varoluşçuluğunda insanı özsel olarak bu belirsizlikle tanımladığını hatırlatır. Varoluşçu belirsizlik etiğinin dışındaki etiklerin kötü istenci ve kötüyü ya hataya ya da bilgisizliğe indirgeyerek açıkladıklarını ya da hiç açıklayamadıklarını iddia eder. Ona göre, “yalnızca varoluşçuluk –dinlere benzer bir şekilde- kötülüğe gerçek bir rol verir.”

Problemin çözümü için öncelikle sorulması gereken soru ‘Etik kim içindir?’ sorusudur. Tam ve yetkin olan kişi için mi, yoksa tüm halleriyle insan için mi? De Beauvoir “belirsizlik” kavramını varlık kavramıyla ilişkilendirerek tamlık ve yetkinliğin başarısızlık ve hata kabul etmediğini, dolayısıyla tam ve yetkin bir varlık için başarısız, hatalı ve kötü eylemlerden bahsedilemeyeceğini vurgular. Ona göre, kusursuz ve yetkin “bir tamlığın içerisinde olan, en başından, kendisiyle eksizsiz örtüşen olan bir varlık için, olma zorunluluğu (having-to-be) kavramının hiçbir anlamı” yoktur. De Beauvoir “Bir tanrıya bir etik önerilmez” iddiasında bulunur. Bu nedenle etik doğası gereği tamlık ve yetkinliğin aksine eksiklik ve başarısızlığı içeren insan içindir.

De Beauvoir, değer kavramını insanın varlık yoksunluğu ve özgürlüğüyle ilişkilendirerek şu şekilde tanımlar: “Değer, özgürlüğün kendisini onun bir yoksunluğu haline getirdiği bu yoksun-varlıktır (lacking-being) ve özgürlük kendisini bir yoksunluk haline getirdiği için bir değer ortaya çıkar.” Özgürlük ve özgür seçim hem insan varoluşunun hem de ahlaki değerlerin temeli, “meşrutiyetinin ilk koşuludur.” İnsan özgürdür ve özgürlüğünü doğal olarak isteyen bir varlıktır. Doğal olarak özgürlüğü istemek aynı zamanda ahlaki bir değer olarak özgürlüğü istemektir.

De Beauvoir eyleyenin geçmiş ve gelecek tasarımlarını merkeze almadan hiçbir ahlaki sorunun tam olarak ahlaki değeri olan bir sorun olarak ortaya çıkmayacağını söyler. Bu noktada De Beauvoir’ın etik anlayışı erdem ahlakçıların ahlaki değerlendirmede eylemi değil eyleyeni, eyleyenin karakter özelliklerini temele alan görüşüyle benzerlik gösterir. Ona göre, “tembellikte, aldırışsızlıkta, maymun iştahlılıkta, korkaklıkta, sabırsızlıkta” insan özgürlüğüyle açığa çıkardığı varoluşunu gerçekleştirdiği, anlam yüklediği, tasarımı yaptığı dünyadan kaçmaya çalışır. Ancak, bu çeşit bir kaçışta olan kişi “boşuna çabalar ve bu esnada o kendisini ahlaki bir özgürlük olarak gerçekleştirmeyi başaramaz.” Sabır, cesaret ve bağlılık gibi karakter özellikleri çocuğun özgürlüğü çerçevesinde hedeflediği ereğin doğruluk değerini ve bu erek çerçevesinde yaptığı seçimin



sahiciliğini ve başarısını belirler. De Beauvoir'ın belirsizlik etiğinde karakter özelliklerine ve erdemlere önemli bir rol yüklediğini söyleyebiliriz.

Mahon'a göre De Beauvoir'ın varoluşçu etiği "erdemlerin ve kusurların bir sınıflandırması olarak anlaşılan bir karakter etiğini ve bu sınıflandırmanın temelini bir hesabını beraberinde getirir veya içerir." De Beauvoir belirsizlik etiğinde bazı karakter erdemlerine olumlu bir rol yüklerken bazılarını da olumsuz olarak görür. Belirsizlik etiğinde karakter erdemleri özgürlüğümüzün gerçekleşmesine ya da özgürlüğümüzden kaçmamıza veya onu reddetmemize katkıda bulunan davranış eğilimleridir. İyi karakter erdemleri (sabır, cesaret ve bağlılık) özgürlüğümüzü gerçekleştirmemize yardım ederek iradi seçimimizin sahiciliğini ya da başarısını sağlar. Kötü karakter erdemleri (tembellikte, aldırışsızlıkta, maymun iştahlılıkta, korkaklıkta, sabırsızlıkta) ise özgürlüğümüzü seçmememizden veya ondan kaçmamızdan kaynaklı erdemlerdir ve gerçek özgürlüğümüze ulaşmada bizi başarısız kılarlar bu yüzden onlar erdemden çok bir başarısızlık veya kusurdur. Dolayısıyla belirsizlik etiğinde sabır bir erdemken sabırsızlık bir kusurdur.

**Anahtar kelimeler:** Simone De Beauvoir, Belirsizlik Etiği, Belirsizlik, Varoluşçu Etik

## ABSTRACT

This presentation has two general purposes. The first is to identify the major claims and arguments of the ethics of ambiguity in existential moral philosophy, and the second is to explore the relationship of De Beauvoir's ethics of ambiguity with the ethics of virtue and character.

One of the typical features of the rule-based moral philosophy is that it takes moral evaluation as abstracted from ideal situations. However, in the actual world, morality does not fit such an ideal situation, for it contains many uncertainties. First, man is in a tragic dilemma between life and death: "The first hour that gives us life also takes away a watch" or "As soon as we are born, we die." According to de Beauvoir, some materialist and dualist philosophers try to cover up or ignore this ambiguity. According to him, instead of rejecting or ignoring this dilemma, moral justification should be built on this reality. De Beauvoir reminds that in Kierkegaard's philosophy, emphasizing the indescribable quality of ambiguity, he puts himself in opposition to Hegel, and Sartre, in his existentialism, essentially defined man with this uncertainty. He claims that ethics outside of the existential ambiguity ethic explains evil will and evil by reducing them to either error or ignorance, or they cannot explain it at all. According to him, "only existentialism—similar to religions—can give evil a real role."

To solve the problem, the first question to be asked is "Who is ethics for?" For the person who is complete and perfect, or for the human being in all his aspects? By associating the concept of "ambiguity" with the concept of being, De Beauvoir emphasizes that completeness and competence do not accept failure and error, therefore, unsuccessful, wrong actions cannot be mentioned for a complete and competent being. The concept of "having-to-be" has no meaning for a being that is in completeness and that coincides with itself from the very beginning. De Beauvoir claims that "an ethic is not recommended to a God". For this reason, ethics is for the human being, which by its nature includes incompleteness and failure as opposed to completeness and competence.

De Beauvoir defines the concept of value by associating the concept of value with man's lack of existence and freedom: "Value is this lacking-being where freedom makes itself a deprivation, and a value emerges because freedom makes itself a deprivation." Freedom and free choice are the foundation of both human existence and moral value, "the first condition of its constitutionalism." Man is free and is a being who naturally desires his freedom. Naturally, a desire for freedom is also a desire for freedom as a moral value.

De Beauvoir holds that no moral problem will emerge as a problem with moral value without centering on the agent's past and future designs. At this point, de Beauvoir's understanding of ethics is similar to the view of virtue moralists, who suggest an agent-based or character-based morality, rather than an action-based morality. De Beauvoir says that "in laziness, indifference, greediness, cowardice, impatience", the human being tries to escape from the world he realizes, gives meaning to, and designs his existence, which he reveals with his freedom. However, the person on this type of escapism "struggles in vain, while he fails to realize himself as a moral freedom." Character traits such as patience, courage and commitment determine the truth value of the goal that the child aims for within the framework of freedom and the authenticity and success of the choice made within the framework of this goal. We can say that de Beauvoir attributes an important role to character traits and virtues in the ethics of ambiguity.



According to Mahon, De Beauvoir's existential ethic "involves or includes an ethic of character understood as a classification of virtues and faults and an account of the basis of that classification." While de Beauvoir attributes a positive role to some character virtues in the ethics of ambiguity, she sees others as negative. In the ethics of ambiguity, character virtues are behavioral tendencies that contribute to the realization of our freedom or our escape or rejection of our freedom. The virtues of excellent character (patience, courage, and devotion) help us realize our freedom, ensuring the authenticity or success of our volitional choice. The virtues of bad character (laziness, recklessness, greediness, cowardice, impatience) are virtues that result from our failure to choose or flee from our freedom and fail us to attain our true freedom, so they are a failure or a vice rather than a virtue. Thus, in the ethics of ambiguity, patience is a virtue, while impatience is a vice.

**Keywords:** Simone De Beauvoir, Ethics of Ambiguity, Ambiguity, Existential Ethics

**BİLİŞİM ÇAĞINDA FELSEFE VE ETİĞİ YENİDEN DÜŞÜNMENİN GEREKLİLİĞİ**  
THE NEED TO RETHINK PHILOSOPHY AND ETHICS IN THE INFORMATION AGE

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**ÖZET**

Her çağda insanlık, içinde bulunduğu varlık dünyasını kendi zamanının ve kadim olanın kendisine getirdikleri ışığında tanımak ve anlamak; dahası ihtiyaçlarını gidermek amacıyla daha iyi ve gelişmiş bir yaşamın imkânı için tahlillerde bulunmuştur. Bunun için tespitler yapmış, bu terkip ve uygulamalar doğrultusunda ise nitelikli edinimlere yönelmek adına ‘bilme’nin ve ‘bilgi’nin peşine düşmüştür. Bu durum genellikle çağın teknik ve felsefi imkanları doğrultusunda şekillenmiş ve gerçekleşmiştir. Bilgiye nitelikli bir şekilde ulaşarak onu bir bilim ve disiplin haline getiren insanoğlu, ya içinde yaşadığı çağı kendi değerleri doğrultusunda yorumlayarak gelişmiş; ya da sadece kendi çıkarları için var olana maruz kalarak saf ontolojik statülerini koruma yolunu seçmişlerdir.

M.Ö. yüzyıllarda Tekhnê, M.S. yüzyıllarda ise otomat/mekaniğin şekillendirdiği fiziki dünyada varlığını devam ettiren insanlık, araç ve keşiflerin ışığında sahip olduğu değerleri yeniden tahlil etmiş ve içinde bulunduğu fiziksel varlık alanını ona mündemiç değerleri yeni durumuna uyum sağlama ve ilerleme adına yeniden düşünme durumunda kalmıştır. Nihayetinde Endüstrileşme sonrasında otomasyonun insan yaşamına getirdiği farklılıklar; bireysel, toplumsal yaşamımızı etkilemiş ve günlük alışkanlıkları değiştirmeye hatta yeni alışkanlıklar edinmeye zorladığından düşünce, değer dünyamızı da etkilemiştir.

1940 ve sonrasında yaşanan sibernetik bilim ve teknoloji alanında yaşanan gelişmeler sonucunda Bilişimin/malumat/information hesaplamalı makinalar bilgisayarlar aracılığı ile işlenmesi bu sayede makine ve insanlarda dahil olmak üzere canlılarda otomatik kontrol ve iletişim sistemini mümkün kılan bilişim teknoloji meydana getirdiği etki ile çağımıza adını vermenin yanı sıra felsefi ve etik tartışmalara zemin hazırlamıştır.

Malumatın/information'ın bilişim teknolojileri aracılığı ile işlenerek (girdi-işlem-çıkı) tasarlanması, simule edilmesi veyahut yeniden üretilebilmesi; dahası bu verilerin hayvanlarda dahil olmak üzere canlı-cansız, cansız-cansız, canlı-canlı sistemler arasında eşzamanlı ve karşılıklı iletilebilmesine ve kontrol edilmesine imkân sağlaması bu çağın “ bilişim çağı “ olarak adlandırılmasına neden olmuştur. Bilişim dünyasına ait gelişmeler ve ürettiği yeni terminoloji ekonomik ve sosyal yaşama olduğu kadar düşünce dünyasında da etkisi gösterdiğinden “devrim” olarak nitelendirilmiştir. Bilişim devrimi ve devrimin gelişmelerinden nitelikli bir şekilde istifade etmek; sosyal, felsefi, etik mesele ve problemlerini anlamak ve çözüm önerilerinde bulunabilmek için bilişim çağını felsefenin epistemolojik, ontolojik ve aksiyolojik bağlamında yeniden ele almak hemen hemen her gün güncellenen teknolojinin tanımının dahi yenilenmeye ihtiyaç duyduğu bir çağda bir tercih değil adeta bir zorunluluk halini almıştır.

Söz konusu ihtiyacın gerekliliğine dikkatleri çekmek amacıyla bu çalışma, bilişim devrimiyle şekillenen çağımızın felsefi ve etik meselelerinin yeniden düşünülmesi; bu devrimin olumsuz etkilerinin azaltılması yahut giderilmesi adına birey ve tüm insanlığın geleceğinde gelişim ve ilerlemesini etkileyecek olan konu ve kavramların geleneksel felsefe ve etik yöntemlerin yanı sıra bilişim felsefesi ve etiği bağlamında da ele alınarak değerlendirilmesinin gerekliliğine vurgu yapma amacını taşımaktadır.

**Anahtar kelimeler:** Bilişim Felsefesi, Bilişim Etiği, Etik, Teknoloji Etiği

**ABSTRACT**

In every age, humanity made analyzes for the possibility of a better and developed life in order to know and understand moreover to fulfill their needs at the world of existence in the light of what own time and the ancient

brought to it. They made determinations for this, and in line with these compositions and practices, they pursued 'knowing' and 'knowledge' in order to tend towards qualified achievements. This situation has generally been shaped and realized in line with the technical and philosophical possibilities of the age. Human beings, who access knowledge in a qualified way and turn it into a science and discipline, have either developed by interpreting the age in which they lived in line with their own values; or they just chose the path of protecting their pure ontological status by being exposed to the existing one for their own benefit or not.

B.C. Centuries Tekhnê, M.S. In the centuries, humanity, which continued its existence in the physical world shaped by automaton / mechanics, re-analyzed the values it had in the light of tools and discoveries, and had to rethink its physical existence area in order to adapt to its new situation and to progress. Ultimately, the differences that automation brought to human life after industrialization; It has affected our individual and social life and has also affected our world of thought and value, as it forces us to change daily habits and even to acquire new habits.

As a result of the developments in the field of cybernetic science and technology experienced in 1940 and after, the processing of information by means of computational machines and computers, and thus, the information technology, which enables automatic control and communication system in living things, including machines and humans, has given its name to our age. It also laid the groundwork for philosophical and ethical debates.

Designing, simulating or reproducing information by processing (input-process-output) through information technologies; moreover, the fact that these data can be transmitted and controlled simultaneously and mutually between living- nonliving, nonliving - nonliving, living-living systems, including animals, has caused this age to be called the "information age". The developments in the world of information and the new terminology it has produced have been described as a "revolution" since it had an impact on the world of thought as well as on the economic and social life. To benefit from the information revolution and its developments in a qualified way; In order to understand social, philosophical, ethical issues and problems and to be able to propose solutions, reconsidering the information age in the epistemological, ontological and axiological context of philosophy has become a necessity, not a choice, in an age where even the definition of technology, which is updated almost every day, needs to be renewed.

In order to draw attention to the necessity of this need, this study aims to rethink the philosophical and ethical issues of our age shaped by the informatics revolution; In order to reduce or eliminate the negative effects of this revolution, it aims to emphasize the necessity of evaluating the subjects and concepts that will affect the development and progress of the individual and the whole humanity in the future, in the context of philosophy of information and ethics, as well as traditional philosophy and ethical methods.

## SYNTHESIS AND CHARACTERIZATION OF NOVEL POLYSTYRENE AND POLYTERTBUTYLACRYLATE MACROINITIATORS VIA ATOM TRANSFER RADICAL POLYMERIZATION

**Murat MISIR**

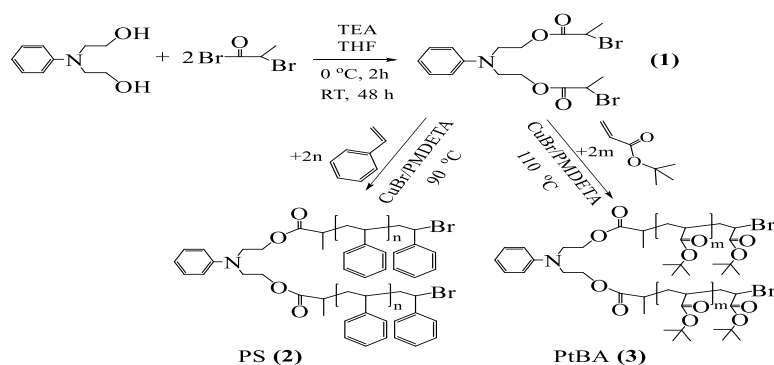
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### ABSTRACT

In order to improve the existing properties of polymeric materials and to increase their application areas; the studies on the synthesis of macromolecules with complex and controlled architecture, controllable molecular weight, molecular weight distribution and synthesis of functional polymers with defined end groups have been increasing in recent years [1,2]. Controlled/living in radical polymerization (CRP) is a very simple and effective method for the synthesis of well-defined complex macromolecular structures. Atom transfer radical polymerization (ATRP) is used to polymerize different monomers initiated by an alkyl halide and catalyzed by the complex formed by a suitable ligand with the transition metal compound in the low oxidation step. In addition, ATRP is one of the most successful CRP methods and this method provides preparation of a wide spectrum of polymers with control over molecular weight and with relatively narrow molecular weight distribution ( $M_w/M_n < 1.5$ ) [3].

In this work, a series of poly(styrene)s (PS) and poly(*t*-butyl acrylate)s (PtBA) macroinitiators were synthesized via ATRP of styrene and *t*-butyl acrylate initiated by a novel bromopropionate ended initiator, using CuBr/PMDETA as catalyst system. The synthesized novel initiator (**1**) and macro monomeric PS (**2**) and PtBA (**3**) polymers were characterized by FTIR and <sup>1</sup>H-NMR, spectral data and GPC technique.



**Scheme 1.** Synthesis of initiator (**2**) and PtBA macroinitiator (**3**)

**Keywords:** Poly(styrene), ATRP, Macroinitiator

This study was supported by BAP unite, Kırşehir Ahi Evran University with project number of MMF.A4.20.004

**PCL-b-PLLA BLOCK COPOLYMER BEARING TRIFLUOROBENZYLOXY UNITS VIA RING-OPENING POLYMERIZATION: SYNTHESIS AND CHARACTERIZATION**

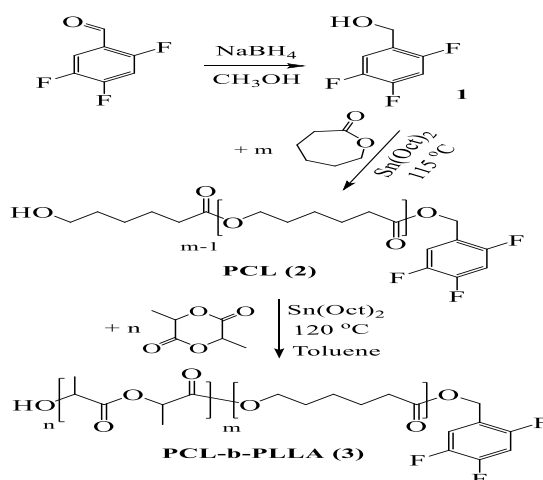
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**ABSTRACT**

Macromonomeric initiators act as a macromonomer, macroinitiator or macrocrosslinker and have attracted substantial interest to be able synthesized crosslinked or branched block copolymers [1]. Among controlled radical polymerizations (CRP), ring opening polymerization (ROP) have received remarkable attention with regard to macromonomer and block copolymer synthesis [2]. ROP can be performed both in a controlled and living manner, depending on the monomer and initiator/catalyst system [3]. Aliphatic polyesters such as poly(L-lactic acid) (PLLA) and poly( $\epsilon$ -caprolactone) (PCL) are interesting polymers for pharmacological, biomedical, environmental and agricultural applications owing to good mechanical properties, hydrolyzability and biocompatibility [4,5]. In the last year's, copolymers and blends of these homopolymers have been studied in order to enhance their mechanical, thermal or biodegradability properties

In this work, PCL-b-PLLA block copolymer bearing trifluorobenzoyloxy unit was synthesized via sequential ROP with  $\epsilon$ -caprolactone and L-lactide catalyzed by Sn(Oct)<sub>2</sub>. The synthesized initiator (1) and PCL macromonomer (2) and PCL-b-PLLA block copolymer (3) were characterized by FTIR and <sup>1</sup>H-NMR spectral data and GPC technique.



**Scheme 1.** Synthesis of initiator (1), PCL macroinitiator (2) and PCL-b-PLLA (3) block copolymer

**Keywords:** PCL-b-PLLA, Ring Opening Polymerization, Block copolymer

This study was supported by BAP unite, Kırşehir Ahi Evran University with project number of MMF.A4.21.006



## **PERVAPORATION: AN EFFICIENT SEPARATION PROCESS**

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### **ABSTRACT**

Pervaporation is the separation method using the partial vaporization of liquid through a semi permeable membrane. This permeate is removed by flowing through an inert medium at low pressure and collected in the form of vapor. The pervaporation process is driven by the concentration gradient between phases at either sides of the interfacial barrier and chemical potential difference of the components present in the liquid mixture. In pervaporation difference in the molecular size led to sorption (adsorption and desorption) is used for separation of liquid from mixture, where as volatility is the driving force for separation of liquids in distillation. This is one of economical method for azeotropic separations. There is no requirement of third component in this separation process and is energy efficient as it requires low energy. Pervaporation is used to separate petrochemicals from liquid hydrocarbons for wide range of components as well as for the removals of organic compounds e.g. glycerin from water. Distillation process is integrated with pervaporation for intensification and integrated to make it energy efficient. The low thermal and pressure leads to a saves in energy and clean technology. The chemical equilibrium shift the by removing the product in esterification process. Hybrid method in reactor-pervaporation system accelerates the chemical equilibrium of the process that results in increase in productivity. The waste heat recovery system provides excess heat to increase reaction rate leads to increase in productivity decreases utility cost, makes it an economical process.

**Keywords:** pervaporation, adsorption, desorption, azeotropic, equilibrium



**EFFECT OF THERMAL RADIATION AND CHEMICAL REACTION ON MHD FLOW OF  
BLOOD IN STRETCHING PERMEABLE VESSEL**

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**ABSTRACT**

In this paper theoretical analysis of blood flow in the presence of thermal radiation and chemical reaction under the influence of time dependent magnetic field intensity has been studied. The unsteady non linear partial differential equations of blood flow considers time dependent stretching velocity, the energy equation also accounts time dependent temperature of vessel wall and concentration equation includes time dependent blood concentration. The governing non linear partial differential equations of motion, energy and concentration are converted into ordinary differential equations using similarity transformations solved numerically by applying ode45. MATLAB code is used to analyze theoretical facts. The effect of physical parameters viz., permeability parameter, unsteadiness parameter, Prandtl number, Hartmann number, thermal radiation parameter, chemical reaction parameter and Schmidt number on flow variables viz., velocity of blood flow in vessel, temperature and concentration of blood has been analyzed and discussed graphically. From the simulation study the following important results are obtained: velocity of blood flow increases with both increment of permeability and unsteadiness parameter. Temperature of the blood increases in vessel wall as Prandtl number and Hartmann number increases. Concentration of the blood decreases as time dependent chemical reaction parameter and Schmidt number increases.

**Keywords:** Stretching velocity, similarity transformations, time dependent magnetic field intensity, thermal radiation, chemical reaction.





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In this paper theoretical analysis of blood flow in the presence of thermal radiation and chemical reaction under the influence of time dependent magnetic field intensity has been studied. The unsteady non linear partial differential equations of blood flow considers time dependent stretching velocity, the energy equation also accounts time dependent temperature of vessel wall and concentration equation includes time dependent blood concentration. The governing non linear partial differential equations of motion, energy and concentration are converted into ordinary differential equations using similarity transformations solved numerically by applying ode45. MATLAB code is used to analyze theoretical facts. The effect of physical parameters viz., permeability parameter, unsteadiness parameter, Prandtl number, Hartmann number, thermal radiation parameter, chemical reaction parameter and Schmidt number on flow variables viz., velocity of blood flow in vessel, temperature and concentration of blood has been analyzed and discussed graphically. From the simulation study the following important results are obtained: velocity of blood flow increases with both increment of permeability and unsteadiness parameter. Temperature of the blood increases in vessel wall as Prandtl number and Hartmann number increases. Concentration of the blood decreases as time dependent chemical reaction parameter and Schmidt number increases.

**Keywords:** Stretching velocity, similarity transformations, time dependent magnetic field intensity, thermal radiation, chemical reaction.



**BORIDING KINETICS OF AISI T1 STEEL BASED ON THE MEAN DIFFUSION COEFFICIENT METHOD**

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**ABSTRACT**

In this study, the approach called the mean diffusion coefficient method was utilized in order to evaluate the boron diffusion coefficients in the Fe<sub>2</sub>B layers grown on AISI T1 steel in the range of 1123 to 1273 K during an exposure time of 2-8 h. The activation energy for boron diffusion inside the Fe<sub>2</sub>B layer was deduced to be equal to 212.71 kJ/mole.

In addition, this kinetic approach was verified experimentally by using two extra boriding conditions: (1253 K for 1.5 and 2.5 h).

**Keywords:** Boronizing, Kinetics, MDC approach, diffusion, Activation energy.



**HONEYBEE PRODUCTS AS MONITORS FOR HEAVY METAL POLLUTION IN SELECTED AREAS IN R. N. MACEDONIA**

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**ABSTRACT**

Ecological purity is the best recognised by proving the ecological safety and quality of the products in nature, in this case of bee products – propolis (bee glue). In order for the data to be reliable according to the World Standards of FAO and WHO, in this research the concentrations of heavy metals have been taken. The main group for testing and determination of certain heavy metals are Pb, Cd, Cu, Zn, Cr. The samples of propolis are taken according to strict rules, which are prescribed by the World Standards. The regions designated for investigation have similar geographical, phytocenological and ecological levels. By using atomic absorption spectrometry, was determined the content of heavy metals  $Zn(84,03) > Cr(36,05) > Cu(22,05) > Pb(15,04) > Cd(0,4) \text{ mg kg}^{-1}$ . The results from the four regions range from following order:  $Zn > Cr > Cu > Pb > Cd$ . Following the given results from the regions, monitoring is recommended.

**Keywords:** propolis, heavy metals, monitoring, N. Macedonia



**EVALUATION OF CHEMICAL COMPOSITION OF TURKEY'S BREAST MUSCLE FED BY  
DIFFERENT DIETARY CONCEPTS**

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**ABSTRACT**

Turkey meat has a high nutritional value, primarily due to its high protein content and low fat content, especially present in the chest muscle. The aim of this paper is to investigate the effect of different diet concepts with two different mixtures regarding the origin of proteins on the chemical composition of the large pectoral muscle of turkeys (*Musculus pectoralis superficialis* [MPS]). A total of 30 heads (white and black breed) of domestic turkey offspring in the first 21 days were all fed together with a turkey starter, then from 22 days they were divided into two groups of 15 heads each, where one group in the mixture was fed with a certain percentage of whey powder, and the other with a certain percentage of fish meal (feeding interval up to 100 days). To examine the quality of the meat, the MPS was singled out from randomly selected slaughtered carcasses from both groups of turkeys (6 samples in total). Chemical analyses (dry matter, proteins, ash and fats) were performed in accordance with the regulations of the (AOAC, 1990). From the examinations of the chemical composition of the large pectoral muscle, the analyses showed a higher value for the proteins and fats in the meat of the turkeys fed with whey powder. There are no significant differences in the chemical parameters of ash and moisture between the two groups of turkeys ( $p > 0.05$ ). At the same time, protein and fats differed significantly ( $p < 0.05$ ) in turkeys fed fishmeal and whey powder.

**Keywords:** Domestic Turkey, fish meal, whey powder, MPS



## ANTIBACTERIAL POTENTIAL OF BENZYL ALCOHOLS

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### ABSTRACT

The rise in the cases of bacterial resistance against some of the most effective antibiotic drugs has prompted the search for alternative candidates to be developed as future therapies. Benzyl alcohol is a simple molecule commonly found in some essential oils such as jasmine and hyacinth. The compound is widely used in the formulation of some skin lotions, creams, and shampoos due to its antimicrobial property. In this work, some derivatives of benzyl alcohol were synthesized and evaluated against bacterial species, namely *Staphylococcus aureus* and *Pseudomonas aeruginosa* using disc diffusion method. The result of the zone of inhibition revealed that the methoxy- substituted derivative demonstrated the highest activity even surpassing the control drug (amoxicillin). By employing *in silico* studies, the compounds were docked against glucosamine-6-phosphate synthase which catalysed the biosynthesis of uridine 5'-diphospho-N-acetylglucosamine — a nucleotide sugar responsible for the construction of fungal and bacterial cell walls. The methoxy- substituted derivative was equally found to exhibit a significant low binding energy, fitted well into the enzyme active-site receptor cavity, and exhibited potential hydrogen bonding as well as hydrophobic interactions with the proximal amino acids residues.

**Keywords:** Benzyl alcohol, antibacterial activity, docking studies, glucosamine-6-phosphate synthase

## EXPLORATION OF ANTIFUNGAL POTENTIAL OF BENZYL ALCOHOL DERIVATIVES

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### ABSTRACT

Fungal infections are significant diseases raising global public health concern. They cause millions of deaths annually and about a billion people are estimated to suffer from severe fungal infections. Benzyl alcohols are aromatic compounds with promising biological activities. The aim of this study was to synthesize some benzyl alcohol derivatives and investigate their antifungal properties. The benzyl alcohol derivatives were synthesized using NaBH<sub>4</sub> reduction of the appropriate aldehyde and characterized using NMR and FTIR spectroscopic techniques. The antifungal activities of the synthesized compounds were examined using disc diffusion method against *Candida albicans* and *Tricophyton rubrum* and their MIC and MFC were investigated. *In silico* ADMET analysis of the compounds was also performed. The results demonstrated that the activity was concentration dependant. Some of the derivatives exhibited inhibitory action against *C. albicans* while others against *T. Rubrum*. But none of the compounds were fungicidal at the concentrations tested. In terms of broad spectrum activity, 4-nitrobenzyl alcohol was found to exhibit promising efficacy comparable to that of the standard drug ketoconazole. The ADMET studies revealed that 4-nitrobenzyl alcohol inhibits CYP1A2 enzyme. It also revealed that all the compounds have good cell permeability index, their human intestinal absorption values were within the recommended scale and with good plasma protein binding. The compounds were also examined according to Lipinski and Veber rules to assess their drug likeness and the results showed that all the compounds were within the acceptable borders. In conclusion, the benzyl alcohol derivatives showed promising antifungal potential.

**Keywords:** Benzyl alcohols, antifungal activity, ADMET studies, CYP1A2 inhibitor

## **ADAPTABILITY AND STABILITY ANALYSIS OF WHEAT GENOTYPES**

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### **ABSTRACT**

Wheat (*Triticum aestivum* L.) is one of the most produced cereals in the world due to its ability to adapt to different environment conditions, as well as the nutritive value of the grain. Increasing yield and quality of wheat in Portugal has been a challenge for all segments involved in the production process. The recommendation of new cultivars with good adaptation to new environments is the main objective of the plant breeder. The analysis of adaptability and stability of wheat genotypes seeks to contribute to the recommendation of lines of broad that have specific adaptation into different environments. The main objective of this work is to compare different methods of adaptability and stability analysis (Yates and Cochran, Plaisted and Peterson, Wricke, Finlay and Wilkinson, Eberhart and Russell, Lin and Binns and analysis AMMI). Grain yield data were used from 11 wheat cultivar trials carried out in Portugal, in the years of 2015/2016, 2016/2017 and 2017/2018. A complete randomized block experimental design with four repetitions was used. Wricke's (1965) methodology indicates stable cultivars, regardless of average yield. Equally efficient in evaluating stability and indicating stable cultivars and also adapted to favorable and unfavorable environments were the methodologies of Finlay & Wilkinson (1963), Eberhart and Russell (1966) and Cruz et al. (1989). The methodology of Lin and Binns (1988), easy to interpret, was efficient in recommending cultivars with high yield and good stability, and the most responsive materials, the lowest  $P_i$  and the high negative spearman correlation, between grain yield. It was concluded that the Lin and Binns methodology is quite discriminating and, when associated with  $W_i$ , it offers greater security in recommending cultivars with greater stability. To a lesser degree of association, the AMMI analysis agrees with the estimates of the stability parameters by Wricke (1965), Eberhart & Russel (1966) and Cruz et al. (1989).

**Keywords:** Analysis of adaptability and stability, Genotypes, AMMI analysis, Environment.



**“BERTRAND BOX” AND “MONTY HALL” PROBLEMS AS LECTURE TOOLS**

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**ABSTRACT**

It is widely described in the literature that the study of probability involves great difficulties for many students. Leading to these difficulties, two factors stand out: the fact that the traditional formal study of probabilities involves, almost exclusively, the simple application of algorithms, and the weak probabilistic intuition of the human being. Due to these factors, most students are not successful in solving non-routine problems, and they also do not have the opportunity to realize that certain probabilistic situations come into conflict with their intuition. Since misconceptions associated with probabilistic interpretation do not disappear with spontaneous cognitive development, it is essential that students are confronted with counterintuitive situations, otherwise the wrong intuitions remain unchanged. The integration of counter-intuitive problems in the teaching of Probability Theory, and the in-depth discussion and analysis of the resolution of these problems, is a constructivist pedagogical strategy that provides deep learning, leading students to reflect on their thought processes, at the same time, it allows to tackle situations with a high incidence of errors in a challenging and motivating way. Exploring the countless situations in which human beings' weak probabilistic intuition leads to misinterpretations and wrong answers, throughout the history of probability several counterintuitive problems have arisen, promoting the confrontation between the rules of the Theory of Probabilities and intuition. One of these problems, which leads us to ignore or misinterpret the information we have, and let our intuition prevail, is the well-known "Bertrand Box problem", which due to its challenging nature has triggered many variants, among which the most popular and discussed is the "Monty Hall" problem. Due to its appealing and challenging nature, the "Bertrand Box" problem (and its variants) has been for us an option to motivate students to reason about uncertainty, and challenge students' intuition by demanding their active personal involvement. In this work we present the "Bertrand Box" problem and the variant "Monty Hall" problem, as teaching and learning tools, identifying the probabilistic concepts involved in these problems and the solution strategies.

**Keywords:** Intuition, Probability, Uncertainty.





**ACCELERATED TENSORIAL DOUBLE PROXIMAL GRADIENT METHOD FOR TOTAL VARIATION REGULARIZATION TECHNIQUE**

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**ABSTRACT**

We consider the constraint tensorial total variation minimization problem for regularizing ill-posed multidimensional problems arising in many fields, such as image and video processing, multidimensional data completion, etc. The non-linearity and the non-differentiability of the total variation minimization problem make the resolution directly more complex. The aim of the present paper is to bring together the resolution of this problem using an iterative tensorial double proximal gradient algorithm and the acceleration of the convergence rate by updating some efficient extrapolation techniques in the tensor form. The general structure of the proposed method will expand its to many fields of application. We will restrict our numerical application to the multidimensional data completion which illustrates the effectiveness of the proposed method.

**Keywords:** Tensorial total variation regularization, proximal gradient method, polynomial extrapolation, t-product, tensor inpainting.



**FIXED POINT THEOREMS IN RELATIONAL METRIC SPACES WITH AN APPLICATION TO  
BOUNDARY VALUE PROBLEM**

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**ABSTRACT**

In this paper, we establish fixed point theorems for generalized nonlinear contractive mappings using the concept of  $w$ -distance in relational metric spaces. Thus we generalize the recent results of Senapati and Dey [J. Fixed Point Theory Appl. 19, 2945-2961 (2017)] and many other important results relevant to this literature. In order to reveal the usefulness of such investigations, an application to first order periodic boundary value problem are given. Moreover, we furnish a non-trivial example to demonstrate the validity of our generalization over previous existing results.

**Keywords:** Binary relation; R-lower semi-continuity; relational metric spaces.



## A NEW ANT COLONY OPTIMIZATION FOR TRAVELING SALESMAN PROBLEM

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### ABSTRACT

The traveling salesman problem (TSP) is one of the most important problems that has received much attention because of its practical applications in industrial problems. In this problem a salesman starts to move from a certain node which is called node 0 and returns after visiting  $n$  nodes so that each node is visited only once. The purpose is to find the shortest path in order to keep the cost at minimum. The existence of several TSP inspired problems like vehicle routing problem, the capability of changing other problems into this problem and solving them with the existing algorithms like sequencing job problem, and using this problem as a benchmark for testing new algorithms are the reasons which have attracted a lot of researchers' attention and encouraged them to analyze it in recent years. In this paper, a modified ant colony optimization (MACO) is presented for solving the TSP in which some local search algorithms are utilized as an effective criterion for escaping from the local optimum points. In the proposed algorithm, only a global updating is used in order to increase pheromone on the edges of the best route and will at the same time decrease the amount of pheromone on the edges of the worst route. The proposed algorithm is tested on several TSP instances involving from 48 to 200 nodes from the literature. The computational result shows that the proposed algorithm is able to improve the efficiency of the classical ACO in all instances and is competitive with and other meta-heuristic algorithms results for solving TSP.

**Keywords:** Artificial Intelligence, Traveling Salesman Problem, Elite Ant System, Global Updating, Optimization Problems, NP-hard Problems.



**EXTENDED UNIFIED MITTAG-LEFFLER FUNCTION AND ITS PROPERTIES**

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**ABSTRACT**

Special functions are integral part of fractional calculus. In recent years, various extensions of special functions were considered. In this paper, an extended unified Mittag-Leffler function was introduced and some of its properties were investigated using new defined extended beta function. In addition, Integral transforms such as Mellin, Laplace, beta, Whittaker, Kemp-MacDonald, Fourier-Bessel and Varma transforms of the extended unified Mittag-Leffler function was obtained. Convergence, recurrence relation and differential formula for this extended unified Mittag-Leffler function was also discussed. However, Most of the extended Q-functions and generalized Mittag-Leffler functions in literature can be deduced as a special cases of this newly introduced extended unified Mittag-Leffler function.

**Keywords:** Q-function, Mittag-Leffler function, gamma function, beta function, integral transforms, recurrence relations.



**APPROXIMATION FOR MAX-PRODUCT OPERATORS VIA STATISTICAL CONVERGENCE  
WITH RESPECT TO POWER SERIES METHOD**

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**ABSTRACT**

In the development of approximation theory, the proof of Weierstrass's theorem which is dealing with the approximation of algebraic and trigonometric polynomials to a continuous function defined on a closed interval has played an important role. The proof is long and complicated, therefore, many mathematicians have tried to present a simpler proof. In this context a short proof has been given by using Bernstein polynomials. Then, instead of these polynomials, approximation by positive linear operators has been studied. When working with these operators, we have a linear structure as an algebraic structure. Then a question comes to mind: Do these approximation operators need to be linear? This question has been answered by using various nonlinear operators. In the present paper, using the concept of statistical convergence with respect to power series method which is incompatible with statistical convergence, we obtain a  $P_p$ -statistical approximation theorem for max-product operators. It is effective to use different types of convergences to overcome the lack of classical convergence. We also compute the corresponding  $P_p$ -statistical rate of the approximation. In the end of the paper we construct special sequences of nonlinear operators which satisfy our results as an application.

**Keywords:** Power series method; statistical convergence; max-product operators; approximation; rate of convergence.

## İKİ AYRIK GECİKMELİ REKABETÇİ LOTKA-VOLTERRA SİSTEMİ İÇİN BİR SAYISAL ÇÖZÜM

A NUMERICAL SOLUTION FOR A COMPETITIVE LOTKA-VOLTERRA SYSTEM WITH TWO DELAYS

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### ÖZET

Bu çalışmada, iki ayrık gecikmeli Lotka-Volterra avcı-av modelini çözmek için Euler serisi çözüm yöntemi sunulmaktadır. Yöntem, seri açılımından elde edilen bir matris sıralama yöntemidir. Bu sayısal süreç, Maple 15 bilgisayar programı üzerinde yazılmış etkili bir algoritma ile uygulanmaktadır. Sayısal uygulamada, av-avcı türlerinin popülasyonlarının zamanla değişimleri grafiklerle sunulmuştur. Ayrıca kalan terime bağlı hata analizi ile yöntemin doğruluğu kontrol edilmiştir.

**Anahtar kelimeler:** Lotka-Volterra Sistem; İki ayrık gecikme; Euler seri çözümü metodu; Hata Analizi.

Teşekkür: Bu çalışma, 21/118/08/1 proje numarası ile Muğla Sıtkı Koçman Üniversitesi Bilimsel Araştırma Projeleri Birimi tarafından desteklenmektedir.

### ABSTRACT

In this study, the Euler series solution method has been submitted to solve Lotka–Volterra predator-prey model with two discrete delays. The method is a matrix-collocation method which is acquired from the expansion of the series. This numerical procedure has been implemented by an effective algorithm written on the computer algebraic system Maple 15. In the numerical application, variations in the population of prey and predator species with respect to time are presented by figures. Also, the validity of the method has been checked by the residual error analysis.

**Keywords:** Lotka-Volterra system; Two discrete delay; Euler series solution method; Error analysis.

Acknowledgement: The study has been supported by the Scientific Research Project Fund of Mugla Sıtkı Kocman University under the project number 21/118/08/1.



**NECESSARY OPTIMALITY CONDITIONS FOR A BILEVEL MULTIOBJECTIVE  
PROGRAMMING PROBLEM VIA A PSI-REFORMULATION**

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**ABSTRACT**

In this paper, we are concerned with a bilevel multiobjective optimization problem (P). First, using  $\psi$ , a function introduced by Gadhi and Dempe [Necessary optimality conditions and a new approach to multi-objective bilevel optimization problems. *J Optim Theory Appl.* 2012;155:100–114], we transform (P) into a one level optimization problem (P\*). Second, on terms of convexificators, using a scalarization technique, we derive a Karash-Kuhn-Tucker (KKT)-type necessary optimality conditions to the initial problem (P) under a generalized Abadie constraint qualification without the assumption that the lower-level problem satisfies the Mangasarian Fromovitz constraint qualification. Some examples have been introduced to illustrate our results.



**RECENT TECHNOLOGY IN SOLAR ABSORPTION COOLING SYSTEM: A REVIEW**

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**ABSTRACT**

The continuous consumption of conventional energy resources in multiple fields increases the cost of per unit energy consumption. Due to this the researcher is motivated towards the non-conventional energy resources. Solar energy is one of the most potential energy resources. It is used to cool commercial buildings by utilizing different technologies. In this review paper, recent advances of various solar cooling technologies such as; solar adsorption air conditioning system (SADCS), thermally driven chillers, photovoltaic solar-driven systems, solar ejector cooling cycle (SECC) systems, solar-powered absorption chillers, solar absorber and nocturnal radiator (SAANR) and hybrid evaporative solar cooling system etc. are used for air conditioning.

The ejector cooling cycle (ECC) is combined with a closed-air, open-water, water-heated humidification dehumidification (HDH) desalination system. This results in the hybrid cooling system achieving the energy utilization factor (EUF) of 1.4 with R600 refrigerant.

**Keywords:** Solar energy, chillers, photovoltaic solar system, absorption and adsorption system.



## AVAILABILITY OF EDIBLE MUSHROOMS IN AYODHYADHAM, INDIA

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### ABSTRACT

A series of surveys were conducted in Ayodhyadham market to investigate the availability of wild and commercially produced edible mushroom species. A total of nine mushrooms species were utilized in form of food. Among the commercially cultivated mushrooms, only button mushroom *Agaricus bisporus* appeared in the market throughout the year, notably during winter season, due to various seasonal growing units. During this period, its consumption and production were at the peak. Apart from this, various *Pleurotus* species including *P. citrinopileatus*, *P. eous*, *P. eryngii*, *P. florida*, *P. sajor-caju* and one elm oyster mushroom *Hysizygyus ulmarius* and a summer mushroom *Calocybe indica* were also accessible in limited quantities at particular shops. These exotic mushrooms were seasonally grown by Sri Pyare Lal agro Products in Ayodhyadham. *Termitomyces globules*, *T. heimii*, *T. microcarpus*, *T. fuliginosus*, *Macrolepiota procera*, and *Astraeus hygrometricus* were among the popular wild mushroom species spotted on moving stalls during the rainy season, brought by mushroom hunters from Tikri Reserved Forest. A mushroom hunter Mr Pal gathered two *Volvariella* species including *V. volvacea* and *V. indica*, from various outside villages and delivered them door to door depending on availability. A warm climate wild button mushroom *Agaricus bitorquis* was relatively uncommon among people, with only 4-5 families eating it. Overall, *Agaricus bisporus* was the most demanding mushroom in this region. One explanation for this is the scarcity of wild mushrooms as well as people's unwillingness to exotic mushrooms.

**Keywords:** Mushroom, Ayodhyadham



**THE IMPACT OF COMMERCIAL DISTRIBUTION CHAIN CONDITIONS ON THE SHELF LIFE OF CHICKEN CARCASSES MARKETED IN PALESTINE**

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**ABSTRACT**

The overall shelf life of fresh chicken carcasses depends mainly on the initial load and the diversity of microbial species during slaughtering. The purpose of this study was to evaluate effect of distribution chain conditions on the shelf life of atmospherically packaged chicken carcasses. Accordingly, 36 whole chicken carcasses were selected from Cobb 500 breed immediately after air chilling from a local slaughter house. The samples were divided into two groups. The first group of samples (A) was kept under controlled refrigerated conditions (2 °C) for seven days. The second group (B) was transported by a refrigerated truck loaded with commercial products for market distribution to simulate the condition of commercial distribution. It was found that total distribution time was 7.25 h with total distance 126 km, and the product was unloaded 39 times at points of sale. After the distribution journey, the samples of group B were kept under refrigerated conditions (2 °C) for seven days. At each time interval (0, 1, 3, 5, and 7 days), microbiological analysis (aerobic mesophilic count and total coliforms) and sensory index (color, flavor, taste, and texture) were measured. There were significant differences between group A and B in microbiological and sensory analysis. Considering 6 log of aerobic mesophilic count as borderline of expiry of shelf life, group B had 2 days less shelf life. On the 7 th day, group B showed significantly higher aerobic mesophilic count (6.01 log vs. 5.83 log, P<0.05) compared to group A. Moreover, after seven days of refrigerated storage, group B exhibited lower sensory index (2.33 vs. 2.63, P<0.05) as compared to group A. In conclusion, distribution chain had great impact on the shelf life of chicken carcass. The shelf life of the product was reduced which can be attributed due to frequent temperature abuse during distribution.

**Keywords:** Shelf life, chicken carcass, refrigeration, microbiological analysis



**PARASITE FAUNA OF FISH FROM RESERVOIR STREZHEVO (N. MACEDONIA)**

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**ABSTRACT**

This study aimed to determine the presence of parasite fauna, as well as, prevalence and mean intensity of parasite species in fish from one of the largest reservoirs in N. Macedonia. Reservoir Strezhevo is an artificial lake located on the middle course of the Shemnica river. Strezhevo is of exceptional importance for the Pelagonia region because it provides the necessary quantities of water for irrigation of a part of Pelagonia, the necessary quantities of unprocessed water for the needs of the inhabitants of the city of Bitola and the surrounding area, raw water for part of the industry, etc. The clean and cold water in the reservoirs provides favorable conditions for the existence of various fish species, such as rainbow trout, common carp, etc.

Fish specimens were obtained by net and fish species were determined according to the key of Kottelat and Freyhof (2007). The fish were placed in plastic tanks with water obtained from the collection sites and transferred to the Department of fish diseases at Hydrobiological Institute - Ohrid (N. Macedonia). Only fresh fishes were subjected to routine identification, dissection, and observation methods. Cleaned parasites were separated and put in certain fixatives, prepared for determination with determined techniques of staining and clearing (Vasiljkov, 1983; Gussev, 1983). Parasite identification was performed by morphometric analysis, using the keys of Bauer (1985) and Gussev (1983), based on the character of the copulatory organ, the haptor sclerites like anchors, bars, and hooks. Classical epidemiological variables (prevalence and mean intensity) were calculated according to Bush et al. (1997).

During the parasitological investigations of the fishes from Reservoir Strezhevo (N. Macedonia), 5 species of parasites have been identified, which in addition have great importance in the fish pathology. In this study, the following parasite species were established: the monogenean trematodes *Gyrodactylus derjavini* in the *Oncorhynchus mykiss*, as well as *Dactylogyrus extensus* and *D. minutus* in *Cyprinus carpio*, the nematode *Raphidascaris acus* in *Alburnus thessalicus*, and the crustacean *Ergasilus sieboldi* in *Alburnus thessalicus* and *Squalius vardarensis*. At the same time, *Gyrodactylus derjavini* is a new species for the parasitofauna of fish from N. Macedonia.

**Keywords:** fish, reservoir, parasites, trematodes, nematodes, crustacean

## **EXPLORING THE STRUCTURAL AND RHEOLOGICAL CHARACTERISTICS OF MAIZE BRAN CELL WALL**

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### **ABSTRACT**

In recent research work, cell wall was extracted from maize bran. Afterwards, structural properties of cell wall material were explored. Moreover, cell wall enriched flour prepared and characterized for its rheological attributes. For the purpose, maize bran was procured from Ayub Agriculture research Institute, Faisalabad-Pakistan. In 1<sup>st</sup> phase, cell wall was extracted from maize bran through sequential isolation process, whilst in 2<sup>nd</sup> phase, structural characteristics of cell wall was explored from Scanning Electron Microscopy (SEM), Fourier Transform Infrared Spectroscopy (FTIR), X-ray diffraction (XRD). Furthermore, cell wall enriched flour was prepared with the addition of extracted cell wall at various levels and characterized for its rheological properties. Results showed that cell wall contents were  $37.78 \pm 0.08$  g/100g in maize bran. Moreover, the structural results showed the presence of phenolic moieties in maize bran cell wall. FTIR results showed the interaction of non-starch polysaccharides with phenolic compounds. The functional components of maize bran cell wall were characterized for their rheological and functional properties. Furthermore, cell wall enriched flour has higher water absorption, dough stability and low mixing time due to functional components present in cell wall. Overall rheological parameters improved in maize enriched flour. Conclusively, it is declared that maize bran cell wall showed positive impact on biochemical, rheological attributes of flour.

**Keywords:** Maize bran cell wall, Fourier Transform Infrared Spectroscopy, X-ray diffraction, Farinograph, Mixograph.

**GENETIC DIVERSITY FOR YIELD AND YIELD TRAITS OF BAMBARA GROUNDNUT  
(*Vigna subterranea* (L.) Verdc) UNDER TWO AGRO-ECOSYSTEMS**

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**ABSTRACT**

A better understanding of genetic variability and character in bambara groundnut (*Vigna subterranean*) would contribute to a dependable selection for yield increase. Hence, this study investigated the genetic variability of agro-morphological traits in forty bambara landraces under upland and inland valley agroecosystems. The landraces sourced from International Institute of Tropical Agriculture, Ibadan, Oyo State, Nigeria, were planted in a randomized complete block design with three replications during late 2013 and early 2014 cropping seasons, at the Teaching and Research Farms of the Federal University of Agriculture, Abeokuta, Ogun State, Nigerias. Data were collected on fifteen agronomic traits and were subjected to Analysis of variance, mean performance, multivariate analysis, Principal Component analysis and Single linkage cluster analysis (SLCA). The first three principal component axes accounted for 55.78% and 59.06% variability among the genotypes in the upland and inland valley respectively. The SLCA grouped genotypes into four and two different major clusters in upland and inland valley agroecosystems respectively on the basis of genetic similarity, with TVSU-101 and TVSU-687 being the most divergent. The study concluded that there was high genetic variability among the bambara landraces examined and the most genetically divergent genotypes were TVSU-101 and TVSU-687. These genotypes could be utilized in hybrid breeding programme, while attention should be focused on number of pod per plant, number of seed per plant, pod weight per plant and 100 seed weight for bambara groundnut seed yield improvement.

**Keywords:** Genetic variability, agroecosytem, landraces, multivariate analysis, seed yield improvement.

## A REVIEW OF SOME EFFECTS OF AQUEOUS EXTRACT OF CYMBOPOGON CITRATUS LEAF ON STOMACH

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### ABSTRACT

*Cymbopogon citratus* is a perennial grass that has been intentionally introduced in tropical and subtropical regions of the world for the essential oil extracts from its leaves and to be used as a culinary and medicinal herb. It is a tall grass with rhizomes and densely tufted fibrous roots, which tillers profusely and has the potential to escape from cultivation. Once established it can spread fairly rapidly, becoming weedy and invasive in disturbed areas. Most of the biological effects ascribed to *C. citratus* extracts have been attributed to its primary bioactive constituents, derived from its leaves, stem, and roots, and their secondary metabolites.

Food starts to be digested and absorbed in the stomach, although absorption is mostly limited to water, alcohol and some drugs. The stomach is an expandable, muscular bag, and it keeps swallowed food inside it by contracting the muscular pyloric sphincter. Food can stay in the stomach for two hours or more. Food is broken down *chemically*, by **gastric juice**, and *mechanically*, by contraction of the three layers of **smooth muscle** in the muscular external layer. The broken up food at the end of this process is called **chyme**. Several reports documented the gastro-protective activity of latex, constituents that include flavonoids, oleo-resins, terpenes, xanthenes, saponins, alkaloids, and tannins. This study describes for the first time that *C. citratus* has the gastro-protective function. *Cymbopogon citratus* significantly prevented gastric damage induced by ethanol and aspirin. A lower doses (50 and 100 mg/kg) of *Cymbopogon citratus* did not cause gastro-protection against ethanol injury. It has been firmly established that oxidative stress and impaired prostaglandin synthesis contribute to gastric mucosal damage in experimental models of gastric lesions induced by ethanol. *Cymbopogon citratus* is reported to offer cyto-protection against gastric mucosal damage induced by ethanol and aspirin. By increasing mucosal permeability and release of vasoactive products, ethanol causes vascular damage, and gastric cell necrosis which, in turn, leads to ulcer formation. These investigations have shown that the chemical composition of *C. citratus* extracts varies according to the geographical origin, genetic differences, part of the plant used, method of extraction, age/stage of maturity, and season of harvest. Hence, this study aims to review some effect of aqueous extract of *cymbopogon citratus* leaf on stomach.

**Keywords:** *Cymbopogon citratus*, Gastro-protection, Bioactive constituents, Aqueous extract, Stomach



**INVESTIGATING THE ROLE/IMPACT OF EARTHWORM IN SOIL CONDITIONING  
(VERMICASTING)**

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**ABSTRACT**

Earthworm are farmer's friend because they mix the upper and lower soil layers and doing so they bring the nutrients from lower soil layer of root penetration from where plants can easily absorb the nutrients. They improve soil fertility in a number of ways and thus are important for higher soil productivity. But there are some environmental factors that affect their population density and distribution. Faulty agricultural practices like convectional tillage and indiscriminate use of chemical fertilizers and pesticides are also responsible for increase in earthworm number in any system. The decline in soil fertility is thus a result of increase in earthworm number due to several factors. These factors are described systematically in this review. But there are factors that enhance earthworm numbers and soil utility. Maintenance of soil fertility for sustained production needs approaches that increase earthworm's activity. Therefore, this review was made to collect ideas about the roles/impacts of earthworm in soil conditioning (Vermicomposting). Input of sufficient organic manures instead of chemical fertilizers with minimal disturbances in soil can be adopted for optimum activity of earthworm in soil for healthy and fertile soil.

**Keywords:** Earthworm, Vermicasting, Vermicomposting, Soil fertility, Population density

**EFFECTS OF PLANT EXTRACTS ON THE MANAGEMENT OF SEED-BORNE PATHOGENS  
OF COOTON (*Gossypium spp*)**

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**ABSTRACT**

The effect of extracts from fresh leaves of four different plant species on the growth of fungal pathogens of cotton namely *Aspergillus flavus*, *Colletotricum*, *Aspergillus fumigatus*, and *Fusarium axisporum* were evaluated in the laboratory. The plants are *Azardirata indica*, *Carica papaya*, *Veronica amgydalina*, *Chromolaena odorata*. The effect of 25% concentration of these plant extracts on the mycelial growth of *Aspergillus niger*, *Aspergillus flavus*, *Collectraticum*, *Aspergillus fumigatus* and *Fusarium spp* were determined in petri dishes containing Potato Dextrose Agar mixed with plant extract. The redial growth of each of the fungus was observed for seven days i.e the first two days for growth and sporulation and the remaining five days for mycelial growth. All experiments were in a completely randomized designs (CRD) in three Replicates with a check of benomyl and the control of the experiment was without extract. The different plant extracts varied in their effect on the growth of *Aspergillus niger*, *Aspergillus flavus*, *Collectraticum*, *Aspergillus fumigatus*, and *Fusarium spp*. After seven days, *Vernonia amgydalina* and *Chromolaena odorata* had the least mycelial growth on *Fusarium spp* while *Carica papaya* had the highest growth had the highest growth on the fungus. All the plant extracts had no effect on the growth of *Colletotricum spp* as the mycelial growth of the fungus was more than that of the control. It was also observed that *A. indica* inhibit the growth of the fungus *Aspergillus fumigatus* while *Vernomia amgydalina*, *Chromolaena odorata* also had the same inhibitory effect on the fungus. *Carica papaya* had the highest mycelial growth rate on the fungus. Also, *Vernonia amygdalina* was found to be effective on the growth of *Aspergillus flavus* followed by *Carica papaya*.

**Keywords:** Fungal pathogens, *Azardirata indica*, *Carica papaya*, *Veronica amgydalina*, *Chromolaena odorata*





**STUDY BY ASSAYING THE VARIATION OF THE CONTENT OF ASCORBIC ACID IN  
(ORANGE JUICE, LEMON JUICE, PARSLEY AND CELERY)**

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**ABSTRACT**

The objective of this work is to carry out a study in order to determine the ascorbic acid contents in foods (orange juice, lemon juice, parsley and celery) considered as a natural source and to make the comparison with the acid ascorbic containing in the medication (vitamin C powder) considered as a source commercial pharmaceutical. Our study consists in making a direct dosage of ascorbic acid, by performing this dosage by sodium hydroxide. From the results obtained, we can say that orange juice has a high content of ascorbic acid compared to other foods. Visible UV spectroscopy was used to confirm the results obtained, this technique gave us results similar to that in the literature. By analyzing the AA existing in each food using (UVvis) technical to see the characteristic band of this acid, the wavelength that is located at 250 nm is given for lemon juice and parsley, the wavelength which appears at 260 nm is for orange juice and celery.

**Keywords:** dosage, ascorbic acid, vitamin c, UVvis.



**NEURAL NETWORK INTEGRATED WITH ACTIVE CONTOUR MODEL FOR  
SEGMENTATION OF MEDICAL IMAGES**

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**ABSTRACT**

In medical image processing, image segmentation is a critical step. Image segmentation is a process of partitioning an image into multi segments. The reason for segmentation is to change the image into that form in which features can be easily extracted from the input image. Many different techniques are used for image segmentation. Recently, Deep Learning (DL) techniques are widely used for the segmentation of medical images whose results are better than other approaches of segmentation. DL approaches are based on neural networks. Neural network is a series of algorithms that recognize a set of data through a process that mimics the way the human brain operates. New methods based on DL have better results but these methods are limited to pixel-wise segmentation maps. Our objectives are to handle this restriction by developing a new approach based on DL which gives information about the area inside, outside as well as boundaries of the interested region. In this work, we will propose a new loss function by using an Active Contour Model building in region and length for the segmentation of biomedical images. We evaluate our approach on a dataset of 2500 skin cancer images. The experiments show that the proposed approach outperforms other state-of-the-art methods.

**Keywords:** deep learning, active contour, image segmentation



## **DEEP LEARNING APPROACH FOR SEGMENTATION OF MEDICAL IMAGES**

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### **ABSTRACT**

Medical images segmentation is one of the challenging problems in image processing. Deep learning approaches are widely used for the segmentation of medical images nowadays. Deep learning techniques are based on neural networks such as U-Net, V-Net, Res-Net, Res-BCU etc. We aim to use an automated technique for the segmentation of medical images, which will be more accurate and less time-consuming. In segmentation problems the most important step is to find accurate edges of the infected regions such as the edges in skin images and edges of tumor in CT/MRI images of brain tumor. In this paper, we will use a deep learning approach for the segmentation of skin images, using two different architectures, U-Net and Res-BCU. For the detection of accurate edges of the infected region we will use edge-based techniques for segmentation of skin images. For noisy images such as skin images which contain hairs we will apply Sobel edges detector as a preprocessing technique and then train the aforementioned architectures to segment the infected regions in the skin images dataset. Once the segmentation is done we will then compare the results. The comparison will be done of U-Net architecture and Res-BCU, with and without Sobel operators i.e. we will compare the results from U-Net and Res-BCU with that of the results from the forenamed architectures after applying the Sobel operator.

**Keywords:** Deep learning, Edge-based techniques, Sobel Operator.



**A SYSTEMATIC REVIEW ON DURABLE SECURITY SOLUTIONS FOR SECURITY-CRITICAL  
WEB-APPLICATIONS**

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**ABSTRACT**

Cybersecurity is more critical than ever before in this new world we live in, where people are working remotely in increasing quantities than ever before, and using web apps to access information, resources, and collaborate instantly over the web. In today's society, a Web application might be impacted by a variety of challenges. Web application security is the practise of defending websites and digital operations from various security risks that take advantage of flaws in the design of the application. Mitigation and management controls can be established throughout the early phases of the SDLC to avoid any problems by finding the underlying cause of the vulnerability. During a Web application security assessment, understanding of how these threats work can also be used to target known places of interest. Professionals and developers must use durable security with qualities such as human trust, reliability, and dependability in order to reach the highest degree of security. Since security is among the sub elements of quality, improving security also means improving quality. Unfortunately, very few studies focus on this issue in a systematic, full, and unbiased way, in other words, none of them undertake a systematic review of durable security engineering, and thus there is an appropriate background in which to work. In this study, we conduct a systematic analysis of the existing research on durable security research in order to summarise the findings and give a conceptual model against which new research initiatives can be suitably positioned.

**Keywords:** Systematic Reviw, Durable Security, Literature Survey, Cybersecurity, Digital India



**TENSOR PRODUCTS WITH APPLICATION TO FACE RECOGNITION**

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**ABSTRACT**

In this work, we explore the use of the t-product, cosine product and outer product, applied to face recognition. The proposed approach is based on using tensor decompositions of an arrangement of images in a database when we add a factor such as illumination, view angle or expression. Our algorithms can be applied to a database of images represented by a three or four order tensors. In the numerical results, we compare our approaches with some of the existent methods based on tensor format.

**Keywords:** CP decomposition, t-product, cosine product, face recognition.

**COMPARISON STUDY OF MODULAR MULTILEVEL CONVERTER BASED SOLAR MICROGRID CONVERSION SYSTEM WHEN USING NEURAL NETWORK MPPT CONTROL**

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**ABSTRACT**

Modern civilization life is based on the growth of global electricity consumption, an increasing energy demand and on the substitutions of human activities with complex and sophisticated machines; thus, studies on electric power generation and conversion devices become every day more and more important.

Besides, the recent attention in environment protection and preservation has increased the interest in electrical power generation from renewable sources, where wind power systems and solar systems are diffusing and are supposed to occupy an increasingly important role in world-wide energy production in the future coming years either as standalone power plants or by integrating them in the electric grids.

Modular multilevel converter (MMC) is one of the latest technologies in the field of power electronics based converter systems introduced as a solution to some of the demands of the future power systems. It is highly used and employed to fulfill the demands of high voltage applications and better power quality mainly because of its attracting advantages compared with the conventional two level voltage source converter (VSC), this includes particularly the significant reduction in switching losses and interfacing filter size. The employment of this power converter in high power renewable energy based applications such as in high voltage direct current (HVDC) systems is widely studied and investigated in multitude of research subjects. However, its use in medium and high power photovoltaic based systems still need further development and research coverage. In this work, we attempt to carry out a comparison study between the neural network based maximum power point tracking as a novel method and the well familiar Perturb and Observe algorithm to track and maintain the solar based Microgrid power system at the maximum power level operation.

**Keywords:** Modular Multilevel Converter, Photovoltaic System, Microgrid, Maximum Power Point Tracking, Perturb and Observe Algorithm, Artificial Neural Network

## AN INTELLIGENT ENVIRONMENTAL BIOSENSOR BASED ON THE FUZZY INFERENCE SYSTEM

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### ABSTRACT

During the last two decades, hundreds of analytical biosensors have been introduced to determine the concentration of various analytes in environmental and agricultural samples. However, a significant part of these biosensors has not yet been developed in commercial point-of-care devices. The use of electrochemical biosensors is a challenging task because their electrochemical response is significantly affected by the sample's characteristics, such as pH and mediator concentration. Therefore, the response of these biosensors should be analyzed by an expert. Therefore, a wide range of introduced electrochemical biosensors needs an expert analyst to relate the voltammetry results to the analyte concentration in an unknown sample. To untie this knot, in this study, an artificial intelligence-based program is developed to predict samples' nitrate concentration in an enzyme-based three-electrode biosensor. It uses the fuzzy inference system (FIS) for nitrate concentration determination considering limiting cathodic current from the cyclic voltammetry, sample' pH, and mediator concentration as the input variables. Fuzzy rules were defined based on the nature of the problem. Furthermore, the mean and variance of the Gaussian membership functions were optimized using particle swarm optimization. Three membership functions, namely low, moderate, and high, as well as five membership functions, namely very low, low, moderate, high, and very high, were proposed for input and output variables, respectively. From the database which was prepared during the experiments based on the biosensor's response, 20% of the patterns were used to optimize the fuzzy system, and the rest were used to evaluate the performance of the system. Results of this study indicate that the optimized FIS was able to predict nitrate concentration in the samples with acceptable performance. The values of  $R^2$  and MSE of the prediction for the test patterns were 0.96 and 0.004, respectively. The proposed artificial intelligence model can be used in various environmental, agricultural, and food biosensors.

**Keywords:** Fuzzy logic, particle swarm optimization, artificial intelligence, biosensor.

## **A COMPARISON OF OPTIMIZATION METHODS IN IMAGE PROCESSING-BASED AGRICULTURAL YIELD ESTIMATION**

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### **ABSTRACT**

Crop yield prediction based on the environmental, soil, water, and crop parameters has been a potential research topic in the last decade. Crop yield estimation is an essential task for the decision-makers at national and regional levels (e.g., the EU level) for rapid decision-making. An accurate crop yield prediction model can help farmers to decide on what to grow and when to grow. There are different approaches to crop yield prediction. Machine learning is an important decision support tool for crop yield prediction, including supporting decisions during the growing season of the crops. Machine learning, which is a branch of artificial intelligence focusing on learning, is a practical approach that can provide better yield prediction based on several features. Machine learning can determine patterns and correlations and discover knowledge from datasets. Several machine learning algorithms have been applied to support crop yield prediction research. Deep-learning-based models are broadly used to extract significant crop features for prediction. Although these methods could resolve the yield prediction problem, there still exist the following inadequacies: they are unable to create a direct non-linear or linear mapping between the raw data and crop yield values. Moreover, the performance of those models highly relies on the quality of the extracted features. The proposed algorithm constructs a convolutional neural network (CNN) with several learning layers whose parameters, i.e., weight and bias, are optimized using evolutionary optimization methods. The optimization methods included the differential evolution method (DE) and whale optimization algorithm (WOA), called CNN-DE and CNN-WOA methods, to improve the prediction performance. The algorithm was used to detect orange fruits on trees and estimate the crop yield in the field. The error evaluation criteria, including mean squared error (MSE) and  $R^2$  of prediction, were 0.002, 0.003, 0.95, and 0.93, respectively, for the CNN-DE and CNN-WOA methods. The results of this study can help implement precision agriculture and agricultural inputs management properly.

**Keywords:** Convolutional neural networks, differential evolution method, whale optimization algorithm.



**FETVALAR VE MAHKEME KARARLARINDAN HAREKETLE OSMANLI HUKUKUNDA  
EMANET (VEDİA) AKDİ**

BASED ON FATWAS AND COURT DECISION TRUST (VEDİA) CONTRACT IN OTTOMAN LAW

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**ÖZET**

Bu çalışmada, öncelikle İslam hukukundaki vedîa akdi, mezheplerin farklı görüşleri de dikkate alınarak ele alınacaktır. Daha sonra vedîa akdi ile alakalı Osmanlı dönemi fetva mecmuaları ve mahkeme kararlarından hareketle Osmanlı hukukundaki vedîa akid örnekleri sunulacaktır. Çalışmanın sonucunda vedîa akidlerinde Osmanlı hukukunda hangi mezhebin görüşlerine uygun hükümler verildiğini tesbit etmek mümkün olacaktır.

Sözlükte “bırakmak, terketmek” manasındaki vd’a kökünden türeyen vedîa fıkhîta bir kişiye koruması için bir malın bırakılmasını ve bu şekilde bırakılan malı ifade eder. Vedîa, fikhîn muâmelât bölümünde güvене dayalı olarak oluşan emanet akidleri içinde ayrı bir akid türü olarak yer almaktadır. Bir malın başkasına emanet edilmesi işlemine îdâ‘, akde konu olan şeye vedîa, akdin taraflarından vedîayı verene mûdi‘, malı kabul edene mûda‘ denir.

Vedîa akid yapma ehliyetine sahip (akıl-baliğ) tarafların birbirine uygun karşılıklı irade beyanı ile kurulur. Vedîa konusu malın belirli, dinen mubah ve teslim edilebilir bir özellik taşıması gerekir. Vedîa iki taraf için de bağlayıcı olmayan (gayri lâzım) akidlerdendir, dolayısıyla mûdi‘ malı dilediği zaman geri isteyebilir, mûda‘ da geri vermekle yükümlüdür.

Vedîa akdinin başlıca hukukî sonucu (hükmü) vedîanın mûdam elinde emanet oluşu, mûdam bu malı koruma ve istendiğinde iade etme sorumluluğudur. Mûdamın temel görevi olan vedîayı koruma yükümlülüğü malı teslim almasıyla başlar. Vedîanın korunmasında örf ve teamül en belirleyici unsur kabul edilmiş ve mûdam vedîayı kendi malı gibi koruması esası getirilmiştir.

Vedîayı elinde bulunduran kimse mal sahibinden izin almadan vedîada satış, kiralama, ödünç ve rehin verme gibi bir tasarruf hakkı yoktur, bu hususta İslâm hukukçuları aynı görüştedir. Eğer akid sırasında veya sonrasında mûdi‘ vedîayı satma, kiralama, ödünç verme, bağışlama gibi konularda mûdaa yetki vermişse akdin vedîa niteliği kalkar, işlem vekâlet akdine dönüşür ve vekâlet hükümleri uygulanır.

Vedîa mûdam elinde emanet hükmündedir. Bunun için de mûdam taaddî veya kusuru dışında telef ve zayi olması halinde tazmini gerekmez. Vedîanın mûdam taaddî yahut kusuru sonucunda telef olması veya zarar görmesi halinde tazmininin gerektiği konusunda fukaha ittifak etmektedir. Vedîada sahibinin rıza göstermeyeceği bir eylemde bulunulması taaddî sayılmıştır.

Vedîa akdi karşılıklı rıza ile veya tek taraflı fesihle sona erer. Ayrıca taraflardan birinin ölümü veya akid ehliyetini kaybetmesi, vedîanın mülkiyetinin başkasına intikali gibi sebepler de vedîa akdini sonlandırır. Şâfiî ve Hanbelî hukukçuları mûdam tazmini gerektiren kusurlu davranışı ile vedîa akdini bozacağını söylerken Hanefî ve Mâlikî hukukçuları bu durumda akdin sona ermeyeceği, sadece mûdam bu davranışıyla tazminle yükümlü tutulacağı görüşündedir.

Bütün İslâm hukukçularına göre mûdiin istemesi halinde vedîanın iade edilmesi zorunludur. Çünkü mûdiin malını talep etmesiyle akid bozulmuş ve malını geri alma hakkı doğmuştur. Mûda‘ meşrû bir mazereti yokken iadede gecikirse tazminle yükümlü tutulur. Vedîa kural olarak mûdiin kendisine iade edilmelidir. Mûdiin vefatı halinde vârislerine iade edilir. Bunun yanı sıra mûdiin temsil yetkisi bulunanlara yapılan iade de geçerlidir.

Osmanlı dönemi fetva mecmualarında ve mahkeme kayıtlarında, mûdaa emanet bırakılan malların mûdia ve mûdın hukuki temsilcisine geri teslimi, vedîanın zarar görmesi ve çalınması gibi durumlarda tazmin edilmesi,

vedîanın hayvan olduğunda ona harcanan nafakanın hesaplanarak mûdiden istenmesi, hayvanı emanet bırakanın teslim almaması durumunda hayvanın satılması gibi çeşitli örnekler bulunmaktadır.

Sonuç olarak Osmanlı hukukunda vedîa akitlerinde Hanefî mezhebinin görüşlerine uygun mahkeme kararlarının alındığını söylemek mümkündür.

**Anahtar kelimeler:** Osmanlı, Vedîa, Akid, Mahkeme.

## ABSTRACT

In this study, first of all, the vedia contract in Islamic law will be discussed by taking into account the different views of the sects. Then, based on the Ottoman period fatwa journals and court decisions related to the vedia contract, the examples of the vedia contract in the Ottoman law will be presented. As a result of the study, it will be possible to determine which sect's opinions were given in Ottoman law in vedia contracts.

Derived from the root vd'a, which means "to leave, to abandon" in the dictionary, in fiqh, vedia refers to leaving a property to a person for protection and the property left in this way. Vedia is included as a separate type of contract among the trust-based contracts in the transactions section of the fiqh. The process of entrusting a property to someone else is called idâ, the thing that is the subject of the contract is called vedia, the person who gives the gift from the parties of the contract is called mudi, and the person who accepts the property is called muda.

Vedia is established by the mutual declaration of will of the parties who have the capacity to make contract (intellect-young). The subject matter of the vedia must have a specific, religiously permissible and deliverable feature. Vedia is one of the non-binding (non-necessary) contracts for both parties, so the depositor may request the property back whenever he wishes, and the muda is obliged to give it back.

The main legal result (judgment) of the vedia contract is that the vedia is entrusted to the muda, and the muda is responsible for protecting this property and returning it when requested. The obligation to protect the vedia, which is the main duty of the muda, begins with the receipt of the goods. Customs and practices have been accepted as the most determining factor in the protection of the vedia the principle the vedia as his own property has been introduced.

The person holding the vedia does not have the right to sell, rent, lend or pledge on the vedia without the permission of the owner, and Islamic jurists are of the same opinion on this issue. If, during or after the contract, the depositor has authorized the muda in matters such as selling, renting, lending and donating, the quality of the contract is removed, the transaction becomes a proxy contract and the provisions of the attorney are applied.

Vedia is like a trust in the hands of the muda. For this reason, compensation is not required in case of loss or damage other than the muda's taaddi or fault. It is agreed with the fughâ that if the vedia is destroyed or damaged as a result of the muda's obedience or fault, compensation is required. It is considered taaddi to take an action that owner of the vedia would not consent to.

Vedia contract ends with mutual consent or unilateral termination. In addition, reasons such as the death of one of the parties or the loss of contractual capacity, the transfer of the ownership of the trust to someone else, also terminates the agreement of the trustee. While Shafii and Hanbali jurists say that muda's faulty behavior that requires compensation, he will break the contract of vedia, Hanafi and Maliki jurists are of the opinion that in this case, the contract will not be terminated, and only the muda's will be held liable for compensation with this behavior.

According to all Islamic jurists, it is obligatory to return the vedia if the depositor requests it. Because when the depositor demanded his property, the contract was broken and he had the right to take his property back. If muda is delayed in returning without a legitimate excuse he is held liable for compensation. As a rule, the vedia should be returned to the depositor himself. In case of death of the depositor, it is returned to his heirs. In addition, the refund made to those who have the authority to represent the depositor is also valid.

In the fatwa journals and court records of the Ottoman period, various kinds of problems such as returning the goods entrusted to the mudi to the legal representative of the mudi, compensation for the damage



and theft of the trust, demanding the alimony from the depositor by calculating the alimony spent on him when the vedia is an animal, and selling the animal if the person who entrusted the animal does not receive it examples are available.

As a result, it is possible to say that court decisions were taken in accordance with the views of the Hanafi sect in vedia contracts in Ottoman law.

**Keywords:** Ottoman, Vedia, Contracting, Court.

## İSLAMİ İLİMLER FAKÜLTESİ ÖĞRENCİLERİNİN DİNİ MUSİKİ DERSİNE İLİŞKİN GÖRÜŞLERİ

THE OPINIONS OF THE STUDENTS OF THE FACULTY OF ISLAMIC SCIENCES ON THE RELIGIOUS MUSIC COURSE

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### ÖZET

Bu makale, Tokat Gaziosmanpaşa Üniversitesi, İslami İlimler Fakültesi, Türk Din Mûsikîsi dersi alan öğrencilerin dini musiki dersine ilişkin görüşlerini ve hazırlanan görüşme neticesinde elde edilen sonuçlardan benzerlik ve farklılıkları tespit etmek gâyesiyle hazırlanmıştır. Öğrencilerin dini musiki dersine karşı tutumlarında dersin akademik personeli, derslerde kullanılan kaynak bilimsel eserler, enstrümanlar ile teknik araç gereçler, sınıfın fiziksel özellikleri ve öğrencilerin dersle alakalı hazırlık düzeyleri elbette önemlidir. Tüm bu etkenler göz önüne alındığında öğrencilerin dini musiki dersine ilişkin görüşleri bakımından incelenmesi ve sonuçların değerlendirilerek yorumlanması hedeflenmiştir. Yapılan çalışmada gönüllü olarak toplamda 88 öğrenci yer almıştır. Her bir öğrenciye dini musikin ne olduğu, dini musiki dersi statüsünün (seçmeli-zorunlu) kendilerince nasıl yorumlandığı, dini musiki dersine ihtiyaç duyup duymadıkları, dini musiki ders akademik personelinin cinsiyetinin kendileri için ne ifade ettiğini, dini musiki ders sonrası duygu durumlarında bir değişiklik olup olmadığına yönelik açık uçlu sorular sorulmuştur. Verilen yanıtlar neticesinde erkek ve kız öğrencilerin yanıtlarına çalışmada ayrı ayrı yer verilmiştir. Ayrıca tüm veriler grafiklerle de desteklenerek açıklanmıştır.

**Anahtar kelimeler:** İlahiyat Fakültesi, Türk Din Mûsikîsi, Türk Din Mûsikîsi Dersi

### ABSTRACT

This article was prepared to determine the opinions of the students of the Faculty of Islamic Sciences at Tokat Gaziosmanpaşa University on the religious music course and to find out the similarities and differences with the results obtained in the interviews that were prepared. The academic staff pertaining to the course, the scientific source materials used in the classes, instruments and technical equipment, the physical features of the classrooms and the level of preparation of the students for the classes are of course important with regards to the attitudes of the students towards religious music. By taking into account all of these factors, the objective was to analyse the opinions of the students on religious music course and to interpret them by evaluating the results. This study included a total of 88 student volunteers. Each student was asked open-ended questions on what religious music is, how they interpreted the status of the religious music course (elective vs compulsory), whether they felt a need for the religious music course, what the sex of the academic staff member teaching the religious course signified for them and whether there was any change in their feelings after the religious music course. The responses of the male and female students were given in the study separately. In addition, all data were explained by supporting them with graphics.

**Keywords:** Faculty of Theology, Turkish Religious Music, Turkish Religious Music course.

## **INTUITION TO INSIGHT: ERROR, DOUBT AND BELIEF**

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### **ABSTRACT**

Intuition is considered as a source of knowledge or a method-style of knowing. It is triggered in problem solving, decision-making or similar tasks and sensitive to contextual task features and time constraint. It is fast, immediate, coercive, self-evident. Intuition complies neither with the facts, rules, contexts, regulations nor with rational mind and its' faculties. Fischbein describes the features of intuitive thinking, then shows examples of these features. Incorporating intuition into learning problem solving context is possible and might be useful. However, the product of intuition could be positive as in expert problem solver or negative as in novice problem solver. It is a strong sense to the degree that does not leave any place for deliberation. When we have intuitively solved a problem or made a decision, we are generally sure of its' certainty that we quit further inquiry. People who are able to solve the problem in terms of ability or knowledge are making surprising and interesting errors even at solving easy problems. Dual processing theories explain the mechanism by two distinct kind of system (Type1 and Type2) and two distinct kind of processing (heuristic and analytic reasoning). Tirosh ve Stavy proposed a heuristic rule (Same A Same B- more A more B) to account for these intuitive errors. Most of the experimental and qualitative studies are conducted in cognitive psychology and decision-making. In addition, there is an ongoing discussion about the differences and similarities of insight, and intuition.

A series of interview with convenience sampling is conducted to understand the phenomenon with a heuristic error in problem solving. The participants are volunteered with an interest in problem solving experience and learning. The analysis of interview which will be presented here is specifically selected to explicate a process of intuitive error to insightful solution. Belief, confidence, doubt, affect, reiteration, help-seeking, persistence, concretization, embodying, accuracy, abstracting, functionalizing are the concepts emerged during problem solving process. Doubt as a sense is a search trigger and concretization as a process is the foundation of an abstracted true belief-rule. Both will be discussed in detail for formal instructional design implications.

**Keywords:** Intuition, insight, heuristic, dual processing, same A same B

## İLKOKUL DÖNEMİNDEKİ ÇOCUKLARIN AHLAKİ TUTUMLARININ OLUŞMASINDA ANNE VE BABANIN ROLÜ\*

THE ROLE OF MOTHERS AND FATHERS IN THE FORMATION OF ETHICAL ATTITUDES OF CHILDREN IN PRIMARY SCHOOL PERIOD\*

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### ÖZET

Allah'ın farklı nitelikteki gizil güçlerle donatıp anne ve babalara emanet ettiği çocuklar, eğilmeye muhtaç varlıklardır. İyi bir eğitim sayesinde bu gizil güçler, çocuğun kendisine, ailesine ve yaşadığı topluma hayırlı bir insan olmasını sağlayabileceği gibi yanlış bir eğitim yüzünden bu gizil güçler, çocuğun kendisine, yakınlarına ve yaşadığı topluma zarar vermesine neden olabilir. Nitekim araştırmalar, yaşamın ileri dönemlerinde görülen pek çok problemin, çocukluk döneminde geçirilen olumsuz yaşantılardan kaynaklandığını ortaya kaymaktadır. Bu dönemde çocukların kendilerinden beklenen gelişim görevlerini yerine getirmesi, önemli ölçüde anne baba tutumlarına bağlıdır. Çünkü çocuklar için her türlü bilginin kaynağı, ilk başlarda anne ve babalarıdır. Bu nedenle çocuğun olumlu bir rol geliştirmesi, büyük ölçüde anne babanın rehberlik görevlerini yerine getirmesine bağlıdır. Bu kilit rol nedeniyle çalışmamızın amacı, ilkokul dönemindeki çocukların ahlaki tutumlarının oluşmasında anne ve babanın rolünü incelemektir.

İlişkisel tarama modelinde olan araştırmanın verileri, geliştirilen “Kişisel Bilgi Formu”, “Dini Tutum”, “Ahlaki Tutum” ile “Anne Babanın Dini ve Ahlaki Eğitim Verme Durumu”na dayanan alt ölçeklerden elde edilmiştir. Araştırmanın örnekleme ise, Şırnak ilinde basit tesadüfi örnekleme yoluyla seçilen 10 ilkokulda öğrenim gören 3. ve 4. sınıf öğrencilerinden oluşan 500 kişilik öğrenci grubudur. Elde edilen veriler, SPSS 15.0 İstatistik Programı ile analiz edilmiştir. Araştırmada, çocukların ahlaki tutumları ile anne babanın dini ve ahlaki eğitim vermesinin pozitif ilişkili olduğu tespit edilmiştir. Yaşanılan yerleşim yeri ile anne babanın yaş düzeyinin çocukların ahlaki tutumları üzerinde etkili olmadığı gözlemlenmekle birlikte; yaşın artması, Din kültürü ve Ahlak Bilgisi dersinin alınması ve baba eğitim düzeyinin yüksek olmasının da çocukların ahlaki tutumlarında olumlu farklılaşma sebebi olduğu gözlemlenmiştir.

**Anahtar kelimeler:** Ahlak, Eğitim, Ahlaki Tutum, Din Eğitimi

### ABSTRACT

Children, entrusted by GOD with different latent powers and entrusted to their parents, are beings in need of education. Thanks to a good education, these latent powers can make the child a good person for himself, his family and the society in which he lives, or because of the wrong education, these latent powers can cause the child to harm himself, his relatives and the society in which he lives. As a matter of fact, researches reveal that many problems seen in the later stages of life are caused by negative experiences in childhood. In this period, children's fulfillment of the developmental tasks expected from them depends on the attitudes of their parents. Because the source of all kinds of information for children is their parents at first. Therefore, the child's development of a positive role largely depends on the parents' fulfillment of their guiding duties. Because of this key role, the aim of our study is to examine the role of parents in the formation of moral attitudes of primary school children.

\* Bu çalışma, araştırmacının “İlkokul Öğrencilerinin Dini ve Ahlaki Tutumlarının Oluşmasında Anne ve Babanın Rolü (Şırnak Örneği)” konulu Yüksek Lisans tezinden derlenmiştir.

\*\* This study was compiled from the researcher's master's thesis titled "The Role of Mothers and Fathers in the Formation of Religious and Moral Attitudes of Primary School Students (The Case of Şırnak)".



The data of the research, which is in the relational scanning model, was obtained from the developed sub-scales based on the "Personal Information Form", "Religious Attitude", "Moral Attitude" and "The Parents' Religious and Moral Education Giving Status". The sample of the study is a group of 500 students consisting of 3rd and 4th grade students studying in 10 primary schools in Şırnak province selected by simple random sampling. The obtained data were analyzed with SPSS 15.0 Statistics Program. In the study, it was determined that the moral attitudes of the children and the religious and moral education of the parents were positively related. Although it is observed that the place of residence and the age level of the parents do not affect the moral attitudes of the children; It has been observed that the increase in age, taking the Religious Culture and Moral Knowledge course and the high level of father education are also the reasons for the positive differentiation in the moral attitudes of the children.

**Keywords:** Ethics, Education, Moral Attitude, Religious Education

**THE EMOTION WALK: EXPLORING RELIGIOUS AND HISTORICAL SPACES THROUGH PSYCHOGEOGRAPHY**

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**ABSTRACT**

The understanding, which is based on the fact that space must be felt for it to make sense, has increased the importance of research that reveals the interaction between people and places through the exploration of various emotions. In this article, we aimed to explore through psychogeography how it affects the dynamic connections between religious and historical places, which are the legacy of past societies, and human behaviors or emotions. In the research, in which the case study model was adopted, we used document analysis and survey techniques, which are among the data collection methods. Based on the official website of the Tokat Governorship, we determined the religious and historical places in the city center and created a travel route. In our study, which consisted of university students as our study group, we preferred the open-ended questionnaire form and Plutchik's wheel of emotion method while obtaining the data. In addition, we asked the participants to photograph the point that affected them the most in the places on the tour route. During the analysis of the data, we examined the documents collected from the participants by subjecting them to descriptive and content analysis. After the analysis, we ended the article with some thoughtful views and suggestions on the emerging emotion maps.

**Keywords:** Human-Space Relationship, Psychogeography, Emotional Maps, Religious and Historical Spaces.



**DİN EĞİTİMİ ALANINDAKİ BİLİMSEL BİRİKİM: LİSANSÜSTÜ TEZLER**  
**THE SCIENTIFIC PROGRESS IN RELIGIOUS EDUCATION: GRADUATE THESIS**

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**ÖZET**

Bilimsel bilginin birikimli ilerlemesi görüşü 1960'larda ve 1970'lerde birçok bilim insanı tarafından etkin bir şekilde sorgulanmış ve genellikle “Bilim ne ölçüde ve hangi açılardan ilericidir?” “Bilimde ilerleme ile ne kastedilmektedir?” ve “Bilimdeki ilerlemeci gelişmeleri nasıl tanıyabiliriz?” sorularına cevap aranmıştır. Günümüzde ise bir bilimsel alandaki bilgi birikimini tanımanın ve takip etmenin ise pek çok yolu bulunmaktadır. Bunlardan birisi de lisansüstü tezleri incelemektir. Bu çalışmada Türkiye’de din eğitimi bilim dalında yapılmış olan lisansüstü tezler; tür, yazarın cinsiyeti, üniversite, konu ve yöntem gibi farklı açılardan analiz edilmiştir. Nitel araştırma yöntemlerinden doküman incelemesi tekniğinin benimsendiği bu çalışma ile hedeflenen gaye, din eğitimi bilim alanındaki lisansüstü bilimsel birikimi ortaya çıkarmak ve değerlendirmesini yapmaktır. Literatürde bulunan çalışmalarda ilgili alandaki tezlerin 1954-2019 yılları arası incelemesi yapıldığından ve 2021 yılı verileri de sürekli güncellendiğinden dolayı araştırmanın kapsamı 2020 yılındaki 42 teze sınırlandırılmıştır. Veriler, Yükseköğretim Kurulu Yayın ve Dokümantasyon Daire Başkanlığı Ulusal Tez Merkezi veri tabanından elde edilmiştir. Tüm erişime açık din eğitimi bilim dalına ait tezlerin 36’sı yüksek lisans, 6’sı doktora tezidir. Çalışmada ele alınan tezlerin 18’inin erkek 24’ünün kadın araştırmacılar tarafından yapıldığı görülmektedir. Üniversitelere göre dağılımlarına bakıldığında en çok Marmara Üniversitesi bünyesinde yapılmıştır. Buna göre Marmara Üniversitesi’nde 3 doktora 7 yüksek lisans tezi olmak üzere toplam 10 lisansüstü tez tamamlanmıştır. Bu üniversiteyi 6 yüksek lisans tezi ile Dicle Üniversitesi, 6 yüksek lisans tezi ile Bursa Üniversitesi, 2 doktora 3 yüksek lisans tezi ile Ankara Üniversitesi ve 5 yüksek lisans tezi ile Van Yüzüncü Yıl Üniversitesi takip etmektedir. En çok çalışılan konular arasında örgün din eğitimi, çeşitli filozof ve eğitimcilerin din eğitimine ilişkin görüşleri ve yüksek din öğretimi öne çıkmaktadır. Yöntem olarak ise en çok teorik/kuramsal çalışmaların tercih edildiği görülmektedir. Böylece bu çalışma, din eğitimi alanında yapılmış lisansüstü tezlerin niteliksel ve niceliksel olarak gelişim seyrinin bir çerçevede görülmesi ve bunun sonucunda oluşan din eğitimi alanı bilimsel birikiminin ortaya konması bakımından önemlidir.

**Keywords:** Din Eğitimi Bilim Dalı, Lisansüstü Tezler, Bilimsel Birikim.

**ABSTRACT**

The view of cumulative progress of scientific knowledge was actively questioned by many scientists in the 1960s and 1970s, often asking "To what extent and in what respects is science progressive?", "What is meant by progress in science?" and "How can we recognize progressive developments in science?" answers to the questions were sought. Today, there are many ways to recognize and follow the knowledge in a scientific field. One of them is to examine postgraduate theses. In this study, postgraduate theses made in the field of religious education in Turkey; analyzed from different perspectives such as genre, author's gender, university, subject and method. The aim of this study, in which the document analysis technique, which is one of the qualitative research methods, is adopted, is to reveal and evaluate the postgraduate scientific progress in the field of religious education. The scope of the research is limited to 42 theses in 2020, since the theses in the related field were examined between the years 1954-2019 and the data for the year 2021 were constantly updated in the studies in the literature. The data were obtained from the National Thesis Center database of the Higher Education Council Publication and Documentation Department. 36 of the theses belonging to the religious education discipline, all of which are open to access, are master's and 6 are doctoral theses. It is seen that 18 of the theses discussed in the study were made by male researchers and 24 by female researchers. Considering



their distribution according to universities, they were mostly made within Marmara University. Accordingly, a total of 10 postgraduate theses, of which 3 doctorate and 7 master's theses, were completed at Marmara University. This university is followed by Dicle University with 6 master's theses, Bursa University with 6 master's theses, Ankara University with 2 doctorate and 3 master's theses, and Van Yüzüncü Yıl University with 5 master's theses. Among the most studied subjects, formal religious education, views of various philosophers and educators on religious education, and higher religious education come to the fore. As a method, it is seen that the most theoretical/theoretical studies are preferred. Thus, this study is important in terms of seeing the qualitative and quantitative development of postgraduate theses in the field of religious education in a framework and revealing the scientific progress of the field of religious education as a result.

**Keywords:** Science of Religious Education, Graduate Theses, Scientific Progress.

## KÖLELİK BAĞLAMINDA İSLÂM VE İNSAN HAKLARI ISLAM AND HUMAN RIGHTS IN THE CONTEXT OF SLAVERY

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### ÖZET

Kölelik, insanlık tarihinin ilk dönemlerine kadar geçmişi olan sosyal bir statüdür. Tarihte kurulmuş olan birçok büyük devlette olduğu gibi, İslâm'ın geldiği dönemde Araplar arasında da kölelik kurumu canlı bir biçimde yaşatılmaktaydı. İslâm, insan haklarına yönelik ihlallerin birçoğuna son verdiği gibi, insana reva görülen bu aşağılayıcı uygulamayı da tedrici bir şekilde ortadan kaldırılmasına yönelik tedbirler aldı.

İslâm her şeyden önce bütün insanların tek bir nefisten yaratıldığını, bu anlamda herkesin eşit olduğunu, insanların farklı millet ve kabileler halinde bulunmalarının onlar için bir ayrıcalık ve üstünlük vesilesi olmadığını, üstünlüğün takvada olduğu esasını getirdi. Kölelik ile aynı etimolojik anlama sahip olan kulluğun Allah'tan başkasına yapılmayacağı anlayışı sıklıkla vurgulandı. İtikadî anlamda tevhide, sosyal anlamda adaletle dayalı erdemli bir toplumun inşa edilmesi için müminlere birtakım yükümlülükler getirildi. İnsan onuru ile bağdaşmayan kölelik ve açlık gibi durumların bitirilmesi (akabe/sarp yokuş) için müminler teşvik edildi. Dinen suç kabul edilen bazı davranışlarda bulunan kişilerden, günahlarının kefareti için ödenmesi gereken bedellerin başında köle âzâd etmeleri istendi. Kölelere iyi muamele edilmesi gerektiği ve çalışıp hürriyetine kavuşmak isteyen kölelere bu fırsatın tanınması emredildi. Bu konuda atılan en radikal adım ise kölelerin âzâd edilmesi için devletin yıllık bütçesinden pay ayrılması oldu.

Bu tebliğde kölelik uygulaması bağlamında İslâm'ın insan haklarına olan katkıları ele alınmıştır. Çalışmada öncelikle insan hakları kavramı işlenmiş sonrasında ise kölelik bağlamında İslâm'ın insan hakları alanında getirmiş olduğu yenilikler ortaya konulmaya çalışılmıştır.

**Anahtar kelimeler:** İslâm hukuku, İnsan hakları, Kölelik.

### ABSTRACT

Slavery is a social status dating back to the earliest periods of human history. As in many great states established in history, the institution of slavery was still alive among the Arabs at the time of the advent of Islam. As Islam put an end to many of the violations of human rights, it also took measures to gradually eliminate this humiliating practice, which is seen as human rights.

First of all, Islam brought the principle that all people were created from a single soul, that everyone is equal in this sense, that people's being in different nations and tribes is not a privilege and superiority for them, and that superiority is in piety. Worship, which has the same etymological meaning as slavery, cannot be done to anyone other than Allah, was often emphasized. In order to build a virtuous society based on tawhid in the theological sense and justice in the social sense, certain obligations were imposed on the believers. Believers were encouraged to end situations such as slavery and hunger (aqaba/steep ascent) that were incompatible with human dignity. People who committed certain acts that were considered a crime by religion were asked to free slaves at the beginning of the price to be paid for their sins. It was ordered that slaves should be treated well and that this opportunity should be given to slaves who wanted to work and be set free. The most radical step taken in this regard was the allocation of a share from the annual budget of the state for the emancipation of slaves.

In this paper, the contribution of Islam to human rights in the context of slavery is discussed. In the study, firstly, the concept of human rights was discussed and then the innovations brought by Islam in the field of human rights in the context of slavery were tried to be revealed.

**Keywords:** Islamic law, Human rights, Slavery.

## INTERACTION VARIANCES OF MOSQUITOES' GENERA

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### ABSTRACT

This article considers the differences among all pairs of sample means divided by the estimated standard deviation of the sample means of adult mosquitoes in four selected sites in Nigeria Police Academy (Polac), Wudil, Kano, Nigeria in August, 2019 via a two-factor experiment and Tukey honestly significant difference (HSD) test. A total of one thousand and sixty (1534) mosquitoes comprising of 3 genera; Anopheles, Aedes and Culex were identified in the girls' hostel, girls' hostel staircase, quarter guard, and clinics. Anopheles mosquitoes was higher in terms of abundance with a total number of 905 samples, about 59.00% followed by Aedes mosquitoes with a total number of 343 samples, about 22.36% and Culex mosquitoes with a total number of 286 samples, about 18.64%. Also, 280 of the mosquitoes were males; about 18.25% and 1254 of the mosquitoes were females; about 81.75%. The population of mosquitoes in girls' hostel was 320, about 20.86%; the staircase of the girls' hostel is 702, about 45.76%; the quarter guard 473, about 30.83%; and the clinic is 39, about 2.54%; thus, abundance of mosquitoes is prevalent in the staircase of the girls' hostel followed by the quarter guard, the girls' hostel and the clinic. The design plot showed that the staircase of the girls' hostel and quarter guard have the highest mean of yields for mosquitoes, while the girls' hostel's and the clinics' mean of yields fall below overall mean of the sample. The means interaction plot made known that the differences between levels of one factor for Aedes will depend on the level of the other factors of Anopheles and Culex mosquitoes. No significant difference between Culex and Aedes as well as Culex and Anopheles mosquitoes; but, significant differences transpired between sample means of Anopheles and Aedes. Also, significant differences between site surveyed sample means of quarter guard and clinic; and girls' hotel staircase and clinic were detected.

Effective control of mosquito populations by improving environmental sanitation, removing mosquito habitats, preventing mosquito exposure; and provide mosquito repellents to protect against mosquito-borne illnesses are necessary for prevention and control of these diseases.

**Keywords:** Environmental Sanitation, Mosquito-borne illnesses, Two-Factor Experiment, Tukey, Honestly Significant Difference (HSD) test

**KUZEYDOĞU AKDENİZ'DE YAKALANAN BİYİKLİ MEZGİTİN (*PHYCIS BLENNOIDES*) YAŞ VE BÜYÜME ÖZELLİKLERİ**

AGE AND GROWTH CHARACTERISTICS OF GREATER FORKBEARD (*PHYCIS BLENNOIDES*) CAUGHT FROM NORTHEASTERN MEDITERRANEAN

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**ÖZET**

Bu çalışma Kuzeydoğu Akdeniz'de yakalanan ve bıyıklı mezgıt balığı olarak bilinen, ekonomik öneme sahip *Phycis blennoides* türünün yaş ve büyüme özelliklerinin belirlenmesi amacıyla yapılmıştır. Bu çalışmada bıyıklı mezgıt balığına ait 43 dişi ve 166 erkek birey olmak üzere toplam 208 balık örnekleri ticari trol avcılığı yapan teknelerle Kuzeydoğu Akdeniz'de, İskenderun Körfezi açıklarında 200-400 m derinliklerde elde edilmiştir.

Balık örnekleri şoklanarak Fırat Üniversitesi, Su Ürünleri Fakültesi, Ekofizyoloji laboratuvarına getirilmiş, boylar 0,1 cm hassasiyetli ölçüm cetveli ve ağırlıklar 0,01 g hassasiyetli tartı ile tartılmıştır. Balık bireylerinin cinsiyeti gonad özelliklerine bakılarak yapılmıştır. *P. blennoides* örneklerinin boy ve ağırlıkları dişi balıklar için 16,9-38,7 cm ve 31,06-415,0 g ve erkekler için 16,3-38,3 cm ve 27,14-504,08 g olarak bulunmuştur.

*P. blennoides* türüne ait örneklerin yaşları 0-4 arasında değişmiştir. Von Bertalanffy büyüme parametreleri dişiler için  $L_{\infty} = 97.87$  cm,  $k = 0.068$  yıl<sup>-1</sup>,  $t_0 = -2.731$  yıl, erkekler için  $L_{\infty} = 67.55$  cm,  $k = 0.123$  yıl<sup>-1</sup>,  $t_0 = -2.229$  yıl ve tüm eşeyler için  $L_{\infty} = 87.61$  cm,  $k = 0.083$  yıl<sup>-1</sup>,  $t_0 = -2.492$  yıl olarak bulunmuştur. Bu çalışma ile Kuzeydoğu Akdeniz'deki *P. blennoides* popülasyonu üzerine yapılan ön çalışmadır ve bundan sonra yapılacak çalışmalara temel olması düşünülmektedir.

**Anahtar kelimeler:** Bıyıklı mezgıt, *Phycis blennoides*, yaş, büyüme, Kuzeydoğu Akdeniz.

**ABSTRACT**

This study was carried out to determine age and growth of the economically important *Phycis blennoides* caught in the Northeast Mediterranean. In this study, a total of 208 fish samples, 43 females and 166 males, belonging to greater forkbeard were obtained by commercial trawlers at depth of 200-400 m off the coast of Iskenderun Bay in the Northeast Mediterranean.

Fish samples were shocked and then transferred to Ecophysiology laboratory in Fırat University, Fisheries Faculty. Total length and weight of fish samples were determined with 0.1 cm and 0.01 g precision. Sex of fish was determined by examining of gonads. The length and weight of *P. blennoides* specimens were 16.9-38.7 cm and 31.06-415.0 g for female fish and 16.3-38.3 cm and 27.14-504.08 g for males.

The ages of the specimens belonging to the *P. blennoides* species ranged from 0-4. The von Bertalanffy growth parameters were estimated as  $L_{\infty} = 97.87$  cm,  $k = 0.068$  year<sup>-1</sup>,  $t_0 = -2.731$  year for females, as  $L_{\infty} = 67.55$  cm,  $k = 0.123$  year<sup>-1</sup>,  $t_0 = -2.229$  year for males and as  $L_{\infty} = 87.61$  cm,  $k = 0.083$  year<sup>-1</sup>,  $t_0 = -2.492$  year for combined sexes.

This is the preliminary study on *P. blennoides* population in Northeastern Mediterranean and these data will be fundamental for the future studies on this subject.

**Keywords:** Greater forkbeard, *Phycis blennoides*, age, growth, Northeastern Mediterranean.



**EXPERIMENTAL AND STATISTICAL STUDY OF THE PHYSICAL, CHEMICAL, AND MECHANICAL CHARACTERISTICS OF THE NORMAL AND TORREFIED PELLETS OF THE USED HORSE BEDDING**

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**ABSTRACT**

Due to the growing concerns over climate change, energy price, and production, renewable energy sources such as biomass are noted. We studied the chemical, physical and mechanical specifications of the normal and torrefied pellets, which are produced by the used horse bedding, as an energy source. We used statistical techniques to evaluate some characteristics of the pellets. In addition, the acquired results were compared with the characteristics of the acceptable wood pellets. The diameter, length, moisture, bulk density, durability, gross energy, and carbon content of the pellets were allowable. The density of the pellet was independent of the initial moisture and grinding size of the used horse bedding samples. The ash, nitrogen, and hydrogen contents of the pellets were not permissible. In the smaller grinding size of the used horse bedding for pellet production, the emission of the particulate matter increased. The torrefaction decreased the density, increased the energy content, and did not affect the ash content of the pellets. However, the torrefied pellets were more brittle and tolerated lesser stress and strain than normal pellets. The pellets, which were produced by the larger grinding size and lower moisture of the used horse bedding, tolerated more stress and strain.

**Keywords:** torrefied pellets, used horse bedding; pellet

**ANALYSIS OF SOME TRACE AND TOXIC ELEMENT CONCENTRATIONS OF SHEEP MILK BY USING AN INDUCTIVELY COUPLED PLASMA OPTICAL EMISSION SPECTROMETER**

İNDÜKTİF EŞLEŞTİRİLMİŞ PLAZMA OPTİK EMİSYON SPEKTROMETRESİ KULLANILARAK KOYUN SÜTÜNÜN BAZI ESER VE TOKSİK ELEMENT KONSANTRASYONLARININ ANALİZİ

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**ABSTRACT**

In sheep farming, especially in extensive livestock systems, monitoring of trace and toxic element concentrations is important to determine the nutritional condition of animals, besides the nutritional importance of milk and the amount of potentially toxic element residues in dairy products. In this study, the concentrations of trace elements (zinc, copper, chromium, manganese, nickel, cobalt) and toxic elements (lead, cadmium) in raw milk samples (n = 51) obtained from sheep raised in Şanlıurfa province were determined by ICP-OES. Zinc, copper, chromium, manganese, nickel levels in raw milk samples were determined as 4967.9±2968.2, 228.7±332.1, 155.8±39.3, 1180±30.4, 0.22±0.05 µg/L, respectively. Cobalt was found below the detection limit in milk samples. Generally, the levels of the trace elements were within the ranges reported in other studies in sheep milk. Lead was detected in all milk samples, with an average level of 0.11±0.03 µg/L, which was below the maximum limits set in the Turkish Food Codex. Therefore, it did not pose any risk for human consumption. Cadmium was determined at the level of 5.12 µg/L in only one sample. The maximum amount of cadmium allowed in the Turkish Food Codex Communiqué on Determination of the Maximum Levels of Certain Contaminants in Foodstuffs is 0.01-1.0 for various foods. mg/kg and the value determined in this study is within the safe limits. As a result, it was determined that the sheep milk analyzed in this study did not threaten public health in terms of toxic elements, and the levels of trace elements were comparable with other study data.

**Keywords:** Sheep milk, trace element, toxic element, ICP-OES

**ÖZET**

Koyunculukta, özellikle ekstansif besi sistemlerinde, eser ve toksik element konsantrasyonlarının takibi, hayvanların beslenme durumu ve ayrıca sütün besin değeri ve süt ürünlerindeki potansiyel olarak toksik element kalıntılarının miktarını belirlemek için önemlidir. Bu çalışmada, Şanlıurfa ilinde yetiştirilen koyunlardan elde edilerek satışa sunulan çiğ süt örneklerinde (n = 51) eser element (çinko, bakır, krom, mangan, nikel, kobalt) ve toksik element (kurşun, kadmiyum) konsantrasyonları ICP-OES ile belirlendi. Çiğ süt örneklerinde çinko, bakır, krom, manganez, nikel düzeyleri sırası ile 4967.9±2968.2, 228.7±332.1, 155.8±39.3, 1180±30.4, 0.22±0.05 µg/L olarak tespit edildi. Süt örneklerinde kobalt elementi deteksiyon limitinin altında bulundu. Genel olarak, eser elementlerin konsantrasyonları, dünya çapındaki koyun sütlerinde yakın zamanda yapılan diğer araştırmalarda rapor edilen aralıklar içindeydi. Süt örneklerinin tamamında kurşun tespit edilmiş olup ortalama 0.11±0.03 µg/L düzeyinde bulundu ve Türk Gıda Kodeksinde belirlenen maksimum limitlerin altındaydı. Bu nedenle insan tüketimi için herhangi bir risk oluşturmadı. Kadmiyum ise yalnızca 1 örnekte 5.12 µg/L düzeyinde belirlendi. Türk Gıda Kodeksi, Gıda Maddelerinde Belirli Bulaşanların Maksimum Seviyelerinin Belirlenmesi Tebliği'nde izin verilen maksimum kadmiyum miktarı çeşitli gıdalar için 0.01-1.0 mg/kg arasında olup bu çalışmada belirlenen değer güvenli sınırlar içerisindedir. Sonuç olarak



bu arařtırmada analiz edilen koyun s tlerinin toksik elementler bakımından halk saęlıęını tehdit etmedięi, eser elementlerin d zeyleri ise dięer alıřma verileri ile kıyaslanabilir olduęu tespit edildi.

**Anahtar kelimeler:** Koyun s t , eser element, toksik element, ICP-OES



**DETERMINATION OF SOME TRACE ELEMENTS IN EWE MILK YOGURT ANALYZED BY ICP-OES**

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**ÖZET**

Yoğurt, sütteki laktik asit bakterilerinin bakteri aktivitesi nedeniyle üretilen fermente bir gıdadır. Zengin bir içeriğe sahip olan yoğurt fonksiyonel bir gıda olarak pek çok alanda değerlendirilmektedir. Bu çalışma, bazı eser element içerikleri açısından koyun sütünden yapılan yoğurtların besin düzeylerini belirlemeyi amaçlamaktadır. Türkiye, Şanlıurfa'da pazarlardan satın alınan koyun sütü yoğurtlarında çinko, bakır, manganez, nikel, krom, kobalt içerikleri mikrodalgada yakma işlemi sonrası indüktif eşleştirilmiş plazma optik emisyon spektrometresi (ICP-OES) kullanılarak belirlenmiştir. Yoğurt örneklerinde ortalama Zn, Cu, Mn, Ni, Cr, Co değerleri sırasıyla  $4849.6 \pm 1392.7$ ,  $56.46 \pm 82.75$ ,  $1.19 \pm 0.06$ ,  $0.23 \pm 0.05$ ,  $0.15 \pm 0.01$ ,  $5.2$  mg/kg yağ ağırlık olarak belirlenmiştir. Günlük yoğurt tüketimi ( $112.7$  g/kişi/gün), eser elementlerin diyet alınmasına önemli ölçüde katkıda bulunur. Bu çalışma koyun sütünden yapılan yoğurt tüketiminin bazı eser elementler açısından insan sağlığına katkı sağladığını göstermiştir.

**Anahtar kelimeler:** Koyun, yoğurt, eser element, ICP-OES, diyet alımı

**ABSTRACT**

Yogurt is a fermented food that is produced owing to the bacterial activity of lactic acid bacterias in milk. Yogurt, which has a rich content, is evaluated in many areas as a functional food. This study aims to specify the nutritional level in terms of some trace element contents of ewe milk yogurts. The content of zinc, copper, manganese, nickel, chromium, cobalt in yogurts purchased in bazaars in Şanlıurfa, Turkey have been identified by using inductively coupled plasma optical emission spectrometry (ICP-OES) after microwave digestion. The mean Zn, Cu, Mn, Ni, Cr, Co values in ewe milk yogurt samples were determined as  $4849.6 \pm 1392.7$ ,  $56.46 \pm 82.75$ ,  $1.19 \pm 0.06$ ,  $0.23 \pm 0.05$ ,  $0.15 \pm 0.01$ ,  $5.2$  mg/kg wet weight, respectively. Daily consumption of yogurt ( $112.7$  g/person/day) subscribes significantly to the dietary intake of trace elements. This study showed that yogurt consumption contributes to human health in terms of some trace elements.

**Keywords:** Ewe, yogurt, trace element, ICP-OES, dietary intake

**KEÇİ ETİNİN BAZI ÖZELLİKLERİ**  
**SOME CHARACTERISTICS OF GOAT MEAT**

**Fusun COŞKUN**

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**ÖZET**

Türkiye keçi varlığı son on yılda yaklaşık iki katına çıkarak önemli bir artış göstermiştir. Bununla birlikte keçi zor şartlarda dahi hayvansal kaynaklı protein üretimi sağlayabilen avantajlı bir türdür. Buna rağmen ülkemizde keçi etinin toplam et üretimindeki payı oldukça düşüktür. Diğer taraftan Türkiye’de kişi başına düşen hayvansal kaynaklı protein tüketim oranı gelişmiş ülkelerin çok altında olmakla birlikte dünya ortalamasının bile gerisinde kalmaktadır. Tüm bunlar göz önünde bulundurulduğunda, keçi eti üretimini artırarak mevcut potansiyelden faydalanmanın önemi ortaya çıkmaktadır. Keçi eti, düşük kolesterol ve yağ içeriği, yüksek protein, demir ve B vitamini içeriği ile düşük kalorili, sağlıklı bir besindir. Doymuş yağ asitleri oranının düşük olması kalp-damar hastalıkları riskini düşürmektedir. Esansiyel amino asitler bakımından zengin yapısı, içerdiği vitamin ve mineraller ile yüksek kaliteli bir protein kaynağıdır. Ancak bazı bölgeler hariç ülke genelinde keçi etine yönelik önyargılar mevcuttur. Bu çalışma ile keçi etinin bazı özellikleri ortaya konularak, besleyici özelliği ve insan sağlığı için faydalarına dikkat çekmek amaçlanmıştır.

**Anahtar kelimeler:** Keçi eti, kolesterol, vitaminler, mineraller, amino asitler

**ABSTRACT**

Turkey's goat population has nearly doubled in the last ten years. Goat is an advantageous species even under insufficient environmental conditions as a protein source. Despite this, the share of goat meat production in total meat production is quite low. On the other hand, the average consumption rate of protein from animal origin in Turkey is under developed countries' rate. Also, it is under the average rate of World consumption as well. These aspects showed that the importance of using this current potential by increasing goat meat (chevon) production. Goat meat is a low-calorie, healthy food source because of low cholesterol and fat content and also high protein, iron, and vitamin B contents. The low rate of saturated fatty acids in the total fat of goat meat reduces the risk of cardiovascular diseases. It is a high-quality protein source because of the contents of essential amino acids, vitamins, and minerals. However, there are prejudices against goat meat throughout the country, except for some regions. It is aimed to draw attention to its nutritional properties and benefits for human health by revealing some properties of goat meat in this study.

**Keywords:** Goat meat (chevon), cholesterol, vitamins, minerals, amino acids

**A RESEARCH ON THE RELATIONSHIP BETWEEN AGRICULTURAL INCOME AND  
TRACTORIZATION IN TURKEY AS OF 2020**

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**ABSTRACT**

The aim of this study was to examine the effects of agricultural income on tractorization in Turkey, based on the statistical information on income and mechanization at the provincial level. For this purpose, Turkish Statistical Institute 2020 statistics, which was the most up-to-date source, were used in the analysis. “Agricultural Equipment and Machinery Statistics” was used for “numbers of tractor” and “the Total Marketing Value of Plant and Animal Production” was used for “Agricultural Income”. As a result of the research; It has been concluded that the total marketing value of plant and animal production of the provinces have meaningful positive effect of  $R^2=0.51$  on the number of tractors, while the income density (TL/ha) have no statistically significant effect of  $R^2=0.19$  on the tractor density (units/1000ha). The relationship between income and tractorization; great differences between provinces in terms of climate, soil-water resources, human labor, capital, mechanization, farm size, type of farms and production infrastructure and it has found to be significant level when considering the pandemic process in which tractor sales sharply decreased as in all goods. The provinces examined in terms of income and tractor density have been divided into 4 different groups according to Turkey's average. 1st group: Provinces which are above the national average in both values (28 prov.). 2nd group: Provinces which are below the national average in both values (30 prov.). 3rd group: Provinces with a higher income density than the national average, but with a low tractor density (10 prov.). 4th group: Provinces with a lower income density than the country average, but with a high tractor density (10 prov.). The relationship has strong in the 1st and 2nd Group, but weak in the 3rd and 4th Group. The group with the highest possible developments in tractorization is the 3rd group. The situation of the provinces in the 4th group should be evaluated in terms of farm structure, product pattern and tractor parking power level. In addition, quadrant analysis were utilized to compare the relations of the variables with each other.

**Keywords:** Number of tractors, tractor density, agricultural income, agricultural income per area.

**ÇOCUKLARDA DENTAL TRAVMALARDA TEDAVİ YAKLAŞIMLARI: VAKA SERİSİ**  
**TREATMENT APPROACHES FOR DENTAL TRAUMA IN CHILDREN: CASE SERIES**

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**ÖZET**

Çocuk diş hekimliğinde dental travma olgularına çok sık rastlanmaktadır. Bu olgulara anında ve doğru müdahale edilmesi, çocukların hem çene gelişimleri hem de ağız ve diş sağlıkları için önem arz etmektedir. Bu vaka serisinde kliniğimize başvuran farklı yaş gruplarındaki çocuklarda gözlenen komplike kron kırığı, kök kırığı, sublüksasyon, ekstrüzyon ve avülsiyon gibi farklı türden travma olgularına nasıl müdahale edildiği ve sonrasındaki aylık ve yıllık takiplerde dokularda gözlenen iyileşme paternleri ele alınmıştır. Bu vaka serisindeki vakalar üzerinden çocuklarda görülen dental travmalar konusunda verilecek genel bilgiler ve öneriler ile bilgilendirme yapılması planlanmaktadır.

**Anahtar kelimeler:** Dental travma, kron kırığı, kök kırığı, avülsiyon, sublüksasyon

**ABSTRACT**

Dental trauma cases are very common in pediatric dentistry. Immediate and correct intervention in these cases is important for both the jaw development and oral and dental health of children. In this case series, it is shown how to intervene in trauma cases such as complicated crown fracture, root fracture, subluxation, extrusion and avulsion observed in children of different age groups who applied to our clinic. And the healing patterns observed in the tissues in the monthly and annual follow-ups were discussed. It is planned to inform with general information and recommendations about dental traumas in children through the cases in this case series.

**Keywords:** Dental trauma, crown fracture, root fracture, avulsion, subluxation

## **YAPIŞIK DİŞETİ YETERSİZLİĞİNDE SERBEST DİŞETİ GREFTİ UYGULAMALARI: VAKA SERİSİ**

### **FREE GINGIVAL GRAFT APPLICATIONS IN ATTACHED GINGIVAL INSUFFICIENCY: CASE SERIES**

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#### **ÖZET**

Serbest dişeti grefti mukogingival problemlerin çözümünde yaygın olarak kullanılmaktadır. Yetersiz ve/veya az miktarda yapışık dişeti varlığında, yüksek frenulum ataçmanları olduğunda, vestibül derinliği sığ olan bireylerde, dişeti çekilmesi olup kök yüzeyi açıkta olan hastalarda, dişlerin ve implantların çevresindeki yumuşak doku kalınlığını arttırmak amacıyla kullanılır. Yapmış olduğumuz çalışmada, çeşitli nedenlerle kliniğimize başvuran hastalarda tespit edilen keratinize dişeti yetersizliği serbest dişeti grefti ile tedavi edildi. Bu vaka serisi; oral hijyenin eksiksiz olarak sağlanabilmesi, ağızdaki sert ve yumuşak dokularının sağlığının idamesi için keratinize yapışık dişetin öneme ve yetersiz olduğu durumlardaki tedavi seçeneklerine dikkat çekmekteyi amaçlamaktadır.

**Anahtar kelimeler:** Serbest dişeti grefti, Yapışık dişeti, Mukogingival cerrahi

#### **ABSTRACT**

Free gingival graft is widely used to solve mucogingival problems. It is used to increase the soft tissue thickness around teeth and implants in the presence of insufficient and/or small amount of attached gingiva, high frenulum attachments, individuals with shallow vestibule depth, patients with gingival recession and exposed root surface. In our study, keratinized gingival insufficiency detected in patients who applied to our clinic for various reasons was treated with free gingival graft. This series of cases: It aims to draws attention to the importance of keratinized attached gingiva and the treatment options in cases where it is insufficient for providing complete oral hygiene and maintaining the health of the hard and soft tissues of the mouth.

**Keywords:** Free gingival graft, Attached gingiva, Mucogingival surgery

**KUZEY CAROLİNA MAKÜLER DİSTROFİSİ: OLGU SUNUMU**  
**NORTH CAROLINA MACULAR DYSTROPHY: CASE REPORT**

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**ÖZET**

Görme azlığı ve gözünde titreme şikayetiyle ailesi tarafından kliniğimize getirilen 6 yaşındaki erkek hastanın tashihsiz görme keskinliği bilateral 0.1 idi.Düzeltilmiş en iyi görme keskinliği 0.2 seviyesinde tespit edildi.Biomikroskopik incelemede nistagmus dışında patoloji saptanmadı.Göz içi basınçları sağ gözde 15 mmHg, sol gözde 13 mm Hg idi.Pupil dilatasyonu sonrası yapılan fundus incelemesinde bilateral toksoplazma koroiditi benzeri kolobomatöz skar ve optik sinire uzanan fibrotik bant tespit edildi.Toxoplazma serolojik test sonucu negatif olan hastaya genetik inceleme sonucu Kuzey Carolina Maküler Distrofi tanısı konuldu.

**Anahtar kelimeler:** Kuzey Carolina Maküler Distrofisi, Toxoplazma, Kolobom

**ABSTRACT**

A 6 year old child with very low vision and nystagmus was presented to our clinic by his parents.Uncorrected visual acuity was 0.1 in both eyes.Corrected best visual acuity was 0.2.In biomicroscopic examination nystagmus was the only pathology detected.Intra ocular pressure was 15 mm Hg in his right eye and 13 mm Hg in his left eye.After pupil dilatation a toxoplasmosis choroiditis like colobomatous scar and a fibrotic tape extending to optic disc was detected bilaterally.Toxoplasma serology was negative and genetic examination results confirmed North Carolina Macular Dystrophy diagnosis in our patient.

**Keywords:** North Carolina Macular Dystrophy, Toxoplasmosis, Coloboma



**AN INCIDENTAL STRAATSMA SYNDROME DETECTED IN THE INVESTIGATION OF  
CATARACT ETIOLOGY**

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**ABSTRACT**

Myelinated retinal nerve fibers are rare congenital anomalies that appear in the retina as gray-white opaque lesions with hairy edges that hide retinal details. Coexistence of myelinated retinal nerve fibers, amblyopia, axial myopia and strabismus has been defined as Straatsma Syndrome. In this case, we wanted to present our case, which was diagnosed as Straatsma Syndrome during the investigation of the etiology of our patient who had mature cataract at a very young age.

**GENÇ SÜREKLİ DİŞLERDE AMPUTASYON TEDAVİSİNE GÜNCEL BAKIŞ**  
CURRENT EVALUATION OF PULPOTOMY TREATMENT IN YOUNG PERMANENT TEETH

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**ÖZET**

Günümüzde pulpanın biyolojik mekanizmaların daha iyi anlaşılması ile enflame pulpanın steril koşullarda doğal iyileşme potansiyelinin bulunduğu kabul edilmektedir. Pulpa dokusu etkilenmiş genç sürekli dişlerin uygun tedavilerle vitalitelerinin korunması, devam eden kök oluşumu ve uygun kron-kök oranının sağlanması açısından önem taşımaktadır. Çürük veya travma kaynaklı enflame pulpa dokusuna sahip genç sürekli dişlerde; kök gelişimini ve dişlerin fonksiyonunu sürdürmek amacıyla vital pulpa tedavileri tercih edilmektedir. Vital pulpa tedavileri, dişlerde koronal veya radiküler pulpa dokusunun canlılığını koruyan, biyolojik ve konservatif tedavi yöntemleridir. Vital pulpa tedavi çeşitlerinden olan ampütasyon uygulamaları, koronal pulpa dokusunun bir kısmının veya tamamının ampüte edilmesi ve kalan vital dokunun biyoyumlu materyallerle örtülmesi esasına dayanmaktadır. Ampütasyon tedavileri, pulpal vitalitenin sürdürülebileceği uygun koşullardaki genç daimî dişler için, ekonomik, basit ve dişin yaşam kalitesine katkı sağlayabilecek tedavi seçenekleri olarak değerlendirilmektedirler. Yeni biyoaktif materyallerin üretilmesi ve kullanılan materyallerin güncellenmesi de ampütasyon tedavilerinin genç sürekli dişlerde uygulama sıklığını arttırmıştır. Bu derlemede, genç sürekli dişlerde uygulanan ampütasyon yöntemleri ve kullanılan güncel materyaller bir arada sunulmuştur.

**Anahtar kelimeler:** Pulpatomi, ampütasyon, daimî diş, vital pulpa tedavileri, genç sürekli dişler

**ABSTRACT**

Nowadays, with a better understanding of the biological mechanisms of the pulp, it is accepted that the inflamed pulp has a natural healing potential under sterile conditions. Preserving the vitality of young permanent teeth with affected pulp tissue with appropriate treatments is crucial in terms of continuing root formation and providing an appropriate crown-root ratio. In young permanent teeth with inflamed pulp tissue caused by caries or trauma; Vital pulp treatments are preferred in order to maintain root development and function of teeth. Vital pulp treatments are biological and conservative treatment methods that preserve the vitality of the coronal or radicular pulp tissue in the teeth. Amputation applications, one of the vital pulp treatments, are based on the amputation of some or all of the coronal pulp tissue and covering the remaining vital tissue with biocompatible materials. Amputation treatments are considered as economical, simple treatment options that can contribute to the quality of life of the tooth for young permanent teeth in suitable conditions where pulpal vitality can be maintained. The production of new bioactive materials and the updating of the used materials have also increased the frequency of application of amputation treatments in young permanent teeth. In this review, amputation methods applied in young permanent teeth and current materials used are presented together.

**Keywords:** Pulpotomy, amputation, permanent tooth, vital pulp treatment, young permanent teeth



**DİŞ KOMPOZİTLERİNİN FOTON ETKİLEŞİM PERFORMANSLARI**  
PHOTON INTERACTION PERFORMANCE OF DENTAL COMPOSITES

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**ÖZET**

Bu çalışmada, bazı diş kompoziteri için 1 keV ile 100 GeV enerji aralığında toplam kütle soğurma katsayısı değerleri WinXCOM bilgisayar programı kullanılarak belirlenmiştir. Lineer azaltma katsayıları, yarı tabaka kalınlıkları, onda bir tabaka kalınlıkları, ortalama serbest yolları, moleküler tesir kesitleri, atomik tesir kesitleri, elektronik tesir kesitleri, etkin atom numaraları ve etkin elektron yoğunlukları yukarıda belirtilen enerji aralığında hesaplanan toplam kütle soğurma katsayıları yardımı ile elde edilmiştir. Fotoelektrik etki, Compton saçılması ve çift oluşum süreçleri sırasıyla düşük, orta ve yüksek enerjilerde etkindir.

**Anahtar kelimeler:** Diş Kompozit, Azaltma katsayısı, Tesir kesiti, Etkin atom numarası.

**ABSTRACT**

In this study, total mass attenuation coefficient values in the energy range from 1 keV to 100 GeV for some dental composites were determined with the WinXCOM computer program. Linear attenuation coefficients, half value layers, tenth value layers, mean free paths, molecular cross sections, atomic cross sections, electronic cross sections, effective atomic numbers and effective electron densities in the aforementioned energy range were obtained with the help of the calculated total mass attenuation coefficients. It has been observed that photoelectric effect, Compton scattering and pair production process are predominate in low, medium and high energies, respectively.

**Keywords:** Dental composite, Attenuation coefficient, Cross section, Effective atomic number.



**HYBRID METAHEURISTICS APPROACH FOR CLINICAL DATABASE WITH SPECIAL REFERENCE TO DIABETES**

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**ABSTRACT**

Diabetes mellitus is a metabolic disease, where a person is affected with high blood glucose level. Diabetes is a metabolic disorder caused due to the failure of body to produce insulin or to properly utilize insulin. This condition arises when the body does not produce enough insulin, or because the cells do not respond to the insulin that is produced. Blood glucose test is the crucial method for diagnosing diabetes. There have been many computerized methods proposed for diagnosis of diabetes. All these methods have some input values which would be the result of different tests that should be carried out in hospitals. Due to uncertainty and huge volume in clinical data, information is imperfect, fragmentary, not fully reliable, unclear, ambiguous or deficient in some way. The new prediction method has proposed in this research to identify the diabetic disease, its causes about diabetic, types and complications from the clinical database in an efficient way. The method has the compound of Neural-network Algorithm, Fuzzy logic techniques, Hybrid Genetic Algorithm and Data clustered algorithms. In total of 300 data have been utilized for training and testing process which was collected through structure questionnaire. The researchers have performed data pre-process operation prior used in the developed system. The system produced 94.6% accuracy of diabetes prediction. This research has developed accurate, near perfect, easy to use, cost effective and a method for supporting medical practitioners. The early recognition and prediction can give a warning at a stage, where some medications and precautionary action can facilitate the patient to increase the period of patient's healthy life.

## HEALTH COMES FROM APITHERAPY

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### ABSTRACT

Apitherapy can be defined as preventing or healing one or more diseases by using bee products (honey, beeswax, pollen, royal jelly, propolis, bee venom, perga). Apitherapy is derived from the Latin Word “apis”, which means “bee”, and is a treatment method that has been applied around the world for about 4000 years. Nowadays, due to the inadequacy of the methods used in the treatment of diseases or the negative side effects that may occur, a tendency to alternative natural treatments has emerged. The use of non-toxic and easily available bee products is also a natural treatment method. Honey is the most important bee product. Studies demonstrate that honey has an effects of antioxidant, anticarcinogenic, accelerating the healing process of wounds and protecting against cardiovascular disease. It is known that honey, which has antibacterial properties, accelerates healing in the treatment of wounds and burns. Bee pollen has antioxidant properties that eliminate free radicals. It has also been clinically proven to protect the body against the side effects caused by exposure to radiation and chemicals. Propolis is a natural antibiotic. It has antimicrobial, antiviral and antioxidant properties. It has been reported in studies that it has a healing effect on diseases such as chill, tooth and gum ailments, ulcers, HIV-1 virus. The lethal dose of bee venom (excluding allergic reactions) averages 2.8 mg per kg of body weight. The survival rate of a person, weighing average of 60 kg, from an injection of 168 mg of bee venom (approximately 600 bees) is 50%. In low doses, it provides the treatment of some ailments (migraine, premenstrual syndrome, vasodilation, inflammatory diseases, etc.). Today, it is mostly used as a veterinary medicine. Royal jelly, an anti-aging product, is effective in preventing the aging process. It has been determined in studies that royal jelly, which has a very strong effect on the regeneration of cells, helps suppressing metastasis in tumor cells. It has a growth-promoting effect in children. Perga is much more useful than pollen due to the large amount of beneficial bacteria and sediment in its content. It is very effective in the treatment of metabolism problems and allergies. Strengthening the immune system is important in the treatment and prevention of diseases. When the studies are examined, it has seen that bee products contribute positively to the immune system. In this study, information about apitherapy and bee products have given, and it has aimed to raise awareness by compiling the effects of bee products on health.

**Keywords:** Apitherapy, bee products, health.

**ŞEMDİNLİ (HAKKARİ) YÖRESİNDE YETİŞTİRİLEN ÜZÜM ÇEŞİTLERİNİN  
AMPELOGRAFİK ÖZELLİKLERİNİN BELİRLENMESİ ÜZERİNE BİR ARAŞTIRMA**

A RESEARCH ON THE DETERMINATION OF THE AMPELOGRAPHIC CHARACTERISTICS OF  
GRAPE VARIETIES GROWED IN ŞEMDİNLİ (HAKKARİ) REGION.

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**ÖZET**

Ülkemiz bağcılığının geliştirilmesi amacıyla asma gen kaynaklarının toplanması, korunması ve geliştirilmesi yönündeki çalışmalar bağcılığımızın geleceği açısından büyük önem taşımaktadır. Bu çalışma, Şemdinli (Hakkari) yöresinde yetiştirilen Çekirdeksiz, Süleymani, Genotip, Hurist, Reşik, Sadani, Keçimemesi, Veşifir, Zerik, Kırıkire ve Sipiyaşın üzüm çeşitlerinin ampelografik özelliklerinin belirlenmesi amacıyla yapılmıştır. Çeşitlerin ampelografik özellikleri IBPGR (Uluslararası Bitki Genetik Kaynakları Merkezi) tarafından hazırlanan 'Üzüm Tanımlayıcıları'na (Descriptors for Grape) göre belirlenmiştir. Üzüm çeşitlerinin tanımlanmalarında esas alınan morfolojik ve fenolojik özelliklerin; yetiştirilen yöre, bakım ve besleme koşulları, buldukları yer ve zamana göre değişebileceği belirlenmiştir. Bağcılık konusundaki zengin genetik potansiyelimizin ortaya çıkarılması amacıyla yapılan ampelografik çalışmada belirlenen çeşitlerin tamamının *V. vinifera L.* türüne ait çeşitler oldukları saptanmıştır. Yörede pekmez yapımı, kurutmalık ve sofralık olarak değerlendirilen bu çeşitler, yapılacak çalışmalar ve modern bağcılık teknikleri kullanımıyla daha verimli hale getirilmesi ve ülkemiz bağcılığına kazandırılması gerekliliği ortaya çıkmıştır. Yörenin filoksera ile bulaşık olması kendi kökleri üzerinde yetiştirilen bu çeşitlerin korunmasına yönelik çalışmalara hız verilmesini zorunlu kılmaktadır. Aksi takdirde bu çeşitlerin zaman içerisinde zararlı nedeniyle ortadan kalkması kaçınılmazdır. *V. vinifera L.* türüne ait olan çeşitlerin, erselik çiçek yapısına sahip ve biri hariç diğerlerinin çekirdekli oldukları belirlenmiştir. Çeşitler arasında ortalama yaprak büyüklüğü, ortalama salkım ağırlığı ve ortalama tane ağırlığı yönünden farklılıkların olduğu gözlemlenmiştir.

**Anahtar kelimeler:** Ampelografi, Yerli Üzüm Çeşitleri, Şemdinli

**ABSTRACT**

In order to develop viticulture in our country, studies on the collection, protection and development of grapevine gene resources are of great importance for the future of our viticulture. This study was carried out to determine the ampelographic properties of Cekirsiz, Suleimani, Genotip, Hurist, Resik, Sadani, Keçimesi, Veşifir, Zerik, Kırıkire and Sipiyaşın grape varieties grown in Şemdinli (Hakkari) region. The ampelographic characteristics of the cultivars were determined according to the 'Descriptors for Grape' prepared by IBPGR (International Center for Plant Genetic Resources). It has been determined that the morphological and phenological characteristics, which are taken as a basis in the identification process of grape varieties, may change according to the grown region, care and feeding conditions, location and time. In this ampelographic study, which was carried out to reveal our rich genetic potential in viticulture, it was determined that all of the varieties determined were *V. vinifera L.* varieties. These varieties, which are used in making molasses, as drying and as edibles, need to be brought to our country's viticulture by making them more productive with future studies and the use of modern viticulture techniques. The infestation of the region with phylloxera



necessitates speeding up the efforts to protect these varieties grown on their own roots. Otherwise, it is inevitable that these varieties will disappear over time. It was determined that the cultivars belonging to the *V. vinifera* L. species had a herbaceous flower structure and all the cultivars except one were nucleated. It was observed that there were differences between cultivars in terms of average leaf size, average cluster weight and average grain weight.

**Keywords:** Amphelographi, Local Grape Varieties, Şemdinli

**ADİLCEVAZ (BİTLİS) YÖRESİNDE YETİŞTİRİLEN ÇEVİZLERDE KLOROFİL  
MİKTARLARININ, STOMA YOĞUNLUKLARININ VE BESLENME DURUMLARININ  
BELİRLENMESİ**

DETERMINATION OF CHLOROPHIL AMOUNT, STOMA DENSITY AND NUTRITIONAL STATUS  
IN CHICKENS CULTIVATED IN ADİLCEVAZ (BİTLİS) REGION

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**ÖZET**

Bu çalışma, Bitlis ili Adilcevaз ilçesinde yetiştirilen 16 farklı ceviz genotipi üzerinde yürütülmüştür. Çalışmanın amacı, ceviz genotiplerinin yapraklarında kalıp alma ve saydamlaştırma yöntemleri kullanarak, stoma yoğunluklarını ve büyüklüklerini tespit etmek ve ayrıca SPAD ile de klorofil miktarlarını belirlemektir. Aynı çeşidin yapraklarının stoma sayıları arasındaki farklılık istatistikî olarak önemli bulunmuştur ( $p<0.05$ ). Saydamlaştırma metodunda 16 ceviz genotipinde stoma sayıları kalıp alma yöntemine göre daha yüksek bulunmuştur. İncelenen çeşitlerde hem klorofil a ve b arasında hem de toplam klorofil ve karotenoid arasında önemli bir regresyon bulunmuştur. En yüksek SPAD değerleri 57.54 ile 13 AC 16 genotipinden elde edilirken, en düşük SPAD değeri ise 34.71 değeri ile 13 AC 11 ceviz genotipinden elde edilmiştir. Yapraklarındaki stoma yoğunlukları kalıp alma yönteminde 174.72-353.60 adet/mm<sup>2</sup>, saydamlaştırma yönteminde ise 145.60-312.00 adet/mm<sup>2</sup> arasında değiştiği belirlenmiştir. Ceviz stomaları böbrek şeklinde olup, uzunlukları kalıp alma yöntemiyle tespit edilenlerde 21.68-32.88 µm arasında, saydamlaştırma yöntemiyle belirlenenlerde ise 23.97-29.31 µm arasında değiştiği belirlenmiştir. İncelenen ceviz tiplerinde stoma yoğunluğu ile stoma büyüklüğü arasında genel olarak ters bir ilişki bulunduğu dikkat çekmektedir. Ceviz genotiplerinin yapraklarından alınan numunelerinin incelenmesi sonucunda, stoma sayısı ceviz genotiplerine göre farklılık gösterdiği ve bunun çeşide özgü olduğu belirlenmiştir.

**Anahtar kelimeler:** Ceviz, Stoma Yoğunluğu, SPAD, Klorofil

**ABSTRACT**

This study was carried out on 16 different walnut genotypes grown in Adilcevaз district of Bitlis province. The aim of the study is to determine the stomatal densities and sizes by using mold removal and transparency methods and also to determine the amount of chlorophyll with SPAD in the leaves of walnut genotypes. The difference between the number of stomata of the leaves of the same cultivar was statistically significant ( $p<0.05$ ). In the transparency method, the number of stomata in 16 walnut genotypes was found to be higher than in the mold area method. Significant regression was found between chlorophyll a and b as well as between total chlorophyll and carotenoid in the cultivars studied. While the highest SPAD values were obtained from 13 AC 16 genotypes with 57.54, the lowest SPAD values were obtained from 13 AC 11 walnut genotypes with 34.71 values. It was determined that the stomatal densities in the leaves varied between 174.72-353.60 pieces/mm<sup>2</sup> in the mold removal method and 145.60-312.00 pieces/mm<sup>2</sup> in the clearing method. Walnut stomas are kidney-shaped and their lengths were determined to vary between 21.68-32.88 µm in those determined by the molding method, and between 23.97-29.31 µm in those determined by the clearing method. It is noteworthy that there is an inverse relationship between stoma density and stoma size in examined walnut



types. As a result of the examination of the samples taken from the leaves of the walnut genotypes, it was determined that the number of stomata differs according to the walnut genotypes and it is specific to the variety.

**Keywords:** Walnut, Stomatal density, SPAD, Chlorophyll

**KIRŞEHİR KOŞULLARINDA FARKLI MÜRDÜMÜK (*LATHYRUS SATIVUS* L.) VE YULAF (*AVENA SATIVA* L.) KARIŞIM ORANLARININ OT VERİM VE KALİTESİ ÜZERİNE ETKİSİ**  
**EFFECTS ON HAY YIELD AND QUALITY OF DIFFERENT GRASSPEA (*LATHYRUS SATIVUS* L.) AND OAT (*AVENA SATIVA* L.) MIXTURES RATIO IN KIRŞEHİR CONDITIONS**

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**ÖZET**

Bu araştırma, Kırşehir ekolojik koşullarında uygun mürdümük (*Lathyrus sativus* L.) + yulaf (*Avena sativa* L.) karışım oranlarını belirlemek amacıyla 2021 yılında yürütülmüştür. Araştırma tesadüf blokları deneme desenine göre üç tekrarlamalı olarak kurulmuştur. Denemede her iki türün saf ekimleri ile üç farklı karışım oranının (%25 mürdümük + % 75 yulaf, % 50 mürdümük + % 50 yulaf, % 75 mürdümük + % 25 yulaf) bazı verim ve kalite özellikleri incelenmiştir. Araştırmada sonuçlarına göre; en yüksek toplam yaş ot verimi % 25 M + % 75 Y karışımından (2096.8 kg da<sup>-1</sup>), en yüksek toplam kuru ot verimi yalın yulaftan (653.2 kg da<sup>-1</sup>), en yüksek toplam ham protein verimi de % 50 M + % 50 Y (87.8 kg da<sup>-1</sup>) karışımından elde edilmiştir. Karışımlarda mürdümük oranı arttıkça ham protein oranı artmış, ADF ve NDF oranı azalmıştır. Sonuç olarak, Kırşehir ve benzer ekolojilerde yüksek verim ve kaliteli ot elde etmek için % 50 M + % 50 Y karışımı önerilebilir.

**Anahtar kelimeler:** Yulaf, mürdümük, karışım, verim, kalite

**ABSTRACT**

This study was conducted to determine the proper mixture ratio of grasspea (*Lathyrus sativus* L.) and oat (*Avena sativa* L.) under the ecological conditions of Kırşehir in 2021. This trial was set up according to a randomized block design with three replicates. This study covered some yield and quality measurement of pure sowing of both species and their different mixture ratios (25% Grasspea + 75% Oat, 50% Grasspea + 50% Oat, 75% Grasspea + 25% Oat). Results showed that the highest total green forage yield was obtained from the mixture of 25% G + 75% O (2096.8 kg da<sup>-1</sup>), the highest total dry matter yield was obtained from pure oat (653.2 kg da<sup>-1</sup>), the highest crude protein yield was obtained from 50% G + 50% O (87.8 kg da<sup>-1</sup>). Increasing the mixture rate of graspea increased the crude protein content while decreased ADF and NDF. To conclude, the mixture of 50% G+50% O could be recommended for Kırşehir and similar ecologies to obtain high yield and quality hay.

**Keywords:** Oat, grasspea, mixture, yield, quality



**YÜKSEK TÜNELLERDE DOĞAL HAVALANDIRMA VE EVAPORATIF SOĞUTMA  
UYGULAMALARININ İÇ ORTAM BUHAR BASINCI AÇIĞINA ETKİSİNİN  
DEĞERLENDİRİLMESİ**

EVALUATION OF THE EFFECT OF NATURAL VENTILATION AND EVAPORATIVE COOLING  
APPLICATIONS ON INDOOR VAPOR PRESSURE DEFICIT IN HIGH TUNNELS

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**ÖZET**

Örtü altı yetiştiriciliğinde çevresel iklim faktörleri arasında, hava neminin bitki büyümesi üzerindeki etkisi yetiştiriciler tarafından genellikle ihmal edilmektedir. Oysaki örtü altı yetiştiriciliğinde yaz aylarında ortaya çıkan düşük neme bağlı buhar basıncı açığı, üretilen ürünlerin kalite ve miktarını olumsuz etkilemektedir. Örtü altı yetiştiriciliğinde iç ortam havasının nem içeriği ile ilgili koşullar, genellikle maksimum ve gerçek su buharı basıncı arasındaki farkı tanımlayan buhar basıncı açığı (VPD) ile tanımlanır. Bu amaçla çalışmada, yüksek tünelde 4 farklı uygulama (T1: doğal havalandırma, T2: doğal havalandırma+ gölgeleme tülü, T3: fan ped, T4: fan ped+gölgeleme tülü) ile iç ortam sıcaklık, bağıl nem, solar radyasyon ve buhar basıncı açığı değerleri belirlenmiştir. Ölçülen değerler yardımıyla uygulamaların iç ortam buharı basıncı açığına etkileri ortaya konulmuştur. Çalışma sonucunda, doğal havalandırma uygulaması yapılan saatlerde dış ortam VPD değerleri ortalama 1.46 kPa olarak bulunurken iç ortamda 3.29 kPa olarak bulunmuştur. Doğal havalandırma+gölgeleme tülü uygulamasında ise dış ve iç ortamda ortalama VPD değerleri 2.46 kPa ve 4.42 kPa olarak bulunmuştur. Fan ped sisteminde ise dış ve iç VPD 2.34 kPa-1.14 kPa ve fan ped+ gölgeleme tülü uygulamasında ise 2.50 kPa-1.05 kPa olarak bulunmuştur. Çalışma sonucunda yaz aylarında ortaya çıkan yüksek VPD nin doğal havalandırma ve gölgeleme tülü uygulamaları ile düşürmenin mümkün olmadığı belirlenmiştir. Bunun yanında fan ped yöntemi ve fan ped+gölgeleme tülü uygulamalarının iç ortamda VPD'yi bitki yetiştiriciliği için uygun sınırlar arasında tutarak üretimde verim ve kalite kayıplarının önüne geçilebileceği çalışma ile belirlenmiştir.

**Anahtar kelimeler:** Sıcaklık, Bağıl nem, Buhar basıncı açığı, Evaporatif soğutma, Doğal havalandırma

**ABSTRACT**

Among the environmental climatic factors in greenhouse cultivation, the effect of air humidity on plant growth is often neglected by growers. However, the vapor pressure deficit due to low humidity in greenhouse cultivation in summer negatively affects the quality and quantity of the products produced. Conditions for moisture content of indoor air in greenhouse cultivation are usually defined by the vapor pressure deficit (VPD), which defines the difference between maximum and actual water vapor pressure. For this purpose, indoor temperature, relative humidity, solar radiation and vapor pressure deficit values were determined with 4 different applications (T1: natural ventilation, T2: natural ventilation+shading net, T3: fan pad, T4: fan pad+shading net) in the high tunnel. With the help of the measured values, the effects of the applications on the indoor vapor pressure deficit were revealed. As a result of the study, the outdoor VPD values were found to be 1.46 kPa on average during the hours of natural ventilation application, while it was found as 3.29 kPa in the indoor environment. In the natural ventilation+shading net application, the average VPD values were found as 2.46 kPa and 4.42 kPa in the outdoor and indoor environments. In the fan pad system, the outer and inner VPD was 2.34 kPa-1.14 kPa, and in the fan pad+shading net application, it was 2.50 kPa-1.05 kPa. As a result of the study, it has been determined that it is not possible to reduce the high VPD that occurs in the summer months with natural ventilation and shading net applications. In addition, it has been determined by



the study that the fan pad method and fan pad+shading net applications can prevent yield and quality losses in production by keeping the VPD within the appropriate limits for plant cultivation.

**Keywords:** Temperature, Relative humidity, Vapor pressure deficit, Evaporative cooling, Natural ventilation

**THE EFFECT OF INCREASING CONCENTRATIONS OF IRON ON IRON NUTRITIONAL PROPERTIES OF SOME SUNFLOWER LINES GROWN IN SAND CULTURE**

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**ABSTRACT**

The aim of this study was to determine the effect of increasing concentrations of iron in the applied nutrient solution on the iron nutritional properties of some sunflower lines grown in sand culture. A nutrient solution containing iron in the form of Fe-EDDHA was applied to 7 different sunflower lines: i) 0.2  $\mu\text{M}$  Fe (Deficient), ii) 45  $\mu\text{M}$  Fe (Adequate), iii) 100  $\mu\text{M}$  Fe (Adequate) concentrations. In the experiment, each treatment was repeated 3 times and the pH of the nutrient solution used was adjusted to 6.0. Lines that respond positively to the ferrous nutrient solution in terms of dry matter amount are sunflower lines 3, 5 and 6 at both iron concentrations (45 and 100  $\mu\text{M}$  Fe). In other sunflower lines, the effect of iron nutrient solution on the amount of dry matter was found to be insignificant. The effect of iron application on total chlorophyll content in sunflower was different according to the lines. Considering the total iron content, adequate lines in terms of iron nutrition were obtained by applying a nutrient solution containing 100  $\mu\text{M}$  Fe. For this reason, it was thought that it would be a more accurate approach to accept the application of 100  $\mu\text{M}$  iron as a sufficient level instead of 45  $\mu\text{M}$  Fe. While the total iron content in sunflower lines grown with a nutrient solution containing sufficient concentration (100  $\mu\text{M}$  Fe) iron varies according to the lines, it is between 65.73-119.96 ppm; active iron contents were found to be between 15.35-23.48 ppm. According to these values, it can be said that the total iron content should be above 50 ppm in the sunflower lines with sufficient iron nutrition, whereas the active iron content should be above the average value of 19.68 ppm. While the active iron content of the lines forming the first group was between 7.03-9.12 ppm under iron deficiency conditions, the active iron content of the lines forming the second group was found to be 14.64 ppm under iron deficiency conditions. The average active iron content value was found to be 8.79 ppm in sunflower lines examined under iron deficiency conditions.

**Keywords:** Sand culture, sunflower line, iron nutrition, chlorophyll, active iron, total iron

## **SERA DOMATES VE BİBER BİTKİ ATIKLARININ ENERJİ POTANSİYELLERİNİN BELİRLENMESİ**

**DETERMINATION OF THE ENERGY POTENTIAL OF TOMATO AND PEPPER RESIDUES IN THE GREENHOUSE**

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### **ÖZET**

Bitkisel artıkların enerji kaynağı olarak değerlendirilmesi tarımsal üretimde sürdürülebilirlik açısından büyük bir önem arz etmektedir. Bu çalışma Kırşehir koşullarında venlo tip tam otomasyonlu cam serada yetiştirilen domates ve biber artıklarının enerji potansiyelinin belirlenmesi amacıyla yapılmıştır. Bu sayede Türkiye’de örtüaltında yetiştirilen domates ve biber artıklarında elde edilebilecek enerji potansiyeli hesaplanmıştır. Denemede 1 dekar alandan 674.8 kg domates, 903.6 kg biber kuru bitki artığı elde edilmiştir. Bu atıklardan hesaplanan enerji değerleri domates için 10,4 GJ, biber için ise 15,7 GJ olarak belirlenmiştir. Türkiye’de örtüaltında domates ve biber üretimi sonucu ortaya çıkan bitki artıklardan elde edilebilecek enerji miktarı; domates için 2009370 GJ, biber için ise 1170389 GJ olarak hesaplanmıştır. Böyle büyük bir potansiyelin değerlendirilmesi, Türkiye ekonomisine büyük katkı sağlayacaktır.

**Anahtar kelimeler:** Bitkisel artık, seracılık, enerji potansiyeli

### **ABSTRACT**

Biomass residues can be regarded as a source of energy in agricultural production and it is of great importance in terms of sustainability. In this study, it was carried out to determine the energy potential of tomato and pepper residues grown in venlo type glass greenhouse with controlled climatic conditions. In this way, the energy potential that can be obtained from tomato and pepper residues grown under greenhouse in Turkey were calculated. In the experiment, 674.8 kg tomato and 903.6 kg pepper dry plant residues were obtained from 1 decare area. The energy values calculated from these residues were determined as 10.4 GJ for tomato and 15.7 GJ for pepper. The amount of energy that can be obtained from plant residues resulting from greenhouse tomato and pepper production in Turkey; 2009370 GJ for tomato and 1170389 GJ for pepper. The evaluation of such a important potential, will contribute greatly to the economy of Turkey.

**Keywords:** Biomass residues, greenhouse, energy potential

**FARKLI YETİŞTİRME ORTAMLARINA MİKORİZA AŞILAMASININ HIYAR  
(CUCUMIS SATIVUS L.) BİTKİ GELİŞİMİ VERİMİ VE MEYVE KALİTESİ ÜZERİNE ETKİSİ**  
EFFECT OF MYCORRHIZA INOCULATION ON DIFFERENT SUBSTRATES ON CUCUMBER  
(CUCUMIS SATIVUS L.) PLANT DEVELOPMENT, YIELD AND FRUIT QUALITY

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## ÖZET

Topraksız tarımda yetiştirme ortamına uygulanan yararlı mikroorganizmalar su ve besin maddelerinin alınımını artırabilir. Bu çalışma, topraksız tarımda farklı katı ortamlarda (perlit, tort+perlit, toprak, rockwool, cocopeat) mikoriza uygulamalarının hıyar yetiştiriciliğinde bitki gelişimi, verim ve kaliteye etkisini belirlemek amacıyla ile sera koşullarında tesadüf blokları deneme desenine göre 3 tekerrürlü olarak yürütülmüştür. Çalışmada; bitki boyu, gövde çapı, bitki yaş ve kuru ağırlığı, toplam verim ve bitki başına ortalama verim, meyvede ağırlık kaybı, meyve eti sertliği, ŞÇKM, meyve EC, pH ve Klorofil (SPAD) içeriği parametreleri belirlenmiştir. Çalışma sonucu farklı katı ortamlara uygulanan mikoriza inokulasyonunun incelenen pomolojik parametrelere kıyasla morfolojik parametreler üzerinde daha fazla olumlu etki göstermiştir. Mikoriza inokulasyonunun kontrol bitkilerine kıyasla verim üzerinde oluşturduğu artış sırasıyla perlit(%21,3), toprak (%10,7), Cocopeat (%9,3), Torf+ perlit(%8,7) ve Rockwool (%1,4) yetiştirme ortamlarında belirlenmiştir. Mikoriza inokulasyonunun kontrol bitkilerine kıyasla bitki bioması üzerine etkisi ise sırasıyla perlit(%19,4), toprak (%15,7), Torf+ perlit(%12,8), Cocopeat (%2,9), ve Rockwool (%1,5) olarak belirlenmiştir. Ortamlar arasında mikoriza inokulasyonu en fazla olumlu etkisi perlit ortamında tespit edilmiştir.

**Anahtar kelimeler:** Hıyar, katı ortam kültürü, mikoriza, verim

## ABSTRACT

In soilless agriculture, beneficial microorganisms applied to the growing medium can increase the uptake of water and nutrients. This study was carried out with 3 replications in greenhouse conditions according to the randomized blocks experimental design in order to determine the effect of mycorrhiza applications on different substrates (perlite, peat+perlite, soil, rockwool, cocopeat) in soilless agriculture on plant growth, yield and quality in cucumber cultivation. In the study; plant height, stem diameter, plant fresh and dry weight, total yield and average yield per plant, fruit weight loss, fruit flesh firmness, TSS, fruit EC, pH and Chlorophyll index parameters were determined. As a result of the study, mycorrhiza inoculated to different substrates indicated more positive effects on morphological parameters compared to the investigated pomological parameters. The increase in yield of mycorrhiza inoculation compared to control plants were determined in perlite(21,4%), soil(10,7%), Cocopeat (9.3%), Peat + perlite (8.7%) and Rockwool (1.4%) growing media, respectively. The effects of mycorrhiza inoculation on plant biomass compared to control plants were determined as perlite (19.4%), soil (15.7%), Peat + perlite (12.8%), Cocopeat (2.9%), and Rockwool(1,5 %),



respectively. Among the mediums, the most positive effect of mycorrhiza inoculation was determined in the perlite medium.

**Keywords:** Cucumber, mycorrhiza, substrate culture, yield

**TAGETES PATULA L. (ASTERALES: ASTERACEAE)'NİN GÜMÜŞ VE ALTIN  
NANOPARTİKÜLLÜ SU EKSTRAKTININ *SITOPHILUS GRANARIUS* (L.) (COLEOPTERA:  
CURCULIONIDAE) KARŞI LABORATUVAR KOŞULLARINDA ETKİNLİĞİNİN  
BELİRLENMESİ#**

DETERMINATION OF THE EFFICACY OF *TAGETES PATULA* L. (ASTERALES: ASTERACEAE)  
SILVER AND GOLD NANOPARTICLES WATER EXTRACT AGAINST *SITOPHILUS GRANARIUS*  
(L.) (COLEOPTERA: CURCULIONIDAE) IN LABORATORY CONDITIONS#

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**ÖZET**

Depo zararlılarından biri olan *Sitophilus* türleri tüm dünyada tahıllarda önemli zararlara neden olmaktadır. *Sitophilus* türleri içerisinde önemli bir tür olan *Sitophilus granarius* L. (Col.: Curculionidae) ülkemizin hemen hemen her bölgesinde yaygın olarak görülür ve bütün hububat çeşitlerinde zarar meydana getirebilmektedir. Hububat danelerini yiyerek oluşturdukları zarar sonucunda danelerin çimlenme oranlarında %80-90 azalma meydana gelmektedir.

Bu zararlılarla mücadelede yoğun olarak sentetik kimyasallar kullanılmaktadır. Sentetik kimyasallar hem direnç oluşumuna neden olmakta hem de insan ve çevre sağlığına zarar vermektedir. Bu etkileri en aza indirmek için alternatif mücadele yöntemleri araştırılmaktadır. Bu yöntemlerden biri de biyopestisit uygulamalarıdır. Özellikle bitkilerden elde edilen biyopestisitler zararlıları baskı altına alırken çevre ve insan sağlığına daha az zararlıdır.

Bu çalışma ile *Tagetes patula* L. (Asterales: Asteraceae)'nın gümüş ve altın nanopartiküllü su ekstraktları *Sitophilus granarius* L. (Coleoptera: Curculionidae)'a karşı kontak ve davranış (beslenmeyi engelleyici) etkileri bakımından laboratuvar koşullarında araştırılmıştır. Çalışmada, *T.patula*, 'nın gümüş nanopartiküllü su ekstraktı *S.granarius* üzerinde kontak etki denemesinde toksik etki göstermiştir. %100 dozunda 4. gün sonunda %61,25±2.95'lik bir ölüm oranı tespit edilmiştir. Altın nanopartikülün etkinliği ise düşük düzeyde bulunmuştur. Davranışa etkisi seçenek testi ile değerlendirilmiştir. Hem altın nanopartikül hem de gümüş nano partikülün ele alınan tüm dozlarında farklı oranlarda da olsa beslenmeyi durdurduğu belirlenmiştir. En düşük ağırlık kaybı %28,43±8.31 ile altın nanopartikül ekstraktı'nın %100 konsantrasyonunda bulunmuştur. Beslenme sonucunda ise en yüksek ölüm oranı gümüş nanopartikülün %100 konsantrasyonunda (%61,01±7.89) tespit edilmiştir. Sonuç olarak, *T.patula*'nın gümüş ve altın nanopartiküllü su ekstraktının *S.granarius* mücadelesinde kullanılma potansiyeline sahip biyopestisit olabileceği bu çalışma ile belirlenmiştir.

**Anahtar kelimeler:** *Sitophilus granarius*, *Tagetes patula*, Gümüş Nanopartikül, Altın Nanopartikül, Buğday.

#Bu çalışma Ahi Evran Üniversitesi Bilimsel Araştırma Projeleri Koordinasyon Birimince Desteklenmiştir.  
Proje Numarası: ZRT.A4.19.022

**ABSTRACT**

*Sitophilus* species, one of the storage pests, cause significant damage to cereals all over the world. *Sitophilus granarius* L. (Col.: Curculionidae), which is an important species among the *Sitophilus* species, is common in almost every region of our country and can cause damage to all cereal varieties.

By eating cereal grains, they produce an 80-90% reduction in the germination rate of grains. Synthetic chemicals are used extensively to control these pests. Synthetic chemicals cause both resistance and damage human and environmental health. Alternative control methods are being investigated to minimize



these effects. One of these methods is the application of biopesticides. Biopesticides, especially from plants, are less harmful to the environment and human health while suppressing pests. In this study, silver and gold nanoparticle water extracts of *Tagetes patula* L. (Asterales: Asteraceae) were investigated their contact and behavioural (feeding inhibitory) effects against *Sitophilus granarius* L. (Coleoptera: Curculionidae) in laboratory conditions.

In the study, silver nanoparticle extract of *T.patula* showed toxic effect on *S.granarius* in the contact effect experiment. A mortality rate of  $61.25 \pm 2.95\%$  was determined at the end of the 4th day at the 100% dose. The effectiveness of the gold nanoparticle was found to be at a low level. The effect of behavior was evaluated by the option test. It was determined that both the gold nanoparticle and the silver nanoparticle stopped feeding at different rates at all the doses considered. The lowest weight loss was found at 100% concentration of gold nanoparticle extract with  $28.43 \pm 8.31\%$ . The highest mortality rate ( $61.01 \pm 7.89\%$ ) as a result of feeding was determined at 100% concentration of silver nanoparticles. As a result, it was determined by this study that the silver and gold nanoparticle water extract of *T.patula* could be a biopesticide with the potential to be used in the control of *S.granarius*.

**Keywords:** *Sitophilus granarius*, *Tagetes patula*, Silver Nanoparticles, Gold Nanoparticles, Wheat.

# This work was supported by the Ahi Evran University Scientific Research Projects Coordination Unit. Project Number: ZRT.A4.19.022.





## UPPER AND LOWER BRANCHES OF CENTRAL RETINAL ARTERY

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### ABSTRACT

Vascular diseases such as diabetes mellitus, hypertension, central retinal occlusion of artery influence vessels of the eye and can lead to loss of vision. According to research about 4.8% of the world's population suffers from diabetic retinopathy. Human retina allows to provide diagnostics of the blood vessels noninvasively. Central retinal artery (CRA) supplies retina with blood. It is important to understand the anatomical variability of the CRA branching. During ophthalmoscopy retina can be divided into two halves: upper and lower hemiretina. The line connects the center of the optic disk and the center of macula. According to that from CRA arise upper and lower branches. Upper and lower branches are divided into temporal and nasal. We investigated 360 ophthalmoscopies without pathology from databases with open access. Research showed that from upper hemiretina arise: two (91,5%), three (8,1%) and four (0,4%) branches. From lower hemiretina arise: one (0,4%), two (94,0%) and three (5,6%) branches. Based on the results of investigation we can suggest that the most common number of branches would be two from each side of hemiretina: temporal and nasal respectively. The third branches were represented by nasal, macular, upper temporal, lower temporal and upper nasal. Four branches included also nasal and macular.

**Keywords:** human, eye, retina, central retinal artery.

## **METABOLIC SYNDROME IN PREGNANT WOMEN: THE ROLE OF BODY COMPOSITION**

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### **ABSTRACT**

**Introduction.** Metabolic syndrome (MS) is an extremely significant public health problem, as its prevalence throughout the world is steadily increasing every year, and in some countries, it reaches a third of the adult population. Mention should also be made of the high cardiovascular risk associated with MS. According to modern concepts, MS is a complex of metabolic disorders, including abdominal obesity, impaired carbohydrate metabolism (impaired fasting glycemia, impaired glucose tolerance), insulin resistance, dyslipidemia, and arterial hypertension. Obesity is a major component of MS and a significant independent risk factor for developing of many gestational complications. It is known that in the presence of obesity during pregnancy, the risk of having children with both underweight and pathological overweight increases, which, in turn, increases the risk of metabolic disorders in this group of children throughout life. According to several American authors, obesity is noted in 20% of women at the time of pregnancy, and in general, it is diagnosed in 30% of women of reproductive age. It is known that obesity during pregnancy, diagnosed with a body mass index (BMI) of more than 30 kg / m<sup>2</sup>, increases the risk of developing fetal growth retardation syndrome, fetal macrosomia, gestational diabetes mellitus, preeclampsia, and sudden fetal death syndrome. Thus, it was found that BMI > 30 kg / m<sup>2</sup> increases the risk of developing preeclampsia by 2-3 times, while an increase in the indicator by 5-7 kg / m<sup>2</sup> before pregnancy doubles the risk of developing this complication. Obesity is also associated with a higher risk of complications during vaginal delivery. All of the above indicates the need for early diagnosis of the development of metabolic syndrome in order to take the necessary rehabilitation measures.

**Purpose of the work.** To study the frequency of metabolic syndrome in pregnant women, depending on the body's composition.

**Materials and Methods.** 46 women aged 22 to 41 were observed. Studies began at 2-4 weeks of gestation and continued until delivery. The bioimpedance method using a body composition monitor "Omron BF-512", Japan, was used to study the body's composition with the determination of muscle and fat components, and the level of visceral fat. Biochemical studies included the determination of blood glucose, glucose tolerance, insulin, triglycerides, high and low-density lipoproteins by standard methods.

**Results.** It was found that the relationship between the initial weight before pregnancy and the newborn's weight is described by Pearson's correlation coefficients  $r = (+0.46)$ , which is characterized as weak. At the same time, the relationship between the amount of weight gain during pregnancy and the newborn's weight is assessed as strong  $r = (+0.73)$ . A close relationship was found between the initial value of the fat component and the amount of weight gain during pregnancy. A strong relationship was also found between body mass index at the beginning of pregnancy and the visceral fat level in the prenatal period ( $r = +0.82$ ). A similar correlation was observed with triglyceride and glucose levels. Consequently, the BMI value at the beginning of pregnancy can be used as a prognostic factor for developing of one of the main components of metabolic syndrome, namely, central abdominal obesity. This allows adequate physical rehabilitation to be carried out from the earliest stage of pregnancy.

**Keywords:** metabolic syndrome, pregnancy, obesity

**THE STATE OF UKRAINE'S READINESS FOR ESTABLISHMENT OBSERVATORIES FOR SUSTAINABLE DEVELOPMENT OF RESORT DESTINATIONS**

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**ABSTRACT**

Ukraine occupies one of the top places in Europe in terms of the level of natural, historical, and cultural resources, and the rapid development of tourism is only a matter of time. Our country's resort and recreational territories are about 9.1 million hectares, which is about 15% of the entire territory. However, according to the World Economic Forum, Ukraine uses less than a third of the available tourist and recreational potential.

In Ukraine, the tourism sector is one of the priorities for the development of the state. The strategy for the development of tourism and resorts for the period up to 2026, pays special attention to the development of resorts, recreation, health-improving, and medical tourism. Almost half of Europe's natural medicinal resources are concentrated in Ukraine, which, unfortunately, currently remain unrealized potential in practically all country regions. The implementation of the tasks of state policy in the field of tourism and resorts, which consists in observing the principles of sustainable development of the tourism and resort potential of Ukraine, is caused by the need to create systemic and complex prerequisites for the development of tourism and resorts in Ukraine. This strategy should become one of the priority areas for accelerating the country's economic growth, attracting investment, providing employment, improving the transport infrastructure of the regions, rational use of natural resources and environmental protection, structural modernization of the economy, and filling budgets all levels.

Taking into account the recommendations of the World Tourism Organization on the development and implementation of national priorities in the implementation of sustainable development goals in the tourism sector, it is necessary to emphasize the relevance for our country of goal 3 - "Good health and well-being". In particular, in the National Strategy for Reforming the Healthcare System in Ukraine for the period 2015-2020, it is noted: "The main function of the state in the field of public health should be the development of policies and strategies in the field of disease prevention, health care, and health promotion."

The analysis of the resort potential of Ukraine showed that the national priority in the implementation of the WTO initiative to create the Observatory for Sustainable Development is the development of a system of criteria and indicators, the creation and maintenance of an inventory of natural medicinal resources, the organization of observation and assessment (monitoring) of the state of resort and tourist destinations to develop recommendations policy of sustainable environmentally friendly development of health tourism.

The scientific base on which the Observatory for Sustainable Development of Resort Destinations in Ukraine can be created is the State Institution "Ukrainian Research Institute of Medical Rehabilitation and Resort Therapy of the Ministry of Health of Ukraine". The Institute is the only institution in Ukraine that carries out systemic research of natural medicinal resources, monitoring and control over their condition, organizational,



methodological, and regulatory support of sanatorium-resort activities, scientific substantiation of directions for the development of resort territories.

**Keywords:** observatory, sustainable development, natural healing resources.



## ISOLATION OF MESENCHYMAL STEM CELLS FROM HUMAN TESTICULAR TISSUE

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### ABSTRACT

**Background and Objective:** The efficacy of methods for testicular tissue-derived mesenchymal stem cells (MSCs) isolation is a challenging issue. The present study aimed to investigate the efficacy of method for isolation of MSCs from human testicular tissue.

**Materials and Methods:** In this experimental laboratory study, the cells were isolated from human testicular tissue by enzymatic method using collagenase. The morphological characteristics of MSCs were examined by invert microscopy and biological characteristics were measured by flow cytometry. Data were analyzed using descriptive statistics.

**Results:** The MSCs were isolated and grown on culture medium successfully. The expression level of CD44, CD73, CD90, and CD29 was significant in cells isolated from the human testicular tissue. CD14, CD34, and CD45 were not expressed or slightly expressed.

**Conclusion:** The protocol used in this study to isolate MSCs from human testicular tissue was highly efficient.

**Keyword:** Mesenchymal stem cells, Testicular tissue, Isolation

**AN UPDATE OF THE POSSIBLE APPLICATIONS OF MAGNETIC RESONANCE IMAGING  
(MRI) IN DENTISTRY: A LITERATURE REVIEW**

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**ABSTRACT**

This review aims to evaluate the current evidence and updates for the application of magnetic resonance imaging (MRI), a radiation-free diagnostic exam, in some fields of dentistry. The branches of dentistry that have been studied have not in the past represented the main application of this method, and for this reason, after the relevant updates of this diagnostic test, we try to understand if it can be more effectively applicable to all dentistry.

**Background:** Radiographic imaging plays a significant role in current first and second level dental diagnostics and treatment planning. However, the main disadvantage is the high exposure to ionizing radiation for patients. It is precisely for this reason that radiation-free diagnostic investigations represent a great stimulus for research.

**Methods:** A search for articles on dental MRI was performed using the PubMed electronic database, and 37 studies were included. Only some articles about endodontics, conservative dentistry, implantology, and oral and craniofacial surgery that best represented the aim of this study were selected.

**Results:** All the included articles showed that MRI can obtain well-defined images, which can be applied in operative dentistry.

**Conclusions:** This review highlights the potential of MRI for diagnosis in dental clinical practice, without the risk of biological damage from continuous ionizing radiation exposure.

**Keywords:** magnetic resonance; imaging; MRI; dentistry; endodontics; implantology; maxillary sinus; dental materials; CBCT

**KOI HERPESVIRUS AND PROBIOTICS APPLIED IN AQUACULTURE TO DECREASE DAMAGES CAUSED BY THE DISEASE**

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**ABSTRACT**

Koi herpesvirus (KHV) is a highly contagious virus that causes high morbidity and mass mortality of common carp (*Cyprinus carpio* Linnaeus, 1758) and its ornamental varieties. Koi herpesvirus disease (KHVD) is one of the major factors that cause significant economic losses affecting both wild and cultured populations of common and koi carp worldwide. There is no effective treatment of the disease. The usage of vaccines for aquatic animals and water environments is limited, associated to the risk of viral reactivation and reversion to virulence. In the other side, probiotic additives are one of the most perspective, promising and safe alternatives of drugs, that provide fish health benefits such as improvement of fish immune resistance and increased growth performance.

We discuss the potential of some probiotics applied in aquaculture, for improvement of carp immune resistance and growth rate, associated to fish mucosal immune system as the first immune barrier.

**Keywords:** koi herpesvirus (KHV), koi herpesvirus disease (KHVD), probiotics, common carp (*Cyprinus carpio* Linnaeus, 1758)

**Acknowledgements:** This paper was supported by the National Science Fund of Bulgaria under Grant № KII-06-H 36/4.

## THE PROFILE OF CD4+, CD8+, AND CD4+/CD8+ T CELLS RATIO IN ADULT ACUTE LEUKEMIA

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### ABSTRACT

The cellular immune response will be induced in malignancy, especially in solid tumors. However, in hematologic malignancy was still inconsistent results of studies. The aim of this study is to investigate the value of CD4+, CD8+ T cells and their ratio in adult acute leukemia. The subjects were recruited from Dr. Soetomo General Academic Hospital, in the Internal Medicine ward. The subjects were comprised of 25 patients who were diagnosed with acute leukemia. Among them, 25 patients were diagnosed with acute myeloblastic leukemia (AML), 4 patients with acute lymphoblastic leukemia (ALL) based on peripheral blood smear or bone marrow smear examination and immunophenotyping. Venous blood specimens with EDTA were taken for examination of Complete Blood Count (CBC), CD4+ and CD8+ T cells using the monoclonal antibody of BD Biosciences reagents, were run on BD FACS Calibur, and determined by BD Multiset software. The data were presented as a mean±SD (minimum-maximum) value. The results as follows: mean±SD (minimum-maximum) of CD4+ T cells; CD8 T cells; CD4+/CD8+ T cells ratio respectively: 3815±976 (171-20288) cells/μL; 3664±927 (73-16120) cells/μL ; 1.15±0.11 (0.33-3.02). Compared with the normal value from the reference as follows: 500-1200 cells/μL for CD4+ T cells; 150-1000 cells/μL for CD8+ T cells means that cellular immune response in adult acute leukemia increase than normal.

**Keywords:** Adult, acute leukemia, CD4+ T cells, CD8+ T cells, ratio





**KNOWLEDGE, FEAR, AND PREVENTIVE COVID-19 BEHAVIOR IN PREGNANT WOMEN IN INDONESIA**

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**ABSTRACT**

The spread of COVID-19 is currently getting wider. It is across regions and countries, accompanied by an increase in the number of cases and many deaths every day. Circulating information affects people's knowledge about COVID-19, although this does not determine their understanding of COVID-19. Knowledge and fear will encourage a person to behave well. Good knowledge and great scare about COVID-19 can improve preventive behavior against COVID-19. The purpose of this study was to determine knowing, fears, and preventive behavior against COVID-19 in pregnant women in Simalungun Regency, North Sumatra, Indonesia. The method used in this research was a cross-sectional study conducted on 100 pregnant women in June-July 2021 in Tapian Dolok District, Simalungun Regency, North Sumatra, Indonesia. Simple random sampling was used in this research. Data was collected using a knowledge questionnaire about COVID-19 (15 questions), a fear questionnaire using the Fear COVID-19 Scale (FCS-19S) (7 questions), and Preventive COVID-19 Behavior Scale (PCV-19BS) questionnaire to determine preventive behavior (4 questions). The FCS-19S and PCV-19BS questionnaires used a Likert scale (1-5). The reliability of the knowledge, fears, and preventive behavior questionnaires were assessed based on Cronbach's Alpha of 0.748 each; 0.846; and 0.898, respectively. The data was presented in a frequency distribution table. The results showed that most participants (79%) had a high level of knowledge about COVID-19, most participants (72%) had a high level of fear of COVID-19, and almost all participants (95%) had a high level of preventive behavior against COVID-19. Efforts should be made to overcome fear and further research to find factors associated with fear of COVID-19.

**Keywords:** COVID-19, fear, knowledge, prevention behavior, pregnant women

**MORPHOGENESIS OF THE LYMPHOID TISSUE OF THE THYROID GLAND AT AN EARLY AGE UNDER CONDITIONS OF EXPERIMENTAL PRENATAL ANTIGENIC LOAD**

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**ABSTRACT**

In modern world literature, much attention is paid to the general impact of the infectious load on the immune system of the body and the development of autoimmune conditions of the thyroid gland. T-lymphocytes are the main effectors of the adaptive immune system and are critical for the body's defense against pathogenic infectious agents. Thyroid glands of Wistar rats aged from 1 to 14 days of postnatal development (90 animals in total) were experimentally investigated. On the 18th day of a dated pregnancy, each fetus was injected with purified adsorbed staphylococcal toxoid liquid (10-14 units/1 ml) at a dose of 0.05 ml during laparotomy, by trans-uterine, transcoccal subcutaneous injection. Histological sections 3-5  $\mu\text{m}$  thick were stained with hematoxylin and eosin, immunohistochemically using monoclonal antibodies CD 3, CD4, CD8, CD20. Statistical analysis of the results was performed using statistical package "Statistica for Windows 6.0", Excel. Intrafetal administration of staphylococcal toxoid led to partial lymphocytic infiltration of the stroma of the thyroid gland and the formation of intraorgan diffuse lymphoid tissue mostly from CD 3<sup>+</sup> and CD 4<sup>+</sup> lymphocytes. Its cooperation in the form lymphoid nodule on the 14th day of postnatal life, the cellular composition of CD 3<sup>+</sup> CD 4<sup>+</sup> and CD 3<sup>+</sup> CD 8<sup>+</sup> T-lymphocytes, manifestations of stasis in the venules, activation of mast cells and macrophages. Thus, intense changes in the immunological compartment of the thyroid gland with the formation of diffuse lymphoid tissue in young rats after prenatal exposure to staphylococcal toxoid due to generalized prenatal antigen load in the body as a whole and are manifestations of reactivity in the formation of antigen-independent differentiation of T lymphocytes.

**Keywords:** thyroid gland, staphylococcal toxoid, rats, immunological reactivity.

«**MORPHOFUNCTIONAL FEATURES OF OLFACTOR EPITHELIUM IN COVID-19 INFECTION**»

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**ABSTRACT**

**Overview:** The olfactory neuroepithelium (ON) is a structure that consists of several cell types. Olfactory analyzer is represented by multi-row epithelium, which includes the following cell types: olfactory neurosensory, supportive, basal and microvilli. The ability to perceive odors belongs to mature olfactory sensory cells. The COVID-19 infection problem is urgent and needs to be investigated.

**Introduction:** COVID-19 (Corona Virus Disease 2019), previously coronavirus infection 2019-nCoV-2 is a potentially severe acute respiratory infection caused by the coronavirus SARS-CoV-2.

Coronaviruses enter the body by liquid-droplet, air-dust and contact, so the epithelial cells of the mucous membranes of the eye, nasal cavity, mouth, upper and lower respiratory tract are primarily affected.

**Results:** Olfactory dysfunction, according to the survey, has been observed in 357 (85.6%) of 417 recovered patients. Loss of olfactory sensitivity occurred in 284 (79,6%). During the first week after discharge from the hospital, the sensitivity was restored: in hyposmia - all, in anosmia - 67.8%. These data were confirmed by C. Hopkins and co-authors in a study of an even larger number of patients (2,428 patients). In a sample of 60 patients, but using the University of Pennsylvania Smell Identification Test (UPSIT), only 1 patient's sensitivity remained unchanged. In addition to these forms of olfactory sensitivity disorders, they may also present as illusions, altered perception, parosmia (32.4%) and phantosmia (12.6%).

Coronavirus CoV-2 was found to infect cells via interaction with its adhesion (S) protein and ACE2 protein (angiotensin-converting enzyme 2) on target cells; this interaction requires cleavage of the S protein by a cell surface protease TMPRSS2 (membrane-binding serine protease). According to a number of researchers, the results indicate that supporting cells, Bowman's glandular cells and horizontal stem cells in the olfactory epithelium are coexpressed in association with the entry of CoV-2 into ACE2 and TMPRSS2 molecules, which are not expressed in mature receptor neurons. Accordingly, CoV-2 is not directly involved in sensory neurons, but instead targets supporting and stem cells, infection of which can cause anosmia and associated sensitive ON dysfunction in patients with COVID-19.

It is likely that in CoV-2 infection in humans causes damage to support cells in the olfactory epithelium that can cause removal of olfactory cilia from the surface of sensory neurons, eliminating the possibility of their interaction with the olfactory stimulus. Therefore, if the lashes are missing or have defects, the detection of odors can not be done. Thus, coronavirus infection of support cells may be sufficient to cause cascading damage to the olfactory epithelium.



It is possible that infection of horizontal basal cells expressing ACE2 and TMPRSS2 also contributes to olfactory dysfunction. It is believed that in COVID-19 damage to these cells is the cause of anosmia. This is due to the fact that at a slow rate of neurogenesis observed in the olfactory epithelium, the death of support cells and the inability of horizontal basal cells to effectively restore the population of mature sensory neurons leads to anosmia. In addition, damage to horizontal basal cells can cause impaired differentiation of neuronal progenitors, inhibiting current neurogenesis. As a result, immature sensory neurons may accumulate in the epithelial tissue, which are unable to respond to specific odor stimuli and, as a result, adequately perform odor function.

It is interesting to note that in young mice, in contrast to adults, there were lower levels of expression of ACE2 and TMPRSS2 in cells of the respiratory and olfactory epithelium. Perhaps, that is a reason why most of coronavirus patients are elder people.

**Conclusion:** All of the above together determines the relevance of the study of cellular morphogenesis of olfactory epithelium under the influence of COVID-19 infection to understand the pathogenesis of the above factors and for pathogenetically sound orientation in the development of new approaches to their correction.

## IMPROVING THE DIGITAL LESSON IN MEDICAL SCHOOL

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### ABSTRACT

The worldwide pandemic lifestyle gave rise to the need for radical change in the way of teaching and learning. Lessons are the basic unit that provides knowledge and skills to students. Traditionally, the forms accepted as basic in academic teaching, such as: lectures, seminars, exercises, individual activities for self-preparation undergo significant transformations and are applied in a new, innovative way.

The organization of distant learning process highlighted some significant specifics of education in all areas of education, such as the use of platforms for conducting distant learning in electronic environment; structuring the process of teaching and learning in electronic environment; evaluation, feedback and validation of results; proper spending of time, etc. But structuring the lesson in medical school has fundamental difference - presence of the patient. This requires new, innovative thinking from teachers and subsequent adapted offering of learning content.

**The purpose** of this report is to present some pandemic, important prerequisites for improving the lesson conducted in electronic environment in Higher Medical School.

Main task: the research is focused on the teaching component in learning process.

Methods: Desk research; documentary; statistically.

Time period: 2020-2021 calendar years.

**Conclusion:** Improving the digital lesson is an urgent task of university teachers. Key factors pointed by them for successful process of e-learning are:

- Accumulated experience and improved skills for working in electronic environment;
- Granted freedom at work;
- Reduced interest and motivation of students as a prerequisite for ineffective learning;
- Overwork and waste of time;
- Effective and sustainable integration of technologies in learning process;
- Creating opportunities for learning anywhere and anytime.

**Keywords:** digital lesson; improvement; teachers.

**INFLUENCE OF SOME MINERAL NATURAL WATERS OF THE BLACK SEA REGION OF UKRAINE ON THE EXPERIMENTAL GASTRITIS**

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**ABSTRACT**

An essential problem in modern medicine is chronic gastritis. The vast arsenal of current drugs used to treat chronic gastritis does not eliminate the risk of complications and the development of resistance to drug therapy, which necessitates the search and development of non-drug treatment strategies, including drinking treatment with mineral waters (MW).

Purpose: to study the effect of natural sodium chloride MW of different microelement compositions on the course of experimental gastritis in rats.

White female rats were used in work, which was ranked into 2 groups. Group 1 - rats with a gastritis model who received MW from the well of the Belaya Akatsiya Medical and Rehabilitation Complex in Odessa, which is a silicon sodium chloride (with mineralization of 5.58 g / l and an H<sub>2</sub>SiO<sub>3</sub> content of 73.50 mg / l), Rats 2 groups with a gastritis model received MW from a well in the village of Lebedevka, Tatarbuniar district, Odessa region (sodium chloride water with a salinity of 4.3 g / l without H<sub>2</sub>SiO<sub>3</sub>). The gastritis model was induced by the introducing into the stomach of animals of a solution of potassium permanganate at a dose of 200 mg per 1 kg once for two days in a row. From 3 to 9 days, the rats received orally appropriate MW, once a day. On day 10, the animals were taken out of the experiment under ether anesthesia, and morphological studies determined the structure of the stomach tissues. Under the influence of both MW, the disappearance of manifestations of inflammation in the stomach wall was microscopically established. At the same time, in rats of group 1, the submucosa of the stomach is dense, the nuclei of fibroblasts are richly colored. There is no lymphoid infiltration. The mucous glands are of the usual tubular shape; the lumens are dilated, the cytoplasm of the epithelial cells is homogeneous, the nuclei are juicy colored. In the layers of the interstitium, lymphocytes are not detected. Consequently, a significant renewal of the structural elements in the stomach has been established. In rats of group 2, microscopic infiltration in the submucous lymphoid plate was not determined. In the mucous gland of the ordinary tubular form, the epithelial cells are edematous. The glands themselves are enlarged, Goblet cells with increased content of mucus, single lymphocytes in the interstitium. There is residual gastritis in the form of edema of mucosal elements and an increase in mucus secretion. In rats of group 1, more significant effect on the course of pathology was established, due to the presence of silicon in the chemical composition of MW in the form of H<sub>2</sub>SiO<sub>3</sub>.



**Conclusions.** The effectiveness of the use of MW in rats with gastritis has been established, which will allow gastroenterologists, based on the data, to develop and implement technologies for the treatment of gastritis.

**Keywords:** gastritis, mineral waters, silicon.



## RECENT DIAGNOSTIC AIDS IN ORAL CANCER DETECTION

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### ABSTRACT

Oral cancers are one of the most common cancers worldwide today. The diagnosis of oral cancer at an early stage has a good prognosis as the survival rate is high (around 80%). However, the majority of oral cancer cases are diagnosed at a later stage with a considerably poor 5-year survival rate of 50% according to World Health Organization statistics. Thus, an effective management strategy for oral cancer will depend on its early identification and intervention which would pave the way for superior prognosis. Many diagnostic tools / aids have been explored with the aim of early detection of oral precancer and cancer. The basic chair-side procedures or relatively advanced aids come with a set of limitations along with subjectivity as one of the setbacks. The advent and exploitation of molecular techniques in the field of health diagnostics, is demanding the molecular typing of the oral potentially malignant diseases and also of oral cancer. The recent diagnostic techniques in oral cancer and precancer detection includes lab-on-chip, microfluidics, nano diagnostics, liquid biopsy, omics technology and synthetic biology in early detection of oral precancer and cancer. Oral cancer being multifactorial in origin with the chief participation of altered genetics and epigenetics would demand high-end diagnostics for designing personalized therapy. Hence, the present paper highlights the role of various advanced diagnostic aids in detection of oral precancer and cancer.

**Keywords:** Oral Cancer, Toluidine Blue Staining, Oral Brush Biopsy, Chemiluminescence.





**CLIMATIC FACTORS AND HOME ENVIRONMENT WITH DENGUE CASES IN THE SEASON ZONE IN FIVE CITIES/DISTRICTS IN EAST JAVA**

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**ABSTRACT**

**Introduction:** Dengue Fever is a disease caused by infection with the dengue virus transmitted by the *Aedes aegypti* mosquito, common in tropical climates such as Indonesia, especially East Java. This study aims to determine the relationship between climate (rainfall, humidity, temperature) and physical conditions of the home environment on the incidence of dengue hemorrhagic fever in several seasonal zones (ZOM) in five district cities in East Java. **Methods:** This research design is an ecological study. Time to observe the trend of dengue incidence in five cities and districts in East Java Province in the 2016-2020 period. **Results:** Not all ZOM were associated with cases of dengue hemorrhagic fever in five cities/districts in East Java Province. The condition of the home environment associated with dengue incidence was in the form of breeding places outside the home ( $p=0.0044$  and  $OR=2.56$ ). In contrast, the presence of shrubs as resting places for *Aedes aegypti* mosquitoes in the home environment is not associated with the incidence of Dengue Fever. **Conclusion:** Rainfall, humidity, and temperature are related to the incidence of dengue in some ZOM areas. The physical environment condition of the house in the form of a breeding place outside the home is related to the incidence of dengue fever.

**Keywords:** ZOM (Season zone), the physical environment of the house; dengue fever cases.

## STUDY OF PHOTOCATALYTIC ACTIVITIES OF BORON DOPED SiC

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### ABSTRACT

Waste water containing organic dyes is discharged mainly by the paint processing and textile industries. With the growth of the paint processing industry, such wastewater has become an environmental problem. Among the various treatment techniques, photocatalytic degradation by semiconductor photocatalysts can effectively remove organic dye from wastewater. Organic molecules that are harmful to the environment and living things can be decomposed into harmless H<sub>2</sub>O and CO<sub>2</sub> molecules by photocatalytic degradation technique. Silicon carbide (SiC) is considered the most promising photocatalyst due to the high reduction potential of photoinduced electrons in the conduction band of SiC, which means that the potentials of the conduction band and the valence band are suitable for photolysis of organic substances. The use of UV light or sunlight for photocatalytic degradation of organic compounds in wastewater can be considered as a green technique that protects the environment. Similar to other semiconductor photocatalysts, SiC exhibits relatively low photocatalytic activity in the absence of a cocatalyst. The reason for the limited activity is the high recombination rate of the photoinduced electron-hole pairs. Metal or nonmetal doping was applied to semiconductor photocatalysts to suppress photoinduced electron-hole pair recombination. In this study, boron doping was applied to SiC nanoparticles. Boron doped SiC nanoparticles were obtained by using the wet impregnation method. The photocatalytic activity of pure SiC boron doped SiC (B-SiC) was analyzed by monitoring the degradation of an organic dye (methylene blue) in aqueous solution exposed to UV light. The structure and morphology of SiC and B-SiC were characterized by FTIR, X-ray diffraction spectroscopy and field emission scanning electron microscopy (FESEM). The optical properties and band gap energy of the prepared samples were evaluated from UV-Vis absorption spectroscopy. Boron atoms substituted silicon atoms during the doping process, which results in a narrower band gap. Under UV light irradiation, B-SiC exhibited an enhanced photocatalytic activity compared to pure SiC nanoparticles.

**Keywords:** Silicon carbide, photocatalytic activity, boron doping, UV light.

## ANTİDEPRESAN İLAÇ ETKEN MADDE FLUOKSETİNE-SEÇİCİ POTANSİYOMETRİK MİKROSENSÖR

ANTIDEPRESSANT DRUG FLUOXETINE-SELECTIVE POTENTIOMETRIC MICROSENSOR

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### ÖZET

Depresyon günümüzün toplumsal sağlık sorunları arasında önemli bir yer almaktadır. Bu yüzden ekonomik, iş gücü ve verimlilik kayıplarına yol açmaktadır. Toplumda genel olarak hastalık olarak nitelendirilmemesi nedeniyle tedavi yoluna da gidilmeyen depresyon; ruhsal, fiziksel ve biyokimyasal değişimlere neden olarak kronikleşmekte ve kişiye zarar vermektedir. Depresyonda; ilaç tedavisi en çok kullanılan tedavi türüdür. Bu çalışmada, antidepresan ilaç etken maddelerinden biri olan fluoksetin (FX)'e seçici yeni tip PVC membran katı-hal mikrosensör geliştirildi. FX-seçici mikrosensörün potansiyometrik performansı durgun ortamlarda test edildi. Geliştirilen mikrosensör her 10 kat fluoksetin konsantrasyonu değişimine karşı yaklaşık 60 mV'luk bir eğime sahip iken, cevap zamanı kısa (<12 s) ve kullanım ömrü uzundu (4-6 hafta). FX-seçici mikrosensörün doğrusal derişim aralığı  $5 \times 10^{-5}$ - $10^{-2}$  mol.L<sup>-1</sup> ve tayin sınırı ise  $3,16 \times 10^{-5}$  M olarak belirlenmiştir. Hazırlanan mikrosensör geniş pH (3-8) ve sıcaklık (~10-30 °C) aralıklarında performans sergiledi ve fluoksetine karşı diğer bazı iyonik türler yanında seçiciliği iyiydi. Hazırlanan FX-seçici potansiyometrik mikrosensör kullanılarak farmasötik ilaç numunelerinde fluoksetin tayini başarıyla gerçekleştirildi.

**Anahtar kelimeler:** Antidepresan, fluoksetin, ilaç, potansiyometri, mikrosensör.

### ABSTRACT

The depression takes an important place among today's social health problems. Therefore, it causes economic, labor and productivity losses. Generally, depression which is not defined as a disease in the society, is not preferred to be treated. Therefore, depression becomes chronic by causing mental, physical and biochemical changes in the human body. For the treatment of depression, the drug therapy method is the most commonly used as treatment method. In this study, a novel selective PVC membrane solid-state microsensor was developed for fluoxetine (FX) that as using an antidepressant drug. The potentiometric performances of prepared FX-selective microsensors were tested under static conditions. This microsensor performed good behaviour (~60 mV/per decade) in fluoxetine solutions with a short response time (<12 s) and long life-time (4-6 weeks). The prepared FX-selective sensor exhibited a linear response towards fluoxetine in a wide concentration range ( $\sim 5 \times 10^{-5}$ - $10^{-2}$  mol.L<sup>-1</sup>). The prepared sensor also exhibited good selectivity towards fluoxetine than the other ions with wide pH (3-8) and temperature (~10-30 °C) ranges. The prepared FX-selective potentiometric microsensor was successfully utilized for the determination of fluoxetine in pharmaceutical samples.

**Keywords:** Antidepressant, fluoxetine, drug, potentiometry, microsensor.

**INVESTIGATIONS OF PHYSICAL PROPERTIES OF BINCA<sub>3</sub> ANTIPEROVSKITE COMPOUND: FIRST PRINCIPLES METHOD**

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**ABSTRACT**

This study reveals the first principle method to run a thorough investigation on structural, electronic, elastic, and thermodynamic properties of antiperovskite BiNCA<sub>3</sub> compound with a space group Pm-3m. The physical and thermodynamic properties and constants of this compound were predicted and evaluated. For this antiperovskite compound, the total energies were obtained according to the different lattice constant values in the Pm-3m space group and the lattice constant at the minimum energy value was calculated. Subsequently, electronic band structures and partial and total densities of states were computed for antiperovskite BiNCA<sub>3</sub>. The electronic properties of the compound reveal a semiconductor character. Various mechanical parameters such as elastic constants, bulk modulus, Young's modulus, shear modulus, and Poisson's ratio were calculated and mechanical stability was examined based on these calculations. Evaluation of mechanical stability via obtained elastic constants exhibited a stable nature for this antiperovskite compound. Directional change of Young and Shear modulus, Poisson's ratio, and compressibility of antiperovskite compound were analyzed. Moreover, the antiperovskite compound is brittle based on Pugh's criteria. The change in specific heat capacity and entropy of antiperovskite compound has been also computed between 0-800 K.

**Keywords:** First Principles, elastic constant, thermodynamic



**A THEORETICAL INVESTIGATION OF PHYSICAL PROPERTIES OF MgPt<sub>3</sub> ALLOY IN L1<sub>2</sub> CRYSTAL STRUCTURE**

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**ABSTRACT**

Ab-initio calculations for the structural, electronic, elastic, and thermodynamic properties of MgPt<sub>3</sub> alloy in L1<sub>2</sub> type crystal structure were analyzed using density functional theory (DFT) together with the Generalized Gradient Approximation (GGA) method. The calculated lattice constants, Bulk modulus, Shear modulus, Young's modulus, B/G ratios, and elastic constants for this alloy are reported and found to be in good agreement with the present results. The mechanical stability was evaluated with the obtained elastic constants and it was found that this alloy is stable in the L1<sub>2</sub> structure. In addition, the electronic band structure, total and partial state densities of the MgPt<sub>3</sub> alloy were calculated and analyzed. The electronic band curves of the alloy showed metallic character and the conductivity was mostly governed by Pt-d states. The specific heat capacity and entropy change in the L1<sub>2</sub> structure of MdPt<sub>3</sub> were calculated between 0-800 K.

**Keywords:** Ab-initio, elastic constant, thermodynamic



**INSIGHT INTO STRUCTURAL, ELECTRONIC, THERMODYNAMIC, AND MECHANICAL PROPERTIES OF  $Li_2MgBi$  HEUSLER ALLOYS**

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**ABSTRACT**

In this study, we have investigated the structural, mechanical, and thermodynamical properties of Heusler alloy  $Li_2MgBi$  under the framework of first principles calculations. The structural parameters such as lattice constants and bulk modulus have been computed and found to be in good agreement with the available theoretical data. The electronic band structure obtained from our calculations shows that this alloy has metallic nature because it contributes to the Fermi energy level from the Bi-5d and Li-2p bands. According to the calculated Poisson ratio ( $\sigma$ ) of 0.32, it is seen that this alloy has ionic metallic character. Since the calculated B/G value of 2.645 for  $Li_2MgBi$  alloy is greater than the value of 1.75 determined by the Pugh criterion, this alloy has a ductile property. Some thermodynamic properties such as internal energy, vibration energy, entropy and specific heat capacity have been investigated at a temperature between 0 and 800 K. Here, the thermodynamic properties of this alloy are reported for the first time.

**Keywords:** Elastic constants, Heuler alloys, Band calculations, density-functional theory, electronic density of states.

**AB-INITIO INVESTIGATION OF STRUCTURAL, MECHANICAL, ELECTRONIC, AND THERMODYNAMIC PROPERTIES OF HALF-HEUSLER ALLOY MGLIBI**

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**ABSTRACT**

Using Plane wave self-consistent field density functional theory as part of the Generalized Gradient Approximation (GGA), we have investigated the structural, electronic, elastic, and thermodynamic of MgLiBi Half-Heusler alloy. Our calculation can be seen that this material is non-magnetic (NM) with metallic nature, elastically stable and anisotropic. With the calculated B/G ratio of 1.233, the alloy is estimated to be brittle in nature. Based on the results of studies on the electronic properties of the half-Heusler alloy MgLiBi using GA-PBE calculations, the main contribution at the Fermi level, which determines the conductivity of the material, is due to the Li-2p, Mg-3s and Bi-6s states. Important thermodynamic properties such as vibrational energy, Free energy, entropy (S) and heat capacity ( $C_V$ ) have been calculated at 0-800 K temperature by applying the quasi-harmonic model of Debye.

**Keywords:** Ab-initio, half-Heusler alloy, Elastic constants, electronic band structure.

**CRYSTAL STRUCTURE, MECHANICAL AND THERMODYNAMICAL PROPERTIES OF  
OS<sub>2</sub>CUAL COMPOUND: A FIRST-PRINCIPLES INVESTIGATION**

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**ABSTRACT**

This work was studied pseudopotential calculations on the structural, electronic, mechanical, and thermodynamic properties of Heusler Os<sub>2</sub>CuAl compound by first principles calculations. Based on the results of this study undertaken on electronic properties of this material using GGA-PBE calculation, it was clearly seen that it possessed metallic characteristic due to overlapping between conduction and valance band at the Fermi level. Based on investigation of elastic properties of Os<sub>2</sub>CuAl, it can be seen that this compound mechanically stable and is ductile in nature. The phonon dispersion relation of Os<sub>2</sub>CuAl was calculated using linear response method. This compound is dynamically stable due to the absence of imaginary frequency in the calculated full phonon spectra. The specific heat capacity, internal energy, entropy and vibrational energy at a constant volume  $C_V$  of Os<sub>2</sub>CuAl was calculated.

**Keywords:** Structural properties, mechanical properties, thermodynamical properties.



**AB-INITIO CALCULATIONS OF ELASTIC CONSTANTS, ELECTRONIC, VIBRATIONAL, AND THERMODYNAMIC PROPERTIES OF VOS<sub>2</sub>Ga HEUSLER COMPOUND**

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**ABSTRACT**

In this work, first-principles approach is used to investigate the elastic, mechanical, phonon and thermodynamic properties of VO<sub>2</sub>Ga Heusler compounds, using a plane-wave pseudopotential scheme in density-functional theory (DFT) utilizing the Quantum-ESPRESSO package program. The calculated equilibrium lattice constant and bulk modulus agree well with the available theoretical data. The calculated negative formation energy indicates that the VO<sub>2</sub>Ga compound has strong structural stability. According to the calculated second-order elastic constants, this compound met the Born criteria for mechanical stability. It has been determined that they have a ductile structure and show anisotropic behaviour according to Pugh criteria. In addition, the electronic band structures of VO<sub>2</sub>Ga compound have calculated, and it has found to have a metallic band structure. To determine the dynamic properties, the phonon dispersion curves, and its corresponding total and projected densities of states have been investigated for the first time by using a linear-response approach. For VO<sub>2</sub>Ga compound, internal free energy, entropy, specific heat capacity at constant volume and vibrational free energy changes analysed and discussed between the temperature range of 0–800 K using the quasi-harmonic approximation.

**Keywords:** Elastic constants, Electronic band, Vibrational properties.



**PREPARATION AND CHARACTERIZATION GOLD-MAGNETIC NANOCOMPOSITE BY  
USAGE GREEN CHEMISTRY**

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**ABSTRACT**

Nanoparticles have revolutionized both science and technology in the last hundred years. Significantly, these nanomaterials are widely used in the fields of health, energy, defense industry, food, and electronic devices, and high efficiency is obtained. In addition, nanocomposites with more affluent properties are obtained by combining more than one nanomaterial. On the other hand, environmental disasters in recent years have shown that the production and use of these materials should be environmentally friendly. In this study, gold-magnetic nanoparticle-nanocomposite was prepared with the help of a green synthesis approach. This study aims to combine the magnetic properties of magnetic nanoparticles with the optical and conductivity properties of gold nanoparticles and make these properties more efficient. Magnetic nanoparticles were prepared using the co-precipitation method. A green chemistry approach was used for the formation of nanocomposite with gold. Gold nanostructures were synthesized and decorated on magnetic nanoparticles using waste grass extract. The antioxidant effect of grass reduces gold ions. Optimization studies were carried out at various volumes and concentrations of extracts and different temperatures. Dynamic Light Scattering Technique Scanning Electron Microscope (SEM), UV-VIS Spectrometer, X-RAY Diffraction Spectrometer were used for characterization studies.

**Keywords:** Nanocomposite, Green Chemistry, Nanoparticles



**CORAL UNIFESP: THE SCENIC CHOIR AS A FIELD FOR MUSIC-PEDAGOGICAL EXPERIENCES**

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**ABSTRACT**

This text deals with an in progress research for a master's degree in music which has as its theme “the scenic choir in the musical formation processes of its members”. The research field is Coral Unifesp, from Universidade Federal de São Paulo, in São Paulo – Brazil.

The scenic choir is a category of choir that emerged in Brazil in the last decades of the 20th century. This modality combines traditional choral singing with elements of theater and dance, with the purpose of adding movement and visual resources to the performance. The repertoire of this modality is essentially Brazilian popular and folk music, organized to form a spectacle, with defined themes.

The scenic choir has become a research field in the area of music due to its performative relevance and its artistic potential. The scientific production regarding this theme has included studies that report its origins, concept, analysis of the spectacles, and, in this current investigation, its musical and educational potential.

This research is being developed in a qualitative approach (CRESWELL, 2014) and its investigative method is the Case Study (YIN, 2015). The objective is to understand how musical education experiences are built in rehearsals, presentations and other actions of Coral Unifesp. In this sense, I will search for analyzing what kinds of formative experiences the choir triggers in its participants, who are these participants and why they remain in the activity.

This research follows the ethical procedures of scientific investigation and uses participatory observations, semi-structured interviews, focus groups, document analysis and audiovisual materials as data collection techniques. The collected data will be catalogued, categorized and analyzed according to the concept of experience as a formative process (LARROSA, 2011).

**Keywords:** Scientific Research in Music; Musical Education; Scenic Choir; Brazilian Music

**DUVAR KAROSU ANGOB FRİTİNDE ALBİT YERİNE OLİGOKLAS MİNERALİNİN  
KULLANIMININ ARAŞTIRILMASI**

INVESTIGATION OF THE USE OF OLIGOCLASE MINERAL INSTEAD OF ALBITE IN WALL TILE  
ENGOBE FRITS

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**ÖZET**

Angob, seramik karolarda sırlama öncesi bünye üzerine uygulanan, camlaşma özelliği göstermeyen veya az miktarda camlaşan, yüksek opaklık özelliği ile bünyenin rengini örten astar tabakasıdır. Angob kompozisyonlarında geçirimsizlik, opaklık ve sır ile bünye arasındaki ısıl genleşme uyumunun sağlanması için önemli oranlarda frit kullanılmaktadır. Bu çalışmada duvar karosu angob frit kompozisyonunda kullanılan albit (sodyum feldispat) yerine oligoklas kullanım olanakları araştırılmıştır. Bu kapsamda standart duvar karosu angob frit kompozisyonunda albit oranı kademeli olarak azaltılarak yerine oligoklas alkali kaynağı ilave edilmiş ve yeni frit reçeteleri geliştirilmiştir. Albite alternatif olarak kullanılan oligoklas alkali kaynağının frit ve duvar karosu engobunun teknik özellikleri üzerine olan etkileri incelenmiştir. Bu kapsamda öncelikle albit ve oligoklas hammaddelerinin kimyasal ve mineralojik analizleri ile tanımlamaları yapılmıştır. Hammaddelerin mineralojik analizi X ışınları difraktometresi(XRD) cihazı ile belirlenmiştir. Oligoklas alkali kaynağının kullanımıyla geliştirilen fritlerin akma davranışı, renk değerleri ve yüzey özellikleri ile bu fritlerle geliştirilen angobların renk ve parlaklık değerleri ile geçirimsizlik özellikleri analiz edilmiştir. Fritlerin ısıl genleşme katsayısı değerleri dilatometre cihazı ile belirlenmiştir. Elde edilen sonuçlara göre, albit yerine kullanılan oligoklas alkali kaynağı fritin ergime davranışını zorlaştırarak viskozitesini artırmaktadır. Oligoklas alkali kaynağı kullanımı ile birlikte fritin beyazlık (L) değerleri çok fazla değişmemesine rağmen bu fritlerle oluşturulan angobların L değerlerinin standart angoba göre düştüğü tespit edilmiştir. Ayrıca frit kompozisyonlarında oligoklas oranındaki artışla birlikte angobların parlaklık değerleri artarken geçirimsizlik özelliklerinin iyileştiği belirlenmiştir. Sonuç olarak duvar karosu angob kompozisyonlarında uygun kompozisyon tasarımının yapılmasıyla oligoklas türü alkali kaynağının kullanımının teknik özellikleri olumsuz yönde etkilemeden mümkün olabileceği tespit edilmiştir.

**Anahtar kelimeler:** Albit, oligoklas, angob, frit

**ABSTRACT**

Engobe is a layer that is applied on ceramic body before glazing, which does not show any vitreous or slightly vitrified, and covers the colour of the body with its high opacity feature. Frit is used in significant proportions to ensure the compatibility of impermeability, opacity and thermal expansion between the glaze and the body. In this study, the possibilities of using oligoclase instead of albite (sodium feldspar) used in wall tile engobe frit composition were investigated. In this context, the albite ratio was gradually reduced in the standard wall tile engobe frit composition, and oligoclase alkali source was added instead, and new frit recipes were developed. The effects of oligoclase alkali source used as an alternative to albite on the technical properties of frit and wall tile engobe were investigated. First of all, albite and oligoclase raw materials were defined by chemical and mineralogical analysis. Mineralogical analysis of raw materials was determined by X-Ray diffraction (XRD). The melting behavior, color values and surface properties of frits developed by the use of oligoclase alkaline source were analyzed. In addition the color, glossiness and permeability properties of engobe developed with these frits were determined. The thermal expansion coefficient values of the frits were



determined with a dilatometer device. According to the results, the oligoclase alkali source used instead of albite increases the viscosity of the frit by getting the melting behavior difficult. Although the whiteness (L) values of the frit did not change much with the use of the oligoclase alkali source, it was determined that the L values of the engobes formed with these frits decreased compared to the standard engobe. In addition, it was determined that the glossiness values of engobes increased with the increase in the oligoclase ratio in frit compositions, while their impermeability properties improved. As a result, it has been determined that the use of oligoclase type alkaline source in wall tile engobe compositions can be possible without adversely affecting the technical properties by making the appropriate composition design.

**Keywords:** Albite, oligoclase, engobe, frit

**SERAMİK DUVAR KAROSU ANGOBLARINDA ALKALİ-TOPRAK ALKALİ ORANLARININ  
ANGOB TEKNİK ÖZELLİKLERİ ÜZERİNE ETKİSİ**

THE EFFECT OF ALKALINE/EARTH-ALKALINE RATIO ON THE TECHNICAL PROPERTIES OF  
CERAMIC WALL TILE ENGOBES

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**ÖZET**

Seramik duvar karolarında angop, sahip olduğu opaklık özelliği ile bünyenin rengini örten, bünye ile sır arasında fiziksel ve kimyasal uyum sağlayarak deformasyonu kontrol eden, bünyeye geçirmezlik özelliği sağlayan ve yüzey hatalarını minimuma indiren, sırlama öncesi bünye yüzeyine uygulanan bir çeşit inorganik kaplamadır. Duvar karosu angob kompozisyonları uygun reolojik özellikler için kil ve kaolen gibi plastik hammaddelerin yanı sıra, feldispat, kuvars ve opaklık özelliğinden dolayı zirkon hammaddelerinden oluşmaktadır. Bunların yanı sıra geçirimsizlik özelliği için %40 ile %80 arasında değişen oranlarda frit kullanılmaktadır. Angob kompozisyonlarında kullanılan fritin miktarı pişirim sıcaklığına ve çevrimine bağlıdır. Dolomit ve manyezit gibi hammaddeler ise nadiren kullanılmakla birlikte angoblarda deformasyon kontrolü ve opaklık için tercih edilebilmektedir. Bu çalışmada duvar karosu angob kompozisyonlarında alkali-toprak alkali oranlarının angob teknik özellikleri üzerine olan etkileri incelenmiştir. Bu doğrultuda farklı  $\text{Na}_2\text{O}/\text{MgO}+\text{CaO}$  ve  $\text{MgO}/\text{CaO}$  oranlarında reçeteler geliştirilmiş ve teknik özellikleri standart angob özellikleri ile karşılaştırılmıştır. Bu kapsamda angobların akma davranışları, renk değerleri ve yüzey özellikleri ile geçirimsizlik özellikleri analiz edilmiştir. Angobların ısıl genleşme katsayısı değerleri dilatometre cihazı ile belirlenmiştir. Ayrıca pişirim sürecinde gelişen fazların analizi X ışınları difraktometresi (XRD) cihazı ile gerçekleştirilmiştir. Kompozisyonlarda artan alkali oksit ( $\text{Na}_2\text{O}$ ) oranıyla birlikte angob geçirgenliği azalırken, değişen  $\text{MgO}/\text{CaO}$  oranının geçirgenlik üzerinde belirgin bir etkisi olmamıştır. Standart angob kompozisyonunda diopsit, kuvars, anortit, ve titanit fazları tespit edilirken kompozisyonlarda azalan  $\text{MgO}$  oranı ile birlikte diopsit fazının belirgin şekilde azaldığı belirlenmiştir. Buna bağlı olarak da artan  $\text{Na}_2\text{O}$  oranı ve azalan  $\text{MgO}/\text{CaO}$  oranının angobların beyazlık değerini ve özellikle ısıl genleşme katsayısı değerini belirgin şekilde düşürdüğü tespit edilmiştir.

**Anahtar kelimeler:** Angob, kompozisyon, alkali, toprak alkali

**ABSTRACT**

In ceramic wall tiles, engobe is a kind of inorganic layer applied to the body surface before glazing, which covers the color of the body with its opacity feature, controls deformation behavior by providing physical and chemical compatibility between the body and the glaze, provides impermeability to the body and minimizes surface defects. Wall tile engobe compositions consist of feldspar, quartz, zircon, and clay/kaolin raw materials. Zircon is used due to its opacity feature while clay and kaolin are used for rheological properties. In addition to these, frits are used at between 40-80% for impermeability. The amount of frit used in engobe compositions depends on the firing temperature. Raw materials such as dolomite and magnesite are rarely used, but they can be preferred for deformation control and opacity in engobes. In this study, the effects of alkaline-earth alkaline oxide ratios on the technical properties of wall tile engobes were investigated. For this purpose, recipes with different  $\text{Na}_2\text{O}/\text{MgO}+\text{CaO}$  and  $\text{MgO}/\text{CaO}$  ratios were developed and their technical properties were compared with standard engobe properties. In this context, rheological behavior, color values, surface properties, and permeability properties of engobes were analyzed. The thermal expansion coefficient



values of the engobes were determined by the dilatometer. In addition, the analysis of the phases developed in the firing process was carried out with X-Ray diffraction (XRD). Engobe permeability decreased with increasing alkali oxide ( $\text{Na}_2\text{O}$ ) ratio in the compositions while changing  $\text{MgO}/\text{CaO}$  ratio did not have a significant effect on permeability. While diopside, quartz, anorthite, and titanite phases were detected in the standard engobe composition, it was determined that the diopside phase decreased significantly with the decreasing  $\text{MgO}$  ratio in the compositions. Accordingly, it was determined that increasing the  $\text{Na}_2\text{O}$  ratio and decreasing  $\text{MgO}/\text{CaO}$  ratio significantly decreased the whiteness value and especially the thermal expansion coefficient value of engobes.

**Keywords:** Engobe, composition, alkaline, earth alkaline

**MUT YÖRESİNDE KİRKİTLİ DOKUMADAN YAPILAN AKSESUARLAR**  
**ACCESSORIES MADE OF KİRKİTLİ WEAVING IN MUT REGION**

**Derya KONUK**

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**ÖZET**

İlk insanlığın var olduğu günden bugünüme kadar çıplak olarak yaratılan vücutları kapatma duygusu ile dünyaya gelen insanoğlu, hep bir arayış içerisinde girmiştir. Bazen hayvan postlarından bazen ise sepet örücülüğünden esinlenerek günümüzdeki gelişen teknoloji ile artık hayal gücünü zorlar bir yere gelen dokuma sanatımız, kılık kıyafette ve onların tamamlayıcısı olmazsa olmaz aksesuarlarda da kullanılmaktadır. Dokuma iki iplik sisteminin birbiri ile kesişmesinden ya da birbirine bağlanmasından oluşturulan yüzeye verilen isimdir. Artık belirli bir doyuma ulaşan insanoğlu günümüzde geleneksel ürünlerimizi kullanarak moda kültürüne kazandırmak için gece gündüz çalışmaktadır. Mut yöresinde yaptığımız alan araştırması sırasında karşılaştığımız bu küçük atölyede çanta, kemer, bileklik, saç tokası, kolye gibi aksesuarlar tamamen kirkitli el dokuması ile dokunmuş olarak karşımıza çıkmaktadır. Bazı aksesuarlar tamamen dokumadan elde edilirken bazıları ise kumaşların üzerine ablike edilerek yapılmaktadırlar. Çok orijinal, organik ve kullanışlı olmalarına rağmen kendilerine yeterince pazar payı bulamayan bu ürünleri literatüre kazandırmak, diğer tasarımcı arkadaşlara örnek olmak ve gelecek nesillere aktarabilmek çalışmamızın amacını oluşturmaktadır. Yapılan alan araştırmasında 50 adet çanta 25 adet kemer, 1 adet saç tokası, 35 adet bileklik olarak dokunmuş ürüne rastlanılmıştır. Desen tekrarına düşmemek adına çalışmamıza dokuma 4 adet çanta, 3 adet kemer, 5 adet bileklik, 2 adet kolye ve 1 adet saç tokası dahil edilmiştir. Aksesuarlar atölyede fotoğraflandırılmış olup, dokuyuculara sorular yöneltilerek ürünler hakkında bilgiler toplanmıştır. Oluşturulan gözlem fişlerinde dokumaların desenleri ve dokuma yöntemleri hakkında bilgiler verilmiştir. Yöreye ait dokumalar genellikle yün ve çin ipeği kullanılarak dokunmuştur. Dokuma tekniği düz kilim dokumadır. Ürünlerin dokunması esnasında germe tezgah kullanılmaktadır.

**Anahtar kelimeler:** Dokuma, Tezgah, Kolye, Aksesuar, Çanta.

**ABSTRACT**

Since the first humanity existed, it always comes from being understood, from the human who came up with the animals that were created until today. Our weaving art, which is sometimes inspired by animal hides and sometimes basket knitting, is now used in costumes and indispensable accessories that complement them. Weaving is the name given to the surface formed by the intersection or connection of two yarn systems with each other. Human beings, who have reached a certain level of satisfaction, are working day and night to bring our traditional products to the fashion culture. Accessories such as bags, belts, bracelets, hairpins, necklaces are completely hand-woven in this small workshop, which we encountered during our field research in the Mut region. While some accessories are completely made from weaving, others are made by embroidering on fabrics. The aim of our study is to bring these products to the literature, to set an example for other designer friends and to transfer them to future generations, although they are very original, organic and useful, but cannot find enough market share for themselves. In the field research, 50 bags, 25 belts, 1 hairpin, 35 bracelets were found. In order not to repeat the pattern, 4 woven bags, 3 belts, 5 bracelets, 2 necklaces and 1 hairpin were included in our work. Accessories were photographed in the workshop and information about the products was collected by asking questions to the weavers. Information about the patterns of weaving and weaving methods are given in the observation slips created. The weavings of the region are generally woven





using wool and china silk. Weaving technique is plain rug weaving. During the weaving of the products, a stretching bench is used.

**Keywords:** Weaving, Stand, Necklace, Accessory, Bag.

**AKSARAY HASANDAĞI ETEĞİNDE YAŞAYAN HALI DOKUMA YERLEŞKELERİNE BİR  
ÖRNEK ‘AKÇAKENT KASABASI’**

AN EXAMPLE OF CARPET WEAVING CAMPUS LIVING ON THE SKIRT OF AKSARAY  
HASANDAĞI "AKÇAKENT TOWN"

**Semra KILIÇ KARATAY**

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**ÖZET**

Dokuma sanatı yüzyıllar boyunca toplumların kültürünü yansıtan el sanatlarından biridir. Toplumların dokudukları halı veya kilim örnekleri o toplumun kültür kimliğinin bir parçasıdır. Dokumalarda kullanılan desen ve renk kompozisyonları, malzemeleri ve düğüm tekniği bazı özellikleri dokumanın yapıldığı dönem ve toplum hakkında bilgi veren kaynaklardır. Anadolu'nun birçok köy ve kasabaları dokuma sanatı ile eski zamanlardan beri uğraşmaktadır.

Dokuma köy ve kasaba yaşamında önemli geçim kaynaklarından biri olmuştur. Özellikle tarım ve hayvancılıkla uğraşan kırsal bölgelerde dokuma sanatı yaygındır. Yaz mevsimlerinde tarımla uğraşan halk kış aylarında dokuma yapmaktadır. Köy ve kasaba gibi kırsal alanlarda iş bulma imkanı oldukça az olması bu bölgelerde yaşayan halkın dokuma sanatı ev ekonomisi için önemli gelir kaynaklarından olmuş, bu bölgelerde dokuma sanatı bir meslek haline gelmiştir.

Aksaray köy ve kasabalarında dokuma sanatının yaygın olduğunu ve eskiden dokuma merkezi olduğunu elde edilen örneklerden ve yazılı kaynaklardan anlaşılmaktadır. Halı ve kilim dokumalarının ev ekonomisine büyük katkı sağladığı yerleşkeler bulunmaktadır. Kirkitli dokuma yerleşkelerine örnek olarak Aksaray merkeze bağlı Akçakent Kasabası alan araştırması olarak çalışılmıştır. Akçakent kasabası Hasandağı eteğinde olup kasabada hayvancılık, tarım ve kirkitli dokumalardan elde edilen gelirler aile ekonomisine katkı sağlamaktadır. Kasabada dokumalar daha çok kadınlar tarafından yapılmaktadır. Dokumaların bir bölümü maddi geçim kaynağı olarak Pazar ürünü dokunduğu gibi kız veya erkeklerin çeyizi için de dokunmaktadır. Günümüzde dokuma sanatı ile uğraşan kişi sayısı azalsa da kasabada dokuma yapılmaktadır. Dokumalar tek kişi tarafından dokunuyorsa genellikle yastık, minder, yolluk gibi küçük ebatlı, birden fazla kişi dokuma yapıyorsa çeyrek veya taban gibi büyük ebatlı dokumalar dokunmaktadır.

Yerleşkede elde edilen dokuma örneklerinin sözlü görüşme ile ses ve görüntü kayıtları alınarak dokuma örneklerinin kullanım alanlarına göre sınıflandırılması yapılmıştır. Dokuma örneklerinin genel olarak kalitesi ve kullanılan düğüm tekniği, dokumalarda kullanılan hammadde, renk ve desen kompozisyonları incelenerek değerlendirilmiştir. Dokuma örneklerinde kullanılan dokuma iplerinin renklendirilmesinde kullanılan doğal boyar maddeler alan araştırması kapsamında değerlendirilmiş ve elde edilen bilgilerin literatüre kazanımı için paylaşımı yapılmıştır.

**Anahtar kelimeler:** Halı, Kilim, Sanat, Kültür, Akçakent

**ABSTRACT**

The art of weaving is one of the handicrafts that reflects the culture of societies for centuries. Carpet or kilim samples woven by societies are a part of the cultural identity of that society. Pattern and color compositions, materials and knot technique used in weaving are sources that provide information about the period and society in which weaving was made. Many villages and towns of Anatolia have been dealing with the art of weaving since ancient times.

Weaving has been one of the important livelihoods in village and town life. The art of weaving is common especially in rural areas dealing with agriculture and animal husbandry. The people who are engaged in agriculture in the summer, weaving in the winter. The weaving art of the people living in these regions has

become an important source of income for the home economy, and the art of weaving has become a profession in these regions.

It is understood from the samples and written sources that the art of weaving was widespread in the villages and towns of Aksaray and that it was a weaving center in the past. There are campuses where carpet and kilim weaving contributes greatly to the home economy. As an example of Kirkitli weaving campuses, Akçakent Town, which is connected to the center of Aksaray, was studied as a field study. The town of Akçakent is on the skirts of Hasandağı and the incomes obtained from livestock, agriculture and weaving with kirkit contribute to the family economy. Weaving in the town is mostly done by women. Some of the weavings are woven for the dowry of girls or boys as well as Sunday products as a source of financial livelihood. Today, although the number of people dealing with the art of weaving has decreased, weaving is still practiced in the town. If the weaving is woven by a single person, small sized woven fabrics such as pillows, cushions and runners are generally woven, and if more than one person is weaving, large sized fabrics such as quarters or soles are woven.

The weaving samples obtained in the campus were classified according to their usage areas by taking verbal interview and audio and video recordings. The general quality of the weaving samples and the knot technique used, the raw materials, color and pattern compositions used in the weavings were evaluated by examining. The natural dyestuffs used in the coloring of the weaving yarns used in the weaving samples were evaluated within the scope of the field research and the information obtained was shared for the acquisition of the literature.

**Keywords:** Carpet, Rug, Art, Culture, Akçakent

**RESİM SANATINDA LİF, İPLİK VE KUMAŞ ETKİLERİNİN DOKUSAL AKTARIMI**  
TEXTURE TRANSFER OF FIBER, YARN AND FABRIC EFFECTS IN PAINTING

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**ÖZET**

Plastik sanatlar alanında yirminci yüzyılla birlikte tüm sanat dalları arasındaki sınırlar erimiş, disiplinler arası ortak bir sanat dili oluşturmak adına malzeme, teknik, tema, kompozisyon gibi aktarım elemanları sanatçı ve izleyici açısından yeni anlamlar kazanmıştır. Rauschenberg'in resim ve tekstili ortak bir paydada buluşturması ile başlayan süreç, sonraki kuşak sanatçılarına yeni bir estetik dil ve algı ile oluşturulan özgün eserler ortaya çıkarma fırsatı sunmuştur.

Bu çalışmada tekstil hammaddelerinin ve tekniğinin resim sanatı içerisinde biçim ve dokusal bağlamda ele alınışı incelenecektir. Konu, farklı resim malzemeleri ile oluşturulan lif, iplik, dokuma kumaş etkilerinin resim yüzeyindeki biçimsel ifadeleri ile sınırlandırılmıştır. Örneklemi verilecek olan eserlerde geleneksel tekstil sanatının teknik ve malzeme özelliklerini deneysel arayışları ile çağdaş olana yükselten örnekler seçilmiştir.

Nitel araştırma yönteminin uygulandığı çalışmanın verileri doküman analizi kullanılarak elde edilmiştir. Sınırlandırılan örneklerde lif, iplik ve kumaş etkilerini tuval yüzeyinde malzemeleri kendi hacimleriyle aktaran sanatçıların eserleri yorumlanmıştır. Bu çalışma ile resim ve tekstil disiplinlerinin birbirinden beslenerek yaratıcı ve özgün yaklaşımlarına ulaşılmıştır. İzleyici ve sanatçı belleğine farklı bakış açıları sağlamayı hedefleyen sanatçıların disiplinler arası yeni çalışmalara kaynaklık ettiği sonucuna varılmıştır.

**Anahtar kelimeler:** Resim, iplik, tekstil, kumaş, disiplinlerarası

**ABSTRACT**

The boundaries between all branches of art have melted in the field of plastic arts with the twentieth century, and transfer elements such as materials, techniques, themes, and compositions have acquired new meanings for the artist and the audience in order to create a common art language between disciplines. The process, which began with Rauschenberg uniting painting and textile on a common ground, provided the opportunity for the next generation of artists to create original works using a new aesthetic language and perception.

The handling of textile raw materials and techniques in the art of painting in form and textural context will be investigated in this study. The subject is restricted to formal expressions of the effects of fiber, yarn, and woven fabric created with various painting materials on the painting surface. Examples of works to be sampled were chosen that, through their experimental search, elevate the technical and material properties of traditional textile art to the contemporary.

The data for the study, which used the qualitative research method, were obtained through document analysis. The works of artists who convey the effects of fiber, yarn, and fabric on the canvas surface with their own volumes are interpreted in the limited examples. With this research, the creative and innovative methods of painting and textile disciplines, which are mutually reinforcing, have been achieved. It has been determined that artists who aim to provide different perspectives to the audience's and the artist's memory are the source of new interdisciplinary studies.

**Keywords:** Painting, yarn, textile, fabric, interdisciplinary

**TƏSVİRİ İNCƏSƏNƏTİN MUSİQİLƏ İNTEQRASIYASININ KREATİV TƏŞKİLİ ZAMANI  
YUXARI SINIF ŞAĞIRDLƏRİNİN HƏYATİ BACARIQLARININ FORMALAŞDIRILMASI**

**FORMATION OF SENIOR STUDENTS' VITAL SKILLS IN CREATIVE ORGANIZATION OF  
INTEGRATION OF FINE ARTS INTO MUSIC**

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**XÜLASƏ**

Azərbaycanda həyata keçirilən təhsil islahatlarına dair direktiv sənədlərdə fənlərin inteqrasiyasının nümunəvi təşkili şagirdlərin hərtərəfli inkişafını təmin edən müasir təlim metodlarından biri kimi təlqin olunur. Göstərilir ki, fənlərin məqsədyönlü inteqrasiyası şagirdlərdə yeni bacarıqlarının aşkara çıxarılmasına köməklik göstərir. Bu mənada yuxarı siniflərdə təsviri incəsənətin digər fənlərlə, o cümlədən musiqilə inteqrasiyası yuxarı sinif şagirdlərinin həyatı bacarıqlarının formalaşması içində mühüm əhəmiyyət kəsb edir.

Məqalədə, təsviri incəsənət dərslərinin musiqi ilə inteqrasiyası prosesində şagirdlər daha çox həyatı bacarıqlara yiyələndikləri ortaya qoyulmuşdur. Ona görə ki, həm təsviri sənət materiaları, həm də musiqi nümunələri şagirdlərin bədii yaradıcılıq qabiliyyətlərinin formalaşdırılmasına birgə təsiri nəticəsində şagirdlər daha zəngin həyatı bacarıqlara yiyələnirlər.

Tədqiq edilən dərslər vəsaitləri və elmi tədqiqatlardan müəyyən edilmişdir ki, həm təsviri incəsənət dərslində, həm də musiqi dərslərində inteqrasiya üçün münasib sayılan mövzuların sayı çoxdur. Bütün bunlar deməyə əsas verir ki, təsviri incəsənət mövzularının hər birinin tədrisində musiqi nümunələrindən istifadə etməklə şagirdlərə həm faydalı həyatı bacarıqları aşılamaq olar.

Qeyd etmək lazımdır ki, təsviri sənətlə musiqinin inteqrasiyası üçün seçilən mövzular V-IX sinif şagirdləri üçün bu baxımdan daha əhəmiyyətli hesab olunabilir. Ona görə ki, təsviri incəsənət dərslərində mövzulara uyğun dinlənən musiqi nümunələri şagirdlərin yorulmasına imkan vermir, yorulanların yorğunluqlarını çıxarır, bütövlükdə isə uşaqların mədəni istirahətini təmin edir. İkinci bir tərəfdən təsviri incəsənətin bütün forma və növləri ilə məşğul olan uşaqların musiqi nümunələri sədaları altında işləmələri, əgər bir tərəfdən daha çox səmərəli nəticələr verirsə, digər bir tərəfdən şagirdlərin bir sıra bacarıqlarının aşkara çıxmasına səbəb olur.

Məsələyə digər müstəvidən yanaşsaq deməliyik ki, təsviri incəsənətin musiqi ilə inteqrasiyası prosesində, şagirdlər musiqi əsərlərinin bir çox janrı ilə yaxından tanış olmaq imkanı əldə edirlər. Bu isə onların yaradıcılıq qabiliyyətlərinin formalaşmasına daha güclü təsir göstərir.

**Açar sözlər:** təsviri incəsənət, musiqi, həyatı bacarıqlar, pedaqogika, fənlərin inteqrasiyası

**ABSTRACT**

The exemplary organization of the discipline integration in the directive documents on education reforms carried out in Azerbaijan is proposed as one of the modern teaching methods that ensure the comprehensive development of students. It is shown that purposeful integration of subjects helps students discover their new skills. In this sense, the integration of Fine Arts with other subjects, including music, is of great importance in the formation of the life skills of senior students.

The article reveals that in the process of integration of Fine Arts lessons with music, students acquire more vital skills. Because both fine art materials and music samples have a joint impact on the formation of students' artistic and creative abilities, students acquire rich life skills.



The study materials and scientific research have found that there are many topics that are considered suitable for integration both in the textbook of Fine Arts and in the textbook of music. All this gives grounds to say that using music samples in teaching each of the subjects of Fine Arts, students can be taught useful vital skills.

It should be noted that the topics selected for the integration of Fine Art and music can be considered more important for students of V-IX grades from this point of view. Because the music samples listened to in the lessons of Fine Arts do not allow the pupils to get tired, remove the fatigue of those who are tired, and in general, provide the cultural rest of children. On the second hand, the work of children engaged in all forms and types of Fine Arts to the accompaniment of musical samples leads to the fact that, on the one hand, it gives more effective results, on the other hand, a number of skills of students are revealed.

If we approach the issue from another perspective, we must say that in the process of integrating fine art with music, students get an opportunity to get acquainted with many genres of musical works. And this has a stronger impact on the formation of their creative abilities.

**Keywords:** fine arts, music, vital skills, pedagogy, integration of disciplines

**NEW YORK YANILSAMALARI FİLMİNE JEAN BAUDRİLLARD'IN SİMÜLASYON KURAMI  
PERSPEKTİFİNDEN BAKMAK**

LOOKING AT THE FILM OF THE SYNECDOCHE NEW YORK FROM JEAN BAUDRİLLARD'S  
PERSPECTIVE OF SIMULATION

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**ÖZET**

Postmodern toplumda göstergelerin tüm gerçekliğin ve anlamın yerini aldığı gerçeğini açıklayan Fransız filozof Jean Baudrillard, onu insan deneyimiyle ilişkilendirmek için gerçeklik simülasyonu kuramını sunmaktadır. Toplumda kimliklerini kaybetme durumuna gelen öznel, yaratılmış bir hiper gerçeklik ile yüzleşmektedir. Bu hiper gerçeklikte, oluşan temsiller duruma göre şekil değiştirmekte ve birer simülakra dönüşmektedir. Jean Baudrillard, “Simülakrlar ve Simülasyon” çalışmasında; gerçeğin bizim bildiğimiz gerçeklikten uzaklaştığını, hiper gerçekliğin gerçek olarak sunulduğunu ileri sürmektedir.

Çalışmanın amacı, simülasyon kuramını hem bireysel tarafı ile, hem de sosyal ve küresel yönleriyle ele almaktır. Bu bağlamda, Baudrillard'ın sanallık, simülasyon, simülakrlar ve hiper gerçekle ilgili temel düşüncesi, film çalışmalarıyla doğrudan keşiştiği için bu kavramlar örneklem olarak ele alınan New York Yanılsamaları filmi üzerinden incelenmiştir. Film, Baudrillard'ın, modern öznenin her türlü anlamının silinmiş olduğu sembolik bir evrende, tamamen kontrol altında hapsediği her yerde, baştan çıkarıcı simülakrlar dünyasının apokaliptik vizyonunu destekleyen somut bir örnek sunmaktadır. Çalışmanın problemini ise, bir tiyatro platosu simülasyonunun içinde yer alan ana karakterimiz bağlamında ele alarak, ‘hiper-gerçek’ çatısı altında yaratılan sahte gerçekliğin çağdaş bireye ‘gerçek dünya’ olarak kabul ettirilmesi teşkil etmektedir.

Çalışmanın örnekleme bağlamında kuramsal çerçeveyi oluşturan simülasyon / simülakrlar, nitel araştırma yöntemlerinden filmsel metin analizi yöntemi ile çözümlenmiştir. Bu anlamda New York Yanılsamaları filmi yukarıdaki kuramlarla anlamlandırılmış ve metin analizi yoluyla çıkarımlar elde edilmiştir.

**Anahtar kelimeler:** Jean Baudrillard, Simülasyon, Simülakrlar, New York Yanılsamaları

**ABSTRACT**

Explaining the fact that signs replace all reality and meaning in postmodern society, the French philosopher Jean Baudrillard presents the theory of reality simulation to relate it to human experience. Subjects, who lose their identity in the society, face a created hyper reality. In this hyper reality, the representations formed change shape according to the situation and turn into simulacras. Jean Baudrillard, Simulacras and Simulation study; He suggests that the truth moves away from the truth we know, hyper-reality is presented as truth.

The aim of the study is to deal with simulation and simulacra theories both with their individual side and social and global aspects. In this context, since Baudrillard's basic idea of virtuality, simulation, simulacra and hyper-reality intersects directly with his film studies, I examine these concepts through the Synecdoche, New York (2008) film, which I have chosen as a sample. The film provides a concrete example that supports Baudrillard's apocalyptic vision of the seductive simulacra world wherever the modern subject is trapped in complete control, in a symbolic universe where all meanings are erased. The problem of the study, on the other hand, constitutes the acceptance of the false reality created under the roof of "hyper-real" on the contemporary individual as the "real world" by taking it in the context of our main character in a theater simulation.

In the context of the sample of the study, the simulation / simulacra, which constitutes the theoretical framework, is analyzed by filmic text analysis method, one of the qualitative research methods. In this sense,



the film of Synecdoche, New York has been interpreted with the above theories and inferences have been obtained through text analysis.

**Keywords:** Jean Baudrillard, Simulation, Simulacra, The Synecdoche, New York



**KAYALARIN L-TİPİ VE N-TİPİ SCHMİDT ÇEKİCİ SERTLİK DEĞERLERİ ARASINDAKİ İLİŞKİNİN İNCELENMESİ VE TEK EKSENLİ BASINÇ DAYANIMI TAHMİNİNE SCHMİDT ÇEKİCİ TİPİNİN ETKİSİ**

INVESTIGATION OF THE RELATIONSHIP BETWEEN L-TYPE AND N-TYPE SCHMIDT HAMMER HARDNESS VALUES OF ROCKS AND THE EFFECT OF SCHMIDT HAMMER TYPE ON THE PREDICTION OF UNIAXIAL COMPRESSIVE STRENGTH

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**ÖZET**

Kayayla temas halindeki mühendislik projeleri öncesinde kayaçların dayanım özelliklerinin belirlenmesi çok önemlidir. Kayaçların tek eksenli basınç dayanımı, çekme dayanımı gibi doğrudan tasarım parametresi olarak kullanılan dayanım değerlerini belirlemek için uygulanan yöntemler numune hazırlamanın zaman alıcı olması gibi nedenlerden dolayı güç olabilmektedir. Böyle durumlarda bu test yöntemleri yerine uygulanması pratik, hızlı ve ucuz olan, çoğu zaman tahribatsız yöntemlerden olan, indeks yöntemler kullanılabilir. Kayaçların sertlik değerleri de indeks test yöntemleri ile belirlenmektedir. Literatüre bakıldığında kayaçların sertlik değerlerinin fiziksel ve mekanik özelliklerinin tahmininde güvenilir bir şekilde kullanılabileceği görülmektedir. Schmidt çekiçi sertliği de kayaçların ve betonun yüzey sertliğini belirlemek ve bazı mekanik özelliklerini tahmin etmek için yaygın olarak kullanılan, belirlenmesi pratik, hızlı ve ucuz bir yüzey sertliği ölçüsüdür. Yöntem hem arazide hem de laboratuvarında farklı örnek boyutlarında ve şekillerinde kolayca uygulanabilmektedir. Çekiç tipi, numune boyutları, uygulama yüzeyinin durumu, çevresel etkilere maruziyet gibi farklı parametreler Schmidt çekiçi sertlik değerini etkilemektedir. Bu çalışmada L-tipi ve N-tipi Schmidt çekiçi sertlik değerlerinin birbiri ile arasındaki ilişki incelenmiştir. Yedi farklı kayaç örneği üzerinde hem L-tipi hem de N-tipi Schmidt çekiçi kullanılarak kayaçların yüzey sertlikleri belirlenmiştir. Literatürde yer alan aynı kayaçlar üzerinde L-tipi ve N-tipi Schmidt çekiçi kullanılarak elde edilmiş Schmidt çekiçi sertlik değerleri ile bu çalışmadan elde edilen sertlik değerleri ve sonuçları karşılaştırılmıştır. L-tipi ve N-tipi Schmidt çekiçi kullanılarak elde edilen sertlik değerleri arasındaki ilişki basit regresyon analizleri ile irdelenmiştir. L-tipi ve N-tipi Schmidt çekiçi sertlik değerleri arasında yüksek korelasyon katsayısına sahip ilişkiler belirlenmiştir. L-tipi veya N-tipi Schmidt çekiçi kullanılarak elde edilen sertlik değerlerinin birbirine dönüşümü için genel ve kayaç kökenine bağlı olarak tahmin modelleri ve dönüşüm katsayıları önerilmiştir. Literatüre bakıldığında Schmidt çekiçi sertliğinin en çok tek eksenli basınç dayanımı ile ilişkisinin incelendiği çalışmalar olduğu görülmektedir. Bu çalışma kapsamında da her iki çekiç tipinin arasındaki ilişkilerin incelenmesinin yanı sıra kayaçların tek eksenli basınç dayanımını tahmin etmede iki çekiç tipinden hangisinin daha başarılı olduğunu tespit etmek için istatistik yöntemlerle analizler yapılmış ve tahmin modelleri oluşturulmuştur. Her iki çekiç tipiyle tek eksenli basınç dayanımı arasında anlamlı ilişkiler olduğu ve tek eksenli basınç dayanımını tahmin etmede kullanılabileceği görülmüştür.

**Anahtar kelimeler:** Kayaç sertliği, Schmidt geri tepme sertliği, L-tipi çekiç, N-tipi çekiç, tek eksenli basınç dayanımı.

**ABSTRACT**

It is very important to determine the strength properties of rocks before engineering projects in contact with the rock. Methods applied to determine the strength values used as direct design parameters, such

as uniaxial compressive strength and tensile strength of rocks, can be difficult due to reasons such as time-consuming sample preparation. In such cases, index methods can be used, which are practical, fast, and cheap to apply, often non-destructive methods, instead of these test methods. The hardness values of the rocks are determined by index test methods. When the literature is examined, it is seen that the hardness values of the rocks can be used reliably in the estimation of their physical and mechanical properties. Schmidt hammer hardness is a widely used, practical, fast and inexpensive measure of surface hardness to determine the surface hardness of rocks and concrete and to predict some mechanical properties. The method can be easily applied on different sample sizes and shapes both in the field and in the laboratory. Different parameters such as hammer type, sample dimensions, application surface condition, exposure to environmental factors affect the Schmidt hammer hardness value. In this study, the relationship between L-type and N-type Schmidt hammer hardness values was investigated. The surface hardness of the rocks was determined by using both L-type and N-type Schmidt hammer on seven different rock samples. The hardness values of Schmidt hammer obtained by using L-type and N-type Schmidt hammer on the same rocks in the literature and the hardness values and results obtained from this study were compared. The relationship between the hardness values obtained using the L-type and N-type Schmidt hammer was examined by simple regression analysis. Relationships with high correlation coefficients were determined between L-type and N-type Schmidt hammer hardness values. For the conversion of hardness values obtained by using L-type or N-type Schmidt hammer, prediction models and transformation coefficients have been proposed depending on general and rock origin. When the literature is examined, it is seen that the studies in which the relationship between Schmidt hammer hardness and uniaxial compressive strength are examined mostly. Within the scope of this study, besides examining the relationships between both hammer types, statistical analyzes were made and prediction models were created to determine which of the two hammer types was more successful in estimating the uniaxial compressive strength of the rocks. It has been observed that there are significant relationships between both hammer types and uniaxial compressive strength and can be used to predict uniaxial compressive strength.

**Keywords:** Rock hardness, Schmidt rebound hardness, L-type hammer, N-type hammer, uniaxial compressive strength.

## TELE ÇALIŞMANIN ANKARA TRAFİK YÜKÜNÜ AZALTMA POTANSİYELİ TELEWORK'S POTENTIAL TO REDUCE ANKARA TRAFFIC LOAD

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### ÖZET

Trafiğe eklenen araç sayısındaki artış özellikle iş gidiş ve dönüş saatlerinde yoğunluğa sebep olarak ciddi trafik yükü oluşturmaktadır. Yollardaki yoğunluk işe gidip gelme sürelerini uzatmakta, daha fazla yakıt harcanmasına sebep olmakta, strese ve hava kirliliğine yol açmaktadır. Bu sorunları çözmek için yolculukların daha verimli türlere yönlendirilmesi, ulaşım türlerinin kendi içinde verimliliğinin artırılabilmesi gayesiyle yolculuk talep yönetimi geliştirilmiştir. Tele çalışma yolculuk talep yönetimi stratejilerinden olup, çalışanların ev dahil her zaman ve her yerde çalışabilmesine imkan sağlayarak, trafiğin yoğun olduğu saatlerde ev-iş arasındaki özel otomobille yapılan yolculukların sayısını azaltma potansiyeline sahiptir. Bu çalışmada, tele çalışmanın Ankara trafik yükünü azaltma potansiyeli araştırılmıştır. Yapılan hesaplamalar sonucunda ev-iş arasındaki otomobil yolculuk sayısında tele çalışma gün sayısı 1 gün olması halinde %20 azalmaya, 2 gün olması halinde %40 azalmaya, 3 gün olması halinde %60 azalmaya, 4 gün olması gün olması halinde ise %80 azalmaya sebep olma potansiyeline sahip olabileceği belirlenmiştir. Sonuç olarak tele çalışma Ankara ilinde uygulanırsa ev-iş arası yolculuk yapan otomobil sayısını ciddi oranda düşürerek trafik yükünde yüksek oranda rahatlama sağlayabilme potansiyeli olduğu tespit edilmiştir. Böylelikle hem ulaşım süreleri kılalacak hem de hava kirliliğinde azalmalar olabilecektir.

**Anahtar kelimeler:** Trafik, Trafik yükü, Yolculuk talep yönetimi, Tele çalışma, Ulaşım süresi.

### ABSTRACT

The increase in the number of vehicles added to the traffic creates a serious traffic load, especially during the business hours of departure and return. Density on the roads prolongs commuting times, causes more fuel consumption, causes stress and air pollution. In order to solve these problems, travel demand management has been developed in order to direct the journeys to more efficient types and to increase the efficiency of the transportation modes. Teleworking is one of the journey demand management strategies, and it has the potential to reduce the number of private car trips between home and work during rush hour by enabling employees to work anytime and anywhere, including home. In this study, the potential of teleworking to reduce Ankara traffic load was investigated. As a result of the calculations, it has the potential to cause a 20% decrease in the number of teleworking days between home and work if it is 1 day, 40% decrease if it is 2 days, 60% decrease if it is 3 days, and 80% decrease if it is 4 days. As a result, it has been determined that if teleworking is applied in the province of Ankara, it has the potential to provide a high level of relief in the traffic load by significantly reducing the number of cars traveling between home and work. Thus, both transportation times will be shortened and air pollution will be reduced.

**Keywords:** Traffic, Traffic load, Travel demand management, Teleworking, Travel time.

## **TORNALAMA OPERASYONLARINDA KESİCİ TAKIM YÜKSEKLİK AYARININ KESME KUVVETLERİNE ETKİSİ**

### **THE EFFECT OF THE HEIGHT SETTING OF THE CUTTING TOOL ON CUTTING FORCES IN TURNING OPERATIONS**

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#### **ÖZET**

Bu çalışmada, iş parçasının tornalamasında oluşan kesme kuvvetlerine kesici takım yükseklik ayarının etkisi araştırılmıştır. Deneysel malzemesi olarak AISI304 paslanmaz çelik malzemesi kullanılmıştır. Deneysel, negatif kesme açısına sahip kaplanmış karbür uçlar kullanılmıştır. Kesici takım ucu, iş parçasının eksenine göre farklı yüksekliklerde bağlanarak denenmiştir. Çalışmada, üç farklı kesme hızı (100, 150 ve 225 m/dak), üç ilerleme hızı (0.15, 0.25 ve 0.35 mm/dev), üç kesme derinliği (0.8, 1.3 ve 2 mm) ve üç kesici uç yarıçapı (0.4 ve 0.8 mm) belirlenerek deneyler gerçekleştirilmiştir. Deneysel sayısı için Taguchi deneysel tasarım yöntemi (DOE) kullanılmıştır. Kesici takım üzerine etki eden kuvvetler ( $F_x$ ,  $F_y$ ,  $F_z$ ) çok bileşenli bir dinamometre ile ölçülmüştür. Elde edilen deneysel sonuçlarının değerlendirilmesi ile kesme kuvvetlerinin artışında en büyük etkiye sahip parametrelerin, talaş derinliği ve ilerleme hızı olduğu doğrulanmıştır. Kesme hızı ve kesici uç yarıçapının kesme kuvvetlerine etkisinin düşük olduğu değerlendirilmiştir. Kesici takımın, parça ekseninde ve parça ekseninden yukarıda ayarlanması durumlarının kesme kuvvetlerinde büyük değişiklik oluşturmadığı, parça ekseninden aşağıda ayarlanmasında ise kesme kuvvetlerinin arttırdığı gözlemlenmiştir. Elde edilen 3B grafikler ve yapılan analizler ile kesici takım yükseklik ayarının kuvvetlere etkisi, yüksek talaş derinliği ve yüksek ilerleme hızlarında belirgin olarak görülmüştür.

**Anahtar kelimeler:** işlenebilirlik, kesme kuvvetleri, takım yükseklik ayarı

#### **ABSTRACT**

In this study, the effect of cutting tool height adjustment on the cutting forces generated during the turning of the workpiece was investigated. AISI304 stainless steel material was used as the experimental material. Coated carbide inserts with a negative cutting angle were used in the experiments. The cutting tool tip has been tried by adjusting it at different heights according to the axis of the workpiece. In the study, three different cutting speeds (100, 150 and 225 m/min), three feed rates (0.15, 0.25 and 0.35 mm/rev), three cutting depths (0.8, 1.3 and 2 mm) and three insert radius (0.4 and 0.8 mm) were determined and experiments were carried out. The Taguchi method of experimental design (DOE) was used for the number of experiments. The forces acting on the cutting tool ( $F_x$ ,  $F_y$ ,  $F_z$ ) were measured with a multicomponent dynamometer. With the evaluation of the test results obtained, it has been confirmed that the parameters that have the major effect on the increase in cutting forces are the depth of cut and the feed rate. It has been evaluated that the effect of cutting speed and cutting edge radius on cutting forces is minor. It has been observed that adjusting the cutting tool in the part axis and above the part axis does not cause a major change in the cutting forces, while adjusting it below the part axis increases the cutting forces. The effect of cutting tool height adjustment on the forces was significantly observed at high cut depth and high feed rates with the help of the obtained 3D graphics and analyzes performed.

**Keywords:** Machinability, cutting forces, Tool Height Adjustment

**FOTOVOLTAİK MODÜL İLE ÜRETİLEN DC ENERJİNİN İÇ MEKÂN AYDINLATMASINDA  
DOĞRUDAN KULLANIMI VE SİSTEMİN EKONOMİK ANALİZİ**

**DIRECT USE OF DC ENERGY PRODUCED BY PHOTOVOLTAIC MODULE IN INDOOR LIGHTING  
AND ECONOMIC ANALYSIS OF THE SYSTEM**

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**ÖZET**

Türkiye’de konutlarda tüketilen toplam elektrik enerjisinin %20’si aydınlatmada kullanılmaktadır. Aydınlatma sistemlerinde günümüz teknolojisine uygun LED lambalar kullanılarak ve fotovoltaik sistemlerden enerji ihtiyacı karşılanarak binaların daha az ve yenilenebilir enerji kullanmaları sağlanmaktadır. Güneş enerjisinden elektrik üreterek konutlarda aydınlatma ihtiyacının karşılanması için fotovoltaik sistemlerin kullanımı bina enerji performansını iyileştirmektedir. Bu yüksek potansiyelden yola çıkarak çalışmamızda güneş enerjisinden üretilen elektrik ile bina içi aydınlatma ihtiyacı DC olarak karşılanmıştır. Şebekeden bağımsız olarak tasarlanan sistem ile DC dağıtım yapılmış olup DC olarak aydınlatmada harcanmıştır. Yapılan çalışmada 120 m<sup>2</sup>’lik bir konutun aydınlatılması için kompakt floresan lamba ve LED lambaların kullanılması sonucu tüketilen elektrik enerjisi ve CO<sub>2</sub> salınım değerleri karşılaştırılmıştır. Aydınlatma için kompakt floresan lamba yerine LED lambaların kullanımı ile yıllık 129.6 kW elektrik enerjisi tasarruf edilirken 77.4 kg CO<sub>2</sub> salınımı azalmıştır. Ayrıca sistemin ekonomik analizi kompakt floresan lamba ve LED lambaların kullanılması durumuna göre çıkarılmış ve iki durum birbirleriyle karşılaştırılmıştır. LED lambaların kullanım ömrünün uzun olması ve DC sistemin minimum güçte kurulması nedeniyle, şebekeye bağlı kompakt floresan lamba sistemine göre geri ödeme süresi ekonomik olarak daha avantajlı olmaktadır.

**Anahtar kelimeler:** Güneş Enerjisi, Fotovoltaik Sistem, Bağımsız Sistem, Enerji Yönetimi, LED Aydınlatma

**ABSTRACT**

In Turkey, 20% of the total electrical energy consumed in residences is used for lighting. Aydınlatma sistemlerinde günümüz teknolojisine uygun LED lambalar kullanılarak ve fotovoltaik sistemlerden enerji ihtiyacı karşılanarak binaların daha az ve yenilenebilir enerji kullanmaları sağlanmaktadır. Güneş enerjisinden elektrik üreterek konutlarda aydınlatma ihtiyacının karşılanması için fotovoltaik sistemlerin kullanımı bina enerji performansını iyileştirmektedir. Starting from this high potential, in our study, the electricity produced from solar energy and the need for indoor lighting were met as DC. With the system designed independently from the mains, DC distribution was made and DC was spent in lighting. In the study, the consumption of electrical energy and CO<sub>2</sub> emission values as a result of using compact fluorescent lamps and LED lamps to lighting a 120 m<sup>2</sup> house were compared. With the use of LED lamps for lighting instead of compact fluorescent lamps, 129.6 kW of electrical energy was saved annually, while 77.4 kg of CO<sub>2</sub> emissions were reduced. By using LED lamps in accordance with today’s technology in lighting systems and by meeting the energy need from photovoltaic systems, buildings are provided to use less and renewable energy. The use of photovoltaic systems to meet the lighting needs of residences by generating electricity from solar energy improves the energy performance of the building. In addition, the economic analysis of the system was made according to



the use of compact fluorescent lamps and LED lamps, and the two cases were compared with each other. Because the LED lamps have a long service life and the DC system is installed at minimum power, the payback time is economically more advantageous than the grid-connected compact fluorescent lamp system.

**Keywords:** Solar Energy, Photovoltaic System, Standalone System, Energy Management, LED Lighting

## UYDU GÖRÜNTÜLERİ KULLANILARAK GÖRÜNTÜ AYRIŞTIRMA YÖNTEMİ İLE ÇATI GÜNEŞ ENERJİSİ POTANSİYELİNİN TAHMİNİ

ESTIMATION OF ROOFTOP SOLAR ENERGY POTENTIAL WITH IMAGE SEGMENTATION USING  
SATELLITE IMAGES

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### ÖZET

Günümüz dünyasında gelişen teknoloji ile birlikte artan enerji ihtiyacı, yenilenebilir enerji potansiyelinin belirlenmesine olan talebi artırmıştır. Kurulum maliyetinin düşük olması, bakım süreçlerinin kolaylığı ve kurulum alanı avantajı gibi etkenler fotovoltaik modülleri en önemli yenilenebilir enerji kaynaklarından biri haline getirmekte ve talebi artırmaktadır. Bu kapsamda, güneş enerjisinden elektrik üretmek için kullanılan fotovoltaik sistemlerde elektrik enerjisi üretim kapasitesinin belirlenmesi çalışmaları giderek önem kazanmıştır. Fotovoltaik panel ile elektrik enerjisi üretim kapasitesi belirlenmesi amacıyla belirli konumlar için veya şehir ölçeğinde tahmin yapılabilmesi amacıyla farklı tekniklerle çok sayıda çalışma yapılmaktadır. Yapılan çalışmalar ile fotovoltaik panel kullanımının yaygınlaştırılması ve tüketilen enerji miktarında yenilenebilir enerji kaynaklarından elde edilen enerji oranının artırılması hedeflenmektedir. Bu çalışmada uydu görüntüleri üzerinden görüntü işleme yöntemi kullanılarak binaların üzerinde bulunan çatılar için fotovoltaik enerji kapasitesi belirlenme işlemi gerçekleştirilmiştir. Coğrafi bilgi olarak kullanılan enlem-boylam değerleri sayesinde istenilen yakınlaştırma seviyesinde ve boyutlarda elde edilen uydu görüntüsünün renk özü, doygunluk ve parlaklık değerleri (HSV) renk modeli yöntemi ile görüntü ayrıştırma yöntemi öncesi optimum seviyelere getirilerek verimli sonuç elde edilmesi amaçlanmıştır. Segmentasyon yöntemi ile arka plan ve ön plan görüntüleri elde edilerek kenar belirleme algoritmasının uygulanabilmesi için uygun görüntü elde edilmiştir. Kenar belirleme algoritması ile görüntüdeki çatı alanlarına ait kenarlar belirlenmiş ve konum değeri merkez alınarak fotovoltaik kapasitesi tahmin edilmek istenen çatı dışındaki alanlar hesaplama dışında bırakılmıştır. Merkez çatı alanına ait kenarları belirlenmiş görüntü elde edildikten sonra bu çatı alanının büyüklüğü hesaplanmıştır. Bu kapsamda değerlendirme yapabilmek için Düzce Üniversitesi Mühendislik Fakültesi'nin çatı alanı fotovoltaik kapasitesi klasik fiziksel hesaplama yöntemi ile hesaplanmıştır. Hesaplanan alan için yerleştirilebilecek fotovoltaik panel sayısı için maliyet ve enerji tahmini yapılmıştır. Aynı alan için fotovoltaik enerji kapasitesi uydu görüntülerinin görüntü işleme tekniği ile işlenmesi sonucunda yeniden hesaplanmış ve elde edilen sonuçlar karşılaştırılmıştır. Elde edilen sonuçlara göre çatılara yerleştirilecek fotovoltaik panel kapasitesinin belirlenmesi konusunda görüntü ayrıştırma ile görüntü işleme yönteminin güvenilir alternatif bir çözüm yöntemi olduğu görülmüştür.

**Anahtar kelimeler:** fotovoltaik potansiyel, görüntü ayrıştırma, uydu görüntüsü

### ABSTRACT

In today's world, the increasing energy need with the developing technology has increased the demand for the estimation of renewable energy potential. Factors such as low installation cost, ease of maintenance processes and advantage of installation space make photovoltaic modules one of the most important renewable energy sources and increase demand. In this context, studies on the estimation of electrical energy production potential for generating electricity from solar energy with photovoltaic systems have become increasingly important. To estimate the solar photovoltaic capacity, many studies have been done with different techniques for certain locations or at urban level. With these studies, it is aimed to expand the use of photovoltaic panels and increase

the rate of energy obtained from renewable energy sources in the amount of energy consumed. In this study, the solar photovoltaic energy capacity determined for the roofs of the buildings by using the image segmentation method on the satellite images. The latitude-longitude values used as geographical information for obtaining satellite images and by using hue, saturation and value (HSV) color model it is aimed to obtain optimal image before applying the image segmentation method. Foreground and background images obtained with the segmentation method, and a suitable image obtained for the application of the edge detection algorithm. By applying the edge detection algorithm, the edges of the roof areas in the image obtained and the areas outside the roof, for which the photovoltaic capacity to be estimated by taking the latitude-longitude value as the center, excluded from the calculation. After obtaining the image of the central roof area with the determined edges, the size of this roof area calculated. To evaluate the results of the study, the photovoltaic capacity of roof area of Duzce University Engineering Faculty calculated by manually with the classical physical calculation method. Cost and energy estimates made for the number of photovoltaic panels that can be placed for the calculated area. Photovoltaic energy capacity for the same area calculated by applying image segmentation technique and the results compared. According to the results obtained, it has been seen that the image processing with image segmentation method is a reliable alternative solution method for determining the number of photovoltaic panels that can be placed to roof and estimating the rooftop solar photovoltaic potential of the roof area.

**Keywords:** solar photovoltaic potential, image segmentation, satellite imagery





## A PRELIMINARY TOXICITY STUDY ON THE LARVICIDAL POTENTIAL OF SPECIFIC SHAMPOOS

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### ABSTRACT

Mosquito Control is important to the community because of the vector potential that exists from mosquitoes in transmitting diseases and the annoyance factor in disrupting outdoor activities. The vector potential of mosquitoes stems from the female's bloodsucking habits. Various mosquito species are capable of transmitting malaria, dengue, yellow fever, filariasis, encephalitis, chikungunya, and Zika viruses and other diseases. Apart from being a nuisance to the public by affecting labor efficiency, depreciation of real estate values, and interference with outdoor activities, they also affect the health of livestock, pets, and wild animal populations. Several techniques are used for mosquito control like chemical control, biological control, source reduction, environmental control, genetic control, traps and personal protection. Shampoos being regularly used, the effluent containing the same is being discharged into the open environment. The present study attempts to investigate the larvicidal effects of different shampoos (a means of chemical control) on mosquito larvae. Toxicity studies were carried out using the serial dilution method and  $LC_{50}$  was estimated for each of the shampoo type (Superia, Clinic Plus, Dove, Sunsilk) at 24hrs interval for five days. A comparison of the lethal effect of these shampoos at specific concentrations (0.1, 0.15, 0.2, 0.25, 0.3 and 0.4) was also done. The study reveals that Superia shampoo has the best larvicidal properties (0.1ml/L) compared to Dove (0.15ml/L), Sunsilk (0.15ml/L) and Clinic Plus (0.2ml/L). The low  $LC_{50}$  value for a particular shampoo could be attributed to the special combination of ingredients used in its preparation which could be employed for mosquito control. An extensively used cosmetic product could be turned into an effective vector control product with further research in the area.

**Keywords:** mosquito, larvicidal effect, shampoo, toxicity, vector control

## RESPIRATORY STRESS OF UJALA DETERGENT ON OREOCHROMIS NILOTICUS

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### ABSTRACT

Nowadays detergents have become an unavoidable part of our daily life. Most of these detergents are non-biodegradable and some degrade at very slow rate. Discharge of these untreated detergents has a chance to reach the nearby waterbodies, which in turn can affect aquatic ecosystem. Present study was undertaken to evaluate the sub lethal effect of Ujala detergent (1/10, 1/8 and 1/5<sup>th</sup>) using different dilution of LC50 value of the detergent on *Oreochromis niloticus* for a period of 20, 100 and 500 hours. After exposure to different dilution of detergent, dosed fishes were transferred to normal water and consumption of oxygen was estimated using Winkler's method during different time intervals (0-15, 16-30 and 45-60 minutes). *Oreochromis niloticus* selected as test species since it is commonly found in the freshwater bodies of Kerala. In control, dissolved oxygen consumption ranged from 0.0150±0.001 to 0.0156±0.002 mg/min/g throughout the experimental period. In 20 hours of exposure, oxygen consumption rate increased from 0.0421±0.002 to 0.0520±0.001, 0.0400±0.002 to 0.0490±0.002 and 0.0360±0.003 to 0.0450±0.002 mg/min/g in 0-15, 16-30 and 45-60 minutes when moved from 1/10<sup>th</sup> to 1/5<sup>th</sup> dilution. This indicated that oxygen consumption rate increased with concentration of detergent. Meanwhile, oxygen consumption rate decreased from 0.0421±0.002 to 0.0360±0.003, 0.0460±0.001 to 0.0420±0.002 and 0.0520±0.001 to 0.0450±0.002 mg/min/g in 1/10, 1/8 and 1/5 dilutions during 0-15 to 45-60 minutes. Current data revealed that oxygen consumption rate was inversely proportional to exposure time. The above results are in agreement with that of 100 and 500 hours. The current study revealed the respiratory stress experienced by *Oreochromis niloticus* when exposed to Ujala detergent. Hence strict measures have to be taken before the release of detergents into the aquatic environment.

**Keywords:** Detergents, Ujala, Dissolved oxygen, *Oreochromis niloticus*, Stress.

## LARVICIDAL ACTIVITY OF CERTAIN HERBAL MOSQUITO REPELLENTS: AN APPRAISAL

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### ABSTRACT

Mosquitoes are well-known group of pestiferous vectors, can transmit various dreadful diseases such as malaria, dengue, chikungunya etc causing millions of deaths every year in both tropical as well as subtropical regions. So eradicating the source of infection is an essential strategy for an effective monitoring of such dreadful vectors. The application of synthetic insecticides causes deleterious issues to non-target organisms. Because of this, the administration of environmentally safe, target-specific insecticides termed biopesticides were considered as an effective herbal mosquito repellent. The present study aimed to investigate the larvicidal activity of certain herbal repellents against mosquito larvae. *Azadirachta indica*, *Citrus sinensis*, *Allium sativum* and *Canarium strictum* were considered for the preparation of herbal extracts. The collected materials were macerated into fine powder and mixed with aqueous medium. The healthy larvae were tested with herbal extracts of different concentrations (5ml, 10ml, 20ml, 25ml and 30 ml) for different exposure time (12, 24, 36, 48, 60, 72 and 96 hours) after which the mortality rate (%) were analysed. The percentages of larval mortality and standard deviations were calculated for each concentration and the results clearly indicated that the concentrations of different herbal extracts exhibited different mortality rate with respect to its corresponding exposure time. Both *Allium sativum* and *Citrus sinensis* revealed its maximum mortality rate (100%) than *Azadirachta indica* and *Canarium strictum* at the end of 96 hour of exposure because the mortality rate increases with increased concentration. First death was noticed in *Azadirachta indica* within the concentration of 5ml at 96 hr of exposure while the same effect occurs in 30 ml at 48 hr of exposure. *Canarium strictum* elicited its larvicidal activity at different concentrations (1st death occurs only at 96 hrs) but it is moderate when compared to other three herbal extracts. The outcome of the study stipulated that the leaf extracts have a significant role for monitoring and managing the vector bone mosquito larvae with an eco-friendly and effectively manner.

**Keywords:** Mosquito repellents, *Azadirachta indica*, *Citrus sinensis*, *Allium sativum*, *Canarium strictum*.

## SOIL-INHABITING INSECTS AND PRODUCTIVITY IN ALFALFA-COCKSFOOT MIXED CROPPING SYSTEMS

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### ABSTRACT

Mixed cropping is of importance and interest towards this system is rising in recent years. It has inbuilt advantage over certain environmental issues. Mixed grown crops are more effective than pure grown in using environmental resources, better withstand adverse conditions, overcome both injurious insects and weed problems, and are more productive. Alfalfa, known as the queen of forages, is grown not only in pure stand, but also in mixtures. The alfalfa-cocksfoot mixtures are the most used in temperate latitudes. The main soil-inhabiting insects in these crops is *Otiorrhynchus ligustici* L., which damages the roots and reduces productivity. In this work we studied the mixed growing of alfalfa with cocksfoot (50:50%) with reference to some soil-inhabiting insects and dry mass productivity. In addition, the effect of spring forage pea as cover crop of alfalfa both pure sown and mixtures with cocksfoot was also studied. The field experiment was performed in the Institute of Forage Crops, Pleven, Bulgaria (2017-2019). We used alfalfa (*Medicago sativa* L.) cv. Pleven 6, cocksfoot (*Dactylis glomerata* L.) cv. Dabrava (both Bulgarian cultivars). Perpendicular to the main crops and mixtures in the first year, spring forage pea was sown as a cover crop with 75% of sowing rate. In the stage of flowering - beginning of the pod formation of alfalfa, soil monoliths were taken and the root length and degree of damage caused by the larvae of *Otiorrhynchus ligustici* L. were measured. Dry mass was calculated using fresh mass and % of dry matter. It was found that the area of damage in alfalfa-cocksfoot mixed crops significantly decreased (by more than 2/3) compared to pure sown alfalfa. Thus, the root system retains its integrity and as a result the nitrogen fixation process was not hindered. The cover crop with nitrogen-fixing ability imposed strong positive effect on alfalfa in the first year, enriching the soil with nitrogen input following the death and decomposition of nodules and root biomass in the following years. Such an arrangement resulted in higher dry matter productivity, and in mixtures, in an increase in the proportion of cocksfoot. It is concluded the root damages from soil-inhabiting insects in alfalfa-cocksfoot mixtures decreased, which resulted in higher dry mass productivity. The sowing of alfalfa pure and in mixtures with cocksfoot under the cover of spring forage pea was considered as response of the concept of agriculture to ecologically oriented.

**Keywords:** alfalfa, mixtures, soil-inhabiting insects, productivity



**THE MOST COMMON DISEASES OF HONEYBEES IN THE BELGRADE AREA**

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**ABSTRACT**

Beekeeping is very well developed in Belgrade (Serbia). Geographical and climatic conditions favor beekeeping, while the wider area of Belgrade has a rich flora suitable for bee feeding. According to the existing data, there are currently 2,069 apiaries in this area with 98,611 marked hives. Honeybees are susceptible to various diseases, some of which are very contagious and diffusive. It is very important that the beekeeper is able to recognize the first signs of disease or infestation in hives and knows how to proceed. The best beekeeping practices involve proper management of the apiary that can prevent bee diseases and, at the same time, allow obtain high quality products respecting the consumer's health. The health care of honeybees in Serbia is regulated by national legislation that is in line with the OIE / FAO regulations. In our paper, we give an overview of the health status of honeybee in the area of Belgrade. From the diseases that are on the OIE list we established American foulbrood, European foulbrood, Varroaosis and Nosemosis. In addition to these diseases we occurred presence of Chalkbrood, Stonebrood, Deformed wing virus (DWV), Black queen cell virus (BQCV), Chronic bee paralysis virus (CBPV), Acute bee paralysis virus (ABPV) and Sacbrood virus (SBV). Varroaosis is most prevalent especially in the winter period, occurred at 29% of examined apiaries. Follow by Nosemosis occurred at 11% of examined apiaries. American foulbrood which meets at spring and autumn period where established it at 3% of apiaries. Viral diseases are much less common, found in less than 1%. Mixed viral infections are a common finding. DWV was most prevalent in strong societies, BQCV, ABPV and CBPV were most commonly detected in moderately strong societies, and SBV was most prevalent in weak bee societies. Chalkbrood, Stonebrood and European foulbrood are found only sporadically, most often in apiary that are neglected and where adequate apitechnics are not applied.

**Keywords:** honeybee, viral disease, bacterial disease, parasitic disease, fungal disease, Belgrade area

## NUTRITIVE VALUE OF TRASH FISHES OF ASHTAMUDI LAKE OVER DELICACIES

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### ABSTRACT

Ashtamudi lake is one of the largest wetland ecosystems in Kerala. Many poor people living on the coasts of Ashtamudi lake depend on fish resources for their dietary protein requirements. Fishes often described as rich food for poor people provides essential nutrients especially proteins of high biological values and fat. A knowledge of proximate biochemical composition of fish is essential in order to compare its value as food with other protein food. The present study focus on finding out the biochemical constitution of selected edible fishes in Ashtamudi lake. Five different species of fishes were selected from local fishermen near Neendakara, Kollam district, for the study. The different species considered for the study were *Lutjanus johnii* (Bloch), *Gerres filamentosus* (Cuvier), *Arius maculatus* (Thunberg), *Etroplus suratensis* (Bloch) and *Mugil cephalus* (Linn). The glycogen and protein content of these fishes were analysed using standard procedures. The protein content was estimated by Folin-Ciocalteu method and glycogen estimation was carried out using anthrone method. The study proved that the nutritional value does not depend on the size or cost of the fish. Small fishes like *Gerres filamentosus* had almost equal nutritional value as that of *Etroplus suratensis* which is treated as a delicacy. It was found that *Gerres filamentosus* possessed high protein content and *Arius maculatus* showed the lowest proving that protein content does not depend on the size of the fish. Some fishes which are available in markets at lower costs were found to have equal or higher nutritional status than that of delicacies.

**Keywords:** Protein content, nutritional value, *Gerres filamentosus*, *Etroplus suratensis*



**AN INSIGHT INTO EVOLUTION OF AUTISM SPECTRUM DISORDER ON A WORLDWIDE SCENARIO**

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**ABSTRACT**

Pervasive mental disabilities are a category of neurodevelopmental disorders marked by communication challenges, reflexive human interaction problems, and confined recurring activities or hobbies. Autism spectrum disorders (ASD) is a word that has been used to characterise their varied characteristics. Although the exact origin of these ailments is unknown, studies strongly suggest that they have a genetic foundation and a complicated pattern of heredity. More study is needed to determine whether environmental variables have a role in the development of these illnesses. ASD is becoming more common over the world, with the most current prevalence surveys suggesting that it affects 6 out of 1000 children. The goals of this article are to give physicians with the necessary knowledge to diagnose and send children with clinical symptoms of ASDs to specialist facilities as soon as possible, as well as to prepare them to deal with public concerns about the genesis and treatment of these diseases.

**Keywords:** Autism Spectrum Disorder (ASD), Environmental Variables, Heredity, Clinical Symptoms

**GROWTH REGULATORY AND FITNESS COST STUDIES IN *Aedes aegypti* ON EXPOSURE TO DIFLUBENZURON, AN INSECT GROWTH REGULATOR**

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**ABSTRACT**

**Introduction:** Mosquito-borne diseases; such as malaria, yellow fever, dengue etc. of human concern; are prevalent throughout the world. The persistent rise in these diseases and the resultant fatalities worldwide has made the management of these small-sized vectors of paramount importance. Unsystematic use of various insecticidal agents to control the mosquito vector has raised other concerns; like multiple insecticide resistance, adverse effects on non-targets including human and deteriorating environmental health; have made the situation more critical. Thus, there is a growing emphasis on the use of eco-safe Insect Growth Regulators (IGRs) that impact insect growth without imparting any appreciable toxic effects. This study is focused on the use of IGR-Diflubenzuron (DFB) as a mosquito control agent. **Aims and Objectives:** To assess the efficacy of DFB on the adult emergence inhibition (IE%) and other growth regulatory parameters of mosquito species, *Aedes aegypti*, the prevalent dengue vector in India. **Methods:** Early-fourth instar larvae of the parent susceptible strain of *Ae. aegypti* were exposed to various concentrations of DFB as per WHO protocol. The susceptibility status and IE% potency of DFB was determined and sublethal IE% values (IE<sub>10</sub> and IE<sub>30</sub>) were computed using regression analysis through SPSS software. The growth regulatory effects of DFB was evaluated by exposing early fourth instars at IE<sub>10</sub> and IE<sub>30</sub> dosage. Various growth and development parameters were recorded and analyzed. **Results:** The larval exposure to DFB inhibited adult emergence significantly, resulting in respective IE<sub>30</sub> and IE<sub>50</sub> as 0.10µg/L and 0.31µg/L. The IE<sub>10</sub> and IE<sub>30</sub> exposure caused diminished reproductive and physiological fitness in comparison to controls. The respective adult emergence in IE<sub>10</sub> and IE<sub>30</sub>-exposed population reduced to 75% and 35.5%, as compared to 97.25% in controls. The negative impact on oviposition/female and %egg hatch on exposure to IE<sub>10</sub> (46.60; 85.5%) and IE<sub>30</sub> (37.17; 68.97%) than control (52.24, 90%) reduced next generation. In addition, larval/pupal mortality was scored in susceptible and IE<sub>10</sub> and IE<sub>30</sub>-exposed population as 1.52%, 13.5% and 35%, respectively and corresponding larval-pupal and pupal-adult intermediates as 0%, 9% and 5.5%. **Conclusions:** The promising growth regulatory effects of DFB imparting negative impact on the physiological and reproductive fitness and diminishing next generation significantly; makes it a significant control agent of *Ae. aegypti*.

**Keywords:** *Aedes aegypti*, Diflubenzuron, Growth, Egg hatch, Fitness.





**ABOVEGROUND AND ROOT BIOMASS PARAMETERS AND RATIOS IN ALFALFA SOWN UNDER COVER OF SORGHUM SSP**

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**ABSTRACT**

The increasing frequency and duration of droughts call for greater efficiency in the use of resources in agriculture. One way is to grow the crops in mixtures. Mixed crops are more efficient than alone in terms of using environmental resources for plant growth. Sorghum species are known for their drought resistance. Alfalfa accumulates in the soil high level root biomass and is considered as "soil building" legume crop. Our study aimed at to find the parameters and ratios of the aboveground and root mass of alfalfa sown under the cover of some species of the Sorghum genus (*Sorghum sudanense* (Piper) Stapf.), *Sorghum vulgare* var. *technicum* [Körn.] and (*Sorghum bicolor* (L.) Moench.) for forage. The experiment was performed in three consecutive years at the Institute of Forage Crops - Pleven, Bulgaria (2017-2019). Alfalfa plants sown under the cover of Sorghum species showed lower height of the aboveground mass, least pronounced in *Sorghum sudanense* (Piper) Stapf.) cover. Weak suppressive effect on fresh and dry weight of the aboveground mass of alfalfa was found only for the *Sorghum vulgare* var. *technicum* [Körn.] as a cover. Cover crops had a suppressive effect on the root mass length of the alfalfa, least pronounced in *Sorghum sudanense* (Piper) Stapf.) cover. The *Sorghum vulgare* var. *technicum* [Körn.] has a depressing effect on the fresh and dry weight of the alfalfa root mass. Some ratios between aboveground and root mass (height, length, fresh and dry weight) of the plants was calculated, which follow the trend found for the indicators themselves.

**Keywords:** Sorghum ssp., alfalfa, mixtures, root mass, aboveground mass



## IMPLEMENTATION OF THE CONCEPT OF COGNITIVE APPRENTICESHIP TO THE POLICE TRAINING

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### ABSTRACT

Quarantine restrictions have led to an expansion of situational distance learning practices. This drew well-founded criticism from students and the public. Police education has not been able to circumvent this trend, especially since the practical training of police officers in transitional countries has long ignored the possibilities of e-learning. Firstly, the very nature of police skills (their realization in physical actions) to a certain extent contradicts the virtuality of computerized environments. Secondly, the methods of traditional, conservative, almost patriarchal mentoring and apprenticeship dominate in the hands-on training of police officers.

In the past two years, in the training of Ukrainian police officers, we have implemented the concept of cognitive apprenticeship using blended learning models. The first stage of modeling is implemented distantly, according to the flipped classroom model. Cadets watch videos of various types: 1) training videos with a demonstration of the actions by the instructor; 2) videos of the actions of cadets with their inherent errors; 3) recordings from body-worn video recorders of policemen filmed in situations of skills implementation.

The next three stages are implemented simultaneously, in accordance with the station rotation model. At the coaching stage, under the guidance of the most experienced teacher, cadets demonstrate the application of skills. The teacher corrects their actions, analyzes errors, selects and gives new situational learning tasks and training scenarios within controlled environments which simulate real policing tasks. At the scaffolding and fading stage, under the supervision of a second lecturer, a subgroup of cadets is working out new situational tasks and case scenarios. Scaffolding is implemented with the help of verbal prompts, facilitating tasks, help from other cadets. Fading, in turn, involves the gradual elimination of prompts and the implementation of scenario-based practical assessments. At the articulation and reflection stages, great attention is paid to problem-solving and decision-making skills. The sixth stage of exploration is implemented outside the classroom with project teams.

Implementation of the concept in blended learning improved academic performance by 10.8%.

**Keywords:** cognitive apprenticeship, police education, blended learning

**INVESTIGATION OF MICROSTRUCTURE AND BIODEGRADABLE PROPERTIES OF ZN-MG EUTECTIC ALLOY SOLIDIFIED UNDER STATIC ELECTRIC FIELDS APPLIED WITH DIFFERENT MAGNITUDES AND DIRECTIONS**

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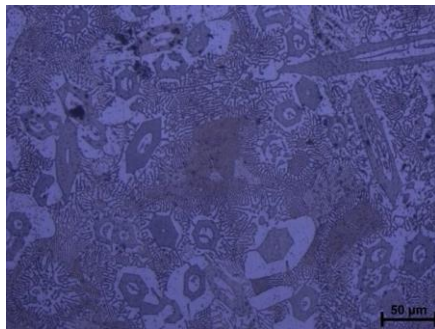
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**ABSTRACT**

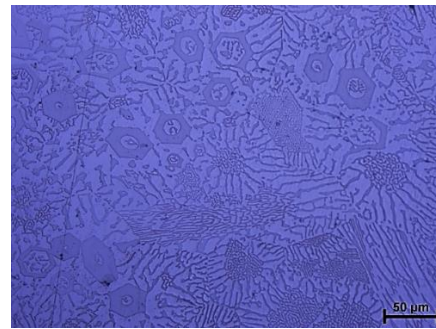
The effects of direction and magnitude of static electrical fields on solidification of Zn-4wt%Mg alloy were investigated. For this purpose, the Zn-4wt%Mg eutectic alloy was carefully solidified in a specially designed static electric field setup. Due to the installation of the apparatus in question, the materials were solidified under a completely different magnitudes of static electric field without any possible arc and pulse effect during solidification. It has been shown in previous studies that the high static electric field applied during solidification affects the microstructure of the alloys[1-3]. However, there are no studies have been conducted on biodegradable metallic materials. Metals such as Zn, Mg and their related alloys have recently become very popular research subject for biodegradable metallic materials (BMMs) [4]. For this reason, Zn-Mg alloys are considered to have potential application in repairing body parts, since both metals are biocompatible and have biodegradable characteristics [5]. Adding Mg to Zn can increase mechanical and corrosion resistances [6]. The mechanical and corrosion properties of metallic materials can be changed by microstructure control. In this study, static electric field was applied with an innovative approach for microstructure and relatedly corrosion control. For the first time, the Zn-4wt%Mg molten eutectic alloy was solidified under positive direction; parallel of the solid liquid interface growth direction ( $E_+$  respectively) and magnitude ( $14 \text{ kVcm}^{-1}$ ) of static high electric fields. In this study, the microstructure and biodegradable properties were investigated systematically. Figure 1 shows the optical microscope images of Zn-Mg alloy solidified with non-electrical field (Fig 1a) and positive electrical field of  $14 \text{ kVcm}^{-1}$  (Fig. 1b). The lamellar spacing and size of hexagon-shaped phase were measured from optical images. Increments of lamellar spacing and size of hexagon-shaped phase were obtained as 100% and 23%, respectively. Also, in vitro degradable rate measurements for the samples were performed in conformation with BS ISO 23317 test standard. The degradation rates for each sample were calculated based on the weight loss in the SBF solution.

**Keywords:** Solidification, Electric field, Zn-Mg alloy, biodegradable materials, metals, BMMs

Acknowledgement: This research was supported financially by the Scientific and Technical Research Council of Turkey (TUBİTAK) 2209-A under application no. 1919B012101674. The authors are grateful to the Scientific and Technical Research Council of Turkey (TUBİTAK) for their financial supports.



(a)



(b)

**Fig. 1** Eutectic typical lamellar morphologies of Zn-Mg alloy solidified under (a) none electrical field and (b) positive electrical field ( $E_+ = 14kVcm^{-1}$ ).

**SYNTHESIS AND CHARACTERIZATION OF NOVEL 1,5-BIS(4-FLUOROPHENYL)PENTA-1,4-DIEN-3-ONE O-BENZOYL OXIME**

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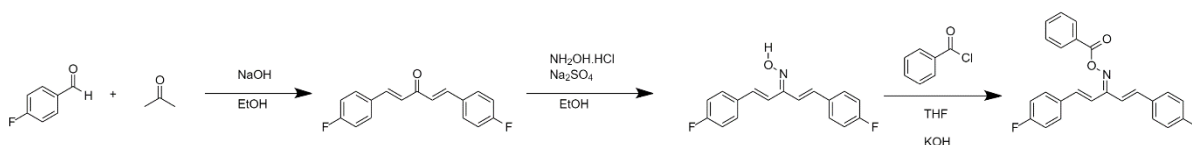
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**ABSTRACT**

Chalcone chemicals are natural molecules that belong to the flavonoid family and can be found in foods such as fruits, vegetables, and tea. Chalcone oximes and Dibenzalacetone derivatives are chemicals that, depending on the substituents they contain, can have biological activity. According to numerous research, these molecules are extremely important organic substances. Antiviral, antifungal, antibacterial, anticancer, anticonvulsant, and many other biological properties have been reported in the literature, making these compounds valuable to synthesize due to their obvious importance in pharmaceutical chemistry, organic chemistry, and the drug industry. Many 1,5-diphenylpenta 1,4-dien-3-one compounds and 1,5-diphenylpenta 1,4-dien-3-one oxime compounds have been synthesized and described in literatures, however due to the large number of substituents that these compounds can contain, there are still many unique compounds that can be created. The goal of this work is to produce a 1,5-bis(4-fluorophenyl)penta-1,4-dien-3-one O-benzoyl oxime molecule and test its biological activities. The 1,5-bis(4-fluorophenyl)penta-1,4-dien-3-one molecule was produced in the first step of this work utilizing literature-based procedures by reacting sodium hydroxide and ethanol with 4-fluorobenzaldehyde and acetone. The obtained intermediate product was used for the second step, which began with purifying the product of the first step and continued with adding hydroxylamine hydrochloride and sodium sulfate in ethanol to produce 1,5-bis(4-fluorophenyl)penta-1,4-dien-3-one oxime compound, and for the next step, benzoyl chloride, KOH, and tetrahydrofuran were added to the second intermediate compound to produce novel 1,5-bis(4-fluorophenyl)penta-1,4-dien-3-one O-benzoyl oxime compound. After purifying with column chromatography, the final product was characterized using spectral analysis such as Proton-NMR, Carbon-NMR, and Mass Spectrums.



**Keywords:** Chalcone oximes, Dibenzalacetone, O-benzoyl oxime, Anti-cancer

## COMPARISON OF MICROWAVE ASSISTED AND CHEMICAL PRE-TREATMENTS AND ENZYMATIC HYDROLYSIS OF THREE AGRICULTURAL WASTES FOR BIOETHANOL PRODUCTION

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### ABSTRACT

Lignocellulosic materials are abundant agricultural wastes which offer a sustainable source of sugars and bioalcohols. The production of bioethanol from lignocellulosic wastes requires pre-treatment, hydrolysis and fermentation processes. In this work, microwave pre-treatment (MWP) and chemical pre-treatment and enzymatic hydrolysis were carried out for the production of bioethanol from *Hyphaene thebaica* stalk (HTS), guinea corn husk (GCH) and sugarcane peel (SCP). Bioethanol was obtained through fermentation and distillation from these agricultural wastes and characterized. Physical properties of the bio-ethanol such as, specific gravity, kinematic viscosity, flash point, pour point, cloud point and research octane number were evaluated using the American Society for Testing and Materials (ASTM) methods. *Hyphaene thebaica* stalk gave the highest yield of bioethanol of 96.4 and 92.4 g/L using chemical and microwave pre-treatments, respectively. The result of fuel characterization of the bioethanol indicated its density, specific gravity, kinematic viscosity, flash point, pour point, cloud point and research octane number to be 0.43 g/cm<sup>3</sup>, 0.79, 2.10, mm<sup>2</sup>/s, 11°C, -10°C, -19°C and 75 for MWP and 0.41 g/cm<sup>3</sup>, 0.78, 2.10 mm<sup>2</sup>/s, 10°C, -9°C, -28°C and 80 for chemical hydrolysis. The study revealed that bioethanol can be produced from the three agricultural wastes using *Aspergillus niger* for hydrolysis and *Saccharomyces cerevisiae* for fermentation. Chemical hydrolysis and enzymatic hydrolysis were most suitable method for the production of the bioethanol in all the three substrates.

**Keywords:** *Hyphaene thebaica*, Agricultural wastes, *Saccharomyces cerevisiae*, *Aspergillus niger*, Bioethanol, Hydrolysis, Fermentation.



**EVALUATION OF LARVICIDAL AND CYTOTOXIC ACTIVITY OF *EUPORBIA POISSONII* EXTRACTS**

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**ABSTRACT**

Mosquitoes have for years remained a causative agent of various diseases in both rural and urban settlements of the world. Malaria being one of the diseases mosquito transmits is known to be highly concentrated in most developing countries killing more people than any other killer disease. The larvicidal activities of n-hexane, chloroform, ethyl acetate, ethanol, methanol and water extracts of *Euphorbia poissonii* against anopheles mosquito were studied. Among the extracts tested, n-hexane shows the highest larvicidal activity against third instar larvae at  $LC_{50} = 163\text{mg/L}$  after 24h exposure period. The lowest larval mortality was observed on the chloroform fraction at  $LC_{50}$  value of 896 mg/L. The methanol fraction showed moderate larvicidal activity against the anopheles mosquito with  $LC_{50}$  value of 205 mg/L. The Brine Shrimp test results of *Euphorbia poissonii* extracts showed significant toxicity against *Artemia salina* with  $LC_{50}$  of 26.3 $\mu\text{g/ml}$  for n-hexane and  $LC_{50}$  35.2 $\mu\text{g/ml}$  for ethanol extracts. It was found that *Euphorbia poissonii* possess potential larvicidal activity, and provides an opportunity for developing alternatives to rather hazardous and costly synthetic insecticides.

**Keywords:** Larvicidal, Cytotoxic, isolation, phytochemicals

**THERMODYNAMIC DETERMINATION OF THE AREAS OF SOLID PHASE STABILITY IN MIXTURES OF ANIONIC AND CATIONIC SURFACTANTS**

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**ABSTRACT**

A thermodynamic model was developed to predict the precipitation conditions using the solubility product relationship between surfactant monomer concentrations, in order to calculate the monomer - precipitate equilibrium. The developed model could predict the amount of precipitate that formed in the mixture of cationic and anionic surfactants, the results proving to be in agreement with the experimental measurements. Mixture of sodium dodecyl sulfate (*SDS*) and dodecylpyridinium chloride (*DPCI*) has been shown to react in solution with the formation of a precipitate in a wide range of concentrations. When the micelles are not present in the solution, this reaction can be modeled by a simple solubility product between the total surfactant concentrations. In addition, the developed approach provides an explicit equation which predicts the amount of solid phase which forms in any *NaDS-DPCI* mixture, so that surfactant equilibrium concentrations (after precipitation) can be determined. The chemical composition in each monomer phase, which is determined in the computerized calculation process, helps to understand and predict the solution compositions corresponding to the precipitation limits of anionic/cationic surfactants. The results of the calculation of the global Gibbs energy variations of this system for different chemical compositions show that with the decrease of the total concentrations of the surfactants the areas of existence of the solid phase,  $DSDP_{(S)}$ , narrows. For the concentrations  $C(DS^-) = C(DP^+) = 1 \cdot 10^{-3} \text{ mol} \cdot \text{L}^{-1}$  the precipitate  $DSDP_{(S)}$  exists in the whole studied range of pH values. From the obtained data it is possible to determine the pH of the coexistence of two solid phases, lauric acid  $HDS_{(S)}$  and dodecylpyridinium dodecyl sulfate  $DSDP_{(S)}$ . Thus, conditions can be predicted in which there is only one phase or when the precipitation of one or both surfactants can be avoided. The obtained results are in agreement with the existing experimental measurements.

**Keywords:** dodecyl sulfate, Gibbs energy, heterogeneous mixture, precipitation, solid phase, anionic and cationic surfactant.



## **LEACHING OF MUNICIPAL SOLID WASTE FROM THE MOSTAGANEM DISTRICT IN ALGERIA**

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### **ABSTRACT**

Algerian cities generate important quantities of wastes estimated at around 10.3 million of tons of household wastes per year in 2010. This production is in substantial progress because

of population growth and important urbanisation. In urban areas, an Algerian produces an average of 0.8 kg of household wastes per day and in rural areas 0.6 kg per day.

The study of the composition of the waste from the city of Mostaganem which was obtained from the waste generated by the sanitary landfill (SL) shows that the fermentable material is predominant compared to other categories of waste, it represents 67% of the total waste the rate of paper and cardboard is 12%.

The objective of the present study is to determine the maximum leaching capacity of the wastes (putrescibles, paper-cardboard and sawdust representing wood wastes), for assessing the environmental impacts. The lixiviation tests were realised (i) without and (ii) with renewing of distilled water. The organic matter released was measured by COD, conductivity and pH.

Putrescibles has a high potential for pollution, a COD of 35000 mg O<sub>2</sub>.L<sup>-1</sup> is obtained after leaching with water for 48 hours. The paper-cardboard and sawdust waste releases a quantity of organic matter between 3000 and 6000 mg O<sub>2</sub>.L<sup>-1</sup>. The conductivity of fermentable waste is very high compared to other categories (putrescible 7.98; paper-cardboard 0.72 and sawdust 0.287 mS/cm).

The release is very important for the first three renewals for the three wastes, giving a COD of the release material of 67.7 g of O<sub>2</sub>.L<sup>-1</sup> for putrescibles, 10.6 g of O<sub>2</sub>.L<sup>-1</sup> for paper and cardboard and 5.4 of O<sub>2</sub>.L<sup>-1</sup> for sawdust.

**Keywords:** solid waste, sanitary landfill, putrescibles, paper-cardboard, sawdust, lixiviation

**PRELIMINARY PHYTOCHEMICAL STUDY OF *HELIOPSIS HELIANTHOIDES* (L.) SWEET.,  
*CELOSIA PLUMOSA* (VOSS) BURV. AND *CELOSIA CRISTATA* L.**

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**ABSTRACT**

**Introduction:** *Heliopsis helianthoides* (L.) Sweet., *Celosia plumosa* (Voss) Burv. and *Celosia cristata* are ornamental plants widely used in folk medicine of Europa, South America and Far East as antioxidant, antibacterial, anti-inflammatory, anti-diabetes, tonic, antinociceptive, anxiolytic, diuretic and analgesic agents as well as for treatment of hypertension, dysentery, coughing, conjunctivitis, blood diseases, oral cavity infections, menstrual pains, menostasia, intestinal, pulmonary, hemorrhoid bleedings, thrombophlebitis, headache, cataract, diabetes, atherosclerosis, leucorrhea and osteoporosis. These plants have a rich chemical composition represented by phenolic, terpene and steroid compounds. These plants are non-pharmacopoeial in Ukraine and require more detailed study.

**Materials and methods:** Herba, roots, leaves, stems and flowers of *Heliopsis helianthoides* (L.) Sweet., *Celosia plumosa* (Voss) Burv. and *Celosia cristata* harvested in the flowering phase in 2019-2021 in Kharkiv region (Ukraine). Preliminary study of the chemical composition was performed using chemical reactions, by paper and thin layer chromatography.

**Results:** According to the results of experiments, free amino acids, free carboxylic and cinnamic acids, flavonoids, terpenoids and steroids were found in all objects. Betacyanins were found in the herba, leaves, stems and flowers of *Celosia plumosa* (Voss) Burv. and *Celosia cristata* L.

**Conclusions:** The obtained results confirm the prospect of further phytochemical studies of the all raw materials and further development of new herbal remedies on their basis.

**Keywords:** chemical composition, *Heliopsis helianthoides* (L.) Sweet., *Celosia plumosa* (Voss) Burv. and *Celosia cristata* L.



**1,2-BENZOTHIAZINE DERIVATIVES: SYNTHESIS, MOLECULAR DOCKING  
AND  $\alpha$ -GLUCOSIDASE INHIBITION**

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**ABSTRACT**

DM (Diabetes mellitus) is among the most sever chronic diseases that has infected a massive human population. Prominently, DM is caused due to decreased insulin production that ultimately raises the glucose level in the blood.  $\alpha$ -Glucosidase enzyme hydrolyzes the long chain sugars into small sugars and this process increases the glucose level in the blood. In this regard, various synthetic drugs are helpful to block the activity of  $\alpha$ -glucosidase enzyme. A variety of 1,2-benzothiazine derivatives with an acetamide group were synthesized and screened against  $\alpha$ -glucosidase enzyme for their inhibitory potentials. The derivatives **11c**, **12a**, **12d**, **12e** and **12g** displayed good *in vitro* inhibitions of  $\alpha$ -glucosidase enzyme having IC<sub>50</sub> values of 30.6, 18.2, 20.7, 35.1 and 24.2  $\mu$ M respectively compared to the standard drug, acarbose (58.8  $\mu$ M). Similarly, good ligand-protein binding modes of these derivatives during *in silico* studies also supported the bio-evaluation results.

**Keywords:** Alpha-glucosidase, antidiabetic, synthesis, 1,2-benzothiazine, docking

**ELECTRONIC, ELASTIC, THERMODYNAMIC PROPERTIES OF  $Mg_3Zn$  COMPOUND:  
INSIGHTS FROM DFT-BASED COMPUTER SIMULATION**

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**ABSTRACT**

Ab-initio calculations were performed to reveal and thoroughly understand the structural, electronic, elastic, and thermodynamic properties of  $Mg_3Zn$  compound in the  $L1_2$  phase. The calculated lattice constant for this compound is in good agreement with the available values. The electronic band structure and density of states were obtained and compared with existing theoretical calculations, and it was shown that this compound exhibits metallic character.  $Mg_3Zn$  compound in  $L1_2$  phase was found to be mechanically stable from elastic constants calculations. Debye temperature, melting temperature, minimum thermal conductivity and Vicker hardness of this material has been investigated. Furthermore, internal free energy, entropy, specific heat capacity at constant volume and vibrational free energy changes of  $Mg_3Zn$  compound were analysed and discussed between the temperature range of 0–800 K using the quasi-harmonic approximation.

**Keywords:** Ab-initio, DFT, elastic constant, thermodynamic

**AB INITIO CALCULATION OF MECHANICAL AND THERMODYNAMIC PROPERTIES OF  
NbOsSi COMPOUND IN C1<sub>b</sub> PHASE**

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**ABSTRACT**

The half Heusler alloys NbOsSi, which has face-centred cubic (fcc) crystal structure and conform to Fm $\bar{3}$ m space group, has been investigated using Generalised Gradient Approximation (GGA) in the Density Functional Theory (DFT) as implemented in Quantum-Espresso program package. The computed lattice constants and elastic constants are in good agreement with available data. Basic physical properties of this material such as bulk modulus, anisotropy factor, shear modulus, Poisson's ratio, Cauchy pressure, elastic constants and Young's modulus were obtained and some of them were compared with those in the literature. Several physical properties such as Debye temperature, melting temperature, minimum thermal conductivity and Vicker hardness, which are important in terms of materials science and engineering, were investigated.

**Keywords:** Ab-initio, DFT, elastic constant, anisotropy, thermodynamic



**LEGAL AND ECOLOGICAL SYSTEM OF THE REPUBLIC OF CROATIA**

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**ABSTRACT**

Sustainable development is a complex matter from both a theoretical and a practical point of view, and it is characterized by a distinct interdisciplinarity. Rethinking sustainable development through environmental action arose as an attempt to find answers to the growing problems that arise within the environment and natural resources on a global scale, which have become an important issue in science, politics and economics. Important questions need to be answered about how to continue the economic growth of developed Western countries with the necessary modernization of underdeveloped economies without compromising climate stability, existing ecosystems and the availability of energy and other natural resources essential for further civilization. The complexity of the sustainability of environmental performance can be summarized in the environmental, sociological and economic dimensions that together determine the sustainability of society. As the pandemic has limited economic activity, consumption and movement, pollutant emissions and resource exploitation have temporarily slowed, and the rate of environmental damage has temporarily fallen in most areas. This is proof of how much damage human activity causes to the environment. The pandemic has only confirmed that the futures of nature and human activities are closely intertwined, so the interdependence of ecological interactions and socioeconomic dimensions requires a new relationship between nature and people. The collapse of any of these dimensions is sufficient to destroy the entire structure and survival of modern society, so sustainable development can and should be linked to national security as a political category. How sustainable development will be further treated in the \* new normal \* and numerous challenges posed by the situation around the COVID-19 pandemic should be considered as the civilizational sustainability of the national economy in the conditions of global movements and limitations in the world.

**Keywords:** Ecological system, sustainable development, national economy of the Republic of Croatia, legal regulations, pandemic COVID-19.

**PROSTITUTION HANDLING STRATEGIES IN HIV/AIDS PREVENTION BASED ON LOCAL WISDOM: BANYUWANGI REGENT REGULATION NO. 45 YEAR 2015**

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**ABSTRACT**

**Background:** The influence of modernization which gives negative effects of globalization which leads to one of the increasing prostitution. Banyuwangi regency one of the areas affected by the negative effects of globalization is the increase of prostitution that has been utilized into business opportunities. Business prostitution perpetrators not only women but has penetrated to men, this resulted in the opening of the entrance of HIV / AIDS in Banyuwangi Regency. The Regency Government has attempted to anticipate the rise of HIV / AIDS incidents which is the effect of the proliferation by issuing Banyuwangi Regent Regulation no. 45 years 2015 on prevention and control of HIV / AIDS. With the enactment of the local regulation is expected as a legal paying in the implementation of HIV / AIDS prevention in Banyuwangi Regency so that it can reduce and reduce the incidence of HIV / AIDS in Banyuwangi Regency.

**Objectives:** To illustrate the strategy for achieving policy implementation in the handling of prostitution in HIV / AIDS prevention efforts in Banyuwangi Regency based on Banyuwangi Regent Regulation No.45 year 2015.

**Methods:** The research is a qualitative research using descriptive approach based on Health Policy perspective.

**Results:** Prostitution handling strategy in HIV / AIDS prevention efforts based on Banyuwangi Regent Regulation no. 45 of 2015 implemented through: Local regulations governing HIV / AIDS prevention policies, policy strategies for the handling of prostitution in HIV / AIDS prevention efforts, the handling of prostitution and the handling of discrimination against people living with HIV / AIDS.

**Keywords:** Strategy of Prostitution handling, HIV / AIDS prevention, Banyuwangi Regent's Regulation, Banyuwangi Regency.



**CLAIMING HISTORY: WOMEN’S MEMOIRS OF STRUGGLES AGAINST MARCOS MARTIAL LAW**

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**ABSTRACT**

The Philippines commemorates the 49th anniversary of the fall of Marcos Martial Law. The commemorations were done through several demonstrations of activists, students, and survivors and government declarations proving the atrocities of the Marcos Martial Law. Despite all these efforts however, one can still see the rampant campaigns of individuals, and political parties who try to deny the narrative of struggle against the Marcos dictatorship. Through a phenomenological approach, and a descriptive – narrative method, this study explores the memoirs of struggles of women during Marcos Martial Law in Mahayag, Zamboanga del Sur Philippines. Anchored to the Challenge and Response Theory, this study also looks into how these women cope with their struggle during the Marcos Martial Law. Studies such as this one is high time important in the Philippines especially with the 2022 national elections coming where politicians employ troll farms to propagate fake news, and propaganda and attempt to revise and distort history. This study also puts emphasis on the struggles of women as they are underrepresented in the narratives already available in the existing literatures about Marcos Martial Law or in the history of conflicts in the Philippines.

**Keywords:** Women    Marcos Martial Law    Memoirs of Struggles    Conflict History





## WOMEN'S ENTREPRENEURSHIP AND THE SOCIO-ECONOMIC DEVELOPMENT

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### ABSTRACT

Female entrepreneurship is important since it is *spritus movens* of job creation and contributes to the increase of the standard of living in each society. Female entrepreneurship is a solution for those women who want control over their career and want to oppose “the glass ceiling effect” (Dafoe, S, 2001). Therefore, female entrepreneurship is closely linked and depends on gender equality in given society, since economic empowerment of women, who are half part of population in each country, is essential part of the improvement of women position towards equal opportunities. Closing the global gender gap can give the world economy a substantial boost —potentially doubling the growth in global GDP contributed by women in the next decade (McKinsey Global Institute, 2016).

It is very difficult for women to change the already established models of society that favored the role of a man in the business world, and besides, women did not receive the support of the environment in which they live, precisely because of the traditional relationships that exist in society. Gender stereotypes are still dominant, traditional and obsolete beliefs about what kind of work women should do. However, women nevertheless decided to pave the way, to take their place and prove themselves in the business world, which has long been operated exclusively as "the men's field." Women are moving with great success to leading positions in companies, thereby breaking stereotypical opinions on the role of women in business. Among other things, using perseverance in work and intuition, women gain some business benefits. If entrepreneurship in the broadest sense of the word implies taking over the risk of commercializing a new idea through the production and sale of products / services through the establishment of one's own firm, an entrepreneur is anyone who meets these requirements.

**Keywords:** female entrepreneurship, socio-economic development.



**PAKISTAN'S JUDICIAL INDEPENDENCE ORIGIN AND INVOLVEMENT IN  
NATION-BUILDING: A HISTORICAL PERSPECTIVE DETAILING JUDICIAL DILEMMAS**

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**ABSTRACT**

An independent judiciary is the basis of a balanced, unbiased, and equitable community. Freedom suggests that law professionals can address legitimate determinations unobstructedly, including prominent lawmakers, political persons, or common residents. Therefore, guaranteeing resolutions depend on a legal structure rather than on the outcome of governmental obligations or supporting some manhood. Supplied with liberation, the legal method works as a defense of the people's priorities and independence. Pakistan's Constitution specifies a sovereign jury, but politics, over the ages, have been assuring that our authorities always survive in an environment of anxiety and give partnership and beneficial settlements under the control of the administrator. The paper achieves that an autonomous constitutional structure may not be the answer to all the difficulties of Pakistan, but it is the most powerful level to resolving the dilemmas fronted by the country.

**Keywords:** Independent Judiciary, Fundamental equalities, Democracy, Parliamentary Government, History of Pakistan Judiciary.



## **EARTHQUAKES ECONOMIC COSTS THROUGH RANK-SIZE LAWS**

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### **ABSTRACT**

The presentation is devoted to explore the magnitude features of the earthquakes occurring in Italy between January 24th, 2016 and January 24th, 2017, to elaborate a cost indicator proposal. The well-known tragic seismic events with epicentres at Accumuli, Visso, Ussita, Castelsantangelo sul Nera, Norcia and Montereale have occurred during the above mentioned period. We develop two different rank-size analyses using the standard Zipf-Mandelbrot Law and the Universal Law on this dataset.

The idea of designing a measure to evaluate the economic impact of earthquakes is based on the obvious evidence of a cause-effect relationship between the magnitude of earthquakes and the economic cost deriving from them. We draw attention to the role of the infrastructures resistance in the relationship between the damages and the sequences of the seismic events, so we conjecture different forms of cost indicators.

**Keywords:** Earthquake, magnitude, economic cost, Zipf-Mandelbrot law, rank-size analysis, Italy.

**YÜZ TANIMAYA DAYALI YOKLAMA SİSTEMİ**  
**FACE RECOGNITION BASED POLLING SYSTEM**

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**ÖZET**

Gelişen teknoloji ışığında bilgisayar programlarına ve bilgisayar otomasyonlarına ilgi oldukça artmaktadır. Özellikle makinelerin deneyimlerden öğrenmesi ve insan benzeri görevleri gerçekleştiren yapay zekâ donanımlı bilgisayarlar sayesinde günlük rutin işlemler oldukça kolaylaşmaktadır. Bu işlerden biri de günlük yoklama alınması işlemidir. Yoklama, okul veya iş yeri gibi insanların rutin olarak bulunması gerekli olan alanlarda bulunup bulunmadığının kontrol edilmesi kavramıdır. Yoklama alınması kavramı; işe yerlerine girişte giriş kartlarının okutulması veya sınıfta öğretmenlerin listeye imza attırması şeklinde ifade edilebilir. Her alanda olduğu gibi yoklama işlemlerinde de büyük açıklar mevcuttur. Giriş kartının farklı kişi ile gönderilmesi veya listeye başka birisinin imza atması gibi. Bu sebeple bu çalışmada hem yoklama kavramının işleyişini kolaylaştırmak hem de açıklara engel olmak adına yapay zekâ destekli yüz tanımaya dayalı yoklama sistemi geliştirilmiştir. Geliştirilen bu sistem için daha önceden oluşturulmuş bir veri tabanındaki kayıtlı yüzler tanıtılarak eğitim işlemi gerçekleştirilmiştir. Eğitim sonucunda sistemin çalışan veya öğrenci grubuna ait yüzleri tanıyarak, imza sistemine veya kart bağlantılı geçişlerine gerek duyulmadan yoklama alınması sağlanmıştır. Geliştirilen sistem sayesinde özellikle derslerde öğrenci yoklamalarındaki tek tek yoklama veya listelere imza attırma gibi karmaşıkları önlemenin yanı sıra belirttiğimiz yoklamadaki açıklıklarında önüne geçildiği düşünülmektedir.

**Anahtar sözcükler:** Yüz Tanıma, Yoklama, Otomasyon

**ABSTRACT**

In the light of developing technology, interest in computer programs and computer automation is increasing. Daily routine operations become much easier, especially thanks to machines learning from experience and artificial intelligence-equipped computers that perform human-like tasks. One of these jobs is the process of taking daily attendance. Attendance is the concept of checking whether people are in areas where they need to be routinely present, such as a school or workplace. The concept of taking attendance; It can be expressed as having the entrance cards read at the entrance to the workplaces or having the teachers sign the list in the classroom. As in every field, there are large gaps in polling processes. Like sending the entry card with a different person or someone else signing the list. For this reason, in this study, a polling system based on artificial intelligence supported face recognition has been developed in order to both facilitate the functioning of the polling concept and prevent the deficits. For this developed system, the training process was carried out by introducing the registered faces in a previously created database. As a result of the training, the system recognized the faces of the employee or student group, and it was ensured that attendance was taken without the need for signature system or card-related passes. Thanks to the developed system, it is thought that in addition to preventing complexities such as taking student attendance one by one or signing lists, especially in the lessons, the vulnerabilities in the attendance are prevented.

**Keywords:** Face Recognition, Polling System, Automation

**SINIFLANDIRMA YÖNTEMLERİNDEN İKİLİ LOJİSTİK REGRESYON, KNN, CART VE  
NAIVE BAYES YÖNTEMLERİNİN KARŞILAŞTIRILMASI**

**COMPARISON OF BINARY LOGISTICS REGRESSION, KNN, CART AND NAIVE BAYES  
METHODS OF CLASSIFICATION METHODS**

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**ÖZET**

Gelişen teknoloji sayesinde elektronik ortamlarda kaydedilen verilerin saklanması ve istenildiği zaman erişilebilir olması yıllar içinde önemini artırmıştır. Büyük veri yapılarından değerli bilgilerin çıkarılması olarak da adlandırılan veri madenciliği, depolama alanlarının ve teknolojik gelişmelerin bir sonucu olarak ortaya çıkar. Veri madenciliği, istatistiksel yöntemleri ve öğrenme algoritmalarını kullanarak veriyi daha kullanışlı hale getiren bir metottür. Sınıflandırma, veri madenciliğinde kullanılan başlıca yöntemlerden biridir ve öğrenme algoritmasına dayanır. Ulaşılmak istenen bilginin elde edilmesi için uygulanan sınıflandırma algoritmaları, ilgilenilen verinin ortak özelliklerine göre veri setinin belirli sınıflara ayrılmasını sağlamaktadır. İletişim, ulaşım, market, depolama, sağlık ve daha birçok alanda sınıflandırma algoritmaları kullanılmaktadır. Bu çalışmada, veri madenciliğinde kullanılan sınıflandırma yöntemlerinden İkili Lojistik Regresyon, Sınıflandırma ve Regresyon Ağacı (CART), Naive Bayes ve K-En Yakın Komşu yöntemi (KNN) incelenmiştir. Nisan-Aralık 2015 döneminde Pakistan'da yapılan bir çalışmada kalp yetmezliği olan 299 hastaya ilişkin bir veri seti ele alınmıştır. Bu veri seti kullanılarak, çalışmada ele alınan yöntemler hem doğruluk oranı hem de duyarlılık kriterleri bakımından karşılaştırılmıştır. Bu karşılaştırma R-Studio programı kullanılarak yapılmıştır. Elde edilen sonuçlara göre en yüksek doğruluk oranı %86.9 ile CART yöntemine ait iken en düşük doğruluk oranı %68.3 ile KNN yöntemine aittir. Buna karşın, en düşük duyarlılık değeri %90.2 ile CART yöntemine ait iken en yüksek duyarlılık %97.5 ile Naive Bayes yöntemine aittir. Sonuç olarak, bu veri seti için doğruluk oranı kriteri bakımından CART, duyarlılık kriteri bakımından Naive Bayes yönteminin diğer yöntemlere göre daha iyi sonuçlar verdiği söylenebilir.

**Anahtar kelimeler:** Sınıflandırma yöntemleri, İkili Lojistik Regresyon, KNN, CART, Naive Bayes

**ABSTRACT**

Thanks to the developing technology, the storage and accessibility of the data recorded in electronic media have increased its importance over the years. Data mining, also called extracting valuable information from big data structures, emerges as a result of storage areas and technological developments. Data mining is a method that makes data more useful by using statistical methods and learning algorithms. Classification is one of the main methods used in data mining and is based on a learning algorithm. The classification algorithms applied to obtain the desired information enable the data set to be divided into certain classes according to the common characteristics of the data of interest. Classification algorithms are used in communication, transportation, market, storage, health, and many other areas. In this study, Binary Logistic Regression, Classification and Regression Tree (CART), Naive Bayes, and K-Nearest Neighbor method (KNN), which are classification methods used in data mining, were examined. A dataset of 299 patients with heart failure was discussed in a study conducted in Pakistan during the period of April-December 2015. Using this data set, the methods covered in the study were compared in terms of both accuracy rate and sensitivity criteria. This comparison was made using the R-Studio program. According to the results obtained, the highest accuracy rate belongs to the CART method with 86.9%, while the lowest accuracy rate belongs to the KNN method



with 68.3%. On the other hand, the lowest sensitivity value belongs to the CART method with 90.2%, while the highest sensitivity belongs to the Naive Bayes method with 97.5%. As a result, it can be said that the CART method in terms of accuracy rate criteria and the Naive Bayes method in terms of sensitivity criteria give better results than other methods for this data set.

**Keywords:** Classification methods, Binary Logistics Regression, KNN, CART, Naive Bayes

**EVALUATING THE RECENT COSMOLOGICAL DATA VIA DEEP LEARNING ANALYSIS**  
**DERİN ÖĞRENME ANALIZI İLE SON KOZMOLOJİK VERİLERİN DEĞERLENDİRİLMESİ**

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**ABSTRACT**

According to the Hubble law, the cosmos has a cosmological enlargement in all directions. In recent years, the deep learning(DL) approach has increased importance in evaluating cosmological datasets. In this study, we firstly designed the Long Short Term Memory (LSTM) network which is a special type of deep learning. The LSTM network was trained on the cosmological data for six different activation functions and the process of training the LSTM network was repeated 500 times with the same dropout rate to create uncertainty regions for each activation function. In the final stage, the uncertainty regions corresponding to each function were compared among themselves.

**Keywords:** The Hubble parameter, Deep Learning, Long Short Term Memory.

**ÖZET**

Hubble yasasına göre, kozmos her yöne kozmolojik bir genişlemeye sahiptir. Son yıllarda derin öğrenme (DÖ) yaklaşımı, kozmolojik veri kümelerini değerlendirmede önemini artırdı. Bu çalışmada ilk olarak derin öğrenmenin özel bir türü olan Uzun Kısa Vadeli Hafıza Ağını (UKVH) tasarladık. Daha sonra bu ağ 6 farklı aktivasyon fonksiyonları için eğitildi ve bu eğitim süreci her aktivasyon fonksiyonu için seyreltme oranı aynı kalmak kaydı ile 500 kere tekrar edilerek bir belirsizlik bölgesi oluşturuldu. Son aşamada her aktivasyon için elde edilen belirsizlik bölgeleri kendi içlerinde karşılaştırıldık.

**Anahtarlar kelimeler:** Hubble parametresi, Derin Öğrenme, Uzun Kısa Vadeli Hafıza.



**DISEASE OUTBREAK PREDICTION: DATA SOURCES AND TECHNIQUES**

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**ABSTRACT**

Disease outbreak is an amount of illness cases in a normal expectancy that arises unexpectedly and in a relatively large geographic area. Disease outbreaks are usually caused by an infection, spreading through person-to-person contact, animal-to-person or from any other medium. An adequate amount of pathogens, transmission mode and vulnerable people are some of the known factors for disease outbreak. In India, several outbreaks have been reported in the past such as Nipah, Zika, Chikungunya, Avian influenza, Japanese Encephalitis (JE), Meningococcal, Dengue fever, Severe Acute Respiratory Syndrome (SARS), Plague and Cholera from year 2000 to year 2018. Currently as well, the world is facing disease outbreaks such as Ebola virus in Democratic Republic of the Congo and Guinea, Middle East respiratory syndrome coronavirus (MERS-CoV) in Saudi Arabia and United Arab Emirates and the Covid-19 pandemic globally. Therefore, there is a need of a system that can predict a disease outbreak using data from multiple sources such as news headlines data, social media trends data, search engine trends data. Data sources such as news headlines related to disease outbreak and social media trends and search engine trends are being used for predicting disease outbreaks frequently with various computational techniques such as Machine learning, Statistical techniques and some hybrid approaches. This work attempts to list and discuss latest research approaches being carried out for disease outbreak prediction aiming to summarize the trends in the domain.

**Keywords:** Disease outbreak, news headline, social media trends, search trends, machine learning.





**PREDICTION OF THE SIMPLE COMPRESSIVE STRENGTH OF LIME STABILIZED CLAYEY SOILS USING ARTIFICIAL NEURAL NETWORKS**

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**ABSTRACT**

The laboratory tests are performed to determine the efficiency of mineral additions used in the soil stabilization, which costs time and expense. Hence, to avoid this problem, the use of the Neural Networks technique allows rapid and efficient prediction of the geotechnical properties of soils. In the present work, this technique was applied to develop a simple compressive strength prediction model of lime stabilized clay soils. However, a database collected from the experimental results of several previous research was used by considering the influencing parameters on the compressive strength. The training, testing and validation performance of the model showed a good correlation reaching and a low MSE. On the other hand, the parametric study and the comparison of the predicted values with experimental results not included in the database proved the performance of the model. According to the found results, the ANNs model is reliable and could be used for the prediction of the simple compressive strength of lime stabilized clay soil.

**Keywords:** Clay soils, stabilization, lime, artificial neural network, prevision, simple compressive strength.



## **CYBER FORENSICS: RELEVANCE OF DIGITAL EVIDENCE IN INDIA**

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### **ABSTRACT**

The evolution in cyber forensics has opened fresh and effortless way for assemblage of evidences in cyber crimes. However, cyber forensics and digital evidences are too specific in nature, there is always a fear about its truthfulness and its acceptability in courts. Cyber forensic is the analysis of data on or recovered from computer storage media in a manner that the information can be used as evidence in the courtroom. Digital evidence is any important data stored in a computer system or transmissible digitally which a party to a legal dispute can use during the trial.

The Indian Evidence Act, 1872 (IEA), provides for legal model on the admissibility of evidence in the courtroom. Before 2000 when the IT Act, 2000 was not in place, all the digital evidence gathered through various ways including cyber forensics was considered as “documentary evidence” and secondary evidence of these electronic “documents” were proved through printed reproductions, this was in compliance to sections 63 and 65 of the Indian Evidence Act. It was in 2003, when the Supreme Court observed certain conditions to be followed before authentication of video conferencing. Later in the same year the court held “that presence of the witness does not mean actual physical presence” and the acceptability of such electronic record known as a computer output, depends on the fulfillment of the four conditions under Section 65B (2) of Indian Evidence Act 1872. Using E-evidence in courts as per section 65B of the IEA helps both the prosecution and the investigation agencies.

Hence, cyber forensics could aid in the enhancement of the efficacy of the criminal justice system by giving a go-bye to the age old methods of investigation, making our police and enforcement agencies more swift and apt with changing requirements of the time.



**THE OPTIMIZED ARTIFICIAL NEURAL NETWORK MODEL WITH  
LEVENBERG-MARQUARDT ALGORITHM FOR GLOBAL SOLAR RADIATION ESTIMATION  
IN OUARGLA CITY OF ALGERIA**

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**ABSTRACT**

This work investigates the use of neural networks in modeling the hourly solar radiation in Ouargla city, Algeria. feed-forward neural network (FFNN) model characterized by a similar structure (seven neurons in the input layer, one hidden layer, and one neuron in the output layer) is constructed with the aim of estimating the hourly solar radiation. A set of 59160 data points for NN were used to test the neural networks. 80%, 10%, and 10% of the total data were used for the training, the validation, and the test of the model. The correlation coefficients (R) values for all phases are 0.9838 NN, root mean square error (RMSE) of 59.9209 (Wh/m<sup>2</sup>), and MAE of 35.9070 (Wh/m<sup>2</sup>) Results obtained indicate that the optimization strategy satisfies practical requirements. It can successfully be generalized for any location in the world and be used in other fields than solar radiation estimation

**Keywords:** Estimation; Solar Radiation; Neural Network; Ouargla



**PREDICTION HOURLY SOLAR RADIATION USING ARTIFICIAL NEURAL NETWORK  
TECHNIQUE OF BENI SLIMANE, ALGERIA**

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**ABSTRACT**

This work investigates the use of neural networks in modeling the hourly solar radiation in the Beni Slimane city, Algeria. Two feed-forward neural network (NN) models characterized by a similar structure (ten neurons for NN1 and NN2 in the input layer, one hidden layer and one neuron in the output layer) are constructed with the aim of predicting the hourly solar radiation. A set of 5832 data points for NN1 and NN2 were used to test the neural networks. 70%, 15%, and 15% of the total data were used respectively for the training, the validation, and the test of the two models. The correlation coefficients (R) values for all phases are 0.9823 and 0.9812 respectively for NN1 and for NN2. Results showed that the neural networks techniques have best performance compared to the algorithms training.

**Keywords:** Prediction; Solar Radiation; Neural Network; Beni Slimane.

**BİR KÜLTÜREL DİPLOMASİ KURUMU OLARAK YUNUS EMRE ENSTİTÜSÜ:  
YAPISI, İŞLEYİŞİ VE TARİHÇESİ**

YUNUS EMRE INSTITUTE AS A CULTURAL DIPLOMACY INSTITUTION: ITS STRUCTURE,  
FUNCTIONING AND HISTORY

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**ÖZET**

Bu çalışmada kültürel diplomasi alanında ülkemiz adına çok yoğun ve önemli faaliyetlerde bulunan özellikle yumuşak gücün tesis edilmesine büyük bir katkı sunan, dünyanın birçok ülkesinde kurmuş olduğu kültür merkezleri aracılığıyla çalışmalarını yürüten Yunus Emre Enstitüsü'nün yapısı, işleyişi ve tarihçesi incelenecektir. Bu manada Yunus Emre Enstitüsü'nün bir kamu vakfı olan Yunus Emre Vakfı'na bağlı ve 05.05.2007 tarih, 5663 sayılı kuruluş kanundaki amaçları gerçekleştirmeye çalışan bir kurum olduğu bilinmelidir. Yunus Emre Vakfının amacı ise “Türk dilini, tarihini, kültürünü ve sanatını tanıtmak; bununla ilgili bilgi ve belgeleri dünyanın istifadesine sunmak; Türk dili, kültürü ve sanatı alanlarında eğitim almak isteyenlere yurt dışında hizmet vermek; Türkiye'nin diğer ülkeler ile kültürel alışverişini artırıp dostluğunu geliştirmektir”. 2009 yılında faaliyetlerine başlayan Yunus Emre Enstitüsü yurt dışında bulunan kültür merkezlerinde Türkçe eğitimi vermekte, bunun yanı sıra farklı ülkelerdeki dış paydaşlarla iş birliği yapmaktadır. Enstitü'nün farklı eğitim kurumları ile kurduğu iletişim vasıtasıyla sunulan Türkçe öğretimi ise kurum tarafından dünya çapında desteklenmektedir. Enstitü'nün Kültür Merkezleri tarafından Türk kültür ve sanatını tanıtmak amacıyla birçok kapsamlı etkinlik düzenlenmektedir. Düzenlenen ulusal veya uluslararası etkinlikler ülkemizin temsil ve tanıtımına doğrudan katkı sunmaktadır. Ayrıca kurumun bir enstitü statüsünde olması sebebiyle bilimsel çalışmalara destek verilmektedir.

**Anahtar kelimeler:** Yunus Emre, Türk Dili, Türk Tarihi, Türk Kültürü, kültürel diplomasi

**ABSTRACT**

The structure, functioning and history of Yunus Emre Institute, which carries out very intense and important activities on behalf of Turkey in the field of cultural diplomacy, especially making a great contribution to the establishment of soft power and carrying out its activities through the cultural centers it has established in many countries of the world, will be examined in this study. In this sense, it must be known that Yunus Emre Institute is an institution affiliated to Yunus Emre Foundation, which is a public foundation and trying to achieve the objectives of the law of establishment no. 5663 and dated 05.05.2007. The objective of Yunus Emre Foundation is “to promote Turkish language, history, culture and art; to make the relevant information and documents available to the world; to provide services abroad to those who want to receive education in the fields of Turkish language, culture and art; and to increase Turkey's cultural exchange with other countries and to develop friendships”. Yunus Emre Institute, which started its activities in 2009, provides Turkish education in cultural centers abroad, as well as cooperating with external stakeholders in different countries. Teaching Turkish, which is presented through the communication of the Institute with different educational institutions, is supported worldwide by the institution. Many comprehensive events are organized by the Institute's Cultural Centers to promote the Turkish culture and art. Such national or international events directly contribute to the representation and promotion of Turkey. In addition, scientific studies are supported since the organization has the status of an institute.

**Keywords:** Yunus Emre, Turkish Language, Turkish History, Turkish Culture, cultural diplomacy

**ANALYSIS THE PROXY WAR OF THE COLD WAR IN THE MIDDLE EAST OF THE ISLAMIC  
REPUBLIC OF IRAN AGAINST THE UNITED STATES  
(A CASE STUDY OF THE AFGHANISTAN CRISIS)**

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**ABSTRACT**

After September 11, the Middle East, and especially Afghanistan, was at the center of the attention of the international community and especially the United States. The end of the Cold War and the collapse of the bipolar system did not mean to create regional peace. The main reason is the direct and indirect intervention of the United States, one of the areas in the center of these interventions is the Middle East and the crisis of Afghanistan. The US military attack on Afghanistan (2001) and the fall of the Taliban has led to a change in power balance in the region and increasing tensions in the relations between the Islamic Republic of Iran against the United States. The competition of the two countries to gain regional superiority, although they did not enter direct military conflict, have exploited the title of the opposite political ideology in the region as a tool for pursuing their own interests and regional allies. The two countries in the framework of a series of Naughty wars to spread sectarianism in poor countries in the region. The United States and Iran have long been engaged in regional influence in Iraq in Iraq. Which is more due to religious, geographic, historical and security differences and geopolitical competitions. This research was pursuing a descriptive-analytical method following the answer to the question of whether the Native War of the Cold War of the Middle East of the Islamic Republic of Iran against the United States in the form of nightstands in Afghanistan its influence on the security of the Middle East and hewable What is the explanation? The research hypothesis is that the Native War of the Cold War in the Middle East of the Islamic Republic of Iran against the United States was involved in a inebriation war, and through which they are increasing their influence and reducing rival influence. The findings of the research indicate that the government of the Islamic Republic of Iran (sponsor) has tried to increase the support of the Taliban (follower) and its influence in Afghanistan, in front of the United States, during the twenty-year wars with the destruction of the Taliban To reduce Iran's influence in this region, change the balance of power in their favor. But with the withdrawal of US troops and its allies, this balance has changed in favor of Iran, led to an increase in Iran's influence in this region and Afghanistan, and change the balance of power in their favor.

**Keywords:** America, Iran, proxy Wars, the Afghan crisis, power balance, regional security.

**INTERNAL FUNDAMENTAL FACTORS LIMITING  
THE RISE OF IRANIN INTERNATIONAL POLITICAL ECONOMY**

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**ABSTRACT**

The continuation of the unfavorable economic performance of Iran has become a prominent issue in the public sphere and academic assemblies in Iran, on the other hand, in the modern age of national wealth has become a basis for the production of national power of governments, so that in the modern era of hegemony in the economy International Politicalism has been large countries that have a significant relative contribution to the world's wealth production. This research seeks to answer this problem which basis has caused the continuation of the unfavorable Iranian economic performance as the consequence of this The performance of Iran's national wealth has not experienced a good increase as the basis for national power and security in the international competitive system compared to emerging powers. The science of economics for a very long time was to study the economic history. After clarifying a lot of shortcomings, economics finally concluded that the study of the history of economics is essential. An important point in the new method of Douglas Cecil North, Daron Acemoglu is that economic history plays a great role in this method. Douglas Cecil North, Daron Acemoglu and James Robinson in his research consider the most important fundamental factor in economic growth "institutions". The institutions in the economy are the same "rules of the game". The time efficiency of this research is the period of the Islamic Republic of Iran (past-revolution) from 1979 to 2020. In this research, after extraction of the theoretical framework of the views of Douglas Cecil North, Daron Acemoglu, James A. Robinson, Adrian Leftwich, Robert Gilpin, are from economists of new institutionalists who are taken or bertrothed in the Nobel Prize. We examine and analyze the status of political and economic institutions during the past-Islamic revolution of Iran. The main question of this research is, what factors have limited the internal economic emergence of Iran in the international political economy? The opportunity for the research is that the internal institutional structure of the post-revolution has limited by two dominant and influential coalitions of Iran's economic emergence in the international political economy. The method of collecting data and resources in this research is library and Internet and ..... Therefore, according to this conceptual framework, if institutional structures are closed with limited political access order to economic structures and as a result of the unfavorable economic performance of Iran in the international political economy, it is necessary that political forces in the form of coalitions from such a structure. Political support are analyzed.

**Keywords:** Fundamental Factors of Growth, Limited Access Order, Iranian Political Coalitions, Emerging Powers, International Political Economy.



**LOOK AT THE FLOW OF SOCIAL AND ECONOMIC REFORMS IN CONTEMPORARY  
IRANIAN HISTORY**

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**ABSTRACT**

The flow of social and economic reforms from the Qajar period was started by Amir Kabir, leading to the desired result. In Iran, after the revolution, the reform flow with Sayed Mohammad Khatami began to work, in fact, it can be said that this stream was developed. Political foot in a path that was not news of economic development. The dialogue of civilizations was given by Sayed Mohammad Khatami Sayed Reform He stayed in oil, or in another language, the economy of the nightmare of the Iranian economy continued to take place. The party was considered a manifest of a manifest of the purpose and strategy of the party's thinking strategy, but in general was not published in society that different classes of society in the field of social and economic movements of the party, which themselves as the weakness is in this way. After passing through the presidency of Ahmadinejad and on the emergence of the Governor's government, the flow of reforms to realize this was entered into negotiations with the United States so that he might be able to break forty-year sanctions of the Islamic Revolution. Born was born with birth of new blood in the veins of reform. But with the arrival of Republicans in the United States and the withdrawal of Trump from the present and the new sanctions of the Iranian economy in its darkest time. The path was open for the continued revolutionary slogans, but their realization was not clear. Even some of the reformists today seek to capture a new manifesto that can lead to new and salvation by new work, they can be said that the goals of this manifesto are issues that all the country toward today's civilization. Political or economically approaching the peaks of success, but what is noteworthy is the wrong policies of the country or their incorrect implementation, either false or semi-dimensioned. Turned into a bright flow. For certain reasons, it has more political approach and political discourse, in order to make an economic discourse that is certain if political and economic development will not be done with each other, and our evidence of the failure of the reform process in contemporary Iran.

**Keywords:** Iran, social-cultural and economic reforms, political parties, development and growth, reform process, contemporary Iranian history, political discourse.



**DÜZEN VE İSTİKRARIN GARANTÖRLÜĞÜ İLE ÖZGÜRLÜK VE DEMOKRASİNİN  
DÜŞMANLIĞI ARASINDA BİR KAVRAM: OTORİTE**

**AUTHORITY: A CONCEPT BETWEEN THE GUARANTEE OF ORDER AND STABILITY, AND THE  
ENMITY OF FREEDOM AND DEMOCRACY**

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**ÖZET**

Bildiri, otorite ve dini otorite kavramlarının sosyolojik analizi ve gençlerin bu kavramlarla ilgili algıları üzerine kurulmuştur. Otorite, benzeri işlevlere sahip değişik figürlerle, insan hayatının doğumdan-ölüme bütün alanlarında etkili olan bir olgudur. Ailede anne baba otoritesiyle başlayan süreç, okulda öğretmen/hoca, iş hayatında yönetici ve siyasi alanda devlet otoritesiyle devam eder. Tüm bunların üstünde de mutlak otorite olarak adlandırdığımız Tanrı otoritesiyle hayatı ve ötesini kuşatacak bir nitelik arz eder. Otorite, psikoloji, sosyoloji, felsefe, siyaset, hukuk, eğitim ve din gibi birçok alanla irtibatlı, karmaşık hatta tartışmalı bir olgudur.

Bildiri, iki ana bölümden oluşmaktadır. Birinci başlıkta, kavramsal, tarihi ve kuramsal açılardan otorite kavramı üzerinde durulacaktır. Kavramın, aile, eğitim, hukuk, ekonomi ve siyaset kurumları içindeki yeri, psikolojik ve sosyolojik yönleriyle ele alınacak; iktidar, meşruiyet ve hiyerarşi gibi ilişkili kavramlara ve otorite-güç ilişkisine değinilecektir. Tarihi arka planda, otoritenin geleneksel ve modern toplumlardaki değişimi ve bu değişimin dayanakları üzerinde durulacaktır. Kavramın kuramsal yönünde, uyuşmacı ve çatışmacı yaklaşımda otoritenin nasıl ele alındığı hakkında bilgi verilecektir. Otorite konusunda öne çıkan Kojeve, S.Milgram, J. B. Bocheński ve Max Weber gibi isimler üzerinde durulacak ve otorite çeşitlerine değinilecektir. Bu bağlamda, bir otorite/otoritede, teorik otorite/pratik otorite, de jure otorite/de facto otorite, epistemik otorite/deontik otorite ve geleneksel/karizmatik/yasal otorite ayrımlarına yer verilecektir. Otoritenin yakından ilişkili olduğu kurumlardan biri de dindir. Dini otorite kavramının ne anlama geldiği, İslam dininin otoriteye bakışı, bireysel ve kurumsal anlamda kimleri/neleri otorite kabul ettiğine dair hususlar ele alınacaktır.

İkinci bölümde ise, uygulamalı araştırma bulguları sunulacaktır. Örneklem İstanbul'daki devlet ve vakıf üniversitelerinin değişik bölümlerinde okuyan, on erkek-on kızdan oluşmaktadır. Gençlerin otorite algıları, kavramdan ne anladıkları, kimleri/neleri otorite kabul ettikleri, otorite ile güç arasında nasıl bir ilişki kurdukları ve dini alanda kimi/neyi otorite gördüklerine dair görüşleri sunulacaktır. Birinci bölümde, dökümantasyon /belge tarama tekniği; ikinci bölümde ise görüşme/mülakat tekniği kullanılmıştır.

**Anahtar kelimeler:** Din sosyolojisi, otorite, dini otorite, gençlik.

**ABSTRACT**

This paper is based on the sociological analysis of the concepts of authority and religious authority and young people's perceptions about these concepts. Authority is an influential phenomenon in all areas of human life from birth to death, with different figures having similar functions. The process that starts with the authority of the parents in the family continues with the teacher in the school, the administrator in the business life, and the state authority in the political field. Above all of this, authority has a quality surrounding the life and beyond with the authority of God, which we call the absolute authority. The concept of authority is related to many fields such as psychology, sociology, philosophy, politics, law, education, and religion, and it is both a complex and controversial phenomenon.

This paper consists of two main parts. In the first chapter, the concept of authority will be emphasized in terms of its conceptual, historical, and theoretical aspects. The place of the concept in family, education, law, economy, politics institutions will be discussed with its psychological and sociological aspects, and related concepts such as power, legitimacy, hierarchy, and the authority-power relationship will be mentioned. The historical background will emphasize the change of authority in traditional and modern societies



and the basis of this change. Information will be given about the theoretical aspect of the concept and how authority is handled in the congruent and confrontational approach. Names such as Kojève, S. Milgram, J. B. Bocheński, and Max Weber, who are prominent in the subject of authority, will be emphasized and types of authority will be mentioned. One of the institutions in which authority is closely related is religion. The meaning of the concept of religious authority, the view of the religion of Islam on authority, the individual and institutional aspects of who / what they accept as the authority will be discussed.

In the second chapter, the findings of the applied research will be presented. The interviews were conducted with a sample group of ten boys and ten girls studying in different departments of state and foundation universities in Istanbul. In the first part of this paper, the documentation technique was used, and in the second part, the interview technique was used.

**Keywords:** Sociology of religion, authority, religious authority, youth.



**TRUST AND ARMED CONFLICT IN SOLID WASTE MANAGEMENT: A CASE STUDY OF THE AL-FAYHAA UNION, LEBANON**

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**ABSTRACT**

Solid Waste Management is of increasing global concern as urban populations continue to rise. Effective solid waste management is critical for maintaining a good quality, healthy environment. Lebanon is considered to have poor management of solid waste and this is associated with social destabilization caused by armed conflict. In fact, Lebanon has a solid waste crisis long ago and there has not been an efficient or well-implemented national policy on solid waste management for many years. To better understand the context of constraints on solid waste management in Lebanon, a case-study was analyzed in the Al-Fayhaa Union area of north-western Lebanon. Fuzzy Cognitive Mapping was used as a participatory approach methodology to reveal and compare the perceptions and understandings of stakeholders in the public sector, private sector, and community grassroots. A round-table discussion workshop was organized and the total of 29 stakeholders participated in total. The results indicate that all three stakeholder groups considered trust relationships as a key factor that both affects, and is affected by, solid waste management. The private sector and the community grassroots groups also considered armed conflicts to be an important factor. The aggregated “social” map showed that “Lack of trust relationships” and “Armed conflict” were rated in the top five variables that affect solid waste management in Lebanon.

**Keywords:** Lack of trust relationships; armed conflicts; fuzzy cognitive mapping; solid waste management; decision-making process; Lebanon.

## CHALMERS'IN RADİKAL ENSTRÜMENTALİZM VEYA PLÜRALİSTİK REALİZMİNİN ULUSLARARASI İLİŞKİLER İÇİN YORUMU

A.CHALMERS' INTERPRETATION OF RADICAL INSTRUMENTALISM OR PLURALISTIC  
REALISM FOR INTERNATIONAL RELATIONS

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### ÖZET

Chalmers bilimsel teoriler ve dış dünyanın gerçek olduğunu fakat bunların birbirleriyle aynileştirilemeyeceklerini vurgular. Bilimsel teoriler, bilimsel pratiğin bir sonucu olarak, arkası kesilmeksizin üretilir ve değişikliğe uğratılırlar. Realizmin bu yorumunu “plüralistik” diye adlandırma isteği bununla ilgilidir. Dış dünya ve teoriler dünyası, bu dünyaların her ikisi de gerçektir fakat bunlar birbirlerinden bağımsız dünyalardır. Onlar üçüncü bir gerçeklikle yani bilimsel pratikle bir araya getirilirler. Savunduğu konum, teorilerle reel dünya arasındaki dolaysız bir bağı reddetmesi, teorilerin gerçekte nasıl olduğunu açıklayacak teşebbüsler diye görülmesini reddetmesi bakımından enstrümentalisttir. Bu bahsedilen yaklaşımdan neo-realizmin eleştirisi yapılacak ve Chalmers'ın naiv enstrümentalistler olarak tanımladığı gruba neo-realistler uygun düşecektir. 1980 sonrası uluslararası ilişkileri açıklamaya çalışan tüm kavramlarda onun Radikal Enstrümentalizm veya Plüralistik Realizmine uygun düşecek şekilde ele alınacaktır.

**Anahtar kelimeler:** Alan Chalmers, Radikal Enstrümentalizm, Plüralistik Realizm, Neo-Realizm, Teori.

### ABSTRACT

Chalmers emphasizes that scientific theories and the external world are real, but they can't be equated with each other. Scientific theories are produced and modified incessantly as a result of scientific practice. The willingness to call this interpretation of realism as a pluralistic is related to this. Both the external world and world of theories are real, but they are different from each other. They are brought together by third reality, scientific practice. The position he advocates is the instrumentalist in that it rejects a direct link between theories and the real world and it refuses to be seen as attempts to explain how theories really are. The neorealism will be criticized via the mentioned approach, and neorealist would fit into this group that Chalmers defines as naïve instrumentalist. All concepts that trying to explain the international relations after 1980 will be discussed in line with his radical instrumentalism or pluralistic realism.

**Keywords:** Alan Chalmers, Radical Instrumentalism, Pluralistic Realism, Neorealism, Theory.

**PROTAC-500, PROTAC 600 VE MARS-300 ZIRH ÇELİKLERİNİN KAYNAKLI  
BİRLEŞTİRMELERİNDE MİKROYAPI VE MEKANİKSEL ÖZELLİKLERİNİN İNCELENMESİ**  
INVESTIGATION OF MICROSTRUCTURAL AND MECHANICAL PROPERTIES FOR WELDED  
JOINTS OF PROTAC-500, PROTAC-600 AND MARS-300 ARMOR STEELS

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**ÖZET**

Bu çalışma zırhlı muharebe araçlarında kullanılan Protac 500, Protac 600 ve Mars 300 zırh çeliklerinin MAG kaynak yöntemi ile birleştirme işlemi ele almaktadır. İlave metal olarak zırh çeliklerinin MAG kaynağı için önerilen X-90 IG ve 307Si MAG kaynak telinin kullanımı ile işlem gerçekleştirilmiştir. Kaynaklı imalata uygun parametrelerde ön sıcaklık ve pasolar arası sıcaklık dikkate alınarak farklı dolgu malzemeleri ile işlemler gerçekleştirilmiştir. Kaynaklama işlemi esnasında farklı dolgu malzemelerinin ısı girdisi farkı, farklı kimyasal kompozisyonların oluşturduğu alaşımlamanın etkisi de incelenmiştir. Kaynaklı imalat sonrası kaynak bölgesi, itab ve ana malzemedeki mukavemet farkı gözlenmiş olup, oluşan yeni yapının kaybettiği ve kazandığı yeni özellikler belirlenmiştir. Zırh çeliklerine çekme testi, mikro yapı incelemesi ve sertlik alınarak hem dolgu malzemelerinin oluşturduğu farklar hem de kendi aralarında oluşan farklar incelenmiş, kaynağa uygunluğu belirlenmiştir.

**Anahtar kelimeler:** Zırh Çeliği, Kaynaklı Birleştirme, Mag Kaynağı, Dolgu Malzemeleri

**ABSTRACT**

This study deals with the process of combining Protac 500, Protac 600 and Mars 300 armor steels used in armored combat vehicles with the MAG welding method. As an additional metal, the process was carried out using the X-90 IG and 307Si MAG welding wire recommended for MAG welding of armor steels. In accordance with the parameters suitable for welded manufacturing, operations were carried out with different filling materials taking into account the preliminary temperature and the temperature between the passes. The difference in heat input of different filler materials during the welding process and the effect of alloying formed by different chemical compositions were also studied. After the welded manufacturing, the strength difference in the welding zone, itab and the main material was observed and the new properties lost and gained by the new structure were determined. Tensile testing, microstructure examination and hardness of armor steels were taken into consideration and both the differences between the filler materials and the differences between them were examined and their suitability for welding was determined.

**Keywords:** Armor Steel, Welded Joining, Mag Welding, Filling Materials

## **KAYSERİ TALAS ‘TAKİ GELENEKSEL YAPI MALZEMELERİNDEN DOĞAL TAŞIN ZAMAN İÇERİSİNDEKİ KONUT MİMARİSİNE ETKİSİ**

**THE EFFECT OF NATURAL STONE FROM TRADITIONAL BUILDING MATERIALS IN KAYSERİ TALAS ON HOUSING ARCHITECTURE IN TIME**

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### **ÖZET**

Çok eski tarihe dayanan Talas ilçesi farklı medeniyetlere ev sahipliği yapmıştır. Bu medeniyetlerin yaşayış şartları, kültürleri, bulunduğu coğrafi özellikleri ve iklim şartları sebebiyle konut mimarisinde farklı yapı malzemeleri kullanmalarına sebep olmuştur. Bunların başında geleneksel yapı malzemelerinden olan doğal taş gelmektedir. Doğal taşlar konut mimarisinde insan yaşamını kolaylaştırıcı bir yöne sahiptir. İklim koşullarından dolayı taş yapı iyi bir ısı dengesi sunmaktadır. Yaz mevsiminde yapının içi daha serin olurken kış mevsiminde ise daha sıcak tutarak insanlara iyi bir yaşam sunmaktadır. Her türlü etkene karşı çok dayanıklı olması, iyi bir taşıyıcı özellikte olması, uzun ömürlü ve ekonomik olması, en önemlisi de sürdürülebilir olması taşın tercih sebepleri olarak sıralanabilmektedir. Yapılarda birçok alanda kullanılan doğal taşlar daha çok duvar yapımında tercih edilmektedir.

Bu çalışmada, Kayseri ili Talas ilçesi sınırları içerisinde bulunan Han, Harman ve Kçüköy mahallelerinde bulunan geleneksel konut inşasında kullanılan taşların incelenmesi hedeflenmiştir. Bu kapsamda Han, Harman ve Kçüköy mahallelerinden birer örnek seçilerek toplamda üç adet geleneksel konutun incelenmesi amaçlanmıştır. Saha çalışması şeklinde planlanan bu çalışmada yöntem olarak, belirlenen mahallelerden seçilen geleneksel konutlar incelenmesi, yapılarda kullanılan taş malzemelerin belirlenmesi ve her bir konut fotoğraflama yöntemiyle tek tek belgelendirilmesi şeklinde bir yol izlenmiştir. Sonuç olarak; Talas ilçesinin Han, Harman ve Kçüköy mahallelerinde taş kullanımına çokça rastlandığı görülmüştür. Mahallelerdeki konutların birçoğunda doğal taş kullanıldığı görülmüştür. Zaten mahallelere farklı perspektiflerle bakıldığında da ilk göze çarpan konutların doğal taşlarla inşaa edilmiş olmasıdır. Birçok yapının bu durumda olması o bölgede yürürken insanı farklı zamanlara götürmekte ve her bir konutun kendine özgü bir durumu olduğu algısını yaratmaktadır. Zaman içerisinde de teknolojinin gelişimi ile bu taşlar farklı yapıya bürünmüş ve işlevleri artmıştır. Konut mimarisinde de karşımıza çıkan bu işlevler insan hayatını birçok yönde etkilemiştir. Faydalı bir şekilde etki ettiği görülse de tarihi dokunun kaybolmasına da sebep olmuştur. Ayrıca insan hayatında önemli bir yere sahip olan konutların doğal taş ile inşa edilmesi bölge halkı için oldukça önemli bir değere sahip olduğu gözlenmiştir.

**Anahtar kelimeler:** Taş, geleneksel konut, Kayseri, Talas

## ABSTRACT

The town of Talas, which dates back to ancient times, has hosted different civilizations. The living conditions, cultures, geographical features and climatic conditions of these civilizations have led to the use of different building materials in residential architecture. Natural stone, which is one of the traditional building materials, comes first. Natural stones have a facilitating aspect of human life in residential architecture. Due to the climatic conditions, the stone structure offers a good heat balance. While the interior of the building is cooler in summer, it keeps warmer in winter and offers a good life to people. The reasons for preference of the stone can be listed as being very resistant to all kinds of factors, being a good carrier, being long-lasting and economical, and most importantly, being sustainable. Natural stones, which are used in many areas in buildings, are mostly preferred in wall construction.

In this study, it is aimed to examine the stones used in the construction of traditional houses in the Han, Harman and K ı ık oy neighborhoods within the borders of Talas district of Kayseri province. In this context, it is aimed to examine three traditional houses in total by selecting one sample from Han, Harman and K ı ık oy neighborhoods. In this study, which was planned as a field study, a method was followed by examining the traditional houses selected from the determined neighborhoods, determining the stone materials used in the buildings and documenting each house one by one by photographing method. As a result; It has been observed that stone use is common in the Han, Harman and K ı ık oy neighborhoods of Talas district. It has been observed that natural stone is used in most of the residences in the neighborhoods. When we look at the neighborhoods from different perspectives, the first thing that catches the eye is that the houses were built with natural stones. The fact that many buildings are in this situation takes people to different times while walking in that area and creates the perception that each house has a unique situation. Over time, with the development of technology, these stones have taken on a different structure and their functions have increased. These functions, which are also encountered in residential architecture, have affected human life in many ways. Although it seems to have a beneficial effect, it also caused the loss of historical texture. In addition, it has been observed that the construction of the houses, which have an important place in human life, with natural stone has a very important value for the people of the region.

**Keywords:** Stone, residence, Kayseri, Talas

**GELENEKSEL YAPI MALZEMELERİNDEN AHŞABIN DIŞ CEPHEDE KULLANIM STRATEJİLERİ (KAYSERİ /TALAS/TABLAKAYA, KİÇİKÖY MAHALLELERİ ÖRNEKLEMİ)**  
**STRATEGIES FOR USE OF WOOD FROM TRADITIONAL BUILDING MATERIALS IN EXTERIOR (KAYSERİ / TALAS / TABLAKAYA, KICIKOY NEIGHBORHOODS SAMPLE)**

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**ÖZET**

Kayseri ili ikisi merkez olmak üzere on altı ilçesi bulunan ve İç Anadolu Bölgesi'nde yer alan bir şehirdir. Kentte geleneksel konut oranı oldukça yüksektir. Bu konutların çoğu merkez ve merkeze yakın ilçelerde yer almaktadır. Kayseri ilçelerinden biri olan Talas, geleneksel konutlarını günümüze kadar taşımış ve konut dokusu ile Kayseri'nin mimarlık tarihi için önemli bir ilçe konumuna gelmiştir. İlçede geleneksel konutların oldukça fazladır.

Geleneksel konutların yapı kabuğu buldukları kültürün kente yansımaları sağlayan ayna görevi üstlenmektedir. Cephe mimarisinde sadece sosyokültürel özellikler değil aynı zamanda yaşantı, ekonomik düzey ve gelenekler-görenekler de rahatlıkla okunabilmektedir. Bununla birlikte inşa edildikleri dönemin taşıyıcı sistem ve kullanılan yapı malzemesi özelliklerinin algılanmasını sağlamaktadır. Tüm bunlar geleneksel konutları geçmişten günümüze taşıyan kimlik unsurlarıdır.

Türkiye'de geleneksel yapı malzemelerinden ahşabın kullanımı çok eski tarihlere dayanmaktadır. Eski çağlardan beri doğal bir ihtiyaç olan barınma; insanları kolay ulaşılabilen ahşap malzemesini kullanmaya yöneltmiştir. Ahşap, taşıma gücü yüksek, birleşim detayları basit, ağırlığı az ve mimari etkisi olumlu bir malzemedir. Ahşap malzemesinin depreme dayanımı oldukça yüksektir. Olumsuz hava koşullarından kimyasal faktörlere kadar birçok etkilere maruz kaldığında mukavemetinde azalmanın yavaş olması ahşabı yapı elemanı olarak kullanımında önemli hale getirebilmektedir.

Bu çalışmada Kayseri ili, Talas ilçesi, Tablakaya ve Kiciköy mahallelerinde bulunan geleneksel konutlarda kullanılan ahşabın irdelenmesi hedeflenmiştir. Bu hedef doğrultusunda mahallelerde saha araştırması yapılmış her bir mahalleden ikişer adet geleneksel konut seçilmiş ve bu konutların dış cepheleri incelenmesi amaçlanmıştır. Çalışmada yöntem olarak; belirlenen mahallelerde seçilen konutlar yerinde incelenmiş, yapıda kullanılan ahşap malzemeler belirlenmiş ve her bir konut fotoğrafı ile yöntemle tek tek belgelendirilmiştir. Sonuç olarak; insan hayatında önemli bir yere sahip olan konutların dış cephesinde ahşap malzeme kullanımı oldukça fazla olduğu görülmüştür. Özellikle yapıyı güçlendirmek için kullanılan payandanın o yapılar için önemli bir parça olduğu farkedilmiştir. Bu yapılar payandalar ve doğal yapı malzemeleri sayesinde ayakta kalmayı başarmışlardır. Ayrıca bu çalışmanın günden güne yok olan geleneksel konutların geleceğe aktarılmasında bir belge niteliği taşıması önem arz etmektedir.

**Anahtar kelimeler:** Ahşap, geleneksel konut, payanda, Kayseri



## ABSTRACT

Kayseri is a city located in the Central Anatolia Region and has sixteen districts, two of which are the center. The rate of traditional housing in the city is quite high. Most of these residences are located in the center and districts close to the center. Talas, one of the districts of Kayseri, has carried its traditional houses to the present day and has become an important district for the architectural history of Kayseri with its housing texture. There are a lot of traditional houses in the district.

The building envelope of traditional houses acts as a mirror that reflects their culture to the city. In the facade architecture, not only socio-cultural features, but also life, economic level and traditions-customs can be read easily. In addition, it provides the perception of the carrier system and the building material used in the period in which they were built. All these are elements of identity that carry traditional houses from the past to the present.

The use of wood, one of the traditional building materials, in Turkey dates back to ancient times. Shelter, which has been a natural need since ancient times; has led people to use easily accessible wood material. Wood is a material with high bearing capacity, simple joint details, low weight and a positive architectural effect. The earthquake resistance of wood material is quite high. The slow decrease in strength when exposed to many effects from adverse weather conditions to chemical factors can make wood important in its use as a building element.

In this study, it is aimed to examine the wood used in traditional houses in Kayseri province, Talas district, Tablakaya and K ı ık oy neighborhoods. In line with this goal, field research was carried out in the neighborhoods, and two traditional houses were selected from each neighborhood and it was aimed to examine the exteriors of these houses. As a method in the study; The selected houses in the determined neighborhoods were examined on site, the wooden materials used in the building were determined and each house was documented one by one by photographing method. As a result; It has been observed that the use of wooden materials on the exterior of the houses, which have an important place in human life, is quite high. It has been noticed that the buttress used to strengthen the structure is an important part for those structures. These structures have managed to survive thanks to buttresses and natural building materials. In addition, it is important that this study is a document in the transfer of traditional houses, which are disappearing day by day, to the future.

**Keywords:** Wooden, traditional house, buttress, Kayseri

**KENTSEL DONATI ELEMANLARININ KULLANIŞLILIK KAPSAMINDA  
DEĞERLENDİRİLMESİ: KIRŞEHİR GÜZLER PARKI ÖRNEĞİ**

THE EVALUATION OF URBAN FITTING ELEMENTS WITHIN THE SCOPE OF USAGE: THE CASE  
OF KIRŞEHİR GÜZLER PARK

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**ÖZET**

Kentsel mekânlar kentin kullanıcılarına işlev çeşitliliği sunan fiziksel ve sosyal ihtiyaçlarını karşılayan ve bu işlevlere yönelik donatı elemanlarının bulunduğu alanlar olarak tanımlanabilir. Kentsel donatı elemanları kentin kullanıcılarına oturma, dinlenme, sohbet, geçiş ve sosyalleşme amaçlı bazı aktivitelere olanak verecek konfor, kullanım ve estetik bazı özellikler taşımalıdır. Kullanıcının gereksinim duyduğu ihtiyaca göre tasarlanan donatı elemanları aynı zamanda bulunduğu kentin imajını kuvvetlendirecek, kentin kimliğini vurgulayacak ve kullanıcının aidiyet hissetmesine olanak verecek nitelikte olmalıdır. Kentsel açık alanlar (kamusal alanlar) kentin tanınmasında ve kullanıcı algısının şekillenmesinde oldukça önemli mekanlar olması nedeniyle bu alanların kentsel donatı elemanları mekânın niteliğini ve cazibe merkezi olmasına katkı sağlayan önemli unsurlardır. Kentlerin kültürel ve sosyal yaşantısının izlerini taşıyan kentsel alanlar ve donatı elemanları kent bağlamından ayrılmayan tasarım ürünleri olarak şekillenmelidir. Bulunduğu çevre ile uyum içinde ve kent bütünü içinde yer alan bir parça olarak varlık göstermesi uygun bulunmaktadır. Kentin bir parçası olarak donatı elemanlarının kullanıcı gereksinimlerine cevap verecek nitelikte, estetik ve uzun ömürlü kullanıma olanak verebilmesi beklenmektedir.

Bu çalışma kapsamında Kırşehir’de bulunan Güzler Evcil Hayvanlar Parkı ve Piknik Alanı çalışma alanı olarak seçilmiştir. 2017 yılında kullanıma açılan Güzler Parkının rekreasyon çalışmalarından önceki işlev, nitelik ve kullanım durumu belirlenmeye çalışılarak günümüzde sahip olduğu işlev çeşitliliği ve donatı elemanlarının işlevlere olanak verme düzeyleri belirlenmeye çalışılmıştır. Parkta bulunan donatı elemanlarının çeşitliliği, estetik düzeyleri, kent kimliğine olan katkıları ve tasarımın işleve uygunluk durumu değerlendirilmeye çalışılmıştır. Kılıçözü Çayı’nın kıyısında bulunan parkın yeni yüzü ile çevresine sağladığı katkı ve işlev çeşitliliğinin kullanıcı profilinde çeşitliliğe imkân verme durumu sorgulanmaya çalışılmıştır.

**Anahtar kelimeler:** Kırşehir Güzler Parkı, kentsel donatı elemanları, kamusal alan, işlev çeşitliliği, kullanışlılık.

**ABSTRACT**

Urban spaces can be defined as areas that provide a diversity of functions to the users of the city, meet their physical and social needs and have reinforcement elements for these functions. Urban equipment elements should have some comfort, usage and aesthetic features that will allow the users of the city to sit, rest, chat, pass and socialize. The equipment elements designed according to the needs of the user should also strengthen the image of the city in which it is located, emphasize the identity of the city and allow the user to feel belonging. Since urban open spaces (public spaces) are very important places in the recognition of the city and in shaping the user perception, the urban reinforcement elements of these areas are important elements that contribute to the quality of the space and its center of attraction. Urban areas and equipment elements bearing the traces of the cultural and social life of the cities should be shaped as design products that do not leave the urban context. It is appropriate for it to exist in harmony with its environment and as a part of the whole of the city. As a part of the city, it is expected that the urban furniture elements will be able to respond to the user's needs, allow for an aesthetic and long-lasting use.

Within the scope of this study, the Guzler Pets Park and Picnic Area in Kırşehir was chosen as the study area. The function, quality and usage situation of the Güzler Park, which was put into use in 2017, was tried to be



determined before the recreation works, and the diversity of functions it has today and the level of enabling the functions of the equipment elements were tried to be determined. The diversity of the urban furniture elements in the park, their aesthetic levels, their contribution to the urban identity and the suitability of the design for the function were tried to be evaluated. It has been tried to question the new face of the park located on the shore of Kılıçözü Stream, its contribution to its environment and the possibility of diversity in the user profile of the diversity of functions.

**Keywords:** Kırşehir Güzler Parkı, urban furniture elements, public space, diversity of functions, usefulness

## KENTSEL AÇIK ALANLARDA KULLANILAN KENT MOBİLYALARININ TASARIM İLKELERİNİN DEĞERLENDİRİLMESİ: KIRŞEHİR KENT PARK ÖRNEĞİ

EVALUATION OF THE DESIGN OF URBAN FURNITURE USED IN URBAN OPEN AREAS: THE CASE OF KIRŞEHİR KENT PARK

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### ÖZET

Kentleşme ve çalışma olanaklarının kentlerde görece daha fazla olması dünya nüfusunun yarısından fazlasının kentsel alanlarda yaşamasına neden olmaktadır. Kentli kullanıcı kent yaşamının doğal sonucu olarak karşılaşılan yoğun yapılaşma, hava kirliliği, trafik ve çevre sorunlarından uzak ve doğa ile iç içe olacakları mekânlara gereksinim duymaktadır. Kullanıcıların sosyal ve kültürel yapısına uygun; yaya kullanımının yoğun olduğu; çocuk, yetişkin, yaşlı ve engelli gibi farklı kullanıcılara hizmet edecek kentsel mekânlar aynı zamanda kente kimlik kazandıran kamusal alanlardır. Kent parkları konum ve büyüklükleri ile günümüzde çok sayıda kullanıcının dolaşım, buluşma, dinlenme, spor, eğlence ve kültürel faaliyetlerini gerçekleştirebilecekleri, kent yaşamının stresinden uzak doğal, dinlendirici ortamlar sunan ve aktif olarak kullanılan mekânlardır. Kent parkları içerisinde tasarlanacak kent mobilyalarının işlevsel, ergonomik, sağlamlık, estetik, ekonomik ve kullanışlı ve kentli kullanıcının yaşam kalitesini yükseltecek elemanlar olması kullanıcı memnuniyetini arttıracaktır. Bu nedenle kentsel açık alanlarda kullanılan kent mobilyalarının mimarlık, şehir ve bölge planlama, endüstriyel tasarım ve peyzaj mimarlığı gibi farklı disiplinler tarafından bütüncül bir yaklaşımla ele alınması, kullanıcının yaşamını kolaylaştıracak, beğeni düzeyini ve kentsel yaşam kalitesini arttıracak nitelikte tasarlanması gerekmektedir. Bu çalışmanın amacı kent mobilyalarının tasarım ilkelerini tartışmak, kent mobilyalarının niteliğini arttıracak öneriler geliştirmektir. Çalışma kapsamında Kırşehir Kent Parkı'nda kullanılan kent mobilyaları işlevsel, ergonomik, sağlamlık, estetik ve kullanışlılık açılarından değerlendirilecektir.

**Anahtar kelimeler:** Kentsel açık alan, Kent Parkı, Kırşehir Kent Parkı, kent mobilyası, kent mobilyası tasarım ilkeleri

### ABSTRACT

The fact that urbanization and working opportunities are relatively higher in cities cause more than half of the world's population to live in urban areas. Urban users need places away from dense construction, air pollution, traffic and environmental problems which are the natural consequences of of urban life and where they will be intertwined with nature. In accordance with the social and cultural structure of the users; pedestrian use is intense; urban spaces that will serve different users such as children, adults, elderly and disabled people are also public spaces that give the city an identity. Urban parks, with their location and size, are places where many users can perform their circulation, meeting, rest, sports, environment and cultural activities, offering natural, relaxing environments away from the stress of city life and actively used. The fact that the urban furniture to be designed in urban parks is functional, ergonomic, robust, aesthetic, economical and useful and will increase the quality of life of the urban user will increase user satisfaction. For this reason, urban furniture used in urban open spaces should be handled with holistic approach by different disciplines such as architecture, city and regional planning, industrial design and landscape architecture, and it should be designed in a way that will facilities the life of user, increase the level of appreciation and urban life quality. The aim of the study is to discuss the design principles of urban furniture and to develop suggestions that will increase the quality of urban furniture. Within the scope of the study, the urban furniture used in Kırşehir City Park will be evaluated in terms of functional, ergonomic, robustness, aesthetics and usefulness.

**Keywords:** Urban open areas, City Park, Kırşehir City Park, urban furniture, urban furniture's design criteria

**CONTACT PROBLEM OF A RIGID CYLINDRICAL INDENTER ON AN FGM LAYER AND A  
HOMOGENEOUS ORTHOTROPIC LAYER**

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**ABSTRACT**

The elasto-static contact problem between functionally graded material (FGM) layer and orthotropic layer is treated within the framework of plane-strain elasticity. The FGM layer is indented by a rigid cylindrical punch that applies a concentrated force in the normal direction. While there is no adhesion between the FGM layer and the orthotropic layer, the orthotropic layer is perfectly bonded to the rigid foundation. The body force of the FGM layer is assumed to exist. The material inhomogeneity in the FGM layer is assumed to entail shear modulus variation along the height direction in terms of exponential function. The governing stress and displacement equations used in the solution of the problem are derived for the FGM layer and the orthotropic layer using theory of elasticity and Fourier integral transform. Application of the mixed boundary condition reduces the problem to an integral equation for the unknowns contact stress and contact length. The resulting integral equation is numerically solved for the unknowns contact stress and contact length using a technique based on the Chebyshev polynomials. In the parametric analysis, the effects of the punch radius, indentation load, inhomogeneity parameter, and orthotropic material type on the contact length and contact stress distribution are investigated.

**Keywords:** Orthotropic layer, Integral equation, Contact stress, Contact length



## CONSTRUCTION DELAY IMPACT ANALYSIS & DIGITALIZED PROJECT MONITORING

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### ABSTRACT

Delays are a major concern in most construction projects. A construction project's completion is generally delayed due to the dynamic interplay between a variety of distinct events, many of which are attributable to contractor liabilities and many others to project owners. Inadequate preparation work prior to the building of any structure may result in construction delays. Delays frequently result in claims, which can lead to disagreements. As a result, it's vital to calculate the cost and time effect of delays on projects particularly on a live infrastructure project in India. variety of studies are conducted to spot and formalize the basis causes of delays in the housing industry [Aghimien et al, 2020], however, there's no agreement on a selected delay analysis technique that every stakeholder should use. Thus, the objective of this work is to develop good knowledge and understanding of the potentiality and constraints of different Delay Analysis Techniques used by the contractor, owner, consultants, etc. in the construction industry and to recommend appropriate techniques to be used in different project situations. Delay Impact Analysis techniques such as Window Analysis, As-Planned vs As-Built, Impact As-Planned, Collapsed As-Built, and Time Impact Analysis is used to assess time-related claims. The construction industry is on the verge of a massive transformation driven by digital technologies and innovations. Digital transformation is a must, even more so in the prevailing pandemic situation. The lockdowns imposed during pandemics have highlighted the importance of digital transformation in the construction industry and the obstacles it can help overcome. The digitalization of the housing industry would not only reduce the life span of projects in the construction industry and boost its profitability, but it would also force firms to more completely evaluate their competitiveness and marketing plan. Thus, the current study includes a sample cycle of tracking & monitoring construction activities digitally. The determination of delay responsibility of the contracting parties is done using the delay analysis techniques (DAT's).

**Keywords:** Construction Delays, Delay Analysis, Digital Transformation.



**SUSTAINABLE SOIL STABILIZATION USING ECO-FRIENDLY BY-PRODUCTS: A STUDY FOR UTILIZATION OF WASTE MATERIALS**

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**ABSTRACT**

For sustainable infrastructure development, soil performance improvement is considered as the base constituent in the construction industry. The stability and strength of soil affect directly the physical properties of construction materials. The study of soil stabilization is vital to improve the durability of any structure and make it last longer. The major focus and core purpose of this research was to enhance the stability of weak soil. In this research, soil performance has been evaluated after the addition of brick dust in different proportions. Brick Dust consists of binder properties being a waste product of brick and available in abundance. Soil stabilization performance is evaluated considering a series of physical and strength properties. So, the results of these tests vary due to the addition of brick dust leading us towards the progress of our desired aim. This study will help in the improvement of soil performance using eco-friendly waste material of brick dust for sustainable development of infrastructures.

**Keywords:** Sustainability; Soil; Stabilization; Brick Dust; Strength.



**A REVIEW OF NON-DESTRUCTIVE TESTING METHODS ON CONCRETE STRUCTURES**

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**ABSTRACT**

To accurately evaluate and analyze concrete structures, different methods of testing can be executed on site for the detection of weaknesses and flaws within the materials. Testing these structures is a crucial task for determining the quality and condition of the components, which is important for maintenance and safety. Buildings, bridges, and pavements can be surveyed through a variety of testing practices, but the most preferred techniques are categorized as non-destructive testing (NDT). The procedures for NDT cause no damage or alterations to the tested material, meaning there is no waste of materials; this is time-saving and cost-effective. While there are copious amounts of applications in NDT, some of the routinely used ones in construction and civil engineering can be classified as one of the following: acoustic emission, ultrasonic, radiographic, and electromagnetic testing. Each of these provide individual measuring purposes with different advantages and limitations. Although NDT is convenient since results are generated in a timely manner, the interpretation of the data has been considered an engineering challenge. However, using a combination of NDT methods allows for more accurate and dependable results. This study focuses on specific NDT applications that are useful for obtaining details on the in-situ strength of distinct structures constructed with concrete.

**Keywords:** Non-destructive Testing, Construction, Civil Engineering



## CHANGE IN SPATIAL EXTENTS OF HEATWAVES OVER TIME IN PENINSULAR MALAYSIA

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### ABSTRACT

Temperature extremes are the most-discussed topics in global climatic research in recent years. The interest could be the result of increasing climatic extremes such as droughts and heatwaves which caused damages to agriculture and public health almost every year in recent decades. Increased frequency and severity of heatwaves is one of the immediate and certain impacts of rising temperature due to global warming. The countries like Malaysia which generally experience no heatwaves in the past have noticed mild to moderate heatwaves in recent years. The continuous increase in global temperature would certainly make the heatwaves in Malaysia more severe in near future. Spatiotemporal characterization of heatwaves is important for their monitoring and planning suitable preventive measures for mitigation of social and economic impacts. Spatial and temporal changes in annual and seasonal temperatures, temperature extremes and heatwaves over peninsular Malaysia has been assessed in this study. Several heat wave related indices considering both daily maximum and minimum temperature are also proposed in this study to assess the changes in different characteristics of heatwaves in peninsular Malaysia. Gridded daily temperature dataset of Princeton's Global Meteorological Forcing having a spatial resolution of  $0.25^\circ$  for the period 1948-2016 was used for the characterization of heatwaves and the assessment of the trends in different characteristics of heatwaves for the period 1948–2016. The modified Mann-Kendall test (MMK), which can discriminate the multi-decadal oscillatory variations from secular trends was used for this purpose. The results revealed daily maximum temperature more than 95-th percentile threshold for consecutive three days or more can well reconstruct the spatial pattern of heat wave in Peninsular Malaysia. The results revealed that intense heat waves in peninsular Malaysia are mostly occurred in the southwest. It was found that major heat waves in peninsular Malaysia occurred in 1954, 1973, 1990, 2001, 2005, 2010 and 2013. The trends in heat wave indices revealed significant increases in the indices calculated based on both the maximum and minimum temperatures.

**Keywords:** Heat wave, temperature extremes, gridded temperature data, modified Mann-Kendall trend test, peninsular Malaysia



**COMBINED EFFECT OF BRICK AND CERAMIC WASTE ON THE BEHAVIOR OF THE MORTAR**

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**ABSTRACT**

In recent years, tons of construction material waste has started to represent a major challenge and an environmental problem. Huge amounts of waste create more land to store. Waste bricks and ceramics are one of the most important alternatives to cement, as researchers have rushed to develop building materials and find usable materials at lower cost thanks to their mechanical and physical properties. The main objective of this study is to follow the combined effect of brick and ceramic waste on the behavior of the mortar by exploiting them and using them as a cement substitute in the mortar which can help overcome the deficiencies of the components of the mortar. mortar and improve its mechanical and physical properties. In this work, crushed bricks and ceramic waste (less than 80 microns) are added to the cement mortar, adding and replacing an amount of cement in the ratio: 5%, 10%, 15% (brick powders), 10%, 20% and 30% (ceramic powders). To carry out this study, several tests were carried out on the various formulations in the fresh state (fluidity and density) and hardened such as shrinkage, porosity and mechanical behavior (compression test).

**Keywords:** cement, mortar, mechanical properties, brick, ceramic powders, compression test.



## **A SIMPLE APPROACH TO CORROSION IDENTIFICATION IN STEEL BRIDGES**

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### **ABSTRACT**

Corrosion, or in a broader sense, material degradation, has been recognized as the fundamental cause for structural failures of various systems, facilities, and infrastructure. It is the function of using inappropriate or defective materials during construction, improper environmental conditions, and lack of periodic maintenance. A better understanding of corrosion mechanisms on environment with higher humidity, can not only lead to corrosion control but also enhance the service life of neighboring structures. Thus, a study on atmospheric corrosion has become a present need for engineers and researchers around the globe. There are different corrosivity determination techniques for steel structures that help us to have better estimation of the corrosion severity in steel structures. In some methods, thickness loss data of structural steel against various exposures are used to calculate corrosion rates while in other methods, the corrosion coulometer is used to monitor field corrosivity data under actual service conditions which has proved advantageous over the traditional plate penetration test methods. The main purpose of this paper is to provide the reader a short overview of atmospheric corrosion on steel structures and to compare between the different approaches and identify the most feasible one in practice. Examples of real applications and standards will be illustrated for better understanding of the method.

**Keywords:** Corrosion, Steel Bridges, Material Degradation, Corrosively, Steel Structures.

**NEW SCHEME FOR ISOLATED BUILDINGS ACCORDING TO ALGERIAN EARTHQUAKE REGULATIONS AND THEIR COMPATIBILITY WITH SEVERAL INTERNATIONAL CODES**

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**ABSTRACT**

Base isolation is now a well-established technology for the earthquake protection of structures. Several national building codes now include chapters on base isolation. In order to promulgate and expand seismic isolation technique and enhance its application to buildings. After gathering a more information on building's codes of Japan, China, IBC2009, Italy, Taiwan, Algerian building code (RPA 99), and using a benchmark building. Subsequently, a comprehensive and comparative study between different regulations taking into account base isolation, knowing that the building's characteristics such as weight, height, hysteresis properties and soil condition are fixed for all codes.

The aims of this research suggest a new design approach for LRB (Lead Rubber Bearing) type isolators relating to isolated buildings in the Algerian earthquake regulations. The latter is essentially based on the equivalent static method, and it employs an iterative process that determines the isolator's displacement design depending on the mechanical and geometric characteristics of the building. Additionally, a nonlinear analysis was performed for the various international building codes excited by accelerograms of different kinds.

This new method was validated by a numerical modeling, which is a comparative study with several regulations in the world, this showed very satisfactory results in design displacement and shear force base, which agrees very well with the various regulation.

**Keywords:** Base isolation; lead rubber bearing (LRB); Algerian seismic code (RPA); Seismic excitation; Hysteresis behavior.

## SEDIMENTATION STABILITY OF DIFFERENTLY SHAPED AND SIZED NANOPARTICLES

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### ABSTRACT

The biological properties of nanoparticles strongly depend on their stability in aqueous suspensions, which is significantly affected by particles' size and shape. Despite high relevance, there are still not enough works demonstrating the effect of industrial nanoparticles' morphology on their stability in aqueous suspensions.

In this work, we investigated industrial hematite nanoparticles ( $\alpha$ -Fe<sub>2</sub>O<sub>3</sub>) with an average size of 30 (Nanografi, Turkey) and 100 nm (Advanced powder technologies, Russia). Two powders purchased from the same producer had similar size (~ 30 nm), but different shapes – acicular and spherical, particularly. Another two types of particles had the same (close to spherical) shape, but they were different in size, 30 and 220 nm in average. We prepared aqueous suspensions by 15 min sonication at the power of 55 Wt prior to evaluating the stability of suspensions by measuring the sedimentation rate of particles. The sedimentation rate was estimated as the change in light transmission coefficient (T, %) measured with a spectrophotometer at 340 nm for 60 min ( $\Delta T$ ).

The experiment made it possible to establish that the aggregates of acicular particles precipitated 4 times faster than spherical ones. For example, the  $\Delta T$  value was  $1.92 \pm 0.9$  and  $0.47 \pm 0.5\%$ , respectively, for needle-like and spherical 30 nm particles. It was also shown that the sedimentation rate of 220 nm particles was 30 times higher than for 30 nm particles with the same shape.

The obtained results may be important for preparing aqueous suspensions of nanoparticles for immunological examinations.

**Keywords:** Fe<sub>2</sub>O<sub>3</sub> Nanoparticles, Suspension, Sonication, Shape, Sedimentation.



**SYNTHESIS AND DESIGN OF VARIOUS PEROVSKITE CATALYSTS FOR LOW TEMPERATURE OXIDATION OF CARBON MONOXIDE**

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**ABSTRACT**

The motor vehicle pollution contributes the major sources of carbon monoxide (CO) into the environment. The catalytic converters have been discovered for controlling the CO emission. Despite that, the development of a sustainable TWC still remains a critical research topic owing to the increasingly stringent emission regulations together with the price and scarcity of precious metals. Among other material classes, perovskite-type oxides are known to be valuable alternatives to conventionally used TWC compositions and have demonstrated to be suitable for a wide range of automotive applications. Perovskite catalysts show great potential for CO oxidation catalyst in a catalytic converter for their low cost, high thermal stability and tailoring flexibility. It is active for CO oxidation at a high temperature. The surface sites and lattice oxygen species present in perovskite catalysts play an important role in chemical transformations. The partial substitution of cations A and B by diverse an element, which changes the atomic distance, causes unit cell disturbances, stabilizes various oxidation states or added cationic or anionic vacancies inside the lattice. The novel things concern the solid reactivity by varying the reaction mechanism on the catalyst surface. Thus, suitable cations substitutions may represent better activity. The aim of this review is to study that the perovskite-type oxides have the potential to fulfill the requirements high activity and stability to be included into the structured catalysts.

**Keywords:** Carbon monoxide, Catalyst, Perovskite, structure and Applications.



**UN INTERNATIONAL POLICY ON SUSTAINABLE DEVELOPMENT IN THE CONTEXT OF CLIMATE CHANGE**

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**ABSTRACT**

The aim of the study is to analyze the UN mechanisms for the formation and implementation of the activities of sustainable communities in the context of climate change. The results of the work can be applied both for the international cooperation and for drawing up domestic strategies.

Methodology: the methods of institutional analysis were used, highlighting the cluster approach of two levels: global and national. The work used the theoretical works of W.Hamilton, W.Nordhaus; materials of the UN, Sendai Framework for DRR etc.

The UN acts not only as a structure coordinating the sphere of international goal-setting, but also as a financial regulator.

The international humanitarian community organizes itself to support government leadership in the response, coordinating its actions through industry working groups. This concept is embodied in the "cluster approach". The cluster approach operates at two levels: globally and nationally.

At the present stage, we see only a transitional process of transformation of the issues of combating natural and climatic disasters into global ideas of climate change, which radically changes them, turning them into an instrument of international cooperation.

**Keywords:** climate change, ESG investing, sustainable development.



**THE NAME OF AN ANCIENT FORTRESS IN THE FOLK PERCEPTION. ENISALA OR HERACLEA?**

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**ABSTRACT**

There is a fortress in Dobruja, Romania called Enisala. The original builder is unknown and many scholars emphasize some hypotheses. The official hypothesis is that it was built by Genovese in XIII centuries, and the name should be Enisala because Turkish arrivals of XIV centuries give this name to this fortress as new fortress. Till nowadays local people disagree. They still call it Heraclea and make so many confusions among academics, who reject it as just folk perception with no scientific proofs. We try in this short approach to determine why folk perception could be sustainable in some way even there are no evidence. The dominant form of current academic science is based on ideas and concepts about science and research, but we wonder if paying attention to some facts might lead in a new direction. It is even more amazing when we realize that all hypotheses are untenable. The of core of truth could be embodied in cultural myths, language, toponym and some could change the status of scientific knowledge in history and archeology and can develop our ideas about 'truth' and the relation to reality. So, let see why simple people are so determined to call this fortress Heraclea even the village is named Enisala and what can reveal the myth of Zmeu, the mythological figure who is living in this fortress. We claim that if we can figure out cultural perspective using popular oral perception might be a new step for future researches.

**Keywords:** culture, perception, myth, scientific truth





**LOCAL PERCEPTION OF CLIMATE CHANGE INDICATORS IN KURFI LOCAL  
GOVERNMENT AREA, KATSINA STATE, NIGERIA**

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**ABSTRACT**

Throughout the world, people with a long history of interaction with their environment, have developed complex systems of first-hand knowledge not only of weather and climate variability, but also of climate change. This study attempts to identify the local people's perception of climate change indicators in Kurfi Local Government Area, Katsina state. Cluster sampling was taken from the age group of 45 years and above. Primary data were obtained through 204 questionnaires administered in *Barkiya*, *Birchi* and *Kurfi* towns. Data collected was analyzed using simple descriptive statistics methods. Part of the result showed that, 94.10% of the respondents observed changes in climate in the study area, while 5.90% observed no changes. Also, changes in rainfall pattern, soil fertility, the gradual disappearance of some trees, migration of some birds, and the extinction of some insects species were reported by these indigenous people and was clearly highlighted in this paper. It is recommended that there is the need to build more closely on the experience of social scientists working with local peoples on environmental issues and that previously neglected geographic areas or climatic regions should be covered.

**Keywords:** Climate Change, Perception, Knowledge, People, Local Communities



**MICRO LEVEL FLOOD CONTROL TECHNIQUES:  
A CASE STUDY ON BENNI HALLA (STREAM) IN NORTH KARNATAKA OF INDIA**

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**ABSTRACT**

Man proposes but God disposes. In these days the entire world is suffering from uncontrollable floods. The floods are taking valuable lives and properties. Though we have sophisticated tool and techniques like several flood modelling systems through advanced software and other flood mitigation mechanisms, we are not in a position to mitigate or predict the vulnerability of floods and losing our valuable lives and properties. The major cause for such floods is the “Global Warming”. The advancement and rapid growth of industries all over the world are contributing major impact on global warming. Can we stop developing science and technology? No, we can't, as it has become indispensable for a nation for its socio-economic growth and safety in these competitive days. Since many years we are witnessing the increase in temperature of earth and ocean. According to NOAA's 2020 Annual Climate Report the combined land and ocean temperature has increased at an average rate of 0.13 degrees Fahrenheit (0.08 degrees Celsius) per decade since 1880; however, the average rate of increase since 1981 (0.18°C / 0.32°F) is doubled. So as of now there is an average increase of temperature of earth and ocean is about 1.52 degree Celsius. The other causes of floods are deforestation, encroachment of water course bodies, urbanisation, silting of water course bodies etc., In addition, natural disasters like forest fires, volcanos which are one of major contribution for the increase in global warming. The cumulative effect of all these is raise in the ocean level due to melting of glaciers. The costal erosion is also being witnessed. This phenomenon of raising ocean level and costal erosion is being seen since centuries. But in the past one decade this is tremendously increased. Average global sea level is increased by 2.5 inch (63mm) compared with the world sea level of 1993 as per the satellite record. It is being observed that every year the sea level is increasing by 3.2mm. It is true that one cannot design 100% nature proof structures as the nature is in nobody's hand. Even then do we need to address this problem? Yes, it is a must. Though we cannot mitigate flood occurrence, we can mitigate or minimize the effects of flood to save the valuable lives and properties. Flood is an accumulation of flow from different sources of water. In this context it is another thought to think of mitigating the flood accumulation at its sources i.e., to emphasize on micro level flood mitigation techniques.

**Keywords:** Global warming, Floods, Mitigation, Earth and ocean temperature and micro flood control techniques



**EVALUATION OF ENVIRONMENTAL IMPACT ON THE CITY PROSPERITY INDEX – CASE STUDY IN DANANG CITY-VIETNAM**

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**ABSTRACT**

The City Prosperity Index (CPI) is a global index developed by UN-Habitat (United Nations Human Settlement Program) to measure the comprehensive efficiency of cities in creating and distribution of economic and social benefits. The calculation of CPI is a multidimensional framework that integrates six carefully selected dimensions including productivity, infrastructure development, equity and social inclusion, environmental sustainability, and urban governance (UN-Habitat, 2012). The CPI not only provides indices and measurements relevant to cities, but it is also an assessment tool that enables city authorities as well as local and national stakeholders, to identify opportunities and potential areas of intervention for their cities to become more prosperous. This study aims to evaluate the effect of environmental sustainability, one of six components in the CPI, on the measurement of the City Prosperity for Danang City which is one of the key economic centres in Vietnam. Firstly, we have excluded the environmental component in the generation of CPI for Danang City using the framework of UN-habitat. Subsequently, the environmental sustainability has been incorporated in the calculation of CPI considering the indices related to air quality, waste management and the use of suitable energy. Results indicate that environmental condition has significantly impacted on the measurement of CPI for Danang City in which the CPI has been reduced after incorporated the environmental data. The findings from this study are valuable for the Danang City Government to improve the environmental quality for the sustainable development.

**Keywords:** City Prosperity Index, UN-Habitat, environmental sustainability, air quality, waste management, suitable energy.



**ROLE OF INDIAN JUDICIARY IN MITIGATION OF CLIMATE CHANGE:  
AN IDEALISTIC APPROACH**

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**ABSTRACT**

The Constitution of India is one of the few Constitutions in the world which contains express provisions dealing with protection and promotion of environment and natural resources. Moreover, in India there is a Ministry, i.e. Ministry of Environment, Forest and Climate Change to specifically take care of matters related to protection of environment and mitigation of climate change. So also India is an active participant in international environment related conferences and is a party to most of the international instruments. Therefore, in order to fulfil, the Constitutional and International obligations, the Indian government has enacted several legislations for the protection of environment and all these legislations have direct and indirect impact on the mitigation of climate change. Due to the quest for development in India, the implementation of these laws become very controversial in several occasions. These controversies are usually ends through a judicial settlement. Hence, the Indian judiciary has played a significant role in implementation of these laws and thereby protecting the environment and dealing with climate change. The judiciary has adopted several rules and principles from international framework and also expanded the scope of different national laws for the purpose of mitigation of climate change. This paper seeks to examine the role of Indian judiciary in mitigation of climate change.

**Keywords:** Mitigation, Constitution, Climate, Judiciary, Environment



## **TOURISM IN INDIAN CONTEXT**

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### **ABSTRACT**

Tourism in India is important for the country's economy and is growing rapidly. The tourism industry has emerged as one of the largest and fastest growing economic sectors globally. Its contribution to the global Gross Domestic Product and employment has increased significantly. In Financial year 2020, tourism sector in India accounted for 39 million jobs, which was 8.0% of the total employment in the country. By 2029, it is expected to account for about 53 million jobs.

Tourism in India is a sun rise industry, an employment generator, a significant source of foreign exchange for the country and an economic activity that helps local and host communities. Rising income levels and changing lifestyles, development of diverse tourism offerings and policy and regulatory support by the government are playing a pivotal role in shaping the good quality tourism infrastructure, global concerns regarding health and safety of tourists, disparate passenger tax structures across various states and shortfall of adequately trained and skilled manpower. Concerted efforts by all stakeholders such as the central and state governments, private sector and the community at large are pertinent for sustainable development and maintenance of the tourism sector in the country.

The Ministry of Tourism designs national policies for the development and promotion of tourism. In the process, the Ministry consults and collaborates with other stakeholders in the sector including various central ministries/agencies, state governments, union territories and private sector representatives. Concerted efforts are being made to promote niche tourism products such as rural, cruise, medical and eco-tourism. The Ministry of Tourism maintains the Incredible India campaign focused on promoting tourism in India.

**Keywords:** Employment generator, inclusive growth, Eco-tourism.



**EVALUATION OF INPUT EFFICIENCY FOR FISHING VESSEL IN COASTAL AREAS OF VIETNAM**

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**ABSTRACT**

This study has used minimizing input-oriented Constant Return to Scale (CRS) Data Envelopment Analysis (DEA) model with one output and seven input variables. The study's purpose was analyse technical efficiency to reduce input resource cost for fishing vessel in Viet Nam. The report is based on 185 samples from from 4 provinces of Vietnam with gathered from the fishermen regarding production and usage of inputs. The minimizing input-oriented CRS DEA results indicate that there are 34 technically efficient fishing vessel (18%) and 151 technically inefficient fishing vessel (82%). The ratio of resource reduction of input variables varied from around 20% to nearly 60%. In addition, the results also show that government subsidies for fishing vessels are ineffective. From there, the study proposes policy implications that contribute to improving input efficiency for fishing vessels in Vietnam. In future research, stochastic frontiers method should be used to compare results of DEA method and environment variables should be included.

**Keywords:** efficiency, fishing vessels, Vietnam

## SOĞUK STRESİ VE OBEZİTEYE BAĞLI OLARAK SIÇANLARDA ANJİOGENİK FAKTÖRLER ÜZERİNE ETKİLERİNİN ARAŞTIRILMASI

INVESTIGATION OF THE EFFECTS OF COLD STRESS AND OBESITY ON ANGIOGENIC FACTORS IN RATS

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### ÖZET

Organizmaların normal yaşamları dışında karşılaşabilecekleri olumsuz koşullara doğuştan sahip oldukları adaptasyon mekanizmaları ile karşı koymaya çalışmaktadırlar. Canlılar yaşamları boyunca karşılaştığı olumsuz koşulların pek çoğu stres faktörleridir. Yetersiz beslenme ve aşırı beslenme koşulları organizma için olumsuz koşul olup canlılar hayatta kalmak için homeostatik mekanizmalarını devreye sokmaktadır. Organizmaların sahip oldukları korunma/savunma mekanizmaları olumsuz koşullara cevap oluşturma mekanizmalarından birisi de anjogenezdır/antianjogenezdır. Anjogenez var olan kılcal damarlardan yeni damar oluşturma işlemi ve antianjogenezde damar oluşumunu engelleme işlemidir. Obeziteye bağlı olarak meydana ağırlık artışı ile artan doku kütlelerinin oksijenlendirilmesi ve bunun için de taşıyıcı sistem kan ve kan damarlarının artması gerekmektedir. Kılcal kan damarlarından yeni damar oluşumunda rol oynayan önemli faktörlerden biriside vasküler endotelial büyüme faktörü (VEGF) dür. Bununla birlikte damar normal şartlar altında damar oluşumunu engelleyen faktörlerden biriside angiostatindir. Stres koşulları da özellikle soğuk stresi enerji metabolizması üzerine etkili olup düşük sıcaklık koşullarında ısı kaybını engellemek amacıyla kılcal damarların kapanması ve yeni damar oluşumu engellenmeye çalışılmaktadır. Bu çalışmada aşırı kilo artışı ve/veya soğuk stresi nedeniyle muhtemel anjionejik/antianjiojenik faktörlerin düzeyinde meydana gelen değişiklikler araştırılmıştır. Bu nedenle çalışmada kontrol ve soğuk stresi uygulanan sıçanlar ile obez sıçanlarda anjiojenik ve anti anjiojenik faktör düzeyleri ELISA yöntemiyle araştırılmıştır. Kontrol ve uygulama gruplarında 6 şar sıçan üzerinde çalışma yapılmıştır. Soğuk stresi uygulaması 10-12 °C'de 72 saat süre ile yapılmıştır. Obez sıçanlar yüksek kalorili diyetle beslenmiş ve %25-30 kilo artışı sağlandıktan sonra soğuk stresi uygulaması yapılmıştır. VEGF ve angiostatin düzeyleri, sıçanların karaciğer, beyaz yağ doku, kahverengi yağ dokusunda araştırılmıştır. Yüksek yağlı diyetle beslenen obez gruplarda VEGF düzeylerinde artış gözlenirken soğuk stresine bağlı olarak hem obez gruplarda hem de normal beslenme olan gruplarda angiostatin düzeylerinde azalma saptanmıştır.

**Anahtar kelimeler:** Vasküler Endotelial Büyüme Faktörü (VEGF), Angiostatin, Obezite, Soğuk Stresi

### ABSTRACT

Organisms try to resist adverse conditions that they may encounter outside of their normal lives, with their innate adaptation mechanisms. Many of the negative conditions that living things encounter throughout their lives are stress factors. Inadequate and overnutrition conditions are negative conditions for the organism, and living things activate their homeostatic mechanisms to survive. One of the mechanisms of protection/defense mechanisms of organisms in response to adverse conditions is angiogenesis/antiangiogenesis. Angiogenesis is the process of forming new vessels from existing capillaries and preventing vessel formation in antiangiogenesis. Oxygenation of the tissue mass that increases with the weight gain due to

obesity, and for this, the blood and blood vessels of the carrier system need to increase. One of the important factors that play a role in the formation of new vessels from capillary blood vessels is vascular endothelial growth factor (VEGF). However, angiostatin is one of the factors that prevent vascular formation under normal conditions. Stress conditions, especially cold stress, are effective on energy metabolism, and in order to prevent heat loss in low temperature conditions, closure of capillaries and formation of new vessels are tried to be prevented. In this study, changes in the level of possible angioneic/antiangiogenic factors due to excessive weight gain and/or cold stress were investigated. For this reason, angiogenic and anti-angiogenic factor levels were investigated by ELISA method in control and cold stressed rats and obese rats. The study was carried out on 6 rats in the control and application groups. Cold stress application was made at 10-12 oC for 72 hours. Obese rats were fed a high-calorie diet and cold stress was applied after gaining 25-30% weight gain. VEGF and angiostatin levels were investigated in liver, white adipose tissue and brown adipose tissue of rats. While VEGF levels were increased in obese groups fed a high-fat diet, angiostatin levels were found to decrease in both obese groups and groups with normal nutrition due to cold stress.

**Keywords:** Vascular Endothelial Growth Factor (VEGF), Angiostatin, Obesity, Cold Stress



**AĞIR METALLERİN *PSEUDOMONAS AERUGINOSA*'DA PİGMENT ÜRETİMİ VE  
ANTIOKSİDAN SİSTEM ÜZERİNE ETKİSİ**

**EFFECT OF HEAVY METALS ON PIGMENT PRODUCTION AND ANTIOXIDANT SYSTEM IN  
*PSEUDOMONAS AERUGINOSA***

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**ÖZET**

*Pseudomonas aeruginosa*, farklı stres koşullarına dirençli patojen bir bakteridir. Bu çalışmada ağır metallerin *Pseudomonas aeruginosa* tarafından biyosorpsiyonu ve bakteri üremesi, kuru hücre miktarı, amonyum asimilasyonu, pigment üretimi ve protein sentezi üzerindeki etkileri araştırıldı. *P. aeruginosa* bakterisine farklı pH (5,7,9)'larda uygulanan  $Mn^{2+}$ ,  $Ni^{2+}$ ,  $Cd^{2+}$  ve  $Pb^{2+}$  ağır metallerinin pigment üretimi ve antioksidan savunma sistemlerinde rol oynayan süperoksit dismutaz, katalaz, glutatyon üzerine etkisi araştırıldı. *P. aeruginosa* stres koşullarında, antimikrobiyal etki gösteren önemli bir sekonder metabolit olan piyosiyanın-piyoverdin gibi pigment ürettiği gözlenmiştir. Farklı pH'larda, ağır metal uygulamasına bağlı olarak Broth P besiyerinde piyosiyanın-piyoverdin pigment miktarları pH 5.0'da azalma ( $Cd^{2+}$ 'deki artış hariç), pH 7'de ( $Ni^{2+}$ 'deki azalış hariç) ve 9'da artış olduğu görülmüştür. Piyorubin üretimi  $Ni^{2+}$  metalinde; pH 5 ve 7'de artış, pH 9'da ise azalış göstermiştir,  $Pb^{2+}$  metalinde ise pH 5.0 ve 7.0'da azalma gözlenirken 9.0'da artış gözlenmiştir. Antioksidan enzimlerden; SOD aktivitesinde, *P. aeruginosa* bakterisi 24 saat metal uygulama sonrasında dört metalde de kontrol grubuna göre azalma CAT aktivitesinde ( $Ni^{2+}$  uygulaması hariç) artış olduğu tespit edilmiştir. Dört metal içinde mangan (42.78 U/mg protein) kontrole (52.75 U/mg protein) yakın bir aktivite gösterirken, kurşunda (32.67 U/mg protein) ise daha düşük bir enzim aktivitesi gözlenmiştir. Kadmiyum metal uygulaması sonrası bakteri de herhangi bir aktivite kaydedilmemiştir. Elde edilen sonuçlar, *P. aeruginosa* bakterisinin biyoremediasyonla, ağır metallerin endüstriyel atık sularından veya ağır metal ile kirlenmiş/kirletilmiş çevresel su kaynaklarından giderimi ile ilgili çalışmalarda yeni güçlü bir kaynak olabileceğini düşündürmektedir.

**Anahtar kelimeler:** *Pseudomonas aeruginosa*, ağır metal stresi, biyosorbsiyon, piyosiyanın, piyoverdin

**ABSTRACT**

*Pseudomonas aeruginosa* is a pathogenic bacterium resistant to different stress conditions. In this study, the biosorption of heavy metals by *Pseudomonas aeruginosa* and their effects on bacterial growth, dry cell amount, ammonium assimilation, pigment production and protein synthesis were investigated. The effects of  $Mn^{2+}$ ,  $Ni^{2+}$ ,  $Cd^{2+}$  and  $Pb^{2+}$  heavy metals applied to *P. aeruginosa* bacteria at different pH (5,7,9) on superoxide dismutase, catalase, glutathione, which play a role in pigment production and antioxidant defense systems were investigated. It has been observed that *P. aeruginosa* produces pigment such as pyocyanin-pyoverdin, an important secondary metabolite with antimicrobial effect, under stress conditions. At different pHs, depending on heavy metal application, the amounts of pyocyanin-pyoverdin pigment in Broth P medium decreased at pH 5.0 (except for the increase in  $Cd^{2+}$ ), at pH 7 (excluding the decrease in  $Ni^{2+}$ ) and at 9 increase was observed. Pyorubin production in  $Ni^{2+}$  metal; It increased at pH 5 and 7 and decreased at pH 9, while a decrease was observed in  $Pb^{2+}$  metal at pH 5.0 and 7.0, while an increase was observed at 9.0. From antioxidant enzymes; It was determined that SOD activity, *P. aeruginosa* bacteria, after 24 hours of metal application, there was a decrease in all four metals compared to the control group, and an increase in CAT activity (except for  $Ni^{2+}$  application). Among the four metals, manganese (42.78 U/mg protein) showed an activity close to the control



(52.75 U/mg protein), while a lower enzyme activity was observed in lead (32.67 U/mg protein). No activity was recorded in bacteria after cadmium metal application. The obtained results suggest that *P. aeruginosa* bacterium may be a new powerful resource in studies related to bioremediation, removal of heavy metals from industrial wastewater or heavy metal-contaminated/contaminated environmental water sources.

**Keywords:** *Pseudomonas aeruginosa*, heavy metal stress, biosorption, pyocyanin, pyoverdinin

## **BİTKİSEL UÇUCU YAĞLARIN BLASTOCYSTOSİS ÜZERİNE ETKİLERİ**

### **THE EFFECTS OF HERBAL ESSENTIAL OILS ON BLASTOCYSTOSIS**

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#### **ÖZET**

Blastocystis spp. dışkı incelemelerinde en sık görülen bir bağırsak parazitlerinden biridir ve Blastocystosis enfeksiyonuna neden olur. Tekrarlayan sulu ishal, mukuslu ishal, kusma, karın krampları Blastocystosis enfeksiyonunun klinik semptomlarından ve bu enfeksiyona karşı çeşitli tedavi yaklaşımları vardır. Metronidazol, Tinidazole, Trimetoprim-sulfamethoxazole, Ketoconazole ve Nitazoxanide, Blastocystosis tedavisi için yaygın olarak önerilen ilaçlardır. Ancak bu ilaçlar istenmeyen yan etkilere ve bu enfeksiyonun tedavisinde başarısızlıklara neden olabilir. Bu nedenle, enfeksiyonun tedavisinde daha etkili ve güvenli alternatif antiprotozoal ajanların geliştirilmesine ihtiyaç duyulmuştur. Bu çalışmada, bitkisel uçucu yağların Blastocystis spp. parazitine olan etkilerini in-vitro yöntemler ile araştırmak amaçlanmıştır. Amerikan Tıp Kültür Koleksiyon merkezinden elde edilen Blastocystis spp. (ATCC™ 50578) paraziti, üretici firmanın talimatlarına göre ATCC Medium 1671 besiyerine ekildi ve 35°C'de inkübe edildi. Besiyerlerindeki Blastocystis spp. parazitlerinin sayısı yaklaşık  $1 \times 10^5 / \text{mm}^3$ 'e ulaştığında farklı tüplere aktarıldı. Tüplerin her birine 10 mg/ml konsantrasyondaki eucalyptus, eugenol, linalol, alphateripineol, tea tree bitkisel uçucu yağları eklendi ve etkileri 12 saat aralıklarla kontrol edildi. Çalışmanın sonunda Blastocystis spp. parazitlerine karşı en etkili bitkisel uçucu yağın tea tree olduğu, bunu sırasıyla eucalyptus, linalol ve alphateripineolün takip ettiği saptandı. Çalışma sonuçları tea tree bitkisel uçucu yağının Blastocystis spp.'e karşı terapötik ajan olduğunu ve Blastocystosis enfeksiyonlarının tedavisinde bitkisel uçucu yağlar kullanılabileceğini göstermektedir. Blastocystosis tedavisinde bitkisel uçucu yağların kullanılmasıyla, bu hastalığın tedavisinde kullanılan kimyasal ilaçların yan etkilerine de maruz kalınmamış olacaktır.

**Anahtar kelimeler:** Blastocystosis, bitkisel uçucu yağlar, in vitro

#### **ABSTRACT**

Blastocystis spp is one of the most common intestinal parasite in fecal examinations and causes Blastocystosis infection. The clinical symptoms of Blastocystosis are recurrent watery diarrhea, mucus diarrhea, vomiting, abdominal cramps, and there are various treatment approaches against this infection. The Metronidazole, Tinidazole, Trimethoprim-sulfamethoxazole, Ketoconazole and Nitazoxanide are commonly recommended drug for treatment of Blastocystosis. However, these drugs can cause undesirable side effects and failures in treatment of this infection. Therefore, there is a need to develop more effective and safe alternative antiprotozoal agents in the treatment of infection. In this study, it was aimed to investigate the effects of herbal essential oils on Blastocystis spp with in-vitro methods. The Blastocystis spp (ATCC™ 50578) obtained from the American Type Culture Collection center and this parasite was seeded in ATCC Medium 1671 according to the manufacturer's instructions and incubated at 35°C. Blastocystis spp parasites were transferred to different tubes, when the number of parasites reached approximately  $1 \times 10^5 / \text{mm}^3$ . The eucalyptus, eugenol, linalool, alphateripineol and tea tree essential oils at a concentration of 10 mg/ml were added to each of the tubes and their effects were checked at 12 hour intervals. At the end of study, it was determined that the most effective herbal essential oil against parasites was tea tree, followed by eucalyptus, linalool and alphateripineol, respectively. Herbal essential oils can be used in the treatment of Blastocystosis infection. Thus, the side effects of the chemical drugs used in the treatment of this disease will not be exposed. The result of this study shows that tea tree essential oil is a therapeutic agent against Blastocystis spp and herbal essential oils can be used in the treatment of Blastocystosis infections. By using herbal essential oils in the treatment of Blastocystosis, the side effects of the chemical drugs used in the treatment of this disease will not be exposed.

**Keywords:** Blastocystosis, herbal essential oil, in-vitro

## **CORRELATION OF NUTRIENT ELEMENTS WITH THE ANTIBACTERIAL ACTIVITY OF BLACK CABBAGE**

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### **ABSTRACT**

Brassica crops take a huge place in world's agriculture and food market as they appear to be one of the ten most economically important crops. Black cabbage (*Brassica oleracea* L. var. *Acephala*), a member of Brassicaceae family, is a widely consumed vegetable in Turkey, especially in the north. The annual production of black cabbage in Turkey is around 60,000 ton. Besides, it is an economically important crop all over the world. The dark green leaves of the plant contain many nutrients such as calcium, iron, vitamin C, magnesium and vitamin B6. Moreover, the leaves are rich in carbohydrates, penolic compounds, flavonoids and phytosterols, which all together make this plant gain anticarcinogenic and antioxidant properties, hence it has started to be accepted and drawn attention as a "super food". Black cabbage extracts also have antibacterial activities against pathological bacterial strains. In this study, it is aimed to reveal the correlation of antibacterial activity of black cabbage extract with some macro and micro nutrient elements present in the plant. For this reason, freshly harvested above ground parts of black cabbage grown under lab conditions were dried and grinded. The macro (P, K, Ca and Mg) and micro (Fe, Cu, Zn, Mn and B) nutrient element contents were determined by ICP-OES. Plant extract was obtained by solid-liquid extraction with ethanol and tested against two Gram positive (*Staphylococcus aureus*, *Enterococcus faecium*) and two Gram negative bacteria (*Escherichia coli*, *Pseudomonas aeruginosa*). The results revealed the correlations of the macro and micro nutrient elements with the antibacterial activity of black cabbage leaf extracts on the mentioned bacteria. The correlations of macro and micro nutrients among each other and with the antibacterial activity are especially important to determine the fertilization regime for black cabbage cultivation as it is a frequently consumed vegetable and a functional food.

**Keywords:** black cabbage, nutrient elements, antibacterial activity

## KLİNİK ESCHERİCHİA COLİ İZOLATLARINDA PLAZMİD ARACILI KİNOLON DİRENÇ GENLERİNİN MOLEKÜLER TESPİTİ

### MOLECULAR DETECTION OF PLASMID-MEDIATED QUINOLONE RESISTANCE GENES IN CLINICAL ESCHERICHIA COLI ISOLATES

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## ÖZET

Memelilerin kalın bağırsağında yaşayan *Escherichia coli* menenjit, peritonit, mastit, septisemi ve pnömoni gibi ciddi hastalıklara ve idrar yolu infeksiyonlarına neden olan fırsatçı patojen bir bakteridir. Kinolonlar, bakteri hücrelerinde DNA sentezini inhibe ederek etki gösteren antibakteriyel ajanlardır. Son yıllarda geniş spektrumlu olduğu için tedavide ön planda olan kinolon grubu antibiyotiklerin aşırı kullanımı nedeniyle hastane ve toplum kökenli *E. coli* izolatlarında kinolon direnci yüksek düzeylere ulaşmıştır. Kinolon direncinin yayılmasında PMQR genlerinin (*qnrA*, *qnrB*, *qnrC*, *qnrS*, *qnrD*, *aac(6')-Ib-cr*, *qepA* ve *oqxAB*) horizontal aktarımı önemli rol oynamaktadır. Bu nedenle *E. coli* izolatlarında PMQR genlerinin saptanması ve prevalansının izlenmesi hastanelerde direncin yayılmasının önlenmesi açısından son derece önemlidir. Bu Yüksek Lisans tez çalışmasının amacı, 2018-2019 yılları arasında Kırşehir Eğitim ve Araştırma Hastanesine başvuran hastalardan izole edilen *E. coli* izolatlarında plazmid aracılı *qnrA*, *qnrB*, *qnrS* ve *aac(6')-Ib* kinolon direnç genlerinin araştırılmasıdır. Klinik örneklerden (idrar, kan, yara ve solunum yolu) elde edilen siprofloksasine dirençli 59 *E. coli* izolatının DNA'sı polimeraz zincir reaksiyonu yöntemi ile analiz edilmiş ve DNA ürünleri agaroz jel elektroforezi sonrasında görüntülenmiştir. Çalışılan 59 *E. coli* izolatının tümü *qnrA*, *qnrB* ve *qnrS* genleri açısından negatif bulunurken, 39 (% 66,1) izolatın *aac(6')-Ib* geni taşıdığı tespit edilmiştir. Elde edilen bulgular, bu izolatlarda *aac(6')-Ib* geni ile *qnr* genleri arasında bir ilişki olmadığını ortaya koydu. Sonuçlarımız, *aac(6')-Ib* geni taşıyan *E. coli* izolatlarının *qnr* genleri taşıyanlardan önemli ölçüde daha yaygın olduğunu gösteren önceki çalışmaların sonuçlarıyla son derece uyumlu bulundu.

**Anahtar kelimeler:** *E. coli*, Kinolon direnci, *qnrA*, *qnrB*, *qnrS*, *aac(6')-Ib*.

## ABSTRACT

*Escherichia coli* living in the large intestine of mammals is an opportunistic pathogenic bacterium that causes urinary tract infections and serious diseases such as meningitis, peritonitis, mastitis, septicemia and pneumonia. Quinolones are antibacterial agents that act by inhibiting DNA synthesis in bacterial cells. In recent years, quinolone resistance has reached high levels in hospital and community-acquired *E. coli* isolates due to the excessive use of quinolone group antibiotics, which are at the forefront of treatment because of their broad spectrum. Quinolone resistance can develop chromosomally or plasmid-mediated acquisition of PMQR genes. Horizontal transfer of PMQR genes (*qnrA*, *qnrB*, *qnrC*, *qnrS*, *qnrD*, *aac(6')-Ib-cr*, *qepA* and *oqxAB*) plays an

important role in the spread of quinolone resistance. Therefore, detection of PMQR genes in *E. coli* isolates and monitoring of their prevalence are extremely important to prevent the spread of resistance in hospitals. The aim of this Master's thesis study was to investigate the presence of plasmid-mediated *qnrA*, *qnrB*, *qnrS* and *aac(6')-Ib* quinolone resistance genes in *E. coli* isolates isolated from patients admitted to Kırşehir Training and Research Hospital between 2018-2019. DNAs of 59 ciprofloxacin-resistant *E. coli* isolates obtained from clinical samples (urine, blood, wound and respiratory tract) were analyzed by polymerase chain reaction method and DNA products were visualized after agarose gel electrophoresis. While all of the 59 *E. coli* isolates studied were negative for *qnrA*, *qnrB* and *qnrS* genes, 39 (66.1%) isolates were found to carry the *aac(6')-Ib* gene. The findings revealed that there was no relationship between *aac(6')-Ib* gene and *qnr* genes in these isolates. Our results were in good agreement with the results of previous studies showing that *E. coli* isolates carrying the *aac(6')-Ib* gene were significantly more common than those carrying *qnr* genes.

**Keywords:** *E. coli*, Quinolone resistance, *qnrA*, *qnrB*, *qnrS*, *aac(6')-Ib*.

## MANYETİK NANOPARTİKÜL KULLANILARAK PEYNİR ALTI SUYUNDAN KİMYASAL OKSİJEN İHTİYACININ GİDERİMİ

### REMOVAL OF CHEMICAL OXYGEN DEMAND FROM WHEY BY USING MAGNETIC NANOPARTICLE

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#### ÖZET

Mevcut çalışmada, manyetik nanopartiküller (MNP'ler) kullanarak peynir altı suyundan (PAS) kimyasal oksijen ihtiyacı (KOİ) giderimi amaçlanmıştır. Bu amaçla hiçbir işlem görmemiş PAS (Ham PAS) 50 mL'lik santrifüj tüplerine doldurulmuş ve ayrı ayrı 2000 rpm, 3000 rpm, 4000 rpm ve 5000 rpm de 10 dk boyunca santrifüjlenmiştir. Daha sonra bu PAS'lara KOİ analizi yapılmış ve santrifüjleme için en uygun değer belirlenmiştir. En uygun santrifüj değerinin belirlenmesinden sonra Ham PAS ayrı ayrı 100 mL'lik beherlere koyulmuş ve beherdeki PAS'ların pH'ları ayrı ayrı pH 4, pH 6, pH 6.5, pH 7, pH 7.5, pH 8 ve pH 10 değerine ayarlanmıştır. Daha sonra üzerlerine 5 mL MNP eklenip 90 dk boyunca manyetik alanda çökelmeye bırakılmıştır. Bu şekilde artırılmış bu PAS'lara KOİ analizi yapılmış ve böylece en uygun pH değeri belirlenmiştir. Son olarak Ham PAS 100 mL'lik beherlere konulmuş ve üzerlerine ayrı ayrı 5 mL, 10 mL ve 15 mL MNP eklenmiş ve sonrasında bu PAS'lara KOİ analizi yapılarak en uygun MNP dozu belirlenmiştir. Çalışmanın laboratuvar sonuçlarına göre en uygun santrifüjleme değerinin 5000 rpm, en uygun pH değerinin pH 10 ve en uygun MNP dozunun 15 mL olduğu sonucuna ulaşılmıştır. Bu çalışma; peynir altı suyunun çevre kirliliğine etkisini azaltmak için orta ve küçük ölçekli tesislerde kullanılmak üzere yeni bir yöntem geliştirmeyi amaçlayan deneysel bir çalışma niteliği taşımaktadır. Çalışmanın ileriki aşamalarında MNP'lerin yüzeyi polimer kaplanarak MNP'nin KOİ süpürme oranı arttırılacaktır.

**Anahtar kelimeler:** Peynir altı suyu, Manyetik nanopartikül, Arıtma.

#### ABSTRACT

In the current study, chemical oxygen demand (COD) removal from whey (PAS) using magnetic nanoparticles (MNPs) was aimed. For this purpose, untreated whey (Raw whey) was filled into 50 mL centrifuge tubes and centrifuged separately for 10 minutes at 2000 rpm, 3000 rpm, 4000 rpm and 5000 rpm. Then, COD analysis was performed on these whey and the most suitable value for centrifugation was determined. After the optimum centrifugation value was determined, Raw whey was put into beakers of 100 mL separately and the pH of the whey in the beaker was adjusted to pH 4, pH 6, pH 6.5, pH 7, pH 7.5, pH 8 and pH 10 separately. Then, 5 mL of MNP was added to them and left to settle in the magnetic field for 90 minutes. COD analysis was performed on these whey treated in this way, and thus the most appropriate pH value was determined. Finally, Raw whey was put into 100 mL beakers and 5 mL, 10 mL and 15 mL MNP were added to them separately, and then the most appropriate MNP dose was determined by making COD analysis to these whey.



According to the laboratory results of the study, it was concluded that the most appropriate centrifugation value was 5000 rpm, the most appropriate pH value was pH 10 and the most appropriate MNP dose was 15 mL. This work; It is an experimental study aiming to develop a new method to be used in medium and small scale facilities to reduce the impact of whey on environmental pollution. In the next stages of the study, the COD scavenging rate of MNP will be increased by coating the surface of MNPs with polymer.

**Keywords:** Whey, Magnetic nanoparticle, Treatment.





## COMPARATIVE STUDY OF OIL ADSORBENTS USING CORN CHAFF AND COCONUT FIBRE

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### ABSTRACT

The issue of oil pollution has been an important concern to oil producing nations of the world due to its serious environmental impact; therefore, necessary actions needs to be taken to prevent or reduce this type of pollution and their environmental consequence. Most materials used for solving the pollution menace are effective and very expensive to procure due to the limited or scarcity of starting material and the processes of transforming such precursor to useful adsorbent. Natural organic sorbents are emerging as proper choice of oil spill clean-up due to their availability, low cost and eco-friendliness. In this study, adsorptive capability of a functionalized low cost effective corn chaff and coconut fibre were investigated and compared. The adsorptive capability of these materials were subjected to various tests which include checking of the effect of sorbent contact time and adsorbent particle size on oil adsorption capacity as evaluation for the pure crude oil and mixture of crude oil and water removal. The result showed that coconut fibre is more effective in oil spill clean-up than corn chaff. The physical characterization of the raw adsorbent was determined in the laboratory while the chemical characterization of the raw and functionalized adsorbent was done using Fourier Transform Infra-Red (FTIR) analysis.

**Keywords:** Oil spillage, Adsorption, Corn chaff, Coconut fibre, FTIR analysis

## **BARRERAS ARANCELARIAS Y BARRERAS NO ARANCELARIAS**

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### **ABSTRACT**

El presente ensayo se analizarà de donde surgen las barreras arancelarias y no arancelarias y porque surgen, tomando en cuenta que en el desarrollo económico existe dos temas que son fundamentales y parte claves en conceptualización de las barreras arancelarias y no arancelarias estas son el proteccionismo y el librecambismo. El proteccionismo es considerado una doctrina y política económica, la cual su objetivo principal es ponerle trabas al ingreso de productos extranjeros, de tal forma que pueda favorecer el comercio nacional, es decir que evita la competencia foránea y privilegia así la producción nacional. Es por ello que, para proteger los productos de la nación, este establece impuestos o también llamados aranceles a la importación, para que de esta forma los productos sean encarecidos al ingresar al país y esto los obliga a ofrecer sus productos a un precio elevado para que resulten rentables, lo que de tal forma beneficia a los productos nacionales. A lo contrario al proteccionismo tenemos el librecambismo o libre cambio, esta es totalmente lo contrario, esta defiende la eliminación a las trabas, es decir los aranceles y las cuotas en el comercio entre países. Su objetivo principal es expandirse del libre mercado entre países, de esta forma se aumentarán las alternativas al consumidor y productor, lo que permitirá que la oferta y demanda se ajusten de forma más efectiva. De acuerdo a todo lo anterior es donde surge la implementación de medidas expresadas en Barreras Arancelarias y Barreras No Arancelaria, siendo estas las que restringen la entrada de productos extranjeros similares o iguales a los productos nacionales a razón de encarecer el producto extranjero o limitar el ingreso favoreciendo al producto local. Es por ello que es necesario que se analice las diferentes características que estas conllevan, los diferentes tipos que existen e ir identificando las diferencias entre ellas.

**Palabras clave:** barreras arancelarias, barreras no arancelarias, proteccionismo, aranceles.



## HERRAMIENTAS ALTERNATIVAS PARA LA VALORACIÓN DE OPERACIONES ENTRE PARTES VINCULADAS

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### ABSTRACT

El objetivo del presente trabajo de investigación es analizar las ventajas de utilizar la información contenida en los estudios de precios de transferencia para la valoración de las mercancías en las aduanas en operaciones pactadas por entidades con intereses económicos comunes, conocidas como partes vinculadas.

En la actualidad los estudios de precios de transferencias constituyen un elemento de control muy socorrido por la autoridad fiscal, por lo que han venido cobrando relevancia, pues le facilita la supervisión de las operaciones que involucran a dos o más empresas que forman parte de un mismo grupo empresarial, con el propósito de comprobar que los precios de las mismas se apeguen a la realidad y no sean simples especulaciones para lograr beneficios económicos, sin que exista realmente una razón de negocios.

Las operaciones de comercio internacional celebradas entre partes vinculadas, dan lugar a situaciones bastante peculiares ya que incorporan consideraciones adicionales al proceso de valoración en aduanas, pues, al llevarse a cabo por entidades que comparten un mismo interés económico, el precio concertado entre ellas pudiera estar artificialmente manipulado con el fin de producir un beneficio indebido en detrimento de la recaudación de impuestos y derechos.

El proceso de estimación del valor de las mercancías en la aduanas plantea problemas tanto a los importadores como a las autoridades aduaneras, pues establecer un sistema que resulte equitativo, uniforme y neutro para todas las partes intervinientes se complica dentro de un contexto de disparidad de intereses.

No obstante, a través del análisis cualitativo de las diversas posturas doctrinarias en materia de valoración aduanera, se concluye que la información contenida en una de las principales herramientas de análisis de precios de mercado para efectos fiscales, como lo son los estudios de precios de transferencia, constituye un recurso valioso en la determinación de precios en operaciones de comercio exterior.

**Palabras clave:** Valoración aduanera, Partes Vinculadas, Partes Relacionadas, Precios de transferencia, metodologías de valuación aduanera.

**E-COMMERCE EN MÉXICO, ANÁLISIS ACTUAL DESDE LA PERSPECTIVA DEL CONSUMIDOR**

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**ABSTRACT**

El e-commerce en México ha facilitado la incursión de nuevas empresas, de todos los tamaños y giros, a sus mercados competidores. Esta nueva era tecnológica brinda las herramientas para reducir costos de transacción y producción, por lo tanto los productos son mas competitivos, contribuyendo al crecimiento económico de un estado o país. En cuanto al cambio a la nueva forma de operar de los negocios, implementada en los diferentes mercados, las ventas en internet no han dejado de evolucionar y cada vez se expanden más, siendo la infraestructura de telecomunicaciones una herramienta vital en este proceso, esto implica que las organizaciones integren en sus estrategias de ventas la modalidad en línea.

El comercio electrónico crece a pasos agigantados por el constante avance tecnológico, el número en aumento de sitios comerciales y la exigencia o demanda de consumidores derivado de factores como lo son: moda de otros países, precios accesibles, facilidad para realizar pedidos vía redes sociales, páginas comerciales o aplicaciones (apps como Shein, Mercado Libre, Amazon), descuentos y promociones, métodos de pago, etc., agrego también un factor sumamente importante de que como consumidores hemos adoptado la costumbre de permanecer en casa y realizar pedidos que sean entregados directamente en la puerta de nuestros hogares derivado de la actual contingencia sanitaria (Covid-19).

Este trabajo de investigación se enfoca en definir los conceptos actuales y la evolución del e-commerce en México en lo que específicamente se refiere a la perspectiva del consumidor. Para el desarrollo del tema se realizó una investigación exhaustiva y comparación con otros trabajos similares, sobre las preferencias de compra de los consumidores, recordando que actualmente hay personas que siguen desconfiando de los procesos de compra en línea y pagos vía TEF (transferencia electrónica de fondos), los cuales son un porcentaje no muy notorio pero que a fin de cuentas forman parte de este trabajo de investigación.

**Keywords:** e-commerce, consumidor, avance tecnológico, internet.

## LA AUDITORIA ADMINISTRATIVA, COMO HERRAMIENTA DE CONTROL INTERNO

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### ABSTRACT

El presente trabajo pretende conocer los tipos de controles administrativos que existen en la realización de las distintas actividades dentro de una empresa; analizar el rol que desempeña la actividad de control en el proceso administrativo o en las principales áreas o departamentos de la organización y con este análisis obtener parámetros de medición que nos permitan evaluar, el impacto de la auditoría administrativa en el cumplimiento de los objetivos de una organización.

La implementación de auditorías administrativas aporta validez a la evaluación y a la eficiencia de las actividades llevadas a cabo por una empresa. Las auditorías administrativas son realizadas por un profesional llamado auditor y se realizan cuando se quiere examinar el desempeño de las áreas administrativas de una organización, mediante un examen detallado. La auditoría administrativa se realiza con la intención de hacer recomendaciones para incrementar la eficiencia operativa de una entidad.

El control interno, por su parte, detecta problemas, proporciona bases para solucionarlos, prevé obstáculos para la eficiencia, brinda recomendaciones para simplificar el trabajo e informa sobre el incumplimiento de planes y objetivos.

La década de los años noventa, fue un periodo decisivo para el cambio del concepto de control interno que conocemos y utilizamos hoy en día. A partir de los noventa, los nuevos modelos desarrollados en el campo del control, están definiendo una nueva corriente del pensamiento, con una amplia concepción sobre la organización, involucrando una mayor participación de la dirección, gerentes y personal en general de las organizaciones a nivel mundial

El control es un factor clave en el logro de los objetivos de las organizaciones, razón por la que debe ser oportuno, económico y seguir una estructura orgánica que tenga una ubicación estratégica. Actualmente se perfila un tipo de control organizacional dirigido precisamente a regular el funcionamiento de las actividades operacionales que se desarrollan en el día a día de una empresa.

En este sentido, la alta dirección de las organizaciones, debe estar consiente que un ente económico se transforma continuamente al momento de experimentar su realidad, que es dinámica, prospectiva y que puede generar una compleja realidad organizacional.

La auditoría se debe orientar hacia el conocimiento y la previsión o pronóstico de la organización en todo sentido.

**Keywords:** auditoría administrativa, control interno, auditor.

## COMERCIO ELECTRÓNICO

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### ABSTRACT

El presente trabajo de investigación tiene como objetivo analizar el tema de Comercio electrónico a través de los elementos que lo componen, así como las oportunidades que tienen hoy en día las empresas de implementar las nuevas tecnologías, conectando con los mercados nacionales e internacionales. El comercio electrónico en México se ha desarrollado con más fuerza en los últimos años y a raíz de la pandemia, dos de cada diez empresas dedicadas a las ventas por internet, plataforma o algún otro medio digital, tuvieron una expansión de más del 300% en el año 2020, marcando una diferencia importante respecto al año 2019. Para el año 2021 se proyectó que las empresas de comercio electrónico en México y las ventas online superarían más del 30% de sus ventas totales. Bajo este contexto, la evolución del comercio electrónico no solo en México sino alrededor del mundo, es de suma importancia para los mercados locales, nacionales e internacionales, ya que de esta forma se pueden tomar medidas necesarias para implementar cuanto antes la transformación digital, adoptar el modelo de comercio online, mejorar los procesos de logística y llegar a una mayor masa de consumidores alrededor del mundo.

Una de las grandes ventajas que representa el comercio electrónico tanto para las empresas como para los usuarios es que se puede contar con negocios que funcionen a nivel mundial, las 24 horas del día, basta con tener una conexión de internet y un medio de pago digital como son las tarjetas de débito, crédito, transferencias electrónicas, monederos electrónicos, PayPal, entre muchos otros que existen hoy en día. Con el comercio digital es más fácil conocer las necesidades y problemáticas que los clientes presentan, a través del uso de herramientas de análisis es posible llevar un registro de las transacciones realizadas, compras repetidas, productos favoritos etc., esto permite aplicar técnicas de recomendación de productos específicos y la personalización de la comunicación entre la empresa y el cliente.

**Keywords:** Comercio electrónico, internet, empresa, clientes, digital.

## IMPACTO DEL COVID-19 AL COMERCIO EN MÉXICO

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### ABSTRACT

Este análisis pretende dar un panorama de cómo el comercio en México se ha visto afectado debido a la crisis sanitaria provocada por la pandemia del covid-19, en donde ha mostrado cambios significativos en la manera en como las empresas se han adaptados a los cambios impuestos por los gobiernos y aún más importante los cambios en los gustos y preferencias de los consumidores, en donde la actual contingencia sanitaria ha acelerado esta transición, atrayendo un mayor número de clientes que adquieren productos mediante plataformas digitales.

Las pequeñas empresas han sido las más afectadas al registrar pérdidas que para algunos ha significado el cierre definitivo de las mismas, al no contar con capital suficiente para sobrellevar los cambios, y de manera contraria esto ha sido una gran oportunidad y excelente apoyo para empresas que han sabido adaptarse y cambiar metodos y estrategias de ventas para lograr colocar su producto en buenos lugares en mercados competitivos dando lugar a un crecimiento economico potencial.

Todos los retos que ha presentado México son también oportunidades que podría utilizar a su favor para alcanzar una estabilidad económica, ya que actualmente otros países ven a México como una plataforma para sus inversiones. Sin embargo, es necesario reforzar y dar seguridad a esas inversiones para consolidarlas y así hacer más llamativa las ofertas para atraer mas inversionistas a nuestro país.

También, analizaremos como ha afectado a las familias en México, siendo esto un factor importante para llevar a cabo el comercio. Una familia sin empleo derivado de la situación actual es perjudicial para las empresas y de igual manera la creación de nuevos empleos brinda mayores posibilidades para adquirir productos. Para complementar el tema se realizará la comparación con otros trabajos metodológicos similares, concluyendo que esta crisis ha marcado un punto importante de evolución de la economía en México, con resultados tanto positivos como negativos.

**Keywords:** COVID-19, plataformas digitales, crecimiento económico.

## **EL CONTROL INTERNO EN LA EFICIENCIA DEL PERSONAL DE UNA EMPRESA**

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### **ABSTRACT**

En la actualidad es fundamental para cualquier empresa el lograr la eficiencia en la producción de las actividades ya que se busca producir la mayor cantidad ya sea de productos o servicios en el menor tiempo posible y con los menores costos ya que la industria va cambiando continuamente y la competencia en el mercado cada vez es mayor no sólo a nivel nacional sino mundial ya que las tecnologías nos acercan a un mercado global. Esta investigación está enfocada a las empresas mexicanas ya que día a día requieren innovarse para poder despuntar dentro del mercado, existen 685,023 empresas en México de las cuales 625,254 son microempresas y 46,122 son pequeñas empresas al ver estas cifras podemos darnos cuenta que en el país la mayoría de las empresas son micro y pequeñas empresas sin contar las de economía informal, esto hace que nos preguntemos si en estas empresas existen los controles internos y poder diferenciar de las empresas que ya cuenten con estos sistemas de control interno de manera adecuada.

En las empresas que ya cuentan con la implementación del control interno podremos analizar las repercusiones de este en sus empleados de manera directa e indirecta y el cambio que ha sucedido en la cuestión de la eficiencia con base a los resultados con los que cuenta en el momento actual la empresa, el antes y después de la implementación a través de una investigación a partir de entrevistas y datos proporcionados por la empresa.

Al acercarnos a esta empresa nos encontramos con un sistema de control interno no establecido sino manejado de manera empírica y al analizarlo se llevaron a cabo recomendaciones pertinentes para poder aplicarlo de manera sistematizada y metódica. Los trabajadores de esta empresa actualmente aplican este sistema de control interno se encuentran adaptándose a él y ha habido gran avance en los resultados de la empresa ya que sus actividades están delimitadas y se ha logrado alcanzar los objetivos en menor tiempo logrando así mayor eficiencia dentro de la empresa.

**Keywords:** Empresa, control interno, métodos



## TRATADOS INTERNACIONALES COMERCIALES DE MEXICO

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### ABSTRACT

El comercio exterior es uno de los detonantes de la economía de un país ya que se constituyen del intercambio comercial y financiero de un país a otro, para que se lleven a cabo todas estas operaciones deben realizar mediante tratados que son fuentes del derecho internacional, en donde Mexico es participe de diversos tratados, miembro del GATT desde el 24 de agosto de 1986 y desde 1995 pertenece a la Organización Mundial de Comercio (OMC), con el objetivo de ayudar a reducir obstáculos al comercio mediante negociaciones entre los gobiernos miembros, el sistema de la OMC también ha contribuido a eliminar otros tipos de barreras que se interponen entre los pueblos y las economías comerciales, durante los últimos años esta organización a ayudado de forma significativa el comercio mundial.

Derivado de ello, en este artículo mencionaremos algunos tratados comerciales más importantes de México, para que cualquier persona que desee realizar intercambios comerciales o llevar a su empresa fuera de las fronteras, tenga una idea sobre que acuerdos o tratados, los países participantes, fecha de publicación en el diario oficial de la federación, así como del objetivo del tratado. Se puede consultar en fuentes oficiales del gobierno federal de Mexico, en donde proporcionan información acerca de los diversos tratados que actualmente tiene Mexico con otros países, tales como 12 tratados de libre comercio firmados con 46 países, 32 Acuerdos para la promoción y protección recíproca de las inversiones con 33 países, 9 Acuerdos de Alcance Actualmente se menciona el tratado TMEC entre los países de Norte América en donde participa México, Estados Unidos de América y Canadá, firmado el 30 de Septiembre de 2018, las tres naciones modernizaron el TLCAN que estuvo en vigor entre el 1° de enero de 1994 y el 31 de junio de 2020 y comprende una de las zonas de libre comercio más grandes del mundo

**Keywords:** Tratado, intercambio, libre, comercio, acuerdos, inversión.

**BARRERAS NO ARANCELARIAS: LAS RESTRICCIONES AL TRATADO DE LIBRE  
COMERCIO**

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**ABSTRACT**

La firma de un acuerdo comercial de estas características exige de cada una de las partes, pero principalmente de la más débil, reflexionar sobre cuáles son los costos y beneficios de una reforma de tal magnitud importancia; el Tratado de libre comercio para los países es de suma importancia, ya que buscan ampliar sus fuentes de ingresos, diversificar sus productos hacia los demás países, pero siempre y cuando con las medidas necesarias para protección del bien y el país que importe y exporte a ello se le denomina Sistema multilateral de comercio donde se pueda encontrar un equilibrio en el beneficio para ambos países. Y para ejecutarlo se encuentran las normas del Acuerdo General Sobre Aranceles Aduaneros y Comercio (GATT); y como fortalecimiento nace la Organización Mundial de Comercio (OMC) entre 1986 y 1994 a consecuencia de las negociaciones, es decir entre la octava y última ronda de negociación denominada “Ronda de Uruguay” donde a diferencia de las demás negociaciones, esta exigía más “aranceles”. La importancia de los acuerdos regionales y el reconocimiento oficial de la legitimidad muestran que la localización geográfica es una variable determinante del intercambio comercial. Los países que forman parte de dichos acuerdos evidencian una tendencia a formar acuerdos comerciales que incluyan al mayor número posible de socios dentro de un área geográfica. El objetivo del análisis es resaltar la restricción que las barreras no arancelarias pueden causar para ejercer el tratado de libre comercio. El análisis será bajo la comparación de otros trabajos metodológicos. Se concluye de forma general que en la actualidad cada país busca la protección comercial y esto ha ido en aumento, lo que a su vez es una problemática para el comercio exterior ya que al producir un alza de aranceles en un producto limita a que un país pueda adquirirlo; es necesario trabajar con nuevas estrategias para evitar las restricciones no arancelarias.

**Keywords:** Tratado de Libre comercio, Barreras no arancelarias, restricciones.



**EL ACCESO A LA INFORMACIÓN COMO UN DERECHO HUMANO**

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**ABSTRACT**

La Constitución Política de los Estados Unidos Mexicanos de 1917, no reconoció desde su promulgación, el derecho de acceso a la información pública, a pesar de que nuestra constitución es reconocida como una de las primeras constituciones con un alto contenido social y el mismo ya se encontraba reconocido en diversos ordenamientos internacionales; más bien, el derecho de acceso a la información, era reconocido como una garantía de los derechos de réplica y de petición, pero ante la necesidad de consolidar la democracia en nuestro país, en la reforma política que se hizo a nuestra constitución en 1977, se reconoció el derecho de acceso a la información como un derecho humano garantizado por el estado, posteriormente, en la reforma constitucional de julio de 2007, se adicionó al artículo 6º constitucional, un segundo párrafo con siete fracciones que regulaban los principios y bases con los que se debería garantizar y ejercer el derecho de acceso a la información, los cuales ya se encontraban regulados en la ley federal de transparencia y acceso a la información pública gubernamental, publicada el 11 de junio de 2002. el 07 de febrero de 2014, nuevamente se reformó el artículo 6º, con la finalidad de ampliar el catálogo de los sujetos obligados, la creación del órgano garante, que actualmente conocemos como el Instituto Nacional de Transparencia, Acceso a la Información y protección de datos personales (INAI), la promulgación de la ley general y la armonización normativa en las constituciones locales y la creación de sus organismos garante.

**Palabras claves:** acceso a la información, obligaciones, derecho humano,



## EL DERECHO A LA VIVIENDA Y LA CARENCIA DE SERVICIOS BÁSICOS

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### ABSTRACT

El derecho a la vivienda se encuentra fundamentado en el artículo 4 constitucional el cual menciona que toda persona tiene derecho a una vivienda digna y decorosa, Sin embargo, en México las viviendas siguen careciendo de espacios o servicios básicos que indican un nivel de pobreza muy bajo dado a los indicadores del Consejo Nacional de evaluación de la Política de Desarrollo Social, el cual dentro de sus indicadores respecto a la población en situación de carencia por servicios básicos de la vivienda se consideran aquellos como el agua se obtiene de un pozo, río, lago, arroyo, pipa, o bien sea agua entubada, asimismo carencias de servicios de drenaje, no se dispone de energía eléctrica, y finalmente el combustible que se utiliza para cocinar o calentar los alimentos es leña o carbón sin chimenea.<sup>1</sup> Así cuando se presentan este tipo de rezagos por carencia de agua potable, energía eléctrica y la infraestructura general en el conjunto de viviendas, se necesita de acciones y políticas o bien programas que se encuentren encaminados en desarrollar o consolidar la estructura de la vivienda para toda aquella población que se encuentren en situación de pobreza, dado que los resultados que se obtengan pueden ayudar a disminuir las situaciones o circunstancias en que la gente más marginada se encuentra, incluso, puede ser el principio o experiencia que en un futuro, los gobiernos puedan considerar dentro de sus planes nacionales de desarrollo para evitar también este tipo situaciones que en la actualidad se siguen suscitando en el país.

**Palabras clave:** Vivienda, Pobreza, Servicios Básicos

<sup>1</sup> Consejo Nacional de Evaluación de la Política de Desarrollo Social, Medición de la Pobreza, Carencia por acceso a los servicios básicos de la vivienda, disponible en:  
[https://www.coneval.org.mx/Evaluacion/IEPSM/Documents/ CPP\\_2022/Carencia\\_servicios\\_vivienda.pdf](https://www.coneval.org.mx/Evaluacion/IEPSM/Documents/_CPP_2022/Carencia_servicios_vivienda.pdf)



**LA LENGUA COMO VEHÍCULO PARA UNA VIDA DIGNA**

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**RESUMEN**

La lengua es parte de la identidad de cada ser humano. Es el medio por el cual se comunican las necesidades y entablamos relaciones con quienes nos rodean. Aunado a ello, la lengua es parte de una vida digna en la cual se respeta y se alienta la identidad del hablante. El hecho de minimizar las lenguas o no establecer leyes que eviten vulnerarlas exime a quienes las utilizan de alcanzar esa dignidad utópica.

De acuerdo a la Declaración Universal de los Derechos Humanos, todos quienes somos parte de la sociedad tenemos derecho a la igualdad y al respeto de la identidad que nos forma. Sin embargo, al analizar casos como el de México, podemos notar que esto no siempre se respeta.

**Palabras clave:** lengua, derechos humanos, vida digna



## LA MEDIACIÓN EN LOS JUICIOS POR HERENCIA EN TABASCO

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### RESUMEN

La mediación, que es un Medio Alternativo de Solución de Controversias (MASC), se tiene contemplada en la legislación de Tabasco para aplicarla con carácter no lucrativo y con el objetivo básico de extender los fundamentos teóricos y las aplicaciones prácticas de la negociación, la mediación y la conciliación.

La justicia mexicana como servicio público facultado institucionalmente por el Poder Judicial se enfrenta a la realidad de una demanda de servicios cuyos recursos presupuestales resultan insuficientes para satisfacer adecuadamente sus funciones. Ante ello, los Medios Alternativos de Solución de Controversias han sido utilizados exitosamente para resolver en forma económica y rápida problemas de marginalidad jurídica, dando como resultado, por una parte, la vigencia del Derecho y por la otra, que los tribunales del Estado se concentren en atender aquellos problemas que son realmente insustituibles.

Concretamente, la figura jurídica de conciliador actualmente la podemos encontrar en nuestro Estado en juicios ordinarios en materia civil, como en asuntos relativos a la guardia y custodia de menores, divorcios y otros asuntos familiares; ello constituye a la conciliación, el arbitraje y la mediación como valiosos instrumentos para la resolución de conflictos jurídicos que deriven de asuntos civiles, familiares, laborales, mercantiles, vecinales, ambientales, etc.

De manera que, dado a que no hay un sistema como tal para la solución de los juicios sucesorios intestamentarios, el presente trabajo se propone realizar un estudio que precise y contemple la viabilidad de implementar los medios alternos de solución de controversias en los juicios sucesorios intestamentarios en el Estado de Tabasco.

**Palabras claves:** Mediación, herencia, juicios sucesorios.



**NIÑOS MIGRANTES Y LAS GARANTÍAS MÍNIMAS DEL DERECHO AL DEBIDO PROCESO**

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**ABSTRACT**

Los niños migrantes son una población que necesita de una protección especial por parte de las autoridades mexicanas, dado su especial condición de vulnerabilidad que presentan al transitar o bien ser detenidos y canalizados a estancias no adecuadas a su condición humana. De modo que, en el plano internacional, la Corte Interamericana de Derechos Humanos ha sido muy enfática respecto a que por las condiciones especiales en la en que se encuentran los niños siempre se deben adoptar ciertas medidas específicas con la finalidad de asegurar un acceso a la justicia en condiciones de igualdad, así como garantizar el efectivo debido proceso y ver que el interés superior se considere primordial en todas las decisiones administrativas judiciales que se adopten. Así de acuerdo al criterio de la Corte toda persona tiene derecho independientemente de su estatus migratorio al debido proceso legal, lo que el Estado debe garantizar a toda persona extranjera de hacer valer sus derechos y defender sus intereses de una manera efectiva y en igualdad procesal.<sup>1</sup> Así, todo niño migrante debe tener derecho a una serie de garantías en el debido proceso, que el tribunal interamericano regional lo ha reconocido, dentro de las cuales aún falta mucho por hacer para la planificación de programas y en el trabajo con órganos especializados en derechos de la infancia, para que se les garantice esos derechos a estos grupos vulnerables en territorio mexicano.

**Palabras clave:** migración infantil, debido proceso, garantías mínimas

<sup>1</sup> Corte Interamericana de Derechos Humanos, Opinión Consultativa OC-21/14 sobre Derechos y Garantías de Niñas y Niños en el Contexto de la Migración y/o en Necesidad de Protección Internacional, párrafo 113.



## PEDAGOGY VIS-À-VIS ARTWORKS

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### **ABSTRACT**

In my courses, I have vastly used entertainment and art works like plays, feature films and documentaries for education in Covid 19 era. In this paper, I am presenting the philosophical foundation of my method. In many cases, I use art works like movies, plays, as well as documentaries. For instance, in the course sequence on Mysticism, I use a Persian play called *The Vagabond* which appear much more helpful than the best textbooks. Philosophical bases for the method follow. Farabi believes in art as the best and sometimes the only way to teach the most complicated and abstract subjects including philosophy as well as religion. He places artists in the second position of Virtuous City as religion-conveyers after the prophetic rulers. The main job of artists is to teach religious and philosophical concepts and rules. The first head of Virtuous City is no one but the prophet, and his government is believed to be accompanied by the divine revelation and all his actions and views are based on heavenly inspiration. In the second place, there are religion-conveyers including orators, missionaries, poets, musicians, singers, writers and the like. The role of poets, singers, musicians, writers, and all artists in Virtuous City can be best accounted for in terms of the roles with which Farabi credits the imaginary faculties in both revelation and art.

**Keywords:** Farabi, art, teaching, imagination.



**AZƏRBAYCANIN ORTA KÜR ÇÖKƏKLIYINDƏ MAYKOP ÇÖKÜNTÜLƏRİNİN  
LITOLOGİYASI VƏ TOPLANMA ŞƏRAITI**

LITHOLOGY AND RESERVOIR PROPERTIES OF THE MAYKOPIAN ROCKS THE MIDDLE KURA  
BASIN OF AZERBAIJAN

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**XÜLASƏ**

Maykop çöküntüləri Azərbaycanın neftli-qazlı zonasında geniş yayılmışdır. Azərbaycanda Məhsuldar Qatdan sonra bu çöküntülər neftlilik-qazlılıq cəhətdən önəmli sayılır. Çöküntülərin neft-qazlılığı onun alt (Yevlax-Ağcabədi və Kür-Qabırçı çaylararası) və üst şöbələri ilə (Yevlax-Ağcabədi və Cənubi-Qobustan rayonları) əlaqədardır. Bu çöküntülər təbii çıxışlarla və eləcə də qazılan quyulardan götürülmüş süxur nümunələri ilə öyrənilmişdir. Tədqiq olunan sahələr Şamaxı-Qobustan neftli-qazlı rayonu və Azərbaycanın qərb hissəsini əhatə edir. Maykop çöküntüləri hər yerdə terrigen əsaslı gilli fassiyada yayılıblar.

Kiçik Qafqazın dağ çaylarının gətirilmə konusunun geniş inkişafı ilə əlaqədar olaraq bu dağ sisteminin yamacında Kiçik Qafqazqarşısı çökəkliyi hüdudunda kobud dənəli potensial süxur kollektorların toplanmasına gətirib çıxartmışdır. Acıdərə və Zeyvə sahələrinin tam kəsilişləri üzrə (Maykop çöküntülərinin bütün şöbələri verilmişdir) kollektor xüsusiyyətlərinin göstəricilərinə əsasən demək olar ki, kəsilişin alt hissəsində kollektor xüsusiyyətlərinin yaxşılaşması aydın görünür. Kern nümunələrinə əsasən Yevlax-Ağcabədi çökəkliyində Alt Maykop çöküntülərinin terrigen süxurlarının karbonatlığı təhlil olunmuşdu. Aparılan tədqiqatlar nəticəsində hövzənin cənub-qərb və şimal-şərq hissəsində Alt Maykop çöküntülərinin karbonatlığı daha yüksək qiymətə malikdir Alt Maykop çöküntülərinin tədqiqat sahəsi üzrə ümumi məsaməlik hövzənin cənub-qərb hissələrində yaxşı həcm xüsusiyyətinə malikdir (25-20%) (Güllüca, Dəlməmmədli sahələri). Quyulardan götürülmüş kern məlumatlarına görə məsaməlik Şərqi Ağcabədi sahəsində 27,4% və Gödəkboz və Əmirarx sahələrində isə 20 və 15 %, Şıxbağı sahəsində 15,5% təşkil edir.

Şimal-şərq və şimal-qərb istiqamətində məsaməliyi qiyməti pisləşir. Quyulardan götürülmüş kern məlumatlarına görə məsaməlik Duzdağ sahəsində 6,3% və Muradxanlı sahəsində isə 9,1% təşkil edir

Alt Maykop çöküntüləri üzrə keçiricilik analoji olaraq hövzənin şimal-şərq hissəsindən cənub-qərb hissəsində artır. Umumilikdə, Maykop süxurları zəif süzülmə xüsusiyyətinə malikdir. Ola bilər ki, bu süxurlarda gedən proseslərlə əlaqədar süxurların sementləşmə dərəcəsinə təsir etmiş və sementin miqdarının dəyişməsinə səbəb olduğundan, keçiriciliyə də öz təsirini göstərmişdir.

Umumilikdə, Kür-Qabırçı çaylararası neftli-qazlı rayonda Maykop çöküntülərinin həcm-süzülmə xüsusiyyətli hövzənin qərb və mərkəzi hissələrində nisbətən yaxşı olduğunu söyləmək olar.

Alınmış nəticələrdən görüldüyü kimi Kür-Qabırçı çaylararası NQR-in şimal-şərq hissəsinin şimal-üstəgəlmələrin inkişaf etdiyi sahələrində Maykop süxurları pis və çox pis kollektor xüsusiyyətləri ilə xarakterizə olunur. Tədqiqat sahəsinin mərkəzi və cənub hissələrində kollektor xüsusiyyətlərinin yaxşılaşması müşahidə olunur. Maykop süxurları yaxşı kollektor xüsusiyyətlərinə malikdilər. Kür-Qabırçı çaylararası rayonunun şərq hissəsində qumlu-alevrolitli süxurların zəif yayılmasına və hətta yoxluğuna görə bu süxurların mineraloji tərkibi haqqında nə isə söyləmək mümkün deyil. Rayonun qərb hissəsində isə məlumatların az olmasını nəzərə almaqla, Maykop süxurlarının mineraloji tərkibində süxur qırıntılarının, çöl şpatlarının üstünlük təşkil etdiyini demək olar.

Mineraloji tərkibin müxtəlif olması klastik materialın müxtəlif mənbədən daxil olduğunu göstərir. Kiçik Qafqazqarşısı çökəkliyin qidalanma mənbəyi Kiçik Qafqazdır. Yevlax-Ağcabədi çökəkliyinin mərkəzi hissəsinə qırıntı materialları Kiçik Qafqazdan axan çaylarla daxil ola bilər.

Kür-Qabırçı çaylararası rayona çökmə süxurları əsasən Kiçik Qafqazın gətirilmə mənbəyi üstünlük təşkil edir.

**Açar sözlər:** kern, terrigen, karbonatlıq, Maykop lay dəstəsi, süxur, məsaməlik, gilli süxurlar

## ABSTRACT

Maykop sediments are widespread in the oil and gas zone of Azerbaijan. After the Productive Layer in Azerbaijan, these sediments are considered important in terms of oil and gas. The oil and gas content of the sediments is related to its lower (between Yevlakh-Agjabadi and Kur-Gabirri rivers) and upper sections (Yevlakh-Agjabadi and South-Gobustan regions). These sediments have been studied by natural outcrops as well as rock samples taken from drilled wells. The studied areas cover the Shamakhi-Gobustan oil and gas region and the western part of Azerbaijan. Maykop sediments are ubiquitous in terrigenous clayey fascia.

Extensive development of the confluence of mountain rivers in the Small Caucasus, the slope of this mountain system has led to the accumulation of coarse-grained potential rock collectors within the Small Caucasus basin. According to the indicators of collector characteristics on the complete cut sections of Ajidara and Zeyva fields (all sections of Maykop sediments are given), the improvement of collector characteristics is clearly visible in the lower part of the cut section. Based on Kern samples, the carbonate content of terrigenous rocks of the Lower Maykop sediments in the Yevlakh-Agjabadi basin was analyzed. As a result of the research, the carbonate content of the Lower Maykop sediments has a higher value in the south-western and north-eastern parts of the basin. According to the kernel data from the wells, the porosity is 27.4% in the East Agjabadi area, 20 and 15% in the Godakboz and Amirrah areas, and 15.5% in the Shikhbagi area.

Porosity prices are deteriorating in the north-east and north-west. According to kernel data from wells, the porosity is 6.3% in Duzdag and 9.1% in Muradkhanli.

The permeability of the Lower Maykop sediments is similarly increasing from the north-eastern part of the basin to the south-western part. In general, Maykop rocks have poor filtration properties. It is possible that due to the processes taking place in these rocks, it affected the degree of cementation of the rocks and, as it caused changes in the amount of cement, it also affected the permeability.

In general, it can be said that the Maykop sediments in the Kur-Gabirri inter-river oil and gas region are relatively good in the western and central parts of the volume-leakage basin.

As can be seen from the results obtained, the Maykop rocks are characterized by bad and the worst collector characteristics in the areas of the north-eastern part of the Kura-Gabirri inter-river, where the development of the north-east is developed. Improvement of collector characteristics is observed in the central and southern parts of the research area. Maykop rocks had good collector properties. Due to the weak distribution and even the absence of sand-siltstone rocks in the eastern part of the Kur-Gabirri inter-river region, it is impossible to say anything about the mineralogical composition of these rocks. Given the lack of information in the western part of the region, it can be said that the mineralogical composition of the Maykop rocks is dominated by rock fragments and feldspars.

The diversity of the mineral composition indicates that the classical material came from different sources. The nourishment source for the Small Caucasus Basin is the Small Caucasus. In the central part of the Yevlakh-Agjabadi basin, debris can enter the rivers flowing from the Small Caucasus.

Sedimentary rocks in the Kur-Gabirri inter-river region are mainly the source of import for the Small Caucasus.

**Keywords:** core, terrigenous, carbonate, Maykopian series, rocks, porosity, clay rocks