

# 4. International Mediterranean Scientific Research Congress

June 15-16, 2023  
Near East University  
Nicosia, Cyprus



## ABSTRACT BOOK

*Editors:*

Prof. Dr. Zehra ALTINAY  
Prof. Dr. Fahriye ALTINAY

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NEAR EAST UNIVERSITY



GUNSEL  
ACADEMY

# 4. INTERNATIONAL MEDITERRANEAN CONGRESS

June 15-16, 2023 / Nicosia-Cyprus

## ABSTRACT BOOK

Edited by

**Prof. Dr. Zehra ALTINAY**

**Prof. Dr. Fahriye ALTINAY**

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## CONGRESS ID

### 4. INTERNATIONAL MEDITERRANEAN CONGRESS

## DATE-PLACE

June 15-16, 2023

Nicosia-Cyprus

## EDITORS

Prof. Dr. Zehra ALTINAY

Prof. Dr. Fahriye ALTINAY

## EVALUATION PROCESS

All applications have undergone a double-blind peer review process

**TOTAL NUMBER OF PAPERS: 183**

**THE NUMBER OF PAPERS FROM TÜRKİYE: 86**

**OTHER COUNTRIES: 97**

## PARTICIPANT COUNTRIES (24):

Turkish Republic of Northern Cyprus, Türkiye, Azerbaijan, India, Philippines, Nigeria, Algeria, Pakistan, Malaysia, Ukraine, Romania, Morocco, Libya, Australia, France, Ethiopia, Hungary, Ghana, Georgia, Libya, Kingdom of Saudi Arabia, Egypt, Bulgaria, Iran



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## PHOTO GALLERY









Zoom Toplantı - HALL 3

Hall 3: SABYASACHI CHAKRABORTY... | Resimlerinizi Gizleyin

Esther Osei Aku... | Hall No 3: Dipa...

Katılımcılar (7)

- ESAD İnstitut... (Öğrenci Sahibi, İeri)
- Hall 3: SABYASACHI CHAKRABORTY
- Prof. Sanyoga Piyti
- Wet
- Esther Osei Aku-Ko
- Hall No 3: Dipankar Chowdhury
- Hall 3: Nandakrishnan Subramanian

**A model based study on interfacial solitary wave profiles in the presence of a free surface**

Suma Debsarma<sup>1</sup> Sabyasachi Chakraborty<sup>1</sup> J. T. Kirby<sup>2</sup>

<sup>1</sup>University of Calicut, India  
<sup>2</sup>University of Delaware, USA

International Mediterranean Congress, June 15-16, 2023

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Zoom Meeting

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Zoom Meeting | 11:49 AM | 15/06/2023

Zoom Toplantı - Hall 4

Katılımcılar (4)

- Wet... (Öğrenci Sahibi, İeri)
- Hall 4: Wang Thantipaporn
- Hall 2: Mehmet Cengiz
- Hall 4: Kapka Marthens

Hall 4: Wang Thantipaporn

Öğrenci Sahibi

Hall 4: Kapka Marthens

Hall 2: Mehmet Cengiz

Zoom Meeting

Video: On | Audio: On | Screen: Off

Zoom Meeting | 11:58 AM | 15/06/2023

Zoom Toplantı - Hall-1

Katılımcılar (8)

Observer Hall-1

Songül

Ozan Tozluca

Zehra KURDUM

11:01  
16.06.2023

24°C Güneşli

Zoom Toplantı - Hall-1

Katılımcılar (8)

OH D... (Ortal oturum sahibi, beri)

H1 Hall 1 songül kurt

NM Nigar Mustafayevahalli

BU Baylan Uygun Aytemiz

HI Hall 1, Filiz Yagar

HD Hall-1 derya çabır0807424867

OT Ozan Tozluca

S Songül

Zehra KURDUM

Tümünü Göster

Zoom Toplantı - Hall-1

Hall-1 Denetim Akademi oturum görüntüleme

Seçenekler Görüntüle

Katılımcılar (9)

Gereç- Yöntem

- Bakıröz Atazık Şehir Hastanesi Tıbbi Genetik Polikliniği'ne başvuran 6 yaşındaki erkek hastanın;
- Periferik venöz kan örneğinden genomik DNA'ya izole edilmiştir. (High Pure PCR Template Preparation Kit (Roche, Pleasanton, CA 94588 USA)
- Elde edilen genomik DNA'ya Tacit CES (South San Francisco, USA) kit ile DNBSQC-0400 (Illumina, San Diego, CA) kullanılarak ile seküenmiştir.
- Genomik veri (Sürüm 6.13.1) yapıldı, ortalama 20X okuma derinliği ve N50,17 bazama ile analiz için kullanılmıştır.

Hall-1 denetim akademi

17:50  
16.06.2023

28°C

Zoom Toplantı - Hall-1

Katılımcılar (9)

OH Oturum... (Oturum Sahibi, beri)

H Hall-1-betalokale

Ç Çeçle Güleç session(hall 1)

HG Hall-1, Güneş ÖMER

HNA Hall-1, MGC. Bn. MUSTAFA SAĞL.

HN Hall-1, Nihan Akarac

HY Hall-1, Yasemin Başra Otul

MK Mehmet Kemal HALI Hall-1

SC Sö-H1 Çiler Çökan Dömet

Tümünü Göster

**Hall-4, Observer** | **Donika Sytyzman**

Kelas: 20441010

Metodologi

- The collection of cells and the preparation of cytological preparations was done according to the procedure described by Holstad (Holstad, 2008) but modified.
- The procedure of this research went in the form:
  - The nasal cavity was dried with water.
  - Epithelial cells were gently scraped with a cytobrush from the inside for about 30 seconds.
  - Cytobrush were placed in separate test tubes that had previously been fixed with 0.9% NaCl solution.
  - The content was centrifuged at 1000 revolutions per minute for 10 minutes.
  - After centrifugation, the supernatant was discarded, and the cells were then fixed in 3 ml of fixative (a solution of methanol and acetic acid, 4:1:1) for 30 minutes. The samples were again centrifuged for 10 minutes at 1000 rpm after being.
  - After decanting of the supernatant, 500 of fresh fixative was added.
  - We left the content in the room for drying for two-three hours and then we stained them with May-Grunwald-Giemsa according to the standard protocol, where first they were stained with May-Grunwald for 2-3 minutes, then they were rinsed with distilled water and then they were stained with Giemsa (1% solution in propylene glycol (4:1 v/v)) for 30 minutes. The preparations were rinsed with distilled water.
- To describe the findings of the study were used statistical analysis and the results were analyzed using a computer program called SPSS version 11, a statistical processing tool.

1 2 3 4 5

Terima Kasih

Kategori (10)

- Hall-4, (Ortak oturum sabitli ben)
- Donika Sytyzman
- Ali

Video konferans sistemini kullanıyorsunuz

Hall 4 Observer

Bashir Ali

HALL 4 - NUR A...

HALL 4 - ESRA E...

HALL 4 - IMES SLIDE

HALL 4 - IME SHARAFIYANTY

HALL 4 - SITI ASH...

Hall 4 Ben Dame

Hall 4, Farhaoui...

Kategori (10)

- Hall 4, (Ortak oturum sabitli ben)
- Donika Sytyzman
- Bashir Ali
- Donika Sytyzman
- HALL 4 - ESRA ERGUNA FREDOUN
- HALL 4 - IME SHARAFIYANTY
- HALL 4 - IMES SLIDE
- HALL 4 - NUR ASYRA ALZENA ET...
- HALL 4 - SITI ASH...
- Hall 4 Ben Dame
- Hall 4, Farhaoui Mohamed

Zoom Toplantı

Kalen: 09:18:13

Katılımcılar (10)

Q Ara

- H4 Hall 4 Observer (ben)
- OH Darwin Hall 4
- SL Sitajuan Izzak
- S HALL 4 - RIM SHAFASWATY
- erika afaid
- Bakir Ali
- H4 HALL 4 - ESRA ERVINA FREDOLIN
- HALL 4 - RIM'S SLIDE
- H4 HALL 4 - NUR ANFAH ALDEYA BT ABD.
- H4 Hall 4 - SALEHA
- H4 HALL 4 - SITI AISAH
- H4 Hall 4 Ben Dame
- H4 Hall 4 farhaoui Mohamed
- SH session-2, Hall-4, ahdour ayoub
- S STEPHEN

Sevki Ak

Hall 3 Moderator - in session - gizli - gizli

Sevki Ak Görüntü

Katılımcılar (7)

Q Ara

- H3 (Ortak oturum sahibi...)
- H3 Moderator: M...
- B Nabila Sher Mohammad
- R Ritu Arya Hall Number 3
- SE Said El Rhabori - Sezen...
- SE Session 2 hall 3: andia ah...
- Y YONSES

Kalen: 09:07:40

## ECHINACEA PURPUREA AND ONOPORDUM ACANTHIUM EXERT ANXIOLYTIC EFFECT IN EXPERIMENTAL MODEL OF ACUTE STRESS

Maria Vlasheva<sup>1</sup>, Mariana Katsarova<sup>1</sup>, Stella Dimitrova<sup>1</sup>, Ilin Kandilarov<sup>2</sup>, Hristina Zlatanova<sup>2</sup>, Iliia Kostadinov<sup>2</sup>

<sup>1</sup> Department of Bioorganic Chemistry, Faculty of Pharmacy, MU- Plovdiv  
<sup>2</sup> Department of Pharmacology and Clinical Pharmacology, Faculty of Medicine, MU- Plovdiv

Yeni Sesli Arama

Değerlendirme



NEAR EAST UNIVERSITY



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# 4. INTERNATIONAL MEDITERRANEAN CONGRESS

June 15-16, 2023 / Nicosia-Cyprus

## PROGRAM

### PARTICIPANT COUNTRIES (24):

Turkish Republic of Northern Cyprus, Türkiye, Azerbaijan, India, Philippines, Nigeria, Algeria, Pakistan, Malaysia, Ukraine, Romania, Morocco, Libya, Australia, France, Ethiopia, Hungary, Ghana, Georgia, Libya, Kingdom of Saudi Arabia, Egypt, Bulgaria, Iran





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

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**Önemli, Dikkatle Okuyunuz Lütfen**

- ✓ Kongremizde Yazım Kurallarına uygun gönderilmiş ve bilim kurulundan geçen bildirimler için online (video konferans sistemi üzerinden) sunum imkanı sağlanmıştır.
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- ✓ Moderatör – oturumdaki sunum ve bilimsel tartışma (soru-cevap) kısmından sorumludur.

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exp. Hall-1, Awais Khan**



# - Opening Ceremony -

**15.06.2023**

**Time : 09:00-11:00**

**Zoom ID: 813 4179 5832**

**Passcode: 010101**

**Address: SBFSalon 1**

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**Prof. Dr. Markus LAUNER**

Ostfalia University of Applied Sciences  
KEYNOTE SPEAKER

\*\*\*

**Prof. Dr. Gökmen DAĞLI**

University of Kyrenia  
KEYNOTE SPEAKER

\*\*\*

**Assoc. Prof. Dr. Osman Kubilay GÜL**

Sivas Cumhuriyet University  
KEYNOTE SPEAKER

**FACE TO FACE (SESSION-1)****15.06.2023****Moderator:****Address: İrfan Günsel Kongre merkezi  
(Sağlık bilimleri fakültesi/Dorana rezidans binası)****Nicosia Local Time: 13:30 – 15:30**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
IMPULSIVITY, NOMOPHOBIA AND COMPULSIVE ONLINE BUYING IN ADULTS	Dr. Bingül SUBAŞI Gizem Zengin	Near East University, Cyprus
THE EFFECT OF UNFINISHED BUSINESS AND GRIEF RUMINATION ON THE LEVEL OF GRIEF IN THE INDIVIDUALS WHO EXPERINCED LOSS	Psk. Öykü ARIBAŞ Dr. Bingül SUBAŞI HARMANCI	Near East University, Cyprus
EXAMINATION OF THE MACHINING OF AEROSPACE ALLOYS IN TERMS OF MICROHARDNESS	Doç. Dr. Mehmet Alper Sofuoğlu Dr. Öğr. Üyesi Gökhan Haydarlar Prof. Dr. Mesut Tekkalmaz	Eskişehir Osmangazi University, Eskişehir, Türkiye Kafkas University, Kars, Türkiye
DETERMINING THE VIEWS OF PARENTS WITH PRESCHOOL CHILDREN ON PEACE EDUCATION	Yrd. Doç. Dr. Derveşe AMÇA TOKLU Doç. Dr. Umut AKÇIL Prof. Dr. Filiz Erbay	Near East University, Cyprus
INTERFACE WITH HYPERPARAMETER FLEXIBILITY	Hasan Hüseyin Yurdağül H. Şebnem Arlı M. Fatih Akay Ülkü Esra Okuyan Şahin Akdağ	Çukurova University, Türkiye Renpro Energy, R&D Director Near East University, Cyprus
A COMPARATIVE STUDY OF AUTOMOTIVE / TRANSPORTATION DESIGN PROGRAMS & UNIVERSITY - INDUSTRY COOPERATION MODELS IN HIGHER EDUCATION	Efe Çukur A. Can Özcan	Izmir University of Economics, Türkiye



**FACE TO FACE (SESSION-2)****15.06.2023****Moderator:****Address: İrfan Günsel Kongre merkezi  
(Sağlık bilimleri fakültesi/Dorana rezidans binası)****Nicosia Local Time: 15:30 – 17:30**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
THE INFLUENCE OF ENTREPRENEURSHIP AND CREATIVITY IN EDUCATION	Assoc. Prof. Dr. Fatma Köprülü Stephen Ofori Yeboah	Near East University, Cyprus
USING THE WORDWALL WEB 2.0 TOOL IN SCIENCE EDUCATION	Ayşe Öz Büşra Akkiren Aşkın Kiraz	Bolu 50. Yıl İzzet Baysal Ortaokulu Darüşşafaka Eğitim Kurumları Yakın Doğu Üniversitesi, Atatürk Eğitim Fakültesi, Lefkoşa
ORAL STORYTELLING AND INTERGENERATIONAL AND TRANSGENERATIONAL TRANSMISSION OF HISTORICAL TRAUMA IN CYPRUS	Gizem ÖKSÜZOĞLU	Uluslararası Final University
LEGAL BASIS OF THE RIGHT TO EDUCATION AND THE CASE OF TRNC	Meryem ÖKSÜZOĞLU	Akdeniz Karpaz University, Türkiye
A STYLISH ANALYSIS ON THE POETRY BOOKS OF FİKRET DEMİRAĞ NAMED AS LİMNİDİ ATEŞİNDEN BUGÜNE AND HÜZÜN ANA	Prof. Dr. Şevket ÖZNUR Uz. Aslı PİRO	Near East University, Cyprus

**Session -1 / Hall-1****15.06.2023****Moderator: Assoc. Prof. Dr. Mehmet ÖZÇELİK****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 12:30 – 14:30**

TITLE	AUTHOR(S)	AFFILIATION
CO-PRODUCTION OF GLUCONIC Acid (GA) and 5-Hydroxymethyl Furfural (HMF)	Abdulkadir GÜL Muhammet Şaban TANYILDIZI	Fırat University, Türkiye
SYNTHESIS OF E/Z ISOMERS OF METHYL-2-(2-(4-(TERT-BUTYL)PHENYL)HYDRAZINELIDEN)-2-PHENYLACETATES	Abel Maharromo Ayten Qajar Gulnar Atakishiyeva Nigar Ahmedova Namiq Shikhaliyev	Baku State University, Baku, Azerbaijan
SYNTHESIS OF METHYL (E)-4-(2,2-DIBROMO-1-(PHENYLDIAZENYL)VINYLBENZOATE DERIVATIVES	Abel Maharramov Shafiga İbrahimova Gulnar Atakishiyeva İrada Shikhaliyeva Namiq Shikhaliyev	Baku State University, Baku, Azerbaijan
ALLILXANTHOGENATOMETHYLTOLUEN ESULFAMIDE AS EXTREME PRESSURE ADDITIVE	Novotrozhdina Nelya Kazimzadeh Shafa Mammadova Afayat Gahramanova Gariba İsmayilov İngilab	Institute of Additive Chemistry of the Ministry of Science and Education of the Republic Azerbaijan
A DECISION MAKING APPROACH FOR DESIGNING OPTIMAL FACILITY LAYOUT PLAN FOR A MANUFACTURING COMPANY	Emine BALOĞLU Melike BOZKUŞ Simge ABUKAN Muhammed ORDU	Osmaniye Korkut Ata University, Türkiye
INVESTIGATION OF POTENTIAL USABILITY OF SODIUM-CALCIUM PENTABORATE OCTAHYDRATE COMPOUND AS AN ECOLOGICAL ALTERNATIVE IN INDIGO DYED DENIM PRODUCTS	Öner GÜNDÜZ Gizem ÇAKAN Sercan YAZ Rıza ATAV	Erak Giyim San. ve Tic. A.Ş Tekirdağ Namık Kemal Üniversitesi
EVALUATION OF HEAVY METAL CONCENTRATIONS IN SULTAN MARSHES SOILS	Selma YAŞAR KORKANÇ Mustafa KORKANÇ Ahmad Farid AMİRİ	Niğde Ömer Halisdemir University, Türkiye
POTENTIAL EFFECT OF KARSTIC FEATURES OF LIMRA MARBLES ON BLOCK PRODUCTION AND GROUND WATER AQUIFERS (DEMRE/ANTALYA/TÜRKİYE)	Mehmet ÖZÇELİK	Süleyman Demirel University, Türkiye

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Every presentation should last not longer than 10-12 minutes.  
Kindly keep your cameras on till the end of the session.**

**Session -1 / Hall-2****15.06.2023****Moderator: Prof. Dr. Çınar Emine YENİ****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 12:30 – 14:30**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
DETERMINATION OF CARBONATION IN CONCRETE WITH DIGITAL SENSORS	Tayfun UYGUNOĞLU Uğur FİDAN Onur KURT	Afyon Kocatepe University, Türkiye
USAGE OF BASALTIC FABRICS AS STRENGTHENING MATERIAL ON LOW STRENGTH CONCRETE	Tayfun UYGUNOĞLU	Afyon Kocatepe University, Türkiye
INVESTIGATION OF THE CAUSES OF DESTRUCTION OF REINFORCED CONCRETE STRUCTURES EXPOSED TO SEQUENTIAL EARTHQUAKES	Tuba Demir Aykut Özpolat	Fırat University, Türkiye
EVALUATION OF THE STRUCTURAL DAMAGE OF UNFINISHED BUILDINGS AFTER EARTHQUAKES	Aykut Özpolat Tuba Demir	Fırat University, Türkiye
STATIC AND DYNAMIC ANALYSES OF A HYDRAULIC TOWABLE BOOM LIFT	Berkan ÇAY Çınar Emine YENİ	Dokuz Eylül University, Türkiye
NANOFLUID-BASED HEAT TRANSFER STUDIES IN AUTOMOBILE RADIATOR COOLING SYSTEMS	Mustafa ARMAGAN Tuğba TETİK Yasin KARAGÖZ Ercan ERTURK	Istanbul Medeniyet University, Türkiye
PCB LAYING MACHINE APPLICATION WITH PICK AND PLACE SYSTEM	Hüseyin KIRCIOĞLU İlyas ÖZER	Bandırma Onyediy Eylül University, Türkiye
INVESTIGATION OF JOINING METHODS OF MATERIALS PRODUCED WITH 3D PRINTERS	Arzu AKBIYIK Nergizhan ANAÇ Furkan PARMAKSIZ Oğuz KOÇAR	Zonguldak Bülent Ecevit University, Türkiye
SEMICONDUCTOR LASER DIODE WAVELENGTH SHIFT DUE TO TEMPERATURE CHANGE AND INVESTIGATION OF THRESHOLD CURRENT CHANGE	İbrahim KILIÇ İlyas ÖZER	Bandırma Onyediy Eylül University, Türkiye
DETERMINATION of THERMAL and STRUCTURAL PROPERTIES of Ti-30Nb-20Ni, Ti-30Zr-20Ni and Ti-30Ta-20Ni ALLOYS	Esra BALCI Samet SADAK Fethi Dağdelen	Fırat University, Türkiye

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**Session -1 / Hall-3****15.06.2023****Moderator: Assist. Prof. Maria Vlasheva****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 12:30 – 14:30**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
SYNTHESIS AND EVALUATION OF SILVER NANOPARTICLES FROM ETHANOLIC LEAF EXTRACT OF <i>Tridax Procumbens</i> .L	Dr. R. Saravanan	Bharath Institute of Higher Education and Research, Chennai, India
EFFECT OF DURATION OF USE OF COMBINED ORAL CONTRASEPTIVES ON SERUM LIPID PROFILES, FASTING BLOOD SUGAR, BLOOD PRESSURE AND BMI IN CHILD BEARING AGE WOMEN	Nabila Sher, Rubina Nazli, Zarghuna Zafar, Mashal Zafar	Khyber Medical University, Peshawar
FUTURE OF MOLECULAR DIAGNOSTICS POST-CORONA PANDEMIC	Dr. Utpal Singha Roy	P. R. Thakur Government College, West Bengal, India
IN SILICO DISCOVERY OF NOVEL ANTI-CANCER AGENTS	Said EL RHABORI, Abdellah EL AISSOUQ, Yassine EL ALLOUCHE, Samir CHTITA, Fouad KHALIL	Sidi Mohamed Ben Abdellah University, Fez, Morocco Hassan II University of Casablanca, Sidi Othman, Casablanca, Morocco
ECHINACEA PURPUREA AND ONOPORDUM ACANTHIUM EXERT ANXIOLYTIC EFFECT IN EXPERIMENTAL MODEL OF ACUTE STRESS	Assist. Prof. Maria Vlasheva Assist. Prof. Ilin Kandilarov Assist. Prof. Hristina Zlatanova Assist. Prof. Mariana Katsarova Assoc. Prof. Ilia Kostadinov Assoc. Prof. Stela Dimitrova	Medical University of Plovdiv
COVID-19 IN MASS MEDIA: UNDERSTANDING THE PERCEPTION OF VIRUS' ICON IMAGE AMONG OLDER ADULTS IN FRANCE	Dr. Petra Pelletier Ms. Ritu Arya Dr. Claire Lefort Dr. Cécile McLaughlin Dr. Magali Boespflug Prof. Sophie Alain Dr. Rubal Kanozia	University of Limoges, France Central University of Punjab, Bathinda, India Research Institute Xlim University of Limoges, France University of Poitiers, France
INVESTIGATION OF MINOCYCLINE EFFECT ON EXPRESSION CHANGES OF MMP-2 AND MMP-9 GENES ON MCF7 BREAST CANCER CELLS	Abedeh Rezaei, Mohammad Khalaj-Kondori	University of Tabriz, Tabriz, Iran

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**Session -1 / Hall-4****15.06.2023****Moderator: Dr.Nassima RIOUCHI****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 12:30 – 14:30**

TITLE	AUTHOR(S)	AFFILIATION
PHENOTYPICALLY DETERMINATION OF NAT2 ACETYLTATION STATUS IN FEMALE VOLUNTEERS	Naheed Akhter, Samreen Gul Khan, Sadia Sana	Government College University, Pakistan. Royal Melbourne institute of technology, Australia
A NOVEL BHP ELECTRODE FOR THE ELECTROCHEMICAL DEGRADATION OF RHODAMINE B DYE	Ayoub AHDOUR, Omar OUAZAGUINE, Lhoussain MLLAOIY, Ali AIT BAHA, Aziz TAOUFYQ, Latifa ANEFLOUS, Abdeljalil BENLHACHEMI, Bahcine BAKIZ	Ibn Zohr university faculty of science, Department of chemistry, Agadir, Morocco.
NUCLEOPLASMIC RATIO IN THE EPITHELIAL CELLS OF THE NASAL MUCOSA IN SMOKERS	Ma.Donika Sylejmani Ma. Arbnora Aliu Prof. Dr. Skender Demaku	University of Prishtina
EFFICIENT REMOVAL OF HAZARDOUS DYE FROM AQUEOUS SOLUTIONS USING MAGNETIC KAOLINITE NANOCOMPOSITE	Hamza IGHNIH Hassan OUCHTAK Naima HAFID Amane JADA	Ibn Zohr University, Agadir, Morocco
MICROSTRUCTURAL CHARACTERISTICS, PROPERTIES, SYNTHESIS AND APPLICATIONS OF MULLITE	Dr.Nassima RIOUCHI, Prof.Dr.Mohamed LOUTOU, Dr.Oussama RIOUCHI, Prof.Dr.Mohamed ABOU-SALAMA	Université Mohammed Premier, Morocco
NANO PARTICLES OF NICKEL OXIDE-ACACIA NILOTICA LEAF EXTRACTS: GREEN SYNTHESIS AND THEIR BIOLOGICAL ACTIVITIES	Dr. Mahmood Ahmed, PhD	University of Education, Lahore-Pakistan
ELIMINATION OF ORGANIC POLLUTANTS BY ADSORPTION ONTO TREATED BIOMASS IN BATCH REACTOR AND FIXED-BED COLUMN	Abdelkader Dabagh, Abdeljalil Ait ichou, Fatima zahra Erraji, Abdallah Assouani, Mohamed El-Habacha, Mahmoudy Guellaa, Ridouan Benhiti, M'hamed Abali, Fouad Sinan, Mohamed Zerbet	Ibn Zohr University, Morocco
AN AB INITIO STUDY OF THE STRUCTURAL, ELASTIC, ELECTRONIC AND OPTICAL PROPERTIES OF AgCaX <sub>3</sub> (X = Br, and F) PEROVSKITES	Djamel Allali, Rabie Amari, Missoum Radjai, Hatem Allaf, Ammar Boukari, Bahri Deghfel, Saber Saad Essaoud	University of M'sila, Algeria
CHEMICAL COMPOSITION, ANTIOXIDANT AND ANTIBACTERIAL ACTIVITIES OF MOROCCAN PROPOLIS	Aboukhalaf Abdelghani Moujabbir Sara El Amraoui Belkassem Belahsen Rekia	Chouaïb Doukkali University, Morocco Ibn Zohr University, Agadir, Morocco
MICROWAVE-ASSISTED PYROLYSIS OF PLASTICS WASTE WITH MAGNETIC-BASED CATALYSTS FOR HYDROGEN AND HIGH-VALUE CARBONS	Bilal Shoukat, Hammad Hussain, Muhammad Yasin Naz, Shazia Shukrullah	University of Agriculture Faisalabad, 38040, Pakistan

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**Session -2 / Hall-1****15.06.2023****Moderator: Assoc. Prof. Dr. Alper SİNAN****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 15:00 – 17:00**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
RECOGNIZING TURKISH COINS USING THE SURF METHOD	Mashar Cenk GENÇAL	Ardahan University, Türkiye
ARTIFICIAL NEURAL NETWORKS APPLICATION FOR POSITION CONTROL OF ROBOT ARM WITH PNEUMATIC ARTIFICIAL MUSCLE	Kübra TÜRE H.Alper ÖZYİĞİT	Zonguldak Bülent Ecevit University, Türkiye İstanbul Gelişim University, Türkiye
TEXT SUMMARIZATION USING TF-IDF AND TEXTRANK ALGORITHM	Özge ÖZGÜNER Taner UÇKAN	Van Yüzüncü Yıl University, Türkiye
DETERMINING THE FACTORS AFFECTING STUDENT FAILURE FEAR BY MULTIPLE LINEAR REGRESSION ANALYSIS ACCORDING TO PISA EXAM DATA	Alper SİNAN Alper TOSUN	Akdeniz University, Türkiye
USAGE OF LOG-LINEAR MODEL IN QUOTA TABLES AND APPLICATION ON EDUCATIONAL DIAGNOSTIC PROCESS IN SPECIAL EDUCATION	Alper SİNAN Ömer Faruk KINA	Akdeniz University, Türkiye

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**Session -2 / Hall-2****15.06.2023****Moderator: Assist. Prof. Dr. Ahmet YENİKALAYCI****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 15:00 – 17:00**

TITLE	AUTHOR(S)	AFFILIATION
ACORN PRODUCTION VARIATION IN TURKEY OAK	Sinan YÜCEDAĞ Tuğçe Baloğlu ERTAŞ Nebi BİLİR	Isparta Uygulamalı University, Türkiye
REPEATABILITY FOR SOME REPRODUCTIVE TRAITS IN TAURUS CEDAR	Nebi BİLİR Tuğçe Baloğlu ERTAŞ	Isparta Uygulamalı University, Türkiye
THE EFFECT OF TOPPING AND SUCKER CONTROL ON YIELD AND QUALITY IN FLUE-CURED (VIRGINIA) TOBACCO	Ahmet YENİKALAYCI	Muş Alpaslan University, Türkiye
STATUS OF ORIGANUM SPECIES IN TÜRKİYE	Lütfi Koç Cennet Yaman	Yozgat Bozok University, Türkiye
LEPIDOPTERA SPECIES IN ORCHARD WHERE DIFFERENT OLIVE VARIETIES IN EDREMIT (BALIKESİR)	Gonca VATANSEVER SAKİN	Balıkesir University, Türkiye
THE EFFECT OF COOKING TECHNIQUE AND TIME ON THE COLOR AND NUTRITIONAL VALUES OF JERUSALEM ARTICHOKE	Meral YILDIRIM-YALÇIN Özlem AKTÜRK GÜMÜŞAY	İstanbul Aydın University, Türkiye Maltepe University, Türkiye
RECTAL PROBE APPARATUS DESIGNED FOR RECTAL ULTRASONOGRAPHIC EXAMINATION IN SHEEP AND PRODUCED BY 3D PRINTER	Nail Tekin ÖNDER Fatih ALİBEYOĞLU Taygun GÖKDEMİR	Kafkas University, Türkiye
EVALUATION OF THE RELATIONSHIP BETWEEN STRENGTH, SPEED AND FLEXIBILITY IN BASIC SPORTING PRACTICES APPLIED TO PRESCHOOL CHILDREN	Özgür NALBANT Hafize KAYA Muhammet Reşat ÖZNACAR	Alanya Alaaddin Keykubat University, Türkiye
EVALUATION OF THE RELATIONSHIP BETWEEN BODY COMPOSITION, NUTRITIONAL LEVEL AND QUALITY OF LIFE IN ELDERLY INDIVIDUALS	Özgür NALBANT Muhammet Reşat ÖZNACAR Hafize KAYA	Alanya Alaaddin Keykubat University, Türkiye

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**Session -2 / Hall-3****15.06.2023****Moderator: Prof. Dr. Süreyya Yiğit****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 15:00 – 17:00**

TITLE	AUTHOR(S)	AFFILIATION
FORMULATION OF TERNARY SYSTEM OF COPPER OXIDE-TITANIUM OXIDE SUPPORTED CHITOSAN PHOTOCATALYST FOR TREATMENT OF WATER EFFLUENTS	Nurhidayatullaili Muhd Julkaplia Suhaila Mohamed, Azman Ma'amor, Fatimah Zahara Abdullah	Universiti Malaya, Kuala Lumpur, Malaysia
A NOVEL HETEROCYCLIC ORGANIC COMPOUND AS AN EFFICIENT INHIBITOR AGAINST CARBON STEEL CORROSION IN HYDROCHLORIC ACID MEDIUM	Youssef ADNAN, Nouredine IDLAHOUSSEINE, Brahim EL IBRAHIMI, Hassan OUACHTAK, Abdelaziz AIT ADDI, Nada Kheira SEBBAR	Ibnou Zohr University, Agadir, Morocco Mohammed V University in Rabat, Morocco
STUDY OF INSTABILITY FOR TWO INTERFACIAL WAVES IN THE PRESENCE OF A BASIC CURRENT SHEAR	Mr. Dipankar CHOWDHURY	Serampore College, India
SURVEYING THE QUALITY OF GROUNDWATER RESOURCES IN GOLD MINING COMMUNITIES IN EASTERN REGION, GHANA	Esther Osei Akuo-ko, Lordford Tettey-Larbi, Francis Otoo, Anita Csordás, Tibor Kovács	Institute of Radiochemistry and Radioecology, University of Pannonia, Hungary Radiation Protection Institute, Ghana Atomic Energy Commission, Ghana
EVALUATING AND STRENGTHENING THE STABILITY OF THE SLIP SLOPE AT THE "TAFOUGHLT" PK 23 INTERCHANGE (TIZI-OUZOU TO BOUIRA)	Dr. Brahim Meziani Dr. Hamid Gadouri	Khemis Miliana University, Algeria
A MODEL BASED STUDY ON INTERFACIAL SOLITARY WAVE PROFILES IN THE PRESENCE OF A FREE SURFACE	Sabyasachi Chakraborty	University of Calcutta, India
INVASION-MEDIATED EVOLUTIONARY CHANGES IN SOIL FUNGAL COMMUNITIES: A REVIEW	Vidya Padmakumar Murugan Shanthakumar	Bangalore University, Bangalore, India
UNSTEADY FLOWS OF A BINGHAM PLASTIC MEDIUM IN MICROCHANNEL WITH SYMMETRIC MEMBRANE CONTRACTION	Ashvani Kumar, Dharmendra Tripathi	National Institute of Technology Uttarakhand, Srinagar-246174, India
SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE	Süreyya Yiğit PhD	New Vision University, Tbilisi, Georgia

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**Session -2 / Hall-4****15.06.2023****Moderator: Pangaribuan Darwin H****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 15:00 – 17:00**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
IMPROVING PRODUCTIVITY OF HEAT STRESSED BT COTTON USING EXOGENOUS SELENIUM AS POTENT MODULATOR OF BIOCHEMICAL TRAITS	Muhammad Shahid, Muhammad Farrukh Saleem, Amna Saleem, Muhammad Sarwar, Muhammad Ramzan Kashif	University of Agriculture, Faisalabad, Pakistan Agronomic Research Station, Bahawalpur, Pakistan Pesticide Quality Control Laboratory, Pakistan
THE EFFECT OF NUTRIENTS FROM VERICOMPOST EXTRACT AS A NUTRITIONAL SUPPLEMENT AB MIX ON THE GROWTH AND YIELD OF MUSTARD PLANTS ( <i>Brassica juncea</i> L. ) ON NFT HYDROPONIC SYSTEMS	Pangaribuan Darwin H, Ginting Yohanes C, Widyastuti Diana, Rawesi Ratih R	Universitas Lampung, Indonesia
RESOURCE-SAVING MEASURES OF GROWING AGRICULTURAL CROPS IN UKRAINE DURING THE POST-WAR PERIOD	Gamayunova V.V. Khonenko L.G. Zadorozhnyi Y.V.	Mykolaiv National Agrarian University, Mykolaiv, Ukraine
ENSURING SUSTAINABLE GRAIN PRODUCTION IN THE CONDITIONS OF THE SOUTHERN STEPPE OF UKRAINE	Baklanova T.V. Gamayunova V.V. Smirnova I.V.	Kherson State Agrarian and Economic University, Kherson, Ukraine Mykolaiv National Agrarian University, Ukraine
AN ASSESMENT OF FUNGI SPECIES PRESENT IN BIRD FEEDS IN LOKOJA AND ANYIGBA, KOGI STATE, NIGERIA	Bashir, A. A., Ahmad, S. K., Namadina, M. M.	Kogi State University, Nigeria Federal University Dutse, Nigeria Bayero University Kano, Nigeria
DETERMINATION OF THE PHYSICO-CHEMICAL PROPERTIES OF LAVANDULA STOECHAS ESSENTIAL OIL AFTER LOW-TEMPERATURE EXTRACTION	Mohammed Benchrifa, Driss Hmouni, Jamal Mabrouki, Khadija El Moustaqim, Yassine Mouniane	Université Mohammed V de Rabat, Rabat
TURMERIC FARMERS AND THEIR SOCIAL PARTICIPATION IN TAMIL NADU OF INDIA	Arunkumar R, V. Kalirajan	Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu. Annamalai University, Chidambaram, Tamil Nadu
PERSULFATE ACTIVATION BY SEWAGE SLUDGE DIGESTATE-DERIVED BIOCHAR FOR ORANGE G DEGRADATION	Aboubakr Ben Hamou, Salaheddine Farsad, Ayoub chaoui, Asma Amjlef, Nisrine Nouj, Ayoub Ahdour, Amane Jada, Ez-zahery Mohamed, El Alem Nouredine	Ibn Zohr University, Agadir, Morocco. Haute Alsace University, Mulhouse, France Strasbourg University, Strasbourg, France
ANALYSIS OF WATER SCARCITY EFFECTS ON REAL ESTATE VALUATION	Slimani Chahid Farhaoui Mohamed	Sidi Mohamed Ben Abdellah University, Fez, Morocco
EXPANDING OPTIONS FOR SNACKS AT SCHOOL WITH PASTRIES AND CAKES	Irmī Sharaswaty Japrin, Siti Aisah Basuni, Nur Arifah Aleeya Abd Rahim, Esra Ervina Fredolin	Keningau Vocational College, Malaysia



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**Session -1 / Hall-1****16.06.2023****Moderator: Prof. Dr. Songul KECECI KURT****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 10:00 – 12:00**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
19th CENTURY MINING WORKERS: THE CASE OF GUMUSHACIKOY	Songul KECECI KURT	Amasya University, Türkiye
DISCUSSIONS ON THE OTTOMAN SOCIAL STRUCTURE AND THE MILLET SYSTEM	Filiz YAŞAR	Mersin University, Türkiye
OPINIONS OF STUDENTS AT AMASYA UNIVERSITY ON IMPROVEMENT OF QUALITY CULTURE	Murat KURT	Amasya University, Türkiye
AN EVALUATION OF THE MARITIME TRANSPORTATION NETWORK IN THE TERRITORY OF KNIDOS	Derviş Ozan Tozluca	Selçuk University, Türkiye
“LATE ROMAN 1 AMPHORAE” IN LIGHT OF KNIDOS’ LAND AND UNDERWATER STUDIES	Songül SÖZEL	Selcuk University, Türkiye
HEYDƏR ƏLİYEV VƏ AZƏRBAYCAN ƏDƏBİYYATI	Gülnar Vaqif Qizi Qasimli	AMEA Nizami Gəncəvi adına Ədəbiyyat İnstitutu
UNDER THE SHADOW OF SKYSCRAPERS: REFLECTIONS FROM PERİDE CELAL’S “ÇUKUR”	Beyhan UYGUN AYTEMİZ	T.C. İstanbul Arel University, Türkiye
INSIDIOUS ACTIVITY OF ARMENIANS LIVING IN DAGESTAN	Nigar Mustafayeva	The Institute of Caucasus Studies of ANAS
NACAK NEWSPAPER IN THE CYPRUS TURKISH PRESS: ITS FOUNDATION AND IDEOLOGY (1959-1963)	Derya ÇAKICI	Trabzon/Türkiye
SHADOW TEACHING AS A NEW PRACTICE IN INCLUSION CLASSES	Zehra KURŞUN	Fatih Sultan Mehmet Vakıf University, İstanbul, Türkiye

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**Session -1 / Hall-2****16.06.2023****Moderator: Lect. Dr. Can SAKAR****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 10:00 – 12:00**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
A COMPARATIVE EVALUATION ON TURKIYE AND AUSTRALIA NATIONAL HIGHER EDUCATION POLICIES AND REFORM ACTIONS	Can SAKAR	Gendarmerie and Coast Guard Academy, Ankara, Türkiye
ON EXAMINATION OF LOCAL GOVERNMENT STRUCTURES: A COMPARISON OF TUKEY FRANCE AND JAPAN	Salih BATAL Büşra KOÇ	Yalova University, Türkiye Marmara University, Türkiye
EXAMINATION OF THE CONCEPT OF SITUATIONAL AWARENESS AND MEASUREMENT TECHNIQUES	Mehmet Ferhat ERDOĞAN Mehmet Güney UĞUR	Sakarya University, Türkiye Sivas Cumhuriyet University, Türkiye
STACKER SELECTION WITH THE CRADIS METHOD	Alptekin ULUTAŞ Ali Aygün Yürüyen	İnönü University, Türkiye Ardahan University, Türkiye
MEASURING INTENSITY OF NUMBER OF EUR/USD QUOTATION CHANGES: A WAVELET ANALYSIS	Erhan ULUCEVİZ	Gebze Teknik University, Türkiye
COLORS IN ACCOUNTING	Abdullah KARA Fatma TEMELLİ	Ağrı İbrahim Çeçen University, Türkiye
A GENERAL EVALUATION OF THE TAX STRUCTURE OF AĞRI PROVINCE	Mustafa SAĞLAM Fatma TEMELLİ	Maliye Bakanlığı, Ağrı İbrahim Çeçen University, Türkiye
EXAMINATION OF ETHICS IN AMBUSH MARKETING	Alper ŞEN Ülkü Zeynep AKPINAR Nilgün DERELİ	Fatih Sultan Mehmet Vakıf University, Türkiye
LEARNED HELPLESSNESS WITH DEMOGRAPHIC CHARACTERISTICS	İsmail BAKAN Burcu ERŞAHAN Sedat ÇİV	Kahramanmaraş Sütçü İmam University, Türkiye
THE EFFECT OF BRAND COMMUNITY BENEFITS ON THE PERCEIVED RISK	Alper ŞEN	Fatih Sultan Mehmet Vakıf University, Türkiye

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**Session -1 / Hall-3****16.06.2023****Moderator: Assoc. Prof. Adnan KIRAL****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 10:00 – 12:00**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
THE ANALYSIS OF CAUSES OF DEATH IN TURKEY WITH CLUSTERING ANALYSIS TECHNIQUES	Selim Tüzüntürk	Bursa Uludağ University, Türkiye
STRUCTURAL AND ECONOMIC EFFECTS OF SEA LEVEL RISING IN HATAY-ISKENDERUN AFTER 6 FEBRUARY 2023 TURKEY-SYRIA EARTHQUAKE	Veli SÜME Adnan KIRAL	Recep Tayyip Erdogan University, Türkiye
AN EMPIRICAL INVESTIGATION TO DETERMINE THE NEGATIVE IMPACTS OF TECHNOSTRESS; EVIDENCE FROM HOTEL FRONT-LINE STAFF IN INDIA	Homayoun Pasha Safavi Mona Bouzari	Cyprus International University, Turkish Republic of Northern Cyprus European University of Lefke, Turkish Republic of Northern Cyprus
INVESTIGATING CONSUMER WILLINGNESS TO USE DIGITAL CURRENCY FOR PURCHASING BY USING THE GRAND THEORY METHOD	Mohammad Sina Ebrahimi Homayoun Pasha Safavi	Cyprus International University
THE AWARENESS OF SAVING BEHAVIOR AMONG STUDENTS	Shaif Galal SHAI F ALAREQI Ayma FATIMA Rasheedul HAQUE	MAHSA University, Malaysia
IMPACT OF MICRO CREDITS ON WOMEN EMPOWERMENT IN RURAL AREAS OF DISTRICT FAISALABAD PUNJAB-PAKISTAN	Sobia Maqsood Saira Akhtar Naima Nawaz	University of Agriculture Faisalabad, Pakistan
FOREIGN DIRECT INVESTMENT IN NIGERIA; HOW EFFECTIVE IS THE IMPLEMENTATION?	Samuel Akpadiagha Etuk	Akwa Ibom State Polytechnic, Ikot Osurua
DEFINITION OF HALAL SUPPLY CHAIN MANAGEMENT	MEILINA Aris SAFI'I Happy Sista DEVY	UIN K.H. Abdurrahman Wahid Pekalongan, Indonesia
THE DEVELOPMENT OF KPOP FANS IN INDONESIA	Riski FEBRIANA Hendri Hermawan ADINUGRAHA	UIN K.H. Abdurrahman Wahid Pekalongan, Indonesia
STATUS OF THE INDONESIAN LANGUAGE	Adhi Riza AULIA Hendri Hermawan ADINUGRAHA	UIN K.H. Abdurrahman Wahid Pekalongan, Indonesia

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**Session -1 / Hall-4****16.06.2023****Moderator: Dr. Juanita GOICOVICI****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 10:00 – 12:00**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
EVALUATING THE USE OF CHATGPT IN TEACHING AND LEARNING PROCESS: A DESCRIPTIVE SURVEY	Moses Adeolu AGOI Oluwanifemi Opeyemi AGOI	Lagos State University of Education, Lagos Nigeria
THE IMPORTANCE OF AFGHANISTAN FOR THE FOREIGN POLICY OF CHINA	Jamaluddin Sadruddin Oghli	
THERAPEUTIC NATURE OF OLD TESTAMENT LITERATURE FOR AFRICANS	Favour C. Uroko Peace N. Ngwoke	University of Nigeria, Nsukka
IMPLIED METHODS OF INDICATING CONSENT OF DATA SUBJECTS TO THE PROCESSING OF PERSONAL DATA	Juanita GOICOVICI	University Babeş-Bolyai of Cluj-Napoca, Romania
THE RAMIFICATIONS OF INTERCULTURAL LEGAL COMMUNICATION: AN EXONERATION FOR UNIVERSAL LINGUA-FRANCA	Dr. Apeksha Ms. Abhilasha Sisodia	Noida Institute of Engineering & Technology (NIET) Galgotias University, Greater Noida, India

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**Session -2 / Hall-1****16.06.2023****Moderator: Assoc. Prof. Dr. Osman Kubilay GÜL****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 14:00 – 16:00**

TITLE	AUTHOR(S)	AFFILIATION
METAPHORICAL PERCEPTIONS OF TRNC PRIMARY SCHOOL STUDENTS REGARDING THE CONCEPT OF TEACHER	Nedime KARASEL Eylem MENTEŞOĞULLARI Şevket ŞAFAKOĞULLARI Melih YILDIZ	Cyprus International University, Cyprus Cyprus University of Health and Social Sciences, Cyprus Ministry of Education
MUSIC EDUCATION IN VILLAGE INSTITUTES: THE CASE OF PAMUKPINAR	Osman Kubilay GÜL Nilay YANALAK KARASU	Sivas Cumhuriyet University, Türkiye
ACCORDING TO ARCHIVE DOCUMENTS, FOREIGN EXPERTS IN THE FIELD OF MUSIC WHO CAME TO TURKEY DURING THE ATATURK PERIOD	Nilay YANALAK KARASU Osman Kubilay GÜL	Sivas Cumhuriyet University, Türkiye
MIDDLE SCHOOL TURKISH TEXTBOOK ILLUSTRATIONS IN THE PROCESS OF ACQUIRING READING CULTURE	Yelda KÖKÇÜ	Fırat University, Türkiye
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UNDER THE SHADOW OF SKYSCRAPERS: REFLECTIONS FROM PERİDE CELAL'S "ÇUKUR"	Beyhan UYGUN AYTEMİZ	T.C. İstanbul Arel University, Türkiye

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**Session -2 / Hall-2****16.06.2023****Moderator: Assoc. Prof. Dr. Ezgi TOKDİL****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 14:00 – 16:00**

TITLE	AUTHOR(S)	AFFILIATION
AN ANALOGICAL LOOK AT THE PROBLEM OF GENDER EQUALITY IN ETRUSCAN SOCIETY THROUGH DESCRIPTIONS OF ETRUSCAN WOMEN	Işık ALBASAN	Mimar Sinan Fine Arts University, Türkiye
INTANGIBLE CONCEPTS, MYTHICAL THOUGHT STRUCTURE AND PSYCHOLOGICAL BACKGROUND IN ANCIENT GREECE	Işık ALBASAN	Mimar Sinan Fine Arts University, Türkiye
ANALYSIS OF GEERTGEN TOT SINS JANS' THE EXALTATION OF MARY	Dicle ŞEN	Bartın University, Türkiye
ANALYSIS OF DANTE GABRIEL ROSSETTI'S "PROSERPINE"	Rüveyda ÖNLER Esra YILDIRIM	Bartın University, Türkiye
ANALYSIS OF MIHRI MÜŞFİK HANIM'S ARTWORK BY LETTA ASIM, THE WIFE OF MINISTER OF FOREIGN AFFAIRS ASIM, WHILE GOING TO THE BALL	Reyhan ÖZTOPRAK Esra YILDIRIM	Bartın University, Türkiye
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ANDASH TRANSLATION TYPE IN ARABIC	Seyidov Rashad Razık	Atatürk University, Türkiye

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**Session -2 / Hall-3****16.06.2023****Moderator: Arnab Kole****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 14:00 – 16:00**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
CLASSIFICATION OF SPIRAL AND NON-SPIRAL GALAXIES USING DECISION TREE ANALYSIS AND RANDOM FOREST MODEL: A STUDY ON THE ZOO GALAXY DATASET	Lulut Alfaris, Ruben Cornelius Siagian, Aldi Cahya Muhammad, Ukta Indra Nyuswantoro, Nazish Laeiq, Froilan Delute Mobo	Politeknik Kelautan dan Perikanan Pangandaran, Indonesia Universitas Negeri Medan, Indonesia Radiant Utama Interinsco, Indonesia Asiatek Energi Mitratama, Indonesia Institute of Technology and Management Aligarh, India Philippine Merchant Marine Academy, Philippines
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**Session -2 / Hall-4****16.06.2023****Moderator: Arnab Kole****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 14:00 – 16:00**

<b>TITLE</b>	<b>AUTHOR(S)</b>	<b>AFFILIATION</b>
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**Session -3 / Hall-1****16.06.2023****Moderator: Uzm. Dr. H. Betül Gerik ÇELEBİ****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 16:30 – 18:30**

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EFFECTS OF FLAVOURING AND FLAVOUR ENHANCERS ON HUMAN HEALTH	Yasemin Büşra Okal Muhsin Öztürk Ayşe Güneş Bayır	Bezmalem Vakif University, Türkiye Istanbul Esenyurt University, Türkiye
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**Session -3 / Hall-2****16.06.2023****Moderator: Assist. Prof. Dr. Fedayi YAĞAR****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 16:30 – 18:30**

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COLLATZ IN CHAOS AND CHAOS IN COLLATZ	Remzi AKTAY Emre YANIK Doruk BOZOĞLU	Çubuk Yıldırım Beyazıt Anadolu High School, Ankara, Türkiye Ankara Atatürk High School, Ankara, Türkiye

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**Session -3 / Hall-3****16.06.2023****Moderator: Dr. Radoaune En-nadir****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 16:30 – 18:30**

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**Session -3 / Hall-4****16.06.2023****Moderator: Dr. Raja Mohammad Latif****Meeting ID: 898 0742 4867 / Passcode: 030303****Nicosia Local Time: 16:30 – 18:30**

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## 19. YÜZYIL MADEN ÇALIŞANLARI: GÜMÜŞHACIKÖY ÖRNEĞİ 19th CENTURY MINING WORKERS: THE CASE OF GUMUSHACIKOY

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### ÖZET

Madenlerde çalışmak günümüzde olduğu gibi tarihin hemen her devrinde zor ve meşakkatli bir iş olarak bilinmektedir. Özellikle teknolojinin henüz gelişmediği, iş güvenliğinin tam olarak sağlanamadığı zamanlarda madenciler günümüzden çok daha zor koşullar altında çalışmak zorunda kalmışlardır. 19. yüzyılda Anadolu'da faaliyet gösteren madenlerden biri de Gümüşhacıköy madenleridir. Burada madenciler yeraltında, mineral veya cevheri kazıp ayıklamak amacıyla çalışmaktadırlar. Dünyanın en tehlikeli işçiliklerinden biri olarak kabul edilen madencilik faaliyetleri, Gümüşhacıköy'de o dönemde maden emini denilen yöneticilerin kontrolünde, vekil, katip, kethüda gibi idari görevlilerin yanında teknik bakımdan ustabaşı (piristatbaşı), piristat, kalcı, feteci gibi görevliler ile asıl madenci denilen, çakılcı, arayıcı, lağımçı, tekneci, dolapçı, körükçü, kantarcı, vezzan, amele, ifrazcı gibi görevliler vasıtasıyla yerine getirilmektedir. Bu çalışmada Gümüşhacıköy madenlerinde görev yapan bu çalışanların faaliyet alanları Cumhurbaşkanlığı Devlet Arşivleri, Salnâmeler ve diğer araştırma eserler ışığında incelenmiştir. Her birinin farklı bir görev üstlendiği çalışanların, faaliyet sahaları, ücretleri ve dini aidiyetleri tespit edilmeye çalışılmıştır. Sonuç olarak 19. yüzyılda madencilik sektöründe Müslüman ve gayrimüslimlerin bir arada çalıştığı, madencilik faaliyetlerinin o dönemde de çok zor koşullar altında gerçekleştiği, Gümüşhacıköy madeninin veriminin düşük olması nedeniyle de zamanla maden çalışanlarının sayısında azalma görüldüğü tespit edilmiştir.

**Anahtar kelimeler:** Gümüşhacıköy, madenci, 19. Yüzyıl

### ABSTRACT

Working in mines is known as a difficult and arduous job in almost every period of history, as it is today. Especially when technology was not yet developed and occupational safety could not be fully ensured, miners had to work under much more difficult conditions than today. One of the mines operating in Anatolia in the 19th century is the Gümüşhacıköy mines. Here, miners work underground to dig and extract minerals or ores. Mining activities, which are considered as one of the most dangerous labors in the world, are under the control of managers called mine trustees in Gümüşhacıköy at that time, besides administrative officers such as deputy, clerk, kethüda, technically officials such as foreman (pristat chief), piristat, kalcı, feteci and the so-called main miner, It is carried out by officers such as gravel maker, seeker, sewer, boatman, cabinet maker, bellows, weighbridge, cashier, worker, and allotment. In this study, the fields of activity of these employees working in the Gümüşhacıköy mines were examined in the light of the Presidency State Archives, Yearbooks and other research works. It has been tried to determine the fields of activity, wages and religious affiliations of the employees, each of whom undertakes a different task. As a result, it has been determined that Muslims and non-Muslims worked together in the mining sector in the 19th century, mining activities were carried out under very difficult conditions at that time, and due to the low efficiency of the Gümüşhacıköy mine, there was a decrease in the number of mine workers over time.

**Keywords:** Gümüşhacıköy, miner, 19th century

## SULTAN SAZLIĞI TOPRAKLARINDAKİ AĞIR METAL KONSANTRASYONLARININ DEĞERLENDİRİLMESİ

### EVALUATION OF HEAVY METAL CONCENTRATIONS IN SULTAN MARSHES SOILS

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#### ÖZET

Sulak alanlar, insanlara çeşitli ekosistem hizmetleri sunan önemli karasal ekosistemlerdir. Ancak bu kıymetli ekosistem toprakları çeşitli kaynaklardan gelen ağır metallerce kirlenebilmektedir. Bu çalışmada Sultan Sazlığı'ndan alınan toprak örneklerinin Pb, Cr, Zn, Fe, As, Mn, Mo, Cd, Cu, Co, Ni konsantrasyonları araştırılmış ve kirlenme faktörü(Cf) ve Potansiyel taşınım indeksi(PLİ) ne göre kirlenme durumu değerlendirilmiştir. Bu amaçla 54 adet üst toprak (0-20 cm) alınmış ve İndüktif Eşleşmiş Plazma Kütle Spektrometresi (ICP MS) ve İndüktif Eşleşmiş Plazma-Optik Emisyon Spektrometresi (ICP-OES) ile ağır metal konsantrasyonları belirlenmiştir. Çalışma sonuçlarına göre, araştırma alanı topraklarının ortalama ağır metal konsantrasyonları yüksekten düşüğe doğru Fe>Mn>Cr>Zn>Ni>As>Cu>Pb>Co>Mo>Cd şeklindedir. Geçmiş referans değerlerle karşılaştırıldığında, ortalama Pb, As, Cd, Mo'in referans değerleri aştığı bulunmuştur. Ortalama Cf değerlerine göre, araştırma alanı topraklarında As, Cd, Mo ve Pb bakımından orta derecede kirlenme, Ni, Cr, Zn, Cu, Mn, Fe, Co bakımından ise az kirlenme olduğu belirlenmiştir. Ortalama PLI ye göre ortamda genel olarak bir kirlenme olmamakla birlikte, toprak örnekleme noktalarının %17'sinde PLİ>1 olup, buralardaki ortam kalitesinde genel bir bozulmaya işaret etmektedir. Bu nedenle sulak alana kirlilik verme potansiyeli olan kaynaklar ve aktiviteler kontrol altına alınmalıdır.

**Anahtar kelimeler:** Sultan Sazlığı, ağır metal, toprak kirliliği, sulak alan

#### TEŞEKKÜR

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#### ABSTRACT

Wetlands are important terrestrial ecosystems that provide a variety of ecosystem services to humans. However, these precious ecosystem soils can be contaminated by heavy metals from various sources. In this study, the Pb, Cr, Zn, Fe, As, Mn, Mo, Cd, Cu, Co, Ni concentrations of the soil samples taken from Sultan Marshes were investigated and the pollution status was evaluated according to the contamination



factor (Cf) and Potential load index (PLI). For this purpose, 54 topsoil (0-20 cm) were taken and heavy metal concentrations were determined by Inductive Coupling Plasma–Mass Spectrometer (ICP-MS) and Inductive Coupling Plasma-Optic Emission Spectrometer ( ICP-OES). According to the study results, the average heavy metal concentrations of the soils were Fe>Mn>Cr>Zn>Ni>As>Cu>Pb>Co>Mo>Cd from high to low. Compared with background reference values, mean Pb, As, Cd, Mo were found to exceed reference values. According to the average Cf values, it was determined that there was moderate contamination in terms of As, Cd, Mo and Pb, and low contamination in terms of Ni, Cr, Zn, Cu, Mn, Fe, Co in the soils of the study area. Although there was generally no contamination in the environment according to the average PLI, PLI>1 at 17% of the soil sampling point indicates a general deterioration in the quality of the environment there. It is recommended that the sources and activities that have the potential to pollute the wetland should be taken under control.

**Keywords:** Sultan Marshes, heavy metal, soil pollution, wetland

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## KKTC İLKOKUL ÖĞRENCİLERİNİN ÖĞRETMEN KAVRAMINA İLİŞKİN METAFORİK ALGILARI

### METAPHORICAL PERCEPTIONS OF TRNC PRIMARY SCHOOL STUDENTS REGARDING THE CONCEPT OF TEACHER

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#### ÖZET

Metafor, bir şeyi açıklamak veya anlamak için başka bir şeyle benzetmenin yapıldığı edebi bir sanat türüdür. Kelime anlamı olarak "metafor", Yunanca'da "bir şeyin yerine başka bir şey koymak" anlamına gelir. Metafor, bir kavramı anlatmak için başka kavramlar kullanarak, anlatımı kuvvetlendiren, dili zenginleştiren ve düşünceleri dilsel eylemlere en etkili bir biçimde dönüştüren yapıdır. Bir metafor, benzer olan iki olgu arasında ilişki kurularak, belli bir zihinsel şema başka bir zihinsel şema üzerine yansıtılır. Metaforlar, bir bireyin zihninin belli bir kavrayış biçiminden başka bir anlayış biçimine hareket etmesini sağlayarak, zihinsel olarak güçlü bir modeldir. Bu makalede, ilkokul öğrencilerinin öğretmen kavramına ilişkin metaforik algıları incelenmiştir. Bu noktadan hareketle; yapılan bu araştırmanın amacı, KKTC'deki Milli Eğitim Bakanlığına bağlı ilkokullarda okuyan ilkokul öğrencilerinin öğretmen kavramını nasıl algıladıklarını ve bu algıların hangi metaforik yapılarla olduğunu belirlemektir. Bu amaca ulaşmak için, 80 ilkokul öğrencisine öğretmen kavramı hakkında yazılı bir anlatım yapmaları istenmiştir. Daha sonra, öğrencilerin yazılarından elde edilen kaynaklar, içerik analizi yöntemiyle incelenerek metaforik yapıların çözülmesi amaçlanmıştır. Araştırma sonuçları, öğrencilerin öğretmen kavramına ilişkin birçok farklı metaforik yapıyı hedeflediğini göstermektedir. Öğretmen, öğrencilerinin bir anne ya da baba figürleri olarak görülen, yol gösterici, rehber, ışık veren, arkadaş ve koruyan bir figür olarak da tasvir edilmiştir. Bunun yanı sıra, öğretmen, bir fabrika, öğrencilerin beyinlerini dolduran bir şey ya da bir robot olarak da algılanmıştır. Araştırma sonuçları, ilkokul öğrencilerinin öğretmen kavramını çok farklı metaforik yapılarla algıladıklarını göstermektedir. Bu da, öğretmenlik mesleğinin çok yönlü bir meslek olduğunu ve öğrencilerin öğretmenlerini farklı şekillerde algılayabileceğini göstermektedir. Bu nedenle, öğrencilerinin metaforik algılarını dikkate alarak, farklı öğrenci grubuna uygun eğitim hedeflerini geliştirmeleri gerekmektedir. Sonuç olarak, bu araştırma, ilkokul öğrencilerinin öğretmen kavramına ilişkin metaforik algılarının önemini vurgulayarak, öğrencilerinin metaforik algılarını anlamalarının ve farklı öğrencilerle uygun eğitim hedefleri geliştirmelerinin önemine dikkat çekmektedir. Bu makale, eğitimciler ve öğretmen adayları için önemli bir kaynak olabilir ve ayrıca öğrencilerinin metaforik düşüncelerini geliştirmeye yardımcı olabilir.



**Anahtar sözcükler:** Metafor, algı, öğretmen, öğrenci, kavram

## ABSTRACT

Metaphor is a type of literary art in which similes are used to explain or understand something. The word "metaphor" means "to replace one thing with another" in Greek. Metaphor is a structure that uses other concepts to describe a concept, strengthens the expression, enriches the language and transforms thoughts into linguistic actions in the most effective way. A metaphor is projected onto another mental schema by establishing a relationship between two similar phenomena. Metaphors are a mentally powerful model, enabling an individual's mind to move from one form of understanding to another. In this article, primary school students' metaphorical perceptions about the concept of teacher were examined. Starting from this point; The aim of this research is to determine how primary school students studying in primary schools affiliated to the Ministry of National Education in the TRNC perceive the concept of teacher and with which metaphoric structures these perceptions are. To achieve this aim, 80 primary school students were asked to make a written statement about the concept of teacher. Afterwards, it was aimed to solve the metaphorical structures by examining the sources obtained from the students' writings with the method of content analysis. The results of the research show that students target many different metaphorical structures related to the concept of teacher. The teacher is also depicted as a guiding, guide, light-giving, friend and protective figure, seen as a mother or father figure of his students. In addition, the teacher was perceived as a factory, something filling the brains of students, or a robot. The results of the research show that primary school students perceive the concept of teacher with very different metaphorical structures. This shows that the teaching profession is a versatile profession and students may perceive their teachers in different ways. For this reason, they need to develop educational goals suitable for different student groups, taking into account their students' metaphorical perceptions. In conclusion, this research emphasizes the importance of primary school students' metaphorical perceptions of the concept of teacher, drawing attention to the importance of their students' understanding of their metaphorical perceptions and developing educational goals suitable for different students. This article can be an important resource for educators and prospective teachers, and can also help develop their students' metaphorical thinking.

**Keywords:** Metaphor, perception, teacher, student, concept



## AMASYA ÜNİVERSİTESİ'NDE OKUYAN ÖĞRENCİLERİN KALİTE KÜLTÜRÜNÜN GELİŞTİRİLMESİNE YÖNELİK GÖRÜŞLERİ\*

### OPINIONS OF STUDENTS AT AMASYA UNIVERSITY ON IMPROVEMENT OF QUALITY CULTURE\*

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#### ÖZET

Üniversitelerin Kalite sistemlerinin en önemli özellikleri paydaş görüşleri olarak sistemlerini sürekli iyileştirmeleri zorunluluğudur. Sistemlerde bu paydaşlar iç ve dış paydaşlar şeklinde tanımlanmış olabilirler. Geri besleme olmadan kurulan kalite sistemleri hem amaçlara çok az hizmet etmekte hem de sistemin devamlılık yaşamasında sorunlara neden olmaktadır. Üniversite Kalite sistemi; Öğretim elemanları ve öğrenciler arasında güçlü bir iletişimin sağlanması için, Öğrenci merkezli aktif öğrenme yöntemlerinin kullanımına yönelik tanımlı süreçlerin oluşması için, Program yeterliliklerine ulaşıp ulaşılmadığının sistematik bir şekilde izlenebilmesi için, Araştırma geliştirme faaliyetlerine paydaş katılımının sürekliliğinin sağlanabilmesi için, Entegre ve etkin bir bilgi yönetim sistemi için, İnsan kaynakları, mali kaynaklar ile taşınır ve taşınmaz kaynakların yönetim şekli ve verimliliğini düzenleyen stratejilerin varlığının sağlanabilmesi için, Sürekli iyileştirmeyi sağlayabilmek, verilen kaliteli eğitim, hizmet ve etkinlikleri kanıtlamak, Riskleri ve ilgili maliyetleri azaltmak, Kanun ve yönetmeliklere uygunluk sağlamak, Çalışanların kurum kültürünü benimsemiş olması ve aidiyet duygusunun yüksek olabilmesi için kalite standartları gereklidir. Dünyada birçok alanı olumsuz yönde etkileyen Covid-19 salgınından eğitim dünyası da olumsuz yönde etkilenmiştir. Salgın sonrası eğitim kurumları salgın öncesi durumlarına dönmekte zorlanmışlardır. Fakat bu olumsuzluklara rağmen Türkiye'deki diğer üniversiteler gibi Amasya Üniversitesi de yüz yüze eğitim sistemine geçmek için çalışma başlatmıştır. Üniversite de kurulu bir iç kalite sistemi mevcuttur. Bu sistem iç paydaşları olan öğrencilerden görüşler olarak iyileştirilmesi gereken alanlarını sürekli iyileştirme mantığında ve PÜKO döngüsü esaslarıyla iyileştirmektedir. Amasya Üniversitesi'nde öğrenim gören öğrencilerin görüşlerinin neler olduğunun belirlenmesi amacıyla Eylül 2022'de üniversite öğrencilerinin tamamından veri toplanmıştır. Veri analizlerinde öğrencilerin uzaktan eğitim sisteminden ve özellikle kütüphane hizmetlerinden memnun oldukları ancak üniversitenin yabancı dil eğitimi ve sosyal etkinlikler noktasında iyileştirilmesi gereken alanlar olduğunu ifade etmişlerdir.

**Anahtar kelimeler:** Amasya Üniversitesi, Paydaş, Kalite, Uzaktan eğitim.

\* Bu makale Amasya Üniversitesi SEB-BAP 20-0211 No'lu proje kapsamında desteklenen çalışmanın verilerinden üretilmiştir.

#### ABSTRACT

The most important features of the quality systems of universities are the obligation to continuously improve their systems by taking stakeholder opinions. In systems, these stakeholders may be defined as internal and external stakeholders. Quality systems established without feedback both serve the purposes very little and cause problems in the continuity of the system. University Quality system; To ensure a strong communication between the instructors and students, To establish defined processes for the use of student-centered active learning methods, To systematically monitor whether the program qualifications have been achieved, To ensure the continuity of stakeholder participation in research and development activities, For an integrated and effective information management system In order to



ensure the existence of strategies that regulate the management and efficiency of human resources, financial resources, movable and immovable resources, To ensure continuous improvement, to prove the quality training, services and activities provided, To reduce risks and related costs, To comply with laws and regulations, To ensure that employees have adopted the corporate culture Quality standards are necessary in order to have a high level of belonging and a high sense of belonging. The education world has also been adversely affected by the Covid-19 epidemic, which has negatively affected many areas in the world. Post-epidemic educational institutions have had difficulty returning to their pre-epidemic status. However, despite these negativities, Amasya University, like other universities in Turkey, has started to work towards a face-to-face education system. The university has an established internal quality system. This system improves the areas that need improvement by taking the opinions of the students, who are its internal stakeholders, with the logic of continuous improvement and the principles of the PUKO cycle. In order to determine the opinions of the students studying at Amasya University, data were collected from all university students in September 2022. In the data analysis, they stated that the students are satisfied with the distance education system and especially the library services, but there are areas that need improvement in terms of foreign language education and social activities at the university.

**Keywords:** Amasya University, Stakeholder, Quality, Distance education.

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## STATUS OF THE INDONESIAN LANGUAGE

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### ABSTRACT

The purpose of this study is to describe the position of the Indonesian language from a subjective perspective. The research method employed a literature review approach, which sourced books and journals related to the discussion of the position of the Indonesian language. The results of this literature review study concluded that Indonesian is the official language of the Republic of Indonesia and is one of the most widely used languages in the country. Indonesian is used as the language of instruction in various fields, such as education, government, business, and mass media. Indonesian is also recognized as one of the official languages of ASEAN. Historically, Indonesian evolved from the Malay language that has been used in the Nusantara archipelago for centuries. Over time, Indonesian has been influenced by various languages, including Dutch, English, and Arabic. However, Indonesian has maintained its unique character as a simple and easy-to-understand language. In the context of globalization, Indonesian plays a significant role as a means of communication and integration for the Indonesian people in the international community. Additionally, the use of Indonesian can strengthen national identity and a sense of nationalism, as well as facilitate cultural and knowledge exchange among nations. Indonesian can also be an effective tool for cultural diplomacy in promoting Indonesia to the world. In addition, the government can also strengthen language policies and promote consistent use of the Indonesian language throughout Indonesia.

**Keywords:** Language, globalization, and Indonesia.



## KÖY ENSTİTÜLERİNDE MÜZİK EĞİTİMİ: PAMUK PINAR ÖRNEĞİ MUSIC EDUCATION IN VILLAGE INSTITUTES: THE CASE OF PAMUKPINAR

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### ÖZET

Köy Enstitüleri, Türkiye Cumhuriyeti'nin kuruluş yıllarında Atatürk'ün önderliğinde başlatılan eğitim reformlarından biridir. 1930'lu yılların başlarında başlatılan bu reform hareketi, Türkiye'nin modernleşmesi ve kalkınması için önemli bir adımdır.

Köy Enstitüleri, kırsal kesimde yaşayan halkın eğitim seviyesini yükseltmek ve modern tarım teknikleri ile tanıştırmak amacıyla kurulmuştur. Bu okullar, öğretmen, öğrenci ve köylü arasındaki mesafeleri azaltmak ve eğitimi kırsal kesimlere taşımak için önemli bir rol oynamıştır.

Köy Enstitülerinde, öğrencilerin yanı sıra öğretmenleri de kapsayan bir eğitim modeli sunmuştur. Öğretmenler, sadece klasik eğitim konularını öğretmekle kalmayıp, aynı zamanda tarım teknikleri, sağlık, hijyen, sanat ve kültür gibi konularda da öğretmenlerdir.

Köy Enstitüleri, öğrencilere birçok farklı ders sunmuştur. Matematik, fen bilimleri, sosyal bilimler ve Türkçe gibi derslerin yanı sıra, tarım, hayvancılık, bahçecilik, ağaç dikimi ve ormancılık gibi pratik beceriler de öğretilmiştir. Bu beceriler, köylülerin modern tarım teknikleri ve teknolojileri kullanmalarına yardımcı olmuştur.

Müzik dersi Köy Enstitülerinin eğitim programı içerisinde önemli bir yer tutmaktadır. Okulun kurulmuş olduğu bölgenin müzik kültürüne göre, öğrencilere en az bir enstrüman çalma kabiliyeti kazandırılmak istenmiştir. Klasik Türk Müziği enstrümanlarının yanında piyano da okulların envanterinde yer almıştır. Enstitülerin kurulduğu tarih göz önüne alındığında piyano bulmak kadar piyano dersi verecek öğretmenlerin de bulunması çok güç bir işti. Bu zorluklara rağmen, yurtdışından piyanolar getirilmiş ve en azından öğrencilerin piyano ile tanışması sağlanmaya çalışılmıştır.

Araştırmaya konu olan Pamuk Pınar Köy Enstitüsü, Pamukpınar Köy Enstitüsü, 1940 yılında, Sivas ilinin Yıldızeli ilçesine yaklaşık 5 kilometre uzaklıktaki Pamukpınar mevkiinde kurulmuştur. 1954 yılında Enstitülerin kapatılmasından sonra öğretmen okulu, güreş eğitim merkezi, Anadolu Öğretmen Lisesi ve son olarak da Yatılı İlköğretim Bölge Okulu olarak hizmet vermiştir.

Bu çalışmada, Pamukpınar Köy Enstitüsünde verilen müzik eğitiminden başlayarak Köy Enstitülerinin müzik eğitimi ve sonrasında Türkiye Cumhuriyeti'nin ilk yıllarında müziğe bakış meselesi irdelenmeye çalışılacaktır.

**Anahtar kelimeler:** Köy Enstitüsü, Müzik Eğitimi, Piyano, Pamukpınar



## ABSTRACT

Village Institutes are one of the educational reforms initiated under the leadership of Atatürk during the founding years of the Republic of Turkey. This reform movement, initiated in the early 1930s, is an important step for Turkey's modernization and development.

Village Institutes were established to raise the level of education of the people living in rural areas and to introduce them to modern agricultural techniques. These schools played an important role in reducing the distances between teachers, students and villagers and bringing education to rural areas.

The Village Institutes offered an education model that included teachers as well as students. Teachers not only taught classical education subjects, but also agricultural techniques, health, hygiene, art and culture.

The Village Institutes offered many different subjects to students. In addition to subjects such as mathematics, science, social sciences and Turkish, practical skills such as agriculture, animal husbandry, horticulture, tree planting and forestry were taught. These skills helped villagers to utilize modern agricultural techniques and technologies.

Music lessons played an important role in the educational program of the Village Institutes. According to the musical culture of the region where the school was established, students were expected to gain the ability to play at least one instrument. In addition to classical Turkish music instruments, the piano was also included in the schools' inventory. Considering the date when the institutes were founded, finding pianos as well as teachers to teach piano lessons was a very difficult task. Despite these difficulties, pianos were brought from abroad and at least the students were introduced to the piano.

Pamuk Pınar Village Institute, Pamukpınar Village Institute, which is the subject of the research, was established in 1940 in Pamukpınar, about 5 kilometers from Yıldızeli district of Sivas province. In 1954, after the closure of the Institutes, it served as a teacher's school, wrestling training center, Anatolian Teacher's High School and finally as a Regional Primary Boarding School.

In this study, starting from the music education given in Pamukpınar Village Institute, the music education of the Village Institutes and then the issue of the view of music in the first years of the Republic of Turkey will be analyzed.

**Keywords:** Village Institute, Music Education, Piano, Pamukpınar



## ARİŞ BELGELERİNE GÖRE ATATÜRK DÖNEMİNDE MÜZİK ALANINDA TÜRKİYE'YE GELEN YABANCI UZMANLAR

### ACCORDING TO ARCHIVE DOCUMENTS, FOREIGN EXPERTS IN THE FIELD OF MUSIC WHO CAME TO TURKEY DURING THE ATATURK PERIOD

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#### ÖZET

Türk müzik inkılabı, aynı zamanda Türk sanat müziğindeki geleneksel tarzların değiştirilmesine de yol açmıştır. Örneğin, Türk sanat müziğindeki eski usul şarkılar yerine, daha modern tarzlar benimsenmiştir.

Müzik inkılabı, Türk müziğinin popüler kültürdeki yerini de değiştirmiştir. Türkiye'de popüler kültür, daha önce genellikle Arap müziğine dayanıyordu. Ancak müzik inkılabı sayesinde, Türk müziği popüler kültürün bir parçası haline gelmiştir. Bu sayede, Türk müziği daha geniş bir kitleye ulaşmıştır.

Türk müzik inkılabı, Türk müziğinin modernizasyonunu teşvik etmekle birlikte, bazı eleştirilere de maruz kalmıştır. Bazıları, geleneksel Türk müziğinin değiştirilmesinin kültürel kimliğin kaybedilmesine yol açabileceğinden endişe etmiştir. Ancak müzik inkılabı, Türk müziğinin uluslararası arenada daha tanınır hale gelmesine ve Türk kültürünün zenginliğinin dünya çapında takdir edilmesine katkı sağlamıştır.

Türkiye'deki müzik inkılabı sürecinde, birçok yabancı uzman da Türkiye'ye gelmiştir. Bu uzmanlar, müzik eğitimi, müzik teorisi, müzikoloji, müzik aletleri yapımı ve benzeri alanlarda uzmanlaşmış kişilerdi.

Bu uzmanlar, Türk müziği üzerine araştırmalar yaparak Türk müziğinin batı müziği ile uyumlu hale getirilmesine katkıda bulunmuşlardır. Ayrıca Türkiye'deki müzik eğitimine de katkıda bulunarak, müzik eğitiminin standartlarını yükseltmişlerdir.

Bu çalışmada, arşiv belgeleri kullanılarak, Mustafa Kemal Atatürk Döneminde Türkiye'ye gelen yabancı uzmanlar ve sanatçılar hakkında bilgi verilecektir.

**Anahtar kelimeler:** Müzik İnkılabı, Yabancı Uzmanlar, Kültür

#### ABSTRACT

The Turkish musical revolution also led to a change in the traditional styles of Turkish art music. For example, instead of the old style songs in Turkish art music, more modern styles were adopted.

The music revolution also changed the place of Turkish music in popular culture. Popular culture in Turkey had previously been based mostly on Arabic music. But thanks to the music revolution, Turkish music became part of popular culture. In this way, Turkish music reached a wider audience.

While the Turkish music reform encouraged the modernization of Turkish music, it was also subject to some criticism. Some worried that changing traditional Turkish music could lead to a loss of cultural



identity. However, the music revolution contributed to making Turkish music more recognizable in the international arena and contributed to a worldwide appreciation of the richness of Turkish culture.

During the music reform process in Turkey, many foreign experts came to Turkey. These experts specialized in music education, music theory, musicology, musical instrument making and similar fields.

These experts conducted research on Turkish music and contributed to the harmonization of Turkish music with western music. They also contributed to music education in Turkey and raised the standards of music education.

In this study, using archival documents, information will be given about the foreign experts and artists who came to Turkey during the Mustafa Kemal Atatürk Period.

**Keywords:** Music Revolution, Foreign Experts, Culture



### 3B YAZICILARLA ÜRETİLEN MALZEMELERİN BİRLEŞTİRME YÖNTEMLERİNİN İNCELENMESİ

#### INVESTIGATION OF JOINING METHODS OF MATERIALS PRODUCED WITH 3D PRINTERS

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#### ÖZET

Eklemeli imalat, Endüstri 4.0 olarak adlandırılan 4.Sanayi Devrimi'nin getirdiği çığır açıcı teknolojilerden biridir. Yöntem; metal, polimer, seramik ve kompozit malzemelerle geleneksel üretim yöntemlerinin çözümsüz kaldığı veya zorlandığı tasarımların üretilmesine imkan sağlamaktadır. Kişiselleştirilmiş ürünlerin (medikal, spor ekipmanları), mimari alanda estetik parçaların, uzay ve havacılıkta hassas ekipmanların, gıda ve ilaç sektöründe kullanılan yenilikçi ürünlerin geliştirilmesini kolaylaştırmıştır. Eklemeli imalat yönteminin; kullanılan hammaddelere ve parçaların oluşturma şekillerine göre farklı çeşitleri bulunmaktadır. Eklemeli imalat yöntemlerinden bazıları sadece sanayiye yönelik uygulamalarda ve bazıları da günlük kullanıma uygun olarak stereolitografi (SLA), seçici lazer sinterleme-ergitme (SLS-SLM), elektron ışın ergitme (EBM) ve ergiyik yığarak modelleme (FDM) gibi yöntemler sayılabilir. Bunlardan ergiyik yığarak modelleme tekniği kullanılarak çalışan 3B yazıcılar, maliyet ve fonksiyonellik açısından hem endüstriyel hem de günlük hayatta prototip imalinde veya son ürün basımında büyük bir fark yaratmıştır. 3B yazıcılar, filament adı verilen hammaddelerin eritilerek üst üste katman katman eklenmesi ile ürünün elde edilmesi prensibine göre çalışır. Filamentler; sade termoplastikten olabildikleri gibi polimer katkılı veya metal katkılı kompozit malzemelerden de olabilmektedirler. Hafif ve mukavemet beklentilerine uygun üretim, zaman ve maliyet açısından esnek üretim şartlarının sağlanması, malzeme israfının azalması ve boyutsal kontrolün hızlı yapılabilmesi 3B yazıcıların önemli avantajlarından. Bu avantajlarının yanı sıra ürünün inşa edildiği platform boyutlarının kısıtlı olması, çok büyük parçaların imalini sınırlamakta veya montaj ihtiyacı olmaktadır. Ayrıca, bazı durumlarda 3B yazıcıda basılan parçaların başka malzeme gruplarıyla (birbirine benzemeyen malzemeler) birleştirilmesi de gerekmektedir.

Ürün montajında, malzemeleri birleştirmek için bilinen temel yöntemler; kaynak, yapıştırma ve mekanik birleştirme olarak sınıflandırılmaktadır. Montaj sonrasında parçaların güvenliği; birleştirilen





malzemelerin özelliklerine, konstrüksiyon-imalatının uyumluluğuna ve birleştirme yerinin sağlamlığına bağlıdır.

Bu çalışmada, genel olarak 3B yazıcılarda (eklemeli imalat yöntemi) üretilen parçalarının birleştirilmesinde kullanılan yöntemler ve 3B yazıcıda basılan polimer esaslı malzemelerin farklı malzeme gruplarıyla birleştirilmesi incelenmiştir. İlgili literatür sonuçları, 3B yazıcılar ve termoplastik malzeme grubuyla çalışan araştırmacılar için detaylı olarak değerlendirilmiştir.

**Anahtar kelimeler:** Eklemeli imalat, 3B basım, birleştirme teknikleri, birbirine benzemeyen malzemeler.

## ABSTRACT

Additive manufacturing is one of the groundbreaking technologies brought about by the so-called Industry 4.0, the 4th Industrial Revolution. The method enables the production of designs with metals, polymers, ceramics, and composite materials where traditional production methods are unsolvable or difficult. It has facilitated the development of personalized products (medical and sports equipment), aesthetic pieces for architecture, precision equipment for aerospace and aviation, and innovative products in the food and pharmaceutical industry. There are different types of additive manufacturing methods according to the raw materials used and the way the parts are formed. Some of the additive manufacturing methods are used only in industrial applications and some are suitable for everyday use, such as stereolithography (SLA), selective laser sintering-melting (SLS-SLM), electron beam melting (EBM) and fused deposition modeling (FDM). Of these, 3D printers, which work using the fused deposition modeling technique, have made a big difference in prototype manufacturing or final product printing in both industrial and daily life in terms of cost and functionality. 3D printers work on the principle that raw materials called filaments are melted and added layer by layer to create a product. Filaments can be pure thermoplastics or composite materials with polymer additives or metal additives. The important advantages of 3D printers are produced in accordance with lightweight and strength expectations, flexible production conditions in terms of time and cost, reduction of material waste, and fast dimensional control. In addition to these advantages, the limited size of the platform on which the product is built limits the production of very large parts or requires assembly. Also, in some cases, 3D printed parts need to be combined with other material groups (dissimilar materials).

In product assembly, the main known methods for joining materials are welding, adhesive bonding and mechanical fastening. The safety of parts after assembly depends on the properties of the joined materials, the compatibility of construction and manufacturing, and the strength of the joint.

In this study, the methods used in the joining of parts produced in 3D printers (additive manufacturing method) in general and the joining of 3D printed polymer-based materials with different material groups are examined. The results of the related literature are evaluated in detail for researchers working with 3D printers and thermoplastic materials group.

**Keywords:** Additive manufacturing, 3D printing, joining techniques, dissimilar materials.



## YEREL YÖNETİM YAPILARININ İNCELENMESİ ÜZERİNE: TÜRKİYE, FRANSA VE JAPONYA MUKAYESESİ

### ON EXAMINATION OF LOCAL GOVERNMENT STRUCTURES: A COMPARISON OF TUKEY FRANCE AND JAPAN

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#### ÖZET

Yerel yönetimler, halka en yakın hizmet birimleridir. Halka yakınlıkları nedeniyle temel kamusal mal ve hizmet üretimlerini daha etkin ve verimli bir şekilde gerçekleştirmektedir. Yerel yönetimler; hizmet sunumlarının yanı sıra yerel demokrasinin gelişmesinde başat aktör olarak sivil toplum kuruluşlarının idari süreçlere katılmasına da büyük katkı sağlamaktadır. Yerel yönetimlerin bu denli önem arz etmesinden dolayı ülkeler, yerel yönetim yapılarını güçlendirmeye yönelik politikalar üretmektedir. Türkiye’de tarihsel süreç içerisinde yerel yönetim yapılanmasını daha etkin kılmayı amaçlamış ve bu doğrultuda politikalar izlemiştir. İzlediği politikalar neticesinde günümüz yerel yönetim anlayışı ortaya çıkmıştır. Türkiye’nin günümüzdeki yerel yönetim yapılanmasını daha iyi tahlil edebilmek ve nasıl daha iyisi olabilir sorusuna cevap bulabilmek adına bu makale çalışması ele alınmıştır. Çalışmada ülkemizin yerel yönetim yapısı, farklı iki ülkenin yerel yönetim yapısı ile mukayese edilmiştir. Bu anlamda mukayesenin daha sağlıklı yapılabilmesi için Türkiye gibi üniter devlet sistemine sahip olan Fransa ve Japonya tercih edilmiştir. Belirlenen ülkelerin yerel yönetim yapıları incelenerek aralarında bulunan benzerlikler ve farklılıklar ortaya koyulmuştur. Ayrıca makale çalışmasının sonuç kısmında, elde edilen bilgiler ışığında Türkiye’nin yerel yönetim yapısına katkı sağlamak için bazı öneriler ortaya konmuştur. Çalışma, literatür taraması yöntemi kullanılarak hazırlanmıştır.

**Anahtar kelimeler:** Yerel Yönetimler, Türkiye, Fransa, Japonya, Özel Yönetim Birimleri, Belediyeler.

#### ABSTRACT

Local governments are the closest service units to the public. Due to its proximity to the public, it produces basic public goods and services more effectively and efficiently. local governments; In addition to its service offerings, it also makes a great contribution to the participation of non-governmental organizations in administrative processes as the leading actor in the development of local democracy. Due to the importance of local governments, countries produce policies to strengthen their local government structures. It aimed to make the local government structuring more effective in the historical process in Turkey and followed policies in this direction. As a result of the policies he followed, today's local government approach has emerged. In order to better analyze Turkey's current local government structure and to find an answer to the question of how it can be better, this article has been discussed. In the study, the local government structure of our country was compared with the local government structure of two different countries. In this sense, France and Japan, which have a unitary state system like Turkey, were preferred in order to make the comparison more soundly. The local government structures of the determined countries were examined and the similarities and differences between them were revealed. In addition, in the conclusion part of the article, some suggestions have



been put forward to contribute to the local government structure of Turkey in the light of the information obtained. The study was prepared using the literature review method.

**Keywords:** Local Administrations, Turkey, France, Japan, Special Administration Units, Municipalities.



## OKUMA KÜLTÜRÜ EDİNME SÜRECİNDE ORTAOKUL TÜRKÇE DERS KİTABI İLLÜSTRASYONLARI

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### ÖZET

Okuma kültürü, bireyin okuma eylemini alışkanlık hâline getirmesi ve yaşamının her alanına entegre etmesi ile ilişkili bir süreçtir. Bu süreçte bireyi erken yaşlardan itibaren nitelikli okuma materyalleri ile tanıştırmak okuma kültürünün edinilmesi açısından önem taşır. Öğrenme ortamlarında sıkça kullanılan Türkçe ders kitapları ve kitaplarda yer alan illüstrasyonların da öğrencilerin okuma kültürünü destekleyecek şekilde hazırlanması gerekmektedir. Bu noktada araştırmanın amacı, 5.6.7. ve 8. sınıf Türkçe ders kitaplarında yer alan illüstrasyonların, okuma kültürüne olan katkısını ortaya koymaktır. Bu kapsamda 2022-2023 eğitim-öğretim yılında okutulan 5. sınıf (Anıttepe Yayıncılık), 6. sınıf (MEB Yayıncılık), 7. sınıf (MEB Yayıncılık) ve 8. sınıf (MEB Yayıncılık) Türkçe ders kitapları incelenmek üzere seçilmiştir. Nitel desende tarama modelinde gerçekleştirilen çalışmada, Türkçe ders kitaplarında yer alan okuma kültürü ile ilişkili olan illüstrasyonlara ait tema, metin adı, görüntü içerikleri, görsel türleri ve sayfa numaraları tablolar hâlinde sunulmuştur.

**Anahtar kelimeler:** Okuma kültürü, Türkçe ders kitabı, illüstrasyon.

### ABSTRACT

Reading culture is a process associated with making the act of reading a habit and integrating it into every aspect of his or her life. In this process, introducing the individual to qualified reading materials from an early age is important in terms of acquiring reading culture. Turkish textbooks, which are frequently used in learning environments and the illustrations in the books should also be prepared in a way that supports the reading culture of the students. At this point, the aim of the research is 5.6.7. To reveal the contribution of the illustrations in the 8th and 8th grade Turkish textbooks to the reading culture. In this context, the 5th grade (Anıttepe Publishing), 6th grade (MEB Publishing), 7th grade (MEB Publishing) and 8th grade (MEB Publishing) Turkish textbooks taught in the 2022-2023 academic year were selected for review. In the study carried out in the scanning model, the theme, text title, image content, visual types and page numbers of the illustrations related to the reading culture in Turkish textbooks are presented in tables.

**Keywords:** Reading culture, Turkish textbook, illustration.



## HAVACILIK ALAŞIMLARININ TALAŞLI İŞLENMESİNİN MİKROSERTLİK AÇISINDAN İNCELENMESİ

### EXAMINATION OF THE MACHINING OF AEROSPACE ALLOYS IN TERMS OF MICROHARDNESS

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#### ÖZET

Talaşlı imalat süreçleri, genellikle iş parçasının mikrosertliğini önemli ölçüde etkiler. Bu etki, işlem parametreleri, takım geometrisi, soğutma yöntemleri ve işlenen malzemenin kendine özgü özellikleri gibi bir dizi faktöre bağlıdır. İdeal olarak, işlem süreci boyunca mikrosertlik, istenen özelliklere ulaşmak için dikkatlice kontrol edilir. Ancak, işlem parametrelerinin yanıltıcı bir şekilde ayarlanması, malzemenin mikrosertliğinde istenmeyen değişikliklere yol açabilir. Bu durum, iş parçasının genel performansını ve dayanıklılığını olumsuz yönde etkileyebilir. Özellikle, yüksek hızlı kesme ve derin kesme işlemleri sırasında, iş parçasının mikrosertliğinde önemli değişiklikler meydana gelebilir. Bu nedenle, talaşlı imalat sürecinin, malzemenin mikrosertliğini istenen şekilde kontrol edebilmek için doğru bir şekilde yönetilmesi hayati önem taşır. Talaşlı imalat süreçlerinde, işlem parametrelerinin sıcaklık, mikrosertlik ve yüzey pürüzlülüğü üzerindeki etkisi uzun yıllardır önemli bir araştırma konusu olmuştur. Bu çalışma, bu geniş araştırma alanı içerisinde, tormalama işlemi sürecindeki işlem parametrelerinin mikrosertlik üzerindeki etkisine özel bir dikkat göstermiştir. Çalışmada kullanılan malzemeler arasında yüksek sıcaklık uygulamalarında yaygın olarak kullanılan Hastelloy-X, Inconel-718 ve Ti6Al4V gibi süper alaşımlar yer almıştır. Bu alaşımların seçilmesi, yüksek sıcaklık ve korozyon direnci özellikleri nedeniyle, özellikle hava ve uzay uygulamalarında kullanılan parçaların üretiminde önemli oldukları için olmuştur. İş parçaları, belirlenen farklı deney parametreleri altında işlenmiştir. Bu parametreler arasında kesme hızı, ilerleme hızı ve kesme derinliği gibi temel tormalama işlemi parametreleri bulunmuştur. Farklı deneyler, mikrosertliğin bu işlem parametrelerine nasıl yanıt verdiğini belirlemek için tasarlanmıştır. İşlem sonrası, işlenmiş yüzeylerden 20x20x5 mm<sup>3</sup> boyutlarında numuneler alınmıştır. Bu numuneler, mikrosertlik değerlerinin doğru bir şekilde ölçülmesini sağlamak için kullanılmıştır. Ölçüm süreci, standart mikrosertlik test yöntemlerine uygun olarak gerçekleştirilmiştir. Sonraki aşamada, işlem parametrelerinin mikrosertlik üzerindeki etkisini tespit etmek adına ortalamalar ve sinyal gürültü oranları için ana etkiler analizleri gerçekleştirilmiştir. Bu analizler, işlem parametrelerinin mikrosertliği nasıl etkilediği hakkında değerli bilgiler sağlamıştır. Analizler sonucunda, mikrosertlik üzerinde kesme derinliğinin etkisi özellikle belirginleşmiştir. Bu, kesme derinliğinin tormalama süreci sırasında meydana gelen deformasyon ve dolayısıyla mikrosertliği etkileyen en önemli parametrelerden biri olduğunu göstermektedir. Bu bulgu, talaşlı imalatta işlem parametrelerinin seçiminde ve optimize edilmesinde önemli bir rol oynayabilir ve bu alanda daha fazla araştırma yapılmasına yönlendirici olabilir.



**Anahtar kelimeler:** : Havacılık malzemeleri, Mikrosertlik, Ti6Al4V, Hastelloy-X, Inconel-718

## ABSTRACT

Machining processes typically have a significant impact on the microhardness of the workpiece. This effect is dependent on a range of factors, including process parameters, tool geometry, cooling methods, and the unique characteristics of the material being processed. Ideally, microhardness is carefully managed throughout the process to achieve the desired characteristics. However, setting process parameters in a misleading manner can lead to unwanted changes in the material's microhardness. This situation can negatively affect the overall performance and durability of the workpiece. In particular, significant changes in the microhardness of the workpiece can occur during high-speed cutting and deep cutting operations. Therefore, it is crucial to properly manage the machining process to control the material's microhardness in the desired way. The effect of process parameters on temperature, microhardness, and surface roughness in machining processes has been a significant research topic for many years. This study has specifically focused on the effect of process parameters on microhardness during the turning process within this broad field of research. The materials used in the study included superalloys like Hastelloy-X, Inconel-718, and Ti6Al4V, which are commonly used in high-temperature applications. These alloys were selected because their high-temperature and corrosion resistance properties are crucial in the manufacturing of parts used particularly in aerospace applications. The workpieces were processed under different experimental parameters. These parameters included essential turning process parameters like cutting speed, feed rate, and cutting depth. Different experiments were designed to determine how microhardness responds to these process parameters. After the process, samples of 20x20x5 mm<sup>3</sup> dimensions were taken from the machined surfaces. These samples were used to accurately measure the microhardness values. The measurement process was carried out in accordance with standard microhardness testing methods. In the subsequent stage, main effects analyses for averages and signal-to-noise ratios were performed to identify the effect of process parameters on microhardness. These analyses provided valuable information on how process parameters affect microhardness. As a result of the analyses, the effect of cutting depth on microhardness was particularly pronounced. This suggests that cutting depth is one of the most important parameters affecting deformation during the turning process and, therefore, microhardness. This finding could play a significant role in selecting and optimizing process parameters in machining and may guide further research in this field.

**Keywords:** Aerospace Materials, Microhardness, Ti6Al4V, Hastelloy-X, Inconel-718



## AROMA VERİCİ VE AROMA GELİŞTİRİCİLERİN İNSAN SAĞLIĞI ÜZERİNDEKİ ETKİLERİ

### EFFECTS OF FLAVOURING AND FLAVOUR ENHANCERS ON HUMAN HEALTH

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#### ÖZET

İnsanların yaşamlarını idame ettirebilmesi için beslenmeye ihtiyaçları vardır. Artan nüfus ile gıda ihtiyacını karşılayabilmek amacıyla gıda endüstrisinde üretim de hızla artmaktadır. yükselmektedir. Üretim sonrası gıdaları uzun süre korumak, besin değerleri kaybını engellemek, proses esnasında kaybolan renk, aroma gibi uygun fiziksel özelliklerini geliştirmek, zenginleştirmek hedeflenmektedir. Bunu sağlamak amacıyla gıda katkı maddeleri kullanılır. Her gıda katkı maddesine Avrupa Birliği tarafından özel tanıma kodu verilir. Bu kodlar, Avrupa Birliği (EU) simgesi olarak E harfi ve üç rakamlı sayıdan ibaret olup gıda katkı maddesinin E kodunun bulunması güvenilir olduğunun göstergesidir. Gıda katkı maddelerinin sınıflandırılması çeşitli şekillerde yapılabilmektedir. Aroma vericiler kendi içinde tatlandırıcılar, doğal ve sentetik aroma vericiler olarak incelenebilir. Tatlandırıcılar gıdaya tatlılık katmak için kullanılan maddelerdir. Aspartam, sakarin ve asesülfam-K bu grup içerisinde bulunmaktadır. Doğal ve sentetik aromalar gıdaların lezzetini değiştirmek için kullanılan çeşitli kimyasal maddelerin karışımıdır. Aroma geliştiriciler; gıda lezzetini artırmak, tamamlamak veya geliştirmek için kullanılır ancak kendi lezzetleri yoktur. Bu grupta en çok kullanılanlardan biri monosodyum glutamattır. Gıda Kodeks Komisyonu (CAC), Gıda Katkı ve Kontaminantları Kodeksi Komitesi (CCFAC) ve Birleşik (FAO/WHO) Gıda Katkıları Uzman Komitesi (JECFA) gibi kuruluşlar gıda katkı maddelerinin tüketim şekli ve dozu ile ilgili düzenlemeler yapmaktadır. Ülkemizdeki yasal düzenlemeler ise Türk Gıda Kodeksi ile belirlenmektedir. Çeşitli ürünlerde bulunan monosodyum glutamat, aspartam, asesülfam K ve sakarin gibi gıda katkı maddeleri için belirlenen kullanım dozlarından fazla kullanıldığında sağlık açısından tehdit oluşturmaktadır. Oksidatif stres, obezite, kanser, diyabet, hepatotoksik, nefrotoksik ve nörolojik etkileri görülmüştür. Şeker alkollerinin ise ağız ve bağırsak sağlığı üzerinde etkileri vardır. Bu çalışmanın amacı aroma verici ve aroma geliştirici gıda katkı maddelerinin insan sağlığı üzerine etkilerini incelemektir.

**Anahtar kelimeler:** Aroma vericiler, aroma geliştiriciler, insan sağlığı, gıda katkı maddeleri.



## ABSTRACT

Humans need food to survive. With the increasing population, production in the food sector is increasing rapidly to meet the food need. rising. It is aimed to preserve the foods for a long time after they are produced, to prevent the loss of nutritional values, to develop and enrich the appropriate physical properties such as colour and aroma lost during processing. To achieve this, food additives are used. Each food additive is given a special recognition code by the European Union. These codes consist of the letter E, the symbol of the European Union (EU) and a three-digit number, and the presence of the E code of the food additive is an indication that it is reliable. Classification of food additives can be done in various ways. Flavourings can be examined as sweeteners, natural and synthetic flavourings in themselves. Sweeteners are substances used to add sweetness to food. Aspartame, saccharin and acesulfame-K are in this group. Natural and synthetic flavours are a mixture of various chemicals used to change the flavour of foods. flavour enhancers; used to enhance, complement, or enhance food flavour but does not have flavours of its own. One of the most used in this group is monosodium glutamate. Organizations such as the Food Codex Commission (CAC), the Food Additives and Contaminants Codex Committee (CCFAC) and the Joint (FAO/WHO) Food Additives Expert Committee (JECFA) make regulations regarding the consumption and dosage of food additives. The legal regulations in our country are determined by the Turkish Food Codex. It poses a threat to health when used more than the specified dosages for food additives such as monosodium glutamate, aspartame, acesulfame-K and saccharin found in various products. Oxidative stress, obesity, cancer, diabetes, hepatotoxic, nephrotoxic and neurological effects have been observed. Sugar alcohols have effects on oral and intestinal health. The aim of this study is to examine the effects of flavouring and flavour enhancing food additives on human health.

**Keywords:** Flavourings, flavour enhancers, human health, food additives.





## AN EMPIRICAL INVESTIGATION TO DETERMINE THE NEGATIVE IMPACTS OF TECHNOSTRESS; EVIDENCE FROM HOTEL FRONT-LINE STAFF IN INDIA

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### ABSTRACT

Technology is a major source of stress (We et al., 2022), which is defined as a psychological or physiological response to a certain environment (Cooper & Marshall, 1976). The psychological stress employees suffer due to utilizing ICT at work is referred to as technostress (Weil & Rosen, 1997). Technostress was defined by Tarafdar et al. (2007) as the difficulty a person has adapting to new technology and was projected as a multi-dimensional scale with five main components: techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty.

The negative outcomes emerging from technostress have been widely debated by scholars in different contexts at the individual level; among them are exhaustion, diminished physical and mental wellness, and psychological distress. Due to its significance, there is still a need to identify the possible effect of technostress in organizations and additional empirical studies should scrutinize its adverse effect. However, a dearth of research empirically investigates the destructive effects of technostress in the hotel industry (Farrish and Edwards, 2020).

The current inquiry examines the effects of technostress on work-related depression and burnout among hotel staff. Quantitative method through judgmental sampling technique was used to gather data from hotel staff in India via using a time-lag design. The results confirmed that technostress increases the level of work-related depression and is also positively and significantly related to burnout. The study suggests useful practical implications and suggests areas for further research.

**Keywords:** technostress, work-related depression, burnout, hotel employees, India



## DURUMSAL FARKINDALIK KAVRAMI VE ÖLÇÜM TEKNİKLERİNİN İNCELENMESİ EXAMINATION OF THE CONCEPT OF SITUATIONAL AWARENESS AND MEASUREMENT TECHNIQUES

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### ÖZET

Farklı koşullar altında insan bilinci karmaşık ve anlaşılmazdır. Bununla birlikte, başta havacılık olmak üzere birçok alanda, farkındalığın güvenlik ve etkinlik açısından önemi nedeniyle, felakete yol açabilecek eylemlerin/hareket tarzlarının seçiminde olası hataları ortadan kaldırmak için durumsal farkındalığın ardındaki süreçlerin ele alınması gerekmektedir. Durumsal farkındalık; kişinin çevresinde olup bitenlerin, o an ve yakın gelecekte algıladığı bilgileri yansıtarak, yaşamının her aşamasında farkında olması olarak tanımlanmaktadır. İhracat alanı başta askeri havacılık olmak üzere son 10 yılda sivil havacılığın operatör/kullanıcı üslerinin merkezi, hava ve deniz trafik operatörleri, nükleer santraller, açık deniz sondaj işçileri vb. yarı bilgisayarlar veya Amaca Yönelik Yardım Sistemleri kullanılarak karar verme ön plandadır. Durumsal farkındalığın tanımı ve teorik yapısı üzerinde fikir birliğine varılmıştır. Durumsal farkındalık, çevredeki olayların, tehlikeli durumların ve potansiyel tehditlerin farkındalığı, bir beceriden çok bir ruh halidir. Kişinin kendi iradesi ve pratik disipliniyle elde edilir. Durumsal farkındalık, yalnızca terör tehditlerini belirlemek için değil, aynı zaman içerisinde suç davranışlarını ve farklı tehlikeli durumları anlamak için de önemlidir. Kavramın ölçüldüğü ve değerlendirildiği aşamaya gelememek karmaşık bir konudur. Bu bir teklif haline getirilmelidir. Durumsal farkındalığı korumanın önemli yanı, başka şeylerle ilgileneniz bile, içgüdülerinize ve etrafınızda olup biten olaylara dikkat etmek için bilinçli bir çaba sarf etmektir. Bu nedenle insanlar başka işlerle uğraşırken bile çevrelerini gözlemlemeyi öğrenmelidirler. Literatürde Durumsal Farkındalık Ölçümleri Teknolojilerin çoğu teorik modellere dayalı olarak geliştirilmiştir. Bu modeller, dondurarak sorgulama teknikleri, gerçek zamanlı sorgulama teknikleri, öznel değerlendirme teknikleri, gözlemci değerlendirme teknikleri, performans ölçümleri, süreç indeksleri gibi ölçümler kullanılmaktadır. Sonuç olarak, durumsal farkındalık takıntı sahibi kişi veya paranoya değildir. Bir olay kontrolden çıktığında kronik adrenalın ve stres vücut ve beyin için sağlıklı değildir ve aynı zamanda bir güvenlik tehlikesi oluşturur. Bu nedenle, sürekli aşırı uyanıklık veya odaklanmış farkındalık çözüm değildir. İnsan vücudu sürekli stres altında çalışacak şekilde tasarlanmamıştır. Bütün insanlar, en yetenekli olanlar bile, dinlenmeye ve kalbinin sesini dinlemeye ihtiyaç duymaktadır

Bu çalışmada durumsal farkındalık kavramı ve ölçüm teknikleri üzerinde durulmuştur. Bu bağlamda literatür taraması yapılmış ve konu kapsamında gerekli kaynaklar incelenerek ulusal ve uluslararası hakemli dergilerde yayınlanmış kitap, makale, tez ve bildiriler kaynak olarak kullanılmıştır.

**Anahtar kelimeler:** Durumsal farkındalık, Farkındalık, Ölçümleme

### ABSTRACT

Human consciousness under different conditions is complex and incomprehensible. However, in many areas, especially aviation, due to the importance of awareness in terms of safety and effectiveness, the processes behind situational awareness need to be addressed in order to eliminate possible errors in the



selection of actions/courses of action that can lead to disaster. Situational awareness; It is defined as being aware of what is happening around the person at every stage of his life, reflecting the information he perceives at that moment and in the near future. In the last 10 years, especially in military aviation, the export area has been at the forefront of decision-making using semi-computers or Purpose-Oriented Assistance Systems such as the center of operator/user bases of civil aviation, air and sea traffic operators, nuclear power plants, offshore drilling workers, etc. Consensus has been reached on the definition and theoretical structure of situational awareness. Situational awareness, awareness of surrounding events, dangerous situations, and potential threats, is more of a mood than a skill. It is achieved by one's own will and practical discipline. Situational awareness is important not only for identifying terrorist threats, but also for understanding criminal behavior and different dangerous situations over time. Not getting to the stage where the concept is measured and evaluated is a complex issue. This should be made into a proposal. The important thing about maintaining situational awareness is making a conscious effort to pay attention to your instincts and the events that are happening around you, even if you are interested in other things. Therefore, people must learn to observe their surroundings even when they are engaged in other tasks. Measures of Situational Awareness in the literature Most of the technologies have been developed based on theoretical models. These models are used in measurements such as freeze interrogation techniques, real-time inquiry techniques, subjective evaluation techniques, observer evaluation techniques, performance measurements, process indices. As a result, situational awareness is not the obsessive person or paranoia. When an event gets out of control, chronic adrenaline and stress are not healthy for the body and brain and also pose a safety hazard. Therefore, constant excessive alertness or focused awareness is not the solution. The human body is not designed to work under constant stress. All people, even the most talented ones, need to rest and listen to their hearts.

In this study, the concept of situational awareness and measurement techniques are emphasized. In this context, literature review was carried out and the necessary sources within the scope of the subject were examined and books, articles, theses and papers published in national and international refereed journals were used as references.

**Keywords:** Situational awareness, Awareness, Measurement



## KAOSTAKİ COLLATZ VE COLLATZ'DAKİ KAOS COLLATZ IN CHAOS AND CHAOS IN COLLATZ

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### ÖZET

Collatz Varsayımı matematikte hala ispatlanamamış sorulardan biridir. Collatz Varsayımı içerisinde bir sayının, 1 sayısına gelene kadar yapılan işlem sayısına adım sayısı denilmiştir. Bu çalışmada adım sayılarının sözde sürekli rastgele sayılar olup olmadığını araştırmak, sayılar ile adım sayıları arasındaki ilişkileri incelemek, sayıların yerine adım sayıları yazılarak aynı adım sayılarını aynı renklere boyayarak bir matematiksel modelleme yapmak, faz uzayını incelemek, sayıların asal çarpanları ile adım sayıları arasındaki ilişkileri incelemek ve varsa Collatz Varsayımı için bir kural oluşturmak amaçlanmıştır. Yöntem olarak nicel araştırma yöntemi ve deneysel desen kullanılmıştır. Çalışma boyunca verilerin toplanması adına sayıların aldığı değerleri ve adım sayısını verecek C++ da bir yazılım geliştirilmiştir. Adım sayılarının sözde rastgele sayılar olup olmadığını test edilmesi için; (NIST) FIPS 140-1 testi uygulanmış test kapsamında 2-3078 sayıları ile 20.000 bitlik bir veri oluşturulmuştur. Çalışmada sayıların adım sayılarının sözde rastgele sayılar olmadığı, deterministik bir ilişkinin olduğu, varsayım içerisinde bazı sayıların örüntü oluşturduğu, 20.000 bit veri içerisindeki sayıların çoğunluğunun maksimum değerinin 9232 olduğu, bazı sayıların ise bu örüntüye uymayan sayılar olduğu yani kaotik davrandığı bulgularına ulaşılmıştır. Çalışmanın sonucunda adım sayıları sürekli rastgele olmadığından belli bir düzene göre gittiği ve varsayımın bir kuralının olduğunun ispatı yapılmış olmaktadır. Araştırma verisi içerisindeki sayılardan asal olmayanların asal çarpanları ile adım sayıları arasında bir ilişkinin olduğu görülmüştür. Yapılan modelleme de varsayımında bir örüntünün olduğu göstermiştir. Az sayıda da olsa düzene uymayan bazı sayıların aykırı ve kaotik özellikte olması aynı zamanda Kaos Teoremine de ışık tutmaktadır. Kaos Teorime göre aslında belli bir örüntü ve düzenin olduğu ancak bu örüntü veya düzenin şu an için açıklanamadığı bilinmektedir. Bu çalışmada kullanılan aykırı ve kaotik sayılarda yine aynı durumda olduğu görülmüştür.

**Anahtar kelimeler:** Collatz Varsayımı, Sözde rastgele sayı üretici, Kaos Teoremi, C++

### ABSTRACT

The Collatz Conjecture is one of the still unproven questions in mathematics. In the Collatz Assumption, the number of operations performed until a number reaches 1 is called the number of steps. In this study, it is aimed to investigate whether step numbers are pseudo-continuous random numbers, to examine the relationships between numbers and step numbers, to make a mathematical model by writing the step numbers instead of the numbers and to paint the same step numbers with the same colors, to examine the phase space, to examine the relationships between the prime factors of the numbers and the step numbers and It is intended to establish a rule for the Collatz Conjecture, if any. As a method, quantitative



research method and experimental design were used. In order to collect data throughout the study, a software was developed in C++ that will give the values of the numbers and the number of steps. Another software has been developed in C++, where many numbers can be entered at the same time, showing the values of the numbers, and giving graphics of the numbers. To test whether the step numbers are pseudo-random numbers; (NIST) FIPS 140-1 test was applied and 20,000 bits of data were created with the numbers 2-3078 within the scope of the test. In the study, it has been found that the number of steps of the numbers are not pseudo-random numbers, there is a deterministic relationship, some numbers in the assumption form a pattern, the maximum value of the majority of the numbers in 20,000 bits of data is 9232, and some numbers are numbers that do not fit this pattern, that is, they behave chaotically. As a result of the study, since the number of steps is not always random, it is proved that it goes according to a certain order and that the assumption has a rule. It has been observed that there is a relationship between the prime factors of the non-prime numbers and the number of steps in the research data. The modeling has also shown that there is a pattern in the assumption. Based on this study, it is possible to find the rule of the assumption. The results of this study can be used for theoretical proof.

**Keywords:** pattern, modeling, FIPS 140-1, Collatz Conjecture, Number Theory



## ETRÜSK KADINLARININ BETİMLERİ ÜZERİNDEN ETRÜSK TOPLUMUNDA KADIN-ERKEK EŞİTLİĞİ SORUNSALINA ANALOJİK BAKIŞ

### AN ANALOGICAL LOOK AT THE PROBLEM OF GENDER EQUALITY IN ETRUSCAN SOCIETY THROUGH DESCRIPTIONS OF ETRUSCAN WOMEN

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#### ÖZET

Bildiri ‘Etrüsk Lahitlerinde ve Duvar Resimlerinde Kadın İkonografisi’ başlıklı doktora tezinden türetilmiştir. Çalışmada Etrüsk kadınlarının betimleri üzerinden Etrüsk sosyal yaşamında ve toplumunda kadının yeri ve erkekle eşit olup olmadığı incelenmiş ve diğer toplumlarla karşılaştırması yapılmıştır. Konu hem yazılı kaynaklar hem de görseller üzerinden ele alınmıştır. Fakat özellikle Etrüsk kadınlarının betimlendiği lahitler, urneler, duvar resimleri ve steller kısacası görseller üzerinde yoğunlaşmıştır. Yazılı kaynaklar kapsamında antik yazarların söylemleri ve yazıtlar yer almaktadır. Bunlardan yola çıkarak Etrüsk kadınlara benzer sosyal profile sahip başka toplumlar olup olmadığına bakıldığında Anadolu’da Asur Ticaret Kolonileri dönemi kadınlarının ve Lykia kadınlarının benzerlikleri dikkat çekicidir. Etrüsk kadınlarının betimlendiği lahitler, urneler, steller ve duvar resimleri denilen görsellerde kadının toplumsal ve sosyal yaşamdaki yeri ve kadın-erkek eşitliği bağlamında araştırmacıların da referans aldığı ikonografik olarak üç temel başlık vardır. Bunlar banket sahneleri, sarılma motifi ve lahitlerde, urnelerde eşlerin birlikte uzanması motifidir. Araştırmacılar, banket sahnelerinden yola çıkarak bu sahnelerdeki kadınlarının hepsinin eş olduklarını, erkekle beraber genelde klinelerde uzandıklarından eşit, özgür bir pozisyonda bulduklarını ele almışlardır. Aynı şekilde sarılma ve eşlerin klinelerde beraber uzanması motiflerini de Etrüsklere özgü şekilde değerlendirerek kadın-erkek eşitliği üzerinde durmuşlardır. Oysaki çalışmada, araştırmacıların, söylemlerinin ne kadar eksik ve genellemeler üzerinden ilerlediği görülmüştür. Bu bağlamda yapılan ikonografik karşılaştırma neticesinde Etrüsk banket sahneleri tekli ve çoklu olarak iki tipe ayrılmaktadır; bu iki tip de kendi içinde alt tiplere ayrılmaktadır. Her tipin altında yer alan örnekler detaylıca değerlendirilmiştir. Bunun neticesinde Etrüsk tekli banket sahnelerinin benzerlerinin klasik banket şeması, Greko-Pers stellerindeki ve Kıbrıs stellerindeki sahnelerle benzerlik taşıdığı görülmüştür. Çoklu banket sahnelerindeki kadınların da benzerlerine Etrüsk örneklerinden daha erkene tarihlendirilen kraterde rastlanmıştır. Böylece bu sahnelerdeki kadınların eşler oldukları net şekilde söylenemez. Sarılma motifi kapsamında Etrüsk eş lahitlerindeki, urnelerindeki kadın ve erkeğin sarılmasının, jestlerinin aynı büyüklükte gösterilmeleri durumunun Etrüsk örneklerinden daha erkene tarihlendirilen Mısır ve Geç Hitit eserlerinde de gözlenmektedir. Ayrıca bu sahneler, kadın-erkek eşitliği durumu üzerinde durmaktan ziyade aile-evlilik temasına odaklanmaktadır. Ardından eşlerin lahit ve urne kapaklarında uzanması motifine bakıldığında kadının klinede uzanması Etrüsklerinkinden erkene tarihlendirilen Fenike eserinde görülmektedir. Etrüsklerin Fenike ve Mısır örneklerinden ilham alarak kadın ve erkeğin sarılarak uzanması motifini ürettiği düşünülebilir. Yine bu motif üzerinden de kadın-erkek eşitliği sorunsalı yerine evli bir çiftin gücüne, sınıfına ve zenginliğine vurgu yapılmıştır.

**Anahtar kelimeler:** Etrüskler, Kadın, Sarılma, Banket, İkonografi.

#### ABSTRACT

The paper is derived from PhD thesis entitled “Woman Iconography in Etruscan Sarcophagi and Wall Paintings”. In the study, the place of women in Etruscan social life, society and whether they are equal to men or not are examined through the descriptions of Etruscan women and compared with other societies. The subject has been handled through both written sources and visuals. However, the focus



has been on sarcophagi, urns, wall paintings and steles, in short, images depicting Etruscan women. Within the scope of written sources, there are discourses and inscriptions of ancient writers. Based on these, when we look at whether there are other societies with a social profile similar to Etruscan women, the similarities between the women of the Assyrian Trade Colonies in Anatolia and the women of Lycia are striking. There are three basic iconographic titles that researchers refer to in the context of women's place in social life and gender equality in images called sarcophagi, urns, steles and wall paintings, in which Etruscan women are depicted. There are the banquet scenes, the hug motif, and the couple lying together in sarcophagi and urns. Based on the banquet scenes, the researchers discuss that all of the women in these scenes are wives, and that they are in equal, free position as they usually lay in the klines with the men. In the same way, they focused on the equality of men and women by evaluating the motifs of hugging and lying together in the klines in a way specific to Etruscans. However, in the study, it is seen how incomplete and generalizations the discourses of the researchers are. As a result of the iconographic comparison, Etruscan banquet scenes are divided into two types as single and multiple; these two types are further subdivided into subtypes. The examples under each type are evaluated in detail. As a result, it has been seen that Etruscan single banquet scenes are similar to the classical banquet scheme, to the scenes in Greco-Persian steles and Cyprus steles. Similar women in the multiple banquet scenes are found in the crater, which is dated earlier than the Etruscan examples. Thus, it can't be said clearly that the women in these scenes are spouses. Within scope of the hug motif, the embracing of men and women in Etruscan sarcophagi, urns and their gestures are also observed in Egyptian and Late Hittite works, which are dated earlier than Etruscan examples. In addition, these scenes focus on the family-marriage theme rather than dwelling on the equality of men and women. Then, looking at the motif of the spouses lying on the sarcophagus and urn caps, the woman lying in the kline is seen in the Phoenician work, which is dated earlier than the Etruscans. It can be thought that the Etruscans, inspired by the Phoenician and Egyptian examples, produced the motif of men and women hugging and lying down. Again, through this motif, the power, class and wealth of a married couple are emphasized instead of the problem of equality between men and women.

**Keywords:** Etruscans, Woman, Hug, Banquet, Iconography.

## ANTİK YUNAN'DA SOYUT KAVRAMLAR, MİTİK DÜŞÜNCE YAPISI VE PSİKOLOJİK ARKA PLANI

### INTANGIBLE CONCEPTS, MYTHICAL THOUGHT STRUCTURE AND PSYCHOLOGICAL BACKGROUND IN ANCIENT GREECE

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#### ÖZET

Bildiride Antik Yunan dinindeki ve mitolojisindeki ruh, beden, yaşam, ölüm, evren, insanın dönüşümü kavramları ele alınmıştır. Bu soyut kavramların somutlaştırılma süreci olan edebiyattaki personifikasyonlara, heykellere, mimariye bakılmıştır. Somut ve soyut olan bağı kurmamızı sağlayan mitlere, bunların psikolojik arka planı üzerinden her somut olanın arkasında soyut bir düşünce olduğu sorunsalına değinilmiştir. Antik Yunanlılar, kendilerinden önceki toplumlardakiler ve çağdaşları gibi, evren, evrenin yaratılışı, insanın yaratılışı, ruh, beden-ruh ilişkisi, yaşam-ölüm arasında ruhun yeri ve insanın burada nerede olduğu gibi soyut kavramları düşünmüş, bunları anlamaya çalışarak kendine göre değerlendirmelerde bulunmuşlardır. Tüm bu soyut kavramlar antik yazarlar ve felsefeciler tarafından ele alınmıştır. Sırasıyla Homeros, Orpheuşçular, Miletos Okulu, Pythagorasçılar, Platon ve Aristoteles özellikle ruh, beden, akıl, zihin kavramları üzerinde ve ruh-beden, yaşam-ölüm gibi paradokslar hakkında yorumlarda bulunmuşlardır. Bu yorumlardan öncelikle Antik Yunan insanının önceliğinin, beden ve yaşam kavramlarına oturduğu görülmektedir. Onlar için gerçek ve somut olan her zaman daha önemli bir yere sahiptir. Böylece soyut olan kavramlar, ifadeler somutlaştırılmaya çalışılır, bu noktadan da edebiyattaki personifikasyonlar (kişileştirmeler) doğar, bu somutlaştırmanın sanattaki ve arkeolojideki hali ise antropomorfizm (insanbiçimcilik) etkisiyle heykellerin, idollerin, tapınakların, sunakların, kutsal alanların ortaya çıkmasıdır. Bu noktada iki uç nokta gibi görünen soyut ve somut arasında aracı, köprü görevini ise mitoloji oynamaktadır. İnsana özgü sembollerin biraradalığı olarak ifade edebileceğimiz mitoloji bu soyut kavramlar ile somutlaştırmalar arasında bir arabulucu rolü oynar. Böylece bütünü algılamamızı kolaylaştırır. Mitoloji, sadece edebiyatı, felsefeyi, dini, sanatı, arkeolojiyi şekillendirmemiş; aynı zamanda psikolojiyi yani insan ruhunu da temelden şekillendirmiştir. Özellikle mitler ve psikoloji arasındaki bağ üzerine Freud ve Jung'un bakış açıları dikkate değerdir. Bu noktada denilebilir ki her soyut ifade ve her mit, insan ruhunu şekillendirmiş, insan ruhu da içinde barındırdıkları ile olayları bir heykeltraş gibi şekillendirmiş, zaman zaman dönüştürmüş ve ortaya edebiyattaki personifikasyonlar (kişileştirmeler), sanat eserleri olarak ortaya çıkmıştır. Mitoloji geçmiş-şu an-gelecek arasında önemli bir aracı ve yol göstericidir. Somut ve soyut olan arasındaki bağıdır. Kısacası sonuç olarak her somut şeyin arka planında mutlaka soyut bir kavram, bir düşünce formu yer aldığı söylenebilir.

**Anahtar kelimeler:** Soyut Kavramlar, Mitoloji, Personifikasyon, Antropomorfizm, Somutlaştırma.

#### ABSTRACT

In the paper, the concepts of soul, body, life, death, universe and human transformation in Ancient Greek religion and mythology are discussed. Personifications in literature, sculpture and architecture, which are the process of concretization of these intangible concepts, are examined. The myths that enable us to establish the connection between the concrete and the intangible, and the problematic that there is an intangible thought behind every concrete thing, through their psychological background, are mentioned. Ancient Greeks, like those in the societies before them and their contemporaries, thought about intangible concepts such as the universe, the creation of the universe, the creation of man, the soul, the body-spirit relationship, the place of the soul between life and death, and where man is here, and tried to





understand them and made evaluations according to themselves. All these intangible concepts were dealt with by ancient writers and philosophers. Respectively Homer, Orpheusians, Miletus School, Pythagorans, Plato and Aristotle commented on the concepts of soul, body, mind and paradoxes such as soul-body, life-death. From these interpretations, it is seen that the priority of the Ancient Greek people is based on the concepts of body and life. For them, the real and tangible has a more important place. Thus, intangible concepts and expressions are tried to be concretized, from this point personifications in literature arise and the state of this embodiment in art and archeology is the emergence of statues, idols, temples, altars, sanctuaries with the effect of anthropomorphism. At this point, mythology plays the role of a mediator and a bridge between the intangible and the concrete, which seems like two extremes. Mythology, which we can express as the togetherness of human symbols, plays a mediator role between these intangible concepts and concretizations. Thus, it makes it easier for us to perceive the whole. Mythology has not only shaped literature, philosophy, religion, art, archaeology; it also fundamentally shaped psychology, that is, the human spirit. In particular, the perspectives of Freud and Jung on the link between myths and psychology are noteworthy. At this point, it can be said that every intangible expression and every myth has shaped the human spirit, and the human spirit, with its contents, has shaped events like a sculptor, transformed from time to time, and emerged as personifications in literature and works of art. Mythology is an important intermediary and guide between the past-present-future. It is the link between the concrete and the intangible. In short, it can be said that there is an intangible concept, a thought form, in the background of every concrete thing.

**Keywords:** Intangible Concepts, Mythology, Personification, Anthropomorphism, Concretization.



## THE DEVELOPMENT OF KPOP FANS IN INDONESIA

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### **ABSTRACT**

The purpose of this study was to determine the impact of consumptive behavior on the development of K-pop fans in Indonesia. This research method uses a literature review approach through journals, theses, and websites regarding the consumptive behavior of K-POP fans on business opportunities and customs taxes. The type used is using qualitative data, namely research used to examine the condition of natural objects. The culture that is currently being hotly discussed is the Korean wave culture. Hallyu or Korean Wave is a combination of cultures as a response to the globalization of Asian culture. The impact of the spread of South Korean culture in Indonesia did not have a bad domino effect. Respondents actually got many positive impacts from following the development of the Korean Wave, including helping them in the process of socializing and interacting with other fans of Korean culture, even those from abroad. K-Pop culture in Indonesia is growing over time. Some e-commerce such as Shopee, Tokopedia, Lazada, have started to use K-Pop groups as their ambassadors. It's not uncommon for K-Pop groups to be invited to Indonesia to take part in the e-commerce event. This marketing method actually worked, because when bringing up the name K-Pop, most Indonesian people were immediately interested. Several Indonesian products, which also feature K-Pop groups as their advertising stars, managed to get the attention of many people so that the products on the market sold out quickly.

**Keywords:** Korean Wave, Fans, Marketing

## KIBRIS TÜRK BASININDA NACAK GAZETESİ: KURULUŞU VE İDEOLOJİSİ (1959-1963) NACAK NEWSPAPER IN THE CYPRUS TURKISH PRESS: ITS FOUNDATION AND IDEOLOGY (1959-1963)

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### ÖZET

Kıbrıs Cumhuriyeti Türkiye, İngiltere ve Yunanistan garantörlüğünde 16 Ağustos 1960 tarihinde kurulmuş ve Kıbrıs Türk toplumu ile Rumların birlikte yaşama esasına dayanmıştır. Cumhuriyet kurulmadan önce Kıbrıs Türk basınında yer alan gazetelerin temel amacı, Kıbrıs Türk'ünün sesini ve varlığını bütün dünyaya duyurmak, onların haklarını ve çıkarlarını savunmak ve adanın Yunanistan'a ilhak edilmesine karşı çıkmaktır. Kıbrıs Türklerinin siyasal hayatında ve basın alanında önemli bir rol oynayan Nacak gazetesi, 29 Mayıs 1959 tarihinden itibaren Lefkoşa'da Cuma günleri yayımlanmaya başlayan haftalık bir gazetedir. Halkın Sesi Matbaası'nda basılan gazetenin sahibi ve başyazarı, Kıbrıs Türk Kurumları Federasyonu adına Rauf R. Denктаş'tır. Gazete yayımlandığı ilk nüshasında yayın hayatı boyunca bağlı kalacağı ilkeleri; Türk köylüsünün ekonomik, sosyal, kültürel açıdan kalkındırarak ve refah düzeyini yükseltmek, Türk işçisinin haklarını korumak, Kıbrıs Türk Millî Mücadelesi'ne engel olanlara karşı çıkmak ve Türk toplumunun millî şuurunu uyanık tutmaya çalışmak olarak belirlemiştir. Gazeteye göre, Kıbrıs Türkleri ulusal bilinç etrafında birlik olmalı ve Enosis isteyen Rumlara karşı güçlü durabilmeliydi. Nitekim Rum toplumu EOKA gibi silahlı yeraltı örgütleriyle, Makarios gibi liderleriyle, gazeteleriyle, radyo ve televizyonlarıyla Enosis peşinde koşmaktaydı. EOKA'ya karşı Türk toplumunu bilinçlendiren gazete ayrıca tarih, coğrafya, Türkiye ile ilişkiler, ekonomi gibi konularda da önemli çalışmalar yapmıştır. Gazete yayım hayatına başladığı tarihten itibaren Kıbrıs Türk toplumunu Türk'ten Türk'e, Vatandaş Türkçe Konuş, Yerli Malı Kullan gibi kampanyalarla bilinçlendirmeye çalışmıştır. Türk Mukavemet Teşkilatı'nın kurulmasından sonra ilk Türk direniş gazetesi olarak çıkan Nacak gazetesi, 20 Aralık 1963 tarihine kadar 239 sayı çıkmıştır. 20 Aralık'ı 21 Aralık'a bağlayan gece Rumların Türklere karşı başlatmış oldukları saldırılar ve matbaa malzemelerinin Rum tüccarlardan alınmaması neticesinde Nacak gazetesi yayın hayatını sonlandırmıştır. Bu çalışmada 1959-1963 yılları arasında faaliyette bulunan Nacak gazetesinin kuruluşu, yapısı, yayın politikası ve ideolojisi ortaya koyulmaya çalışılacaktır. Belirtilen tarih aralığındaki gazete nüshaları, gazetenin kurucu isimlerinin çalışmaları ve diğer matbu eserler incelenerek literatüre katkı sağlamak amaçlanmaktadır.

**Keywords:** Nacak, Kıbrıs, Kıbrıs Türkleri, Enosis.

### ABSTRACT

The Republic of Cyprus was established on August 16, 1960 under the guarantee of Turkey, England and Greece, and was based on the coexistence of the Turkish Cypriot community and the Greeks. Before the establishment of the Republic, the main purpose of the newspapers in the Turkish Cypriot press was to announce the voice and existence of the Turkish Cypriots to the whole world, to defend their rights and interests, and to oppose the annexation of the island to Greece. Nacak newspaper, which plays an important role in the political life and press of the Turkish Cypriots, is a weekly newspaper that started to be published on Fridays in Nicosia since 29 May 1959. The owner and editor-in-chief of the newspaper, which is published in Halkın Sesi Printing House, is Rauf R. Denктаş on behalf of the Cyprus Turkish Institutions Federation. The principles that the newspaper will adhere to throughout its publication life in its first issue; Developing the economic, social and cultural aspects of Turkish villagers and raising their welfare level, protecting the rights of Turkish workers, opposing those who hinder the Turkish Cypriot National Struggle and trying to keep the national consciousness of the



Turkish society awake. According to the newspaper, the Turkish Cypriots should be united around the national consciousness and be able to stand strong against the Greeks who want Enosis. As a matter of fact, the Greek community was pursuing Enosis with an armed underground organization like EOKA, leaders like Makarios, newspapers, radio and television. Raising awareness of the Turkish society against EOKA, the newspaper also carried out important studies on subjects such as history, geography, relations with Turkey, and economy. Since its inception, the newspaper has tried to raise awareness of the Turkish Cypriot community through campaigns such as From Turkish to Turkish, Citizen Speak Turkish, Use Domestic Goods. Nacak newspaper, which was published as the first Turkish resistance newspaper after the establishment of the Turkish Resistance Organization, had 239 issues until 20 December 1963. Nacak newspaper ended its publication life as a result of the attacks launched by the Greeks against the Turks on the night of December 20 to December 21 and the inability to buy printing materials from Greek merchants. In this study, the establishment, structure, publishing policy and ideology of Nacak newspaper, which was active between 1959-1963, will be tried to be revealed. It is aimed to contribute to the literature by examining the newspaper copies in the specified date range, the works of the founders of the newspaper and other printed Works.

**Keywords:** Nacak, Cyprus, Turkish Cypriot, Enosis.

**ALLİLSANTOGENATOMETİLTOLUOLSULFAMİD SİYRİLMƏYƏ QARŞI AŞQAR  
KİMİ****ALLILXANTHOGENATOMETHYLTOLUENESULFAMIDE AS EXTREME PRESSURE  
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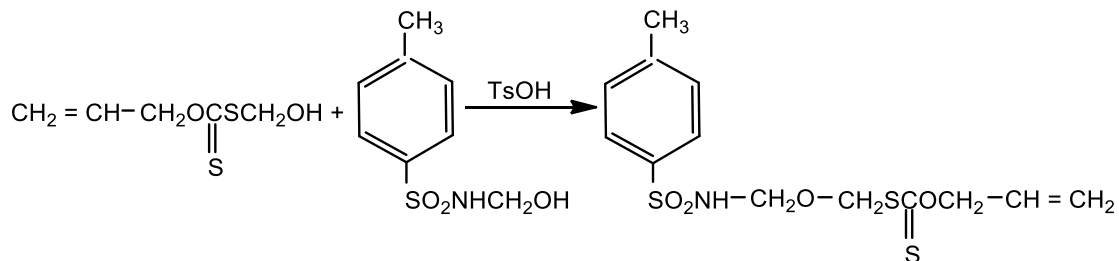
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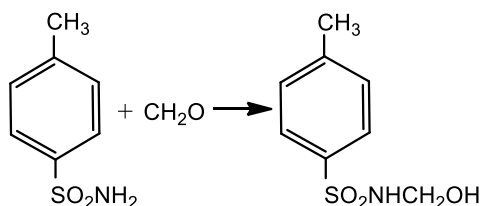
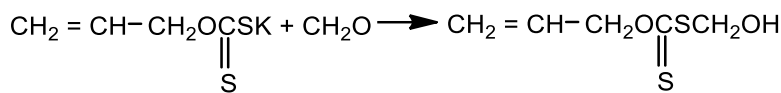
**ÖZƏT**

Xalq təsərrüfatının müxtəlif sahələrində yüksək keyfiyyətli sürtkü yağlarından istifadə edilir. Bu yağları yaratmaq üçün müxtəlif funksiyalı aşqarlardan (əlavələrdən) istifadə olunur. Sintez olunan hər aşqar öz funksiyasını daşıyır. Keyfiyyətli transmissiya yağlarını hazırlamaq üçün siyirməni azaldan aşqarların sintezi həmişə aktualdır. Transmissiya yağlarının müasir tələblərə uyğun çeçidlərinin artırılmasında əsas meyarlardan biri, onların yüksək triboloji xassələrə malik olmasıdır. Bu məqsədlə müəlliflər tərəfindən allilksantogenatometiltoluolsulfamid sintez edilmişdir. Maddə aşağıdakı sxem üzrə alınmışdır:



Reaksiya su ayırıcı qurğu ilə təmin olunmuş kolbada aparılır. Həllədiçi kimi benzoldan istifadə olunur, katalizator kimi toluolsulfoturşu götürülmüşdür. Reaksiya 75-80°C-də 6 saat ərzində qarışdırılmışdır.

İlkin maddələr kimi istifadə olunmuş allilksantogenatın hidrosimetil efiri və hidrosimetiltoluolsulfamid müəlliflər tərəfindən aşağıda verilən sxem üzrə alınmışdır:



Hər iki maddə Din-Stark qurğusu ilə təmin olunmuş üç boğazlı reaksiya kolbasında, suyun tam çıxması başa çatana qədər aparılmışdır.

Alınmış maddələrin strukturu, fiziki-kimyəvi xassələri, element analizi öyrənilmiş və İQ-spektroskopiyaya üsulu ilə təsdiq edilmişdir.

Sintez edilmiş allilksantogenatometiltoluolsulfamidin siyirməyə qarşı xassələri dördkürəli sürtünmə maşınında (HMT) ASTM D2596 test üsulu ilə müəyyən edilmişdir, əsas göstəricilər – siyirmə indeksi, kritik yük, qaynaq yükü tədqiq edilmişdir.

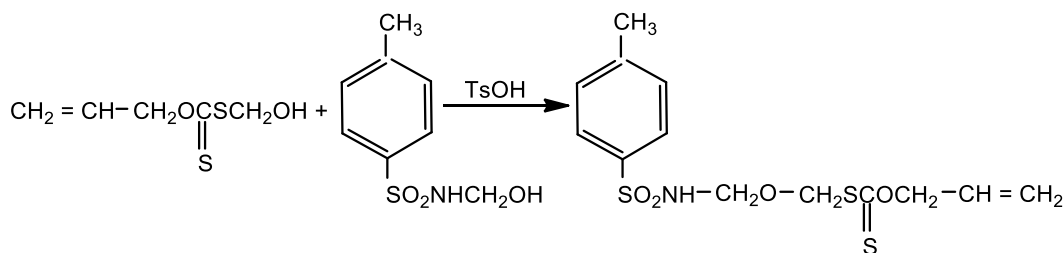
Tədqiq olunan nümunə 3% qatılıqda yarımsintetik (MC-20 –aviasiya yağı + PEE –sintetik yağ 1:1) yağda hazırlanmışdır.

Alınan göstəricilərdən məlum olur ki, bu maddə siyirməyə qarşı xassələrə malikdir.

Maddənin siyirməyə qarşı xassələrini molekulun tərkibində tion və tiol kükürd atomlarının olması ilə izah etmək olar. Kükürd atomları yüksək təzyiq və temperaturda metal səthinə adsorbsiya olunur və mfkəm qoruyucu təbəqə yaradır.

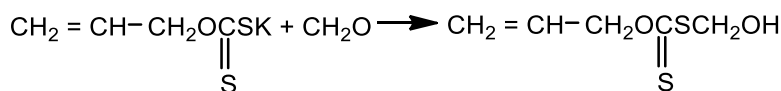
## ABSTRACT

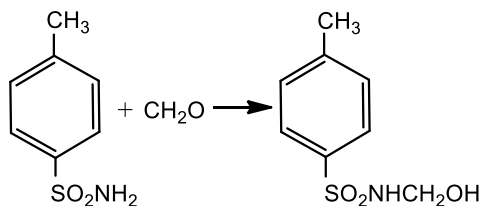
High-quality lubricants are used in various areas of the national economy. To create these oils, additives with different functions are used. Each synthesized additive has its own function. The synthesis of extreme pressure additives is always relevant for obtaining high-quality gear oils. One of the main criteria for expanding the range of gear oils in accordance with modern requirements is their high tribological properties. For this purpose, the authors synthesized allyl xanthogenatomethyltoluenesulfamide. The reaction was carried out according to the following scheme:



The reaction was carried out in a flask equipped with a water separator. Benzene is used as a solvent, and toluenesulfonic acid is used as a catalyst. The reaction mixture was stirred at 75-80°C for 6 hours.

Allyl xanthate hydroxymethyl ether and hydroxymethyltoluenesulfamide used as starting material were obtained by the authors according to the scheme below:





The reaction of obtaining both additives was carried out in a three-necked reaction flask equipped with a Dean-Stark device until the water was completely released.

The structure, physicochemical properties, elemental analysis of the obtained substances were studied and confirmed by IR spectroscopy.

The extreme pressure properties of allyl xanthogenatomethyltoluenesulfamide were determined by the ASTM D2596 test method; on a four-ball friction machine ChMT-1, the calculated indicators were the tear index, critical load, welding load.

The test sample was prepared in semi-synthetic (MS-20 – aviation oil + PEE – synthetic oil 1:1) oil at 3% concentration.

From the results obtained, it can be said that this additive has extreme pressure properties.

The extreme pressure properties of the resulting product can be explained by the presence of thione and thiol sulfur atoms in the molecule. Sulfur atoms are adsorbed on the metal surface at high pressure and temperature and form a thin protective layer.

## HİDROLİK ÇEKİLEBİLİR BUMLU BİR KALDIRMA ARACININ STATİK VE DİNAMİK ANALİZİ

### STATIC AND DYNAMIC ANALYSES OF A HYDRALIC TOWABLE BOOM LIFT

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#### ÖZET

Bu çalışma kapsamında 8 ayaklı, 13 adet hidrolik elemandan oluşan, maksimum 11,5 m dik yüksekliğe ulaşabilen, maksimum 10 m açıklığa sahip olan ve 200 kg kaldırma kapasiteli özgün bir hidrolik çekilebilir bumlu kaldırma aracının tasarımı gerçekleştirilmiştir. Çalışmanın tasarım, montaj ve analiz adımlarında Solidworks paket programı kullanılmıştır. Montajlı sistemin belirli bir yük altında ve yerçekimi etkisi göz önünde tutularak en uygun matematiksel modeli oluşturulup analizleri yapılmıştır. Ayrıca platformun açı değerlerine bağlı değişen konumu belirli aralıklarla Solidworks programında tasarım senaryoları oluşturularak incelenmiştir. Her bir senaryoda sistemin yer değiştirme değerleri, eş değer Von Mises gerilmeleri, emniyet katsayıları ve doğal frekansları hesaplanmıştır. Böylelikle sistemdeki en kritik açı belirlenerek diğer açı değerleri ile karşılaştırılması yapılmıştır. Ardından sistemde kullanılan her bir parçanın tek başına ve kısmi montajlar ile sistemin en kritik çalıştığı konumdan yola çıkılarak mekanik davranışı incelenmiştir. Yapılan çalışmalar sonucunda ele alınan tasarımda kullanılan her bir cıvata ve pim gibi makine elemanlarının emniyetli sınırlar dahilinde minimum 2 kat emniyetle çalıştığı, bununla birlikte sistemin bütünü ele alındığında minimum 1,8 kat emniyetle çalıştığı gözlemlenmiştir.

**Anahtar kelimeler:** Sekiz ayaklı platform; Hidrolik bum; Mekanik tasarım; Gerilme; Yer değiştirme.

#### ABSTRACT

The scope of this study is the design of a unique hydraulic towable boom lift truck with 8 legs, 13 hydraulic elements, a maximum vertical height of 11.5 m, a maximum span of 10 m and a lifting load of 200 kg. Solidworks software program was used in the design, assembly and analysis steps of the study. The most suitable mathematical model of the assembled system was created and analyses have been carried out under a certain load and by taking into account the effect of gravity. In addition, the varying position of the platform depending on the elevation angles was examined by creating design scenarios in Solidworks program at regular intervals. In each scenario the displacement values, equivalent Von Mises stresses, factor of safety and natural frequencies of the system were calculated. Thus, the most critical angle in the system was determined and compared with the results of other angle values. Then, the mechanical behavior of each part used in the system was examined by starting from the most critical operating position of the system with stand-alone and partial assemblies. As a result of the studies, it has been observed that each machine element such as bolts and pins used in the design which is considered works with a minimum of 2 times safety within the safe limits, at the same time when the whole system is considered, it works with a minimum of 1.8 times safety..

**Keywords:** Eight-legged platform; Hydraulic boom; Mechanical design; Stress; Displacement



## YETİŞKİN BİREYLERDE DÜRTÜSELLİK, NOMOFOBİ VE KOMPULSİF ÇEVİRİMİÇİ SATIN ALMANIN İNCELENMESİ

### IMPULSIVITY, NOMOPHOBIA AND COMPULSIVE ONLINE BUYING IN ADULTS

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#### ÖZET

Bu çalışmanın amacı, yetişkin bireylerin dürtüsellik düzeyi, nomofobi düzeyi ve kompulsif çevrimiçi satın alma düzeyinin incelenmesidir. Tarama modeli kullanılarak gerçekleştirilmiş olan bu çalışmanın evrenini Türkiye’de yaşayan 18 yaş ve üzeri yetişkin bireyler oluşturmaktadır. Araştırmanın örnekleme seçkisiz olmayan örnekleme yöntemlerinden biri olan gelişigüzel yöntemi kullanılarak ulaşılmıştır. Araştırma, Türkiye’de yaşayan 18 yaş ve üzeri 318 kadın ve 101 erkek olmak üzere toplam 419 yetişkin bireyin katılımıyla gerçekleştirilmiştir. Katılımcılara Sosyodemografik Bilgi Formu, Barratt Dürtüsellik Ölçeği, Nomofobi Ölçeği ve Kompulsif Çevrimiçi Satın Alma Ölçeği çevrimiçi olarak uygulanmıştır. Çalışma bulgularına göre katılımcıların nomofobi ölçeği ve ölçeğin alt boyutları ile kompulsif çevrimiçi satın alma ölçeği ve ölçeğin alt boyutları arasında istatistiksel olarak anlamlı düzeyde pozitif yönde ilişki olduğu tespit edilmiştir. Motor dürtüsellik ve dikkat dürtüsellik alt boyutları arttıkça kompulsif çevrimiçi satın alma davranışının arttığı, plan yapma alt boyutu arttıkça kompulsif çevrimiçi satın alma ve alt boyutlarında azalma olduğu tespit edilmiştir. Rahatlıktan feragat etme alt boyutu kompulsif çevrimiçi satın almayı yordar bir niteliktedir. Dikkat dürtüsellığı arttıkça kompulsif çevrimiçi satın alma davranışı da artmaktadır. Nomofobi düzeyi arttıkça kompulsif çevrimiçi satın alma düzeyi de artmaktadır. Nomofobi ve dürtüsellik, kompulsif çevrimiçi satın almayı yordamaktadır. Dürtüsellik, nomofobi ve kompulsif çevrimiçi satın alma değişkenlerinin cinsiyetlere eşit olarak uygulanması alana katkı sağlayacağı düşünülmektedir.

**Anahtar kelimeler:** dürtüsellik, nomofobi, kompulsif çevrimiçi satın alma.

#### ABSTRACT

The aim of this study is to search the impulsivity level, nomophobia level and compulsive online buying level of adult individuals. The target population of this study, which was carried out using the scanning model, consists of adult individuals aged 18 and over living in Turkey. The sample of the study was reached by using the random method, which is one of the non-random sampling methods. The research was carried out with the participation of a total of 419 adult individuals, 318 women and 101 men, aged 18 and over, living in Turkey. Sociodemographic Information Form, Barratt Impulsivity Scale, the Nomophobia Scale, and the Compulsive Online Buying Scale were administered to the participants online. According to the findings of the study, it was determined that there was a statistically significant positive correlation between the participants' nomophobia scale and its sub-dimensions, and the compulsive online purchasing scale and its sub-dimensions. It was determined that as the sub-dimensions of motor impulsivity and attention impulsivity increased, compulsive online buying behavior increased, and as the sub-dimension of planning increased, compulsive online buying and sub-dimensions decreased. The comfort waiver sub-dimension predicts compulsive online buying. As attention impulsivity increases, compulsive online buying behavior also increases. As the level of



nomophobia increases, the level of compulsive online buying also increases. Nomophobia and impulsivity predict compulsive online buying. It is thought that applying the variables of impulsivity, nomophobia and compulsive online buying equally to the genders will contribute to the field.

**Keywords:** impulsivity, nomophobia, compulsive online buying.



**TÜRKİYE VE AVUSTRALYA ULUSAL YÜKSEKÖĞRETİM POLİTİKALARI VE  
REFORM EYLEMLERİ ÜZERİNE KARŞILAŞTIRMALI BİR DEĞERLENDİRME**  
**A COMPARATIVE EVALUATION ON TURKIYE AND AUSTRALIA NATIONAL HIGHER  
EDUCATION POLICIES AND REFORM ACTIONS**

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**ÖZET**

Bilim, endüstri ve teknoloji alanında dünyanın gelişmiş ülkelerinden birisi olarak kabul gören Avustralya, aynı zamanda nitelikli ve üst düzey eğitim veren yükseköğretim kurumlarının varlığıyla da ön plana çıkmaktadır. Dünyada bulunan farklı yükseköğretim kurumlarının akademik anlamdaki başarı sıralamalarını inceleyen farklı uluslararası sıralama indeksleri çerçevesinde yapılan araştırma sonuçları, Avustralya yükseköğretim kurumlarının sosyal ve beşerî bilimler, eğitim bilimleri, doğa bilimleri gibi farklı bilimsel alanlarda her yıl ön sıralarda yer aldığını göstermektedir. Bu çerçevede Avustralya'da aktif olarak uygulanan yükseköğretim politikaları ve ulusal eğitim reformları, Türk yükseköğretim kurumlarını paydaşları arasında akademik başarı ve uluslararası tanınırlık açısından ön sıralara taşımayı amaçlayan Türkiye ulusal yükseköğretim politikalarının geliştirilmesi adına yol gösterici bir nitelik taşımaktadır. Bu çalışma, en güncel Avustralya yükseköğretim politikalarını ve reform eylemlerini analiz ederek Türk yükseköğretim kurumlarının akademik anlamda nasıl daha nitelikli bir yapı kazanabileceğine odaklanmaktadır. Bu yönüyle bu çalışma, yenilikçi Türk yükseköğretim politikaları ve reform hareketleri geliştirilmesi adına kapsamlı öneriler sunmaktadır. Çalışma, Türkiye ve Avustralya örneklemi üzerinden aktif olarak uygulanan eğitim politika ve reform hareketlerini karşılaştırmalı olarak analiz ettiğinden karşılaştırmalı bir eğitim araştırmasıdır. Çalışmada veriler, doküman incelemesi yoluyla Avustralya ve Türkiye yükseköğretim politikaları ile ilgili detaylı bilgiler içeren hükümet kaynaklı resmi internet siteleri ve farklı ulusal ve uluslararası bazlı resmi raporlar üzerinden elde edilmiştir. Verilerin analiz sürecinde betimsel analiz yöntemi kullanılmıştır. Sonuç olarak Türk yükseköğretim sisteminin uluslararası anlamda daha nitelikli bir görünüm kazanabilmesine açısından ne tür yenilikçi politikaların yapılabileceğine dair kapsamlı ve sistematik bir bakış açısının elde edileceği düşünülmektedir.

**Anahtar kelimeler:** yükseköğretim politikaları, reform, Türkiye, Avustralya.

**ABSTRACT**

Considered one of the world's most developed countries in science, industry, and technology, Australia also stands out with higher education institutions that provide qualified and high-level education. The research outcomes made within the framework of different international ranking indexes that examine the academic success of higher education institutions worldwide indicate that Australian higher education institutions are at the forefront every year in various scientific fields such as social and human sciences, educational sciences, and natural sciences. In this context, higher education policies and national education reforms actively implemented in Australia serve as a guide for the development of Turkish national higher education policies, which aim to bring Turkish higher education institutions to the forefront regarding academic success and international recognition among their stakeholders. This study focuses on how Turkish higher education institutions can gain a more qualified structure for academic success by analyzing the most recent Australian higher education policies and reform actions. In this respect, this study offers comprehensive recommendations for developing innovative Turkish higher education policies and reform movements. The study is comparative education research since it



comparatively analyzes the education policy and reform movements actively implemented through the samples of Türkiye and Australia. The data were obtained from government-sourced official websites and national and international official reports containing detailed information about Turkish and Australian higher education policies through document analysis. In the data analysis process, the descriptive analysis method was used. Consequently, it is thought that a comprehensive and systematic perspective will be obtained on what kind of innovative policies can be made to gain a more qualified appearance in the international sense of the Turkish higher education system.

**Keywords:** higher education policies, reform, Türkiye, Australia.



## SYNTHESIS AND EVALUATION OF SILVER NANOPARTICLES FROM ETHANOLIC LEAF EXTRACT OF *Tridax Procumbens*.L

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### ABSTRACT

In recent science Nanotechnology is a burning field for the researchers. Nanotechnology deals with the Nanoparticles having a size of 1-100 nm in one dimension used significantly concerning medical chemistry, atomic physics, and all other known fields. Silver nanoparticles were synthesized using aqueous extract of *Tridax procumbens* leaves, and silver nitrate. XRD, SEM, FTIR, Optical absorption were measured and analyzed. The synthesized AgNps exhibits lowest energy absorption band at 400 nm. Synthesis of Nanoparticles may involve various routes including physical, chemical and biological approaches. Traditionally these are manufactured by wet chemical methods which require toxic and flammable chemicals. Nanoparticles thus formed are confirmed and characterized by using UV-Visible Spectroscopy, SEM, FTIR, Zeta Analysis, XRD measurements.

Further, these green synthesized Nanoparticles showed bactericidal activity against multidrug-resistant human pathogenic bacteria. The AgNps formed were found to have enhanced antimicrobial properties and showed zone of inhibition against isolated bacteria (*Escherichia coli*) from garden soil sample. In totality, the AgNps prepared are safe to be discharged in the environment and possibly utilized in process of pollution remediation. AgNps may also be efficiently utilized in agricultural research to obtain better health of crop plants as shown by our study.

**Keywords:** Silver nanoparticles; FTIR; SEM; Antimicrobial Activity ; *Tridax procumbens*.



## EFFECT OF DURATION OF USE OF COMBINED ORAL CONTRASEPTIVES ON SERUM LIPID PROFILES, FASTING BLOOD SUGAR, BLOOD PRESSURE AND BMI IN CHILD BEARING AGE WOMEN

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### ABSTRACT

**Background:** Combined Oral Contraceptives Pills (COCs) are effective and widely used method for contraception. There is a positive relationship between COCs and lipid and carbohydrate metabolism in previous studies. We have seen the effect of duration of COCs (0.3mg norgestrel and 0.03mg ethinyl estradiol) used in tertiary care hospitals of Peshawar Khyber Pukhtunkhawa Pakistan on the lipid and carbohydrate metabolism in women taking combined oral contraceptives.

**Study Design:** This cross sectional analytical study included 100 participants women of child bearing age 14-49yrs using COCs divided in three groups according to the duration of use group A at least 6 month COCs users, group B were 1 year COCs users , group C more than 1 year COCs users. Serum Total cholesterol (TC), triglyceride (TG), high density lipoprotein cholesterol (HDL-C), low density lipoprotein cholesterol (LDL-C), very low density lipoprotein cholesterol (VLDL-C), fasting blood sugar(FBS) were determined by using standard colorimetric techniques BMI and BP were also measured in all subjects.

**Results:** we estimated the effect of duration of use of combined oral contraceptives on the levels of different biochemical parameters. Their levels were found gradually increasing from 6months to those who are using it for 1 year and more than 1 year. The results showed significant elevation of cholesterol (p-0.0003), HDL-C (p-0.0229), LDL-C (p-0.0271), VLDL-C (p- 0.0004), Triglycerides (p- 0.0006) levels in the group of more than 1 year users females when compared with 6 months users.

**Conclusion:** The levels of cholesterol, HDL, LDL, VLDL and Triglyceride levels were found to be increased with the duration of use in the women of child bearing age of KP province of Pakistan.

**Keywords:** Combined Oral Contraceptives Pills, lipid profile, BMI, Contraceptives



## STRUCTURAL AND ECONOMIC EFFECTS OF SEA LEVEL RISING IN HATAY- ISKENDERUN AFTER 6 FEBRUARY 2023 TURKEY-SYRIA EARTHQUAKE

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### ABSTRACT

On February 6, 2023, two earthquakes with magnitudes of 7.8 and 7.5 Mw occurred in Turkey, 9 hours apart. The earthquake epicentres were in the Pazarcık and Ekinözü districts of Kahramanmaraş. These earthquakes, which were felt across a large area and caused a considerable deal of destruction and damage, impacting 11 provinces, were particularly damaging to the province of Hatay. These earthquakes led to the deaths of more than 50,000 people in Turkey and around 9,000 people in Syria, as well as more than 120,000 injuries. Following the earthquakes, more than 33,000 aftershocks with magnitudes up to 6.7 Mw were recorded. As a result of the tectonic activity on land and under the sea, the mainland shifted to the west for meters, creating large rifts in the land. In the gulf region of the Iskenderun district of Hatay, subsidence and settlements occurred on the ground and the coastline changed. Following that, sea waves and flooding occurred due to northerly wind and the tide blowing from the sea to the land nearby. Subsequently, due to the northerly wind and tide blowing from the sea to the land in the region, sea swells and sea floods occurred. This situation caused the residential areas on the coast to be flooded. Due to the rise in the sea level, vehicle traffic was affected, the streets were flooded. The basement floors of shops, workplaces, hospitals, social facilities and residences facing the streets along the coast were filled with sea water and became unusable and people suffered substantial economic losses. Downfall in the structures and cracks in the walls were observed. The reinforcements in the foundation and columns began to corrode due to the salt water. Harbour, marina, boatyards, boats etc. were severely damaged. this study reveals the structural and economic effects of sea level rise in Iskenderun.

**Keywords:** February 6 2023 Turkiye-Syria earthquake, Economic consequences, Sea level rise, Structural damages

**BAZALT KUMAŞLARININ DAYANIMI DÜŞÜK BETON ÜZERİNDE GÜÇLENDİRİCİ  
MALZEME OLARAK KULLANIMI**  
**USAGE OF BASALTIC FABRICS AS STRENGTHENING MATERIAL ON LOW STRENGTH  
CONCRETE**

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**ÖZET**

Türkiye'de 6 Şubat 2023 depreminde çok sayıda bina yıkıldı. Çoğu yapı da hafif hasar gördü. Hafif hasarlı yapıların güçlendirilmesi gerekiyor. Mühendislik yapılarının güçlendirilmesi ve onarımında kompozit malzemelerin kullanımı son yıllarda hızla artmaktadır. Elyaf takviyeli polimer (FRP) kumaşlar, kolay ve hızlı uygulanmaları, hafif olmaları ve yüksek mukavemetleri ile geniş bir uygulama alanına sahiptir. Bu çalışmada, bazalt ile güçlendirilmiş düşük dayanımlı betonarme betonun basınç altında özellikleri incelenmiştir. Laboratuvarında C10 sınıfı silindirik beton numuneleri üretilmiştir. Standart kür sürelerinden sonra betonlar bazalt kumaş ile sarılmıştır. Bu betonların basınç-deformasyon özelliklerini belirlemek için sarılmamış beton ile karşılaştırılmıştır. Elde edilen sonuçlara göre, düşük dayanımlı beton sınıfının, bazaltik doku saran normal dayanımlı beton sınıfına yükseldiği gözlenmiştir. Betonun yük altında deformasyon kabiliyeti de önemli ölçüde artar. Mevcut güçlendirme yöntemleri yerine güçlendirme uygulamalarına alternatif olarak bazalt kumaşların tercih edilebileceği ve daha ekonomik olacağı görülmüştür

**Anahtar kelimeler:** Beton, Düşük Mukavemet, Donatı, FRP kumaş

**ABSTRACT**

Many buildings were destroyed in the earthquake of February 6, 2023 in Turkey. Most structures were also slightly damaged. Slightly damaged structures are in need of reinforcement. The use of composite materials for strengthening and repairing engineering structures has been increasing rapidly in recent years. Fiber reinforced polymer (FRP) fabrics have a wide application area with their easy and fast application, light weight and high strength. In this study, the properties of low strength reinforced concrete reinforced with basalt were investigated under compression. C10 class cylindrical concrete samples were produced in the laboratory. The concretes were wrapped with basalt fabric after standard curing periods. To determine the compressive-deformation properties of these concretes, they were compared to the concrete which is not wrapped. According to the results, it was observed that the class of low-strength concretes have increased to the class of normal-strength concretes wrapping of basaltic fabric. The deformation ability of the concrete under load is also significantly increased. It was found that basalt fabrics could be preferred as an alternative to reinforcement applications instead of existing strengthening methods and they would be more economical.

**Keywords:** Concrete, low strength, reinforcement, FRP fabric.





**SOSYAL BİLİMLER ALANINDA ÖĞRENİM GÖREN ÜNİVERSİTE ÖĞRENCİLERİNİN  
TEKNOFEST HAKKINDAKİ GÖRÜŞLERİ**  
**OPINIONS OF UNIVERSITY STUDENTS STUDYING IN THE FIELD OF SOCIAL  
SCIENCES ABOUT TEKNOFEST**

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**ÖZET**

Bu çalışmada sosyal bilimler alanlarında öğrenim gören üniversite öğrencilerinin Teknofest'e bakış açılarını çeşitli açılardan değerlendirmek amaçlanmıştır. Teknofest yarışmaları ilk olarak 2018 yılında başlamış olup, literatürde Teknofest'e ilişkin çalışmaların sınırlı olduğu görülmektedir. Bu yönüyle çalışmanın özgün ve sonuçlarının alana katkı sağlayabileceği düşünülmektedir. Nitel araştırma yöntemlerinden fenomenoloji yöntemiyle gerçekleştirilen bu çalışmada veriler görüşme yöntemi toplanmıştır. Görüşmeler araştırmanın amacına uygun olarak maksimum çeşitlilik örnekleme yöntemi ile belirlenen yirmi dört katılımcı ile gerçekleştirilmiştir. Veri toplama sürecinde kullanılan yarı yapılandırılmış görüşme formu için geçerlik ve güvenilirlik çalışmaları yapılmıştır. Görüşmelerden elde edilecek veriler içerik analizi tekniğiyle analiz edilmiştir. Analizler sonucunda görüşme yapılan tüm öğrencilerin Teknofest'i ülkenin gelişimi, başvuran öğrencilerin gelişimi ve ortaya yeni ve özgün ürünler çıkması nedeniyle olumlu buldukları görülmüştür. Teknofest yarışma kategorileri açısından, öğrencilerin bir kısmı Teknofestte sosyal bilimler öğrencileri için uygun kategoriler bulunduğunu düşünürken, bir kısmı ise Teknofestte çoğunlukla mühendislik alanlarına uygun yarışma kategorileri bulunduğu yönünde düşüncelerinin olduğu tespit edilmiştir. Öğrencilerin genel olarak Teknofest'in İstanbul dışında başka şehirlerde yapılması gerektiği ve böylece etkileşimin artacağı, yeni kültür ve ortamların keşfedileceği yönündeki görüşleri dikkat çekmiştir. Teknofest'in yapıldığı şehrin ekonomisine katkı sağladığı, bunun yanı sıra farklı kültürlerdeki bireylerin birbirleri arasındaki iletişime olanak sağladığına ilişkin görüşlerin öğrencilerde hâkim olduğu görülmüştür. Teknofestte derece elde edilen projelerin maddi ve manevi olarak arkasında durulması gerektiğini belirten öğrenciler, bu projelerin ancak bu şekilde ülkenin ekonomik, yazılım ve savunma sanayi gibi alanlarına katkı sağlayabileceğini bildirmişlerdir. Öğrencilerin Teknofest'e başvuru sürecinden finale kalana kadar ki süreçte yaşadıkları en önemli sorun olarak, ürün geliştirme sürecinde ihtiyaç duyulan maddi destek ve fikrinin beğenilmeyecek olması kaygısı görülmektedir. Teknofest'in öğrencilere kazandırdığı en önemli kazancın kariyer anlamında olduğu ardında ise özgüven kazandırma anlamında olduğu belirlenmiştir. Teknofest'in ülke ve toplum için çok önemli olduğunu düşünen öğrenciler kesinlikle projeleri için maddi destek mekanizmasının daha etkin işletilmesi yönünde önerileri olmuştur. Ayrıca Teknofest'in sadece mühendislik ve teknik alanlarda bir yarışma olmadığı, sosyal bilimler alanında yarışma kategorilerinin olduğuna yönelik algı ve reklam çalışmalarının artırılması önerilebilir. Bu çalışmada elde edilen sonuçların başladığı yıldan itibaren milyonlarca yarışmacı ve ziyaretçiye ulaşan Teknofest'in değerlendirilmesi açısından literatüre katkı sunacağı düşünülmektedir.

**Anahtar kelimeler:** Teknofest, Sosyal Bilimler, Üniversite Öğrencileri, Nitel Çalışma



## ABSTRACT

In this study, it is aimed to evaluate the opinions of university students studying in the fields of social sciences towards Teknofest from various perspectives. Teknofest competitions first started in 2018, and it is seen that studies on Teknofest are limited in the literature. In this respect, it is thought that the study is original and its results can contribute to the field. In this study, which was carried out with the phenomenology method, one of the qualitative research methods, the data were collected using the interview method. The interviews were conducted with twenty-four participants determined by the maximum diversity sampling method in accordance with the purpose of the research. Validity and reliability studies were conducted for the semi-structured interview form used in the data collection process. The data obtained from the interviews were analyzed by content analysis technique. As a result of the analysis, it was seen that all the interviewed students found Teknofest positive due to the development of the country, the development of applicant students and the emergence of new and original products. In terms of Teknofest competition categories, while some of the students thought that Teknofest had categories suitable for social sciences students, some of them thought that Teknofest had competition categories mostly suitable for engineering fields. The students' opinions that Teknofest should be held in cities other than Istanbul, thus increasing interaction and discovering new cultures and environments attracted attention. It has been observed that the opinions that Teknofest contributes to the economy of the city where it is held, as well as enabling communication individuals from different cultures are dominant among the students. The students stated that the projects that were ranked in the Teknofest should be supported financially and morally, and that these projects can only contribute to the country's economy, software and defense industry fields in this way. The most important problem experienced by the students in the process from application process to Teknofest until the final is the financial support needed in the product development process and the anxiety that their ideas will not be liked. It was determined that the most important gain that Teknofest brings to students is in terms of career, followed by gaining self-confidence. Students, who think that Teknofest is very important for the country and society, definitely have suggestions for more effective operation of financial support mechanism for their projects. In addition, it can be suggested to increase the perception and advertising efforts that Teknofest is not only a competition in engineering and technical fields, but also that there are competition categories in the field of social sciences. It is thought that the results obtained in this study will contribute to the literature in terms of the evaluation of Teknofest, which has reached millions of competitors and visitors since the year it started.

**Keywords:** Teknofest, Social Sciences, University Students, Qualitative Study



## İNDİGO BOYALI DENİM ÜRÜNLERDE EKOLOJİK ALTERNATİF OLARAK SODYUM-KALSİYUM PENTABORAT OKTAHİDRAT BİLEŞİĞİNİN KULLANILABİLME POTANSİYELİNİN İNCELENMESİ

### INVESTIGATION OF POTENTIAL USABILITY OF SODIUM-CALCIUM PENTABORATE OCTAHYDRATE COMPOUND AS AN ECOLOGICAL ALTERNATIVE IN INDIGO DYED DENIM PRODUCTS

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#### ÖZET

Bu çalışmanın amacı indigo boyalı denim ürünlerin ağartılmasında kullanılan konvansiyonel ağartıcılara (hipoklorit ve potasyum permanganat) daha ekolojik alternatif bulmak üzere sodyum-kalsiyum pentaborat oktahidrat bileşiğinin kullanılabilirliğinin incelenmesidir. Bu bileşik ile 3 farklı sıcaklık (20-40-60°C), 3 farklı süre (10-20-30 dk.), 3 farklı pH (4-7-10) ve 3 farklı konsantrasyonda (10-20-30 g/L) yapılan işlemler sonrası kumaş numunelerinin renk ölçümleri gerçekleştirilmiştir. Yapılan denemelerde işlem koşulları ne olursa olsun etkin bir ağartma efekti elde edilememiştir. Ancak özellikle 40 °C'ta pH 10'da 20 dk. süreyle işlem gören kumaşın rengindeki açılmanın ve sağlanan etkinliğin en fazla olduğu görülmüştür.

**Anahtar kelimeler:** Denim, ağartma, sodyum-kalsiyum pentaborat oktahidrat, renk.

#### ABSTRACT

The aim of this study is to examine the usability of sodium-calcium pentaborate octahydrate compound to find a more ecological alternative to conventional bleaching agents (hypochlorite and potassium permanganate) used for indigo dyed denim products. Color measurements of the fabric samples were carried out after the treatments with this compound at 3 different temperatures (20-40-60°C), 3 different times (10-20-30 min.), 3 different pH (4-7-10) and 3 different concentrations (10-20-30 g/L). In the experiments, an effective bleaching effect could not be obtained regardless of the processing conditions. However, especially at 40 °C, at pH 10 for 20 minutes, it was observed that the lightening in the color of the treated fabric and the effectiveness provided were the highest.

**Keywords:** Denim, bleaching, sodium-calcium pentaborate octahydrate, color.

**BAHADIR YENİŞEHİRLİOĞLU'NUN AŞK CEPHESİ, SON HASAT, TAHTA AT, HANNE VE BEYAZ USTA SİYAH ÇIRAK ADLI ROMANLARINA SEÇİCİ OKUMA TEKNİĞİ İLE PSİKOLOJİK BİR BAKIŞ**

**A PSYCHOLOGICAL PERSPECTIVE ON BAHADIR YENİŞEHİRLİOĞLU'S NOVELS NAMED AŞK CEPHESİ, SON HARVEST, TAHTA AT, HANNE AND BEYAZ USTA SİYAH ÇIRAK WITH SELECTIVE READING TECHNIQUE**

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**ÖZET**

Bu araştırmada Bahadır Yenişehirlioğlu'nun Aşk Cephesi, Son Hasat, Tahta At, Hanne ve Beyaz Usta Siyah Çıracık adlı romanlarına seçici okuma tekniği ile psikolojik bir bakış yapılması amaçlanmıştır. Nitel araştırma deseninde yapılan bu araştırmada doküman analizi tekniği kullanılmıştır. Yukarıda belirtilen yazarın kitapları yaptıkları baskı sayısı, okunma durumu ile yazarın popülerliği dikkate alınarak, ilgili yayınevinin sayfasından takip edilmiş ve incelenmek için seçilmiştir. Bu kitaplar seçici okuma tekniği ile araştırmacılar tarafından farklı zamanlarda okunmuş ve psikolojik durum içeren ifadeler belirlenmiştir. Bahadır Yenişehirlioğlu'nun Aşk Cephesi adlı romanda 76 sayfada, Son Hasat adlı romanda 73 sayfada, Tahta At adlı romanda 67 sayfada, Hanne adlı romanda 122 sayfada ve Beyaz Usta Siyah Çıracık adlı romanda ise 130 sayfada psikolojik tahlil ifadesi tespit edilmiştir. İncelenen eserlerde 210 tane psikanalitik analiz ifadesi, 82 tane davranışsal analiz ifadesi, 80 tane bilişsel analiz ifadesi, 29 tane hümanistik analiz ifadesi ve 18 tane de varoluşçu analiz ifadesi tespit edilmiştir. Dolayısıyla bu araştırmada incelenen eserlerin psikolojik bakış açısından oldukça zengin oldukları ve okurlarını bu yönden de etkiledikleri sonucuna ulaşılmıştır. Bahadır Yenişehirlioğlu'nun Aşk Cephesi, Son Hasat, Tahta At, Hanne ve Beyaz Usta Siyah Çıracık adlı romanlarının lise ve üstü düzeyindeki okurlar tarafından okunması hâlinde okuyuculara bu bağlamda derinlik katacağı düşünülmektedir. İlgili eserlerin diğer okuma türleri ve dil bilgisi kuralları açısından incelenmesi önerilmektedir.

**Anahtar kelimeler:** Seçici okuma, roman, psikolojik bakış, Bahadır Yenişehirlioğlu.

**ABSTRACT**

In this research, it is aimed to make a psychological view of Bahadır Yenişehirlioğlu's novels titled Aşk Cephesi, Son Harvest, Tahta At, Hanne and Beyaz Usta Siyah Çıracık with the selective reading technique. Document analysis technique was used in this qualitative research design. The books of the above-mentioned author were followed from the relevant publishing house's page, taking into account the number of editions, the status of reading and the popularity of the author, and were selected for examination. These books were read by the researchers at different times with the selective reading technique and the expressions containing psychological states were determined. In Bahadır Yenişehirlioğlu's novel Aşk Cephesi (Love Front) on 76 pages, in Son Hasat (The Last Harvest) on 73 pages, in Tahta At (Tahta At) on 67 pages, in Hanne (Hanne) on 122 pages and in White Master Black Apprentice (White Master Black Apprentice) on 130 pages, psychoanalytical statements were identified. In the works examined, 210 psychoanalytic analysis statements, 82 behavioral analysis statements, 80



cognitive analysis statements, 29 humanistic analysis statements and 18 existential analysis statements were identified. Therefore, it has been concluded that the works analyzed in this study are quite rich in terms of psychological perspective and that they affect their readers in this respect. It is thought that Bahadır Yenişehirlioğlu's novels titled Aşk Cephesi, Son Harvest, Tahta At, Hanne and Beyaz Usta Siyah Çırak will add depth to readers in this context if they are read by readers at high school and above. It is recommended that the related works be analyzed in terms of other reading types and grammar rules.

**Keywords:** Selective reading, novel, psychological perspective, Bahadır Yenişehirlioğlu.

## AİLE VE EVLİLİĞE İLİŞKİN TUTUM VE BEKLENTİLERDEKİ DEĞİŞİMİN İNCELENMESİ

### EXAMINATION OF CHANGE IN ATTITUDES AND EXPECTATIONS REGARDING FAMILY AND MARRIAGE

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#### ÖZET

Bu çalışmada X, Y ve Z kuşaklarının aile ve evliliğe ilişkin tutum ve beklentilerindeki değişim incelenmiştir. Bu çalışmanın amacı, X, Y ve Z kuşakları açısından, aile ve evlilik kurumunda meydana gelen değişimleri, evliliğe ve aileye karşı olan algı ve tutumlardaki değişimleri incelemek, kuşaklar arası farklılık olup olmadığını araştırmak ve olası farklılıkların kaynaklandığı nedenleri ortaya koymaktır. Araştırma 2021 yılı Aralık ayı içerisinde Niğde ili, ilçeleri ve köylerinde elde edilen verilerden oluşmaktadır. Araştırma kapsamında deneklere açık uçlu ve yarı yapılandırılmış sorulardan oluşan 52 soruluk bir görüşme formu kullanılmıştır. Araştırma kapsamında her kuşaktan 110 kişi olmak üzere 115 kadın ve 115 erkek olmak üzere toplam 330 kişiyle görüşme yapılmıştır. Elde edilen veriler daha sonra sınıflandırılarak SPSS paket programında değerlendirilmiştir. Kuşaklar arasında aile ve evliliğe ilişkin tutumlarda istatistiksel olarak anlamlı bir farklılık gözlemlenmiştir. Gösterdikleri bu farklılıklar kuşaktaki bireylerin kişilik özelliklerine yansımış, aynı zamanda dünyayı algılayış biçimlerini, hayata karşı bakışlarını ve davranışlarını değiştirmiştir. X kuşağının yaşam şartlarında görülen olumlu gelişmeler, bireylerin davranışları üzerinde de etki yaratmış, bireylerin parasal konular dışında, sosyal yaşamla ilgili unsurlara önem vermelerini beraberinde getirmiştir. Değişen dünyanın dinamiklerinin acımasızca yüzlerine çarptığı, olabildiğince kanaatkar, toplumcu, sadık ve idealist bir kuşaktır. Diğer kuşaklardan, yetiştikleri dönemin olumlu şartlar taşıması sebebiyle ayrılan “Y Kuşağı”, teknolojik imkanlar olarak da gelişme gösteren bir dünyada yetişmişlerdir. Z kuşağı ise dünya zevklerine düşkün, teknolojiyi hızlı şekilde kavrayan, işlerini kısa sürede ve titiz biçimde yerine getiren davranış özellikleriyle dikkat çekmektedir. Bu kuşaklar, toplumu yeniden üretme kurumlarından olan evlilik ve aile kurumu açısından incelendiğinde belirgin farklar olduğu gözlemlenmiştir.

**Anahtar kelimeler:** Kuşak, Aile, Evlilik, Toplumsal Değişme.

#### ABSTRACT

In this study, the changes in the attitudes and expectations of the X, Y and Z generations towards family and marriage were examined. The aim of this study is to examine the changes in family and marriage institution, the changes in perception and attitudes towards marriage and family in terms of X, Y and Z generations, to investigate whether there are differences between generations and to reveal the reasons for possible differences. The research consists of the data obtained in the province of Niğde, its districts and villages in December 2021. Within the scope of the research, an interview form with 52 questions consisting of open-ended and semi-structured questions was used. Within the scope of the research, a total of 330 people, 115 women and 115 men, 110 people from each generation, were interviewed. The obtained data were then classified and evaluated in the SPSS package program. A statistically significant



difference was observed in attitudes towards family and marriage between generations. These differences that they show have been reflected in the personality traits of the individuals in the generation, as well as changing their way of perceiving the world, their outlook on life and their behavior. Positive developments in the living conditions of the X generation have also had an impact on the behavior of individuals, and have brought individuals to attach importance to social life-related elements, apart from monetary issues. It is a generation that is as self-confident, socialist, loyal and idealistic as possible, in which the dynamics of the changing world ruthlessly hit their faces. The “Generation Y”, which differed from other generations due to the favorable conditions of the period in which they grew up, grew up in a world that also showed improvement in terms of technological opportunities. The Z generation, on the other hand, draws attention with their behavioral characteristics that are fond of worldly pleasures, grasp technology quickly, and carry out their work in a short time and meticulously. When these generations are examined in terms of the institution of marriage and family, which are among the institutions of reproduction of society, it has been observed that there are significant differences.

**Keywords:** Generation, Family, Marriage, Social Change.



## INVESTIGATION OF THE CAUSES OF DESTRUCTION OF REINFORCED CONCRETE STRUCTURES EXPOSED TO SEQUENTIAL EARTHQUAKES

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### ABSTRACT

Observational research is carried out at the first stage in order to quickly evaluate the damage conditions of the structures after the earthquake. Within the scope of observational research, structural and non-structural damages in the building system are examined. However, it is not possible to examine the collapsed structures with the observational research method and the reasons for the collapse cannot be determined with this method. More detailed research should be done to investigate the reasons for the collapse of buildings that were completely destroyed as a result of the earthquake. In this study, the reasons for the collapse of the structures after the Kahramanmaraş earthquakes on February 6 were investigated. In this context, many collapsed and wrecked buildings in Malatya, one of the provinces affected by the earthquake, were examined. Concrete and steel samples were taken from these structures. The samples taken were subjected to compressive strength and reinforcement tensile strength tests in the laboratory. In addition, during the field investigation, it was checked whether the reinforcements were made in accordance with the design project. As a result of the examinations, it was determined that the structures collapsed due to the design defects in the project, the deficiencies in the application, the inadequacy of the building regulations used, and the strengths of the materials used were not in accordance with the project design values.

**Keywords:** Earthquake, structures, concrete.





## EVALUATION OF THE STRUCTURAL DAMAGE OF UNFINISHED BUILDINGS AFTER EARTHQUAKES

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### ABSTRACT

In this study, earthquake-induced damages and structural damages in the buildings under construction during the Kahramanmaraş earthquake that occurred on February 6 were examined. For this reason, field work was carried out in the center and districts of Elazığ, which is one of the 11 provinces affected by the earthquake. Within the scope of this field study, many buildings that have not yet been completed were examined. As a result of the examination, earthquake damages and structural defects in these structures, which are subject to the 2018 earthquake regulations, were determined. It has been observed that the earthquake damage in the buildings is mostly wall damage. It has been determined that these wall damages occur depending on the type of soil that varies from region to region. In addition, structural defects were identified and on-site solutions were proposed for some of these defects.

**Keywords:** Earthquake, structures, structural damages.

## SURF YÖNTEMİNİ KULLANARAK TÜRK MADENİ PARALARINI TANIMA RECOGNIZING TURKISH COINS USING THE SURF METHOD

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### ÖZET

Para, uzun bir süredir mal ve hizmetlerin fiziksel bir değiş-tokuş aracı olarak kullanılmaktadır. Bu ticaret yöntemi, kullanım kolaylığı, ortak ölçü ve değer biriminin mevcudiyeti gibi birçok faktörden dolayı takas gibi daha önce kullanılan ticaret yöntemlerine göre üstünlük sağlamıştır. Para, ticaret yapmanın belki de en kolay yöntemi olsa da, insanların tanınması, sayması ve saklaması için ek bir yük sunmaktadır. Ancak, teknolojik gelişmeler ile birlikte yapay zekâ yöntemlerinin gelişmesi, ticari işlemlerde kullanılan para birimlerinin bir sistem tarafından tanınması gerekliliğini doğurmuş ve böylece insanın parayı tanıma ile uğraşma ihtiyacı azalmıştır. Bu nedenle para tanıma sistemleri alanında yapılan çalışmalar önem kazanmıştır. Son yıllarda para tanıma sistemleri ile ilgili yapılan çalışmaların büyük çoğunluğu makine öğrenmesi yaklaşımları ile bilgisayarlı görü yaklaşımlarından oluşmaktadır. Bilgisayarlı görü alanında para tanıma sistemleri ile ilgili yapılan çalışmalarda, özellikle Scale Invariant Feature Transform (SIFT) ve Speeded-up Robust Features (SURF) metodları kullanılmaktadır. Bu çalışmada geliştirdiğimiz algoritma SURF yöntemini kullanarak bir fotoğraftaki Türk madeni paralarını tanımaktadır. Algoritmanın başarısı, hiç madeni para bulunmayan, sadece para(lar) olan, üst üste gelmiş ya da sadece bir parçası gözükken para(lar) olan, üzerine diğer nesnelerin gölgesi düşmüş para(lar) olan ve renk değişimine uğramış paraların olduğu fotoğraflar olmak üzere farklı durumlar altında test edilmiştir. Ayrıca, algoritmadan elde edilen sonuçlar, daha önce SIFT yöntemini kullanarak yapmış olduğumuz çalışmadan elde edilen sonuçlar ile karşılaştırılmıştır. Algoritmalar performans açısından kıyaslandığında, SURF yönteminin SIFT yöntemine göre daha başarılı sonuçlar sunduğu söylenebilir.

**Anahtar kelimeler:** Madeni para tanıma, bilgisayarlı görü, SURF.

### ABSTRACT

Money has long been used as a physical medium of exchange for goods and services. This trading method outperformed previously used trading methods such as barter due to many factors such as ease of use, availability of common measure and value unit. While money is perhaps the easiest method of trading, it presents an overhead for people to recognize, count, and store. However, the development of artificial intelligence methods together with technological developments has led to the necessity of recognizing the currencies used in commercial transactions by a system, and thus the need for people to deal with recognizing money has decreased. That is why, studies in the field of money recognition systems have gained importance. In recent years, most of the studies on money recognition systems consist of machine learning approaches and computer vision approaches. In studies on money recognition systems in the field of computer vision, especially Scale Invariant Feature Transform (SIFT) and Speeded-up Robust Features (SURF) methods are employed. In this paper, the algorithm that we developed recognizes Turkish coins in a photograph by utilizing the SURF method. The success of the algorithm was tested under different conditions; including photos with no coins, only coin(s), coin(s) overlapping or only part of them, coin(s) overshadowed by other objects, and photos with color-changed coins. In addition, the obtained results from the algorithm were compared with the results that were obtained from our previous study using the SIFT method. When the algorithms are compared in terms of performance, it can be said that the SURF method offers more successful results than the SIFT method.

**Keywords:** Coin recognition, computer vision, SURF



## ARAPÇADA ANDAŞ ÇEVİRİ TÜRÜ ANDASH TRANSLATION TYPE IN ARABIC

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### ÖZET

Arapçada bu sözlü türünde çevirmen, konuşma yapanın konuşmasıyla aynı zamanda çeviri yapar. Ama aynı zamanda da uygulandığı düşünülen bir sözlü çeviri türü olarak bilinmektedir. Ülkemizde ise en fazla “eşzamanlı” “anında” “andaş” ya da “simültane” çeviri terimleri kullanılmaktadır. Andaş çeviri türü birçok araştırmacılar tarafından incelenen çeviri olmaktadır. Genel olarak bir çeviri kabininde yapılır. Çevirmen, kulaklık aracılığıyla konuşmayı dinleyip mikrofonla çeviri yapar. Çeviri, toplantı yerinde dinleyicilere özel bir tehzizatla kulaklıklardan yayımlanır. Andaş çeviri türü çok zorlu bir çeviri türü olarak biliniyor. Çevirmenin aynı anda konuşma yapanı dinlemesi ve konuşmacının sözlerini takip etmesi ve uygun şekilde yorumlaması, ve isitsel olarak elde edilen bilgileri yorumlayıp çeviri yapmak zorundadır. Konuşmaların metni çevirmene verilebilir. Böyle durumda tercüman konuşma yapanı dinlerken bir yandan da elinde olan metni izleyebilir ve kısmen göz önünde bulundurarak çeviri tekniğinden de faydalanabilir. Andaş çevirinin gerçekleşmesi için mikrofon, kulaklık gibi teknik tehzizatların yerini özellikle ses ve görsel veri şekli alır. Andaş çeviri pratiği arttıkça, çevirilerin niteliği beklentisinde hızlı bir artış ortaya çıkar. Andaş çevirinin yapılabilmesi için ortam çok önem arz etmektedir. Çünkü insan kafasını zorlayacak ve zihinsel bir yüklemeye yapar. Bu sebeple koşulların uygun olması önemlidir. Konu insan olunca çeviri aşamasını etkileyen etkenler, durumdan duruma değişmesi ve teknik tehzizatların yetersiz olması çevirmende olumsuz etki bırakabilir.

1953 yılında kurulmuş olan Uluslararası Konferans Çevirmenliği Derneğinin önemli gayesi en baştan sözlü çevirinin niteliğidir. Örnek olarak Uluslararası Standartlar Kuruculuğu ile yapılmış olan ortak bir araştırma sonucunda, sözlü çeviri kabinlerinin ölçütleri belirlenir.

Andaş çeviri türünden ve kabinlerle ilgili sıkıntılardan bahsederken, ve diğer sıkıntılı türlerden biride fısıltılı çevridir. Bu çeviri türünde de konuşanı dinleyerek aynı anda çeviri yapılır, ancak kabin ve özel tehzizat olmadan gerçekleştirilir. Çevirmenler az sayıda dinleyicinin arkasında veya arasında oturarak çeviriyi fısıltıyla, başka katılımcıları rahatsız etmemek suretile andaş çeviri kullanarak yaparlar.

Bunuda hatırlatmakta fayda vardır ki, Arapçada birçok tercüme çeşitleri vardır. Bunlardan “Ardıl çeviri” “Sözlü çeviri” “Andaş çeviri” “Diyalog çeviri” “Toplum çevirmenliği” “Konferans çevirmenliği” gibi çeviri türlerinin da önemli rolü vardır.

**Anahtar kelimeler:** Arapça, Çeviri, Tercüme

### ABSTRACT

In this type of spoken Arabic, the translator translates at the same time as the speaker's speech. But it is also known as a type of interpreting that is thought to be applied. In our country, the terms "simultaneous", "instant", "andas" or "simultaneous" translation are mostly used. Andaş translation type is the translation studied by many researchers. It is generally done in a translation booth. The translator listens to the speech through headphones and translates into the microphone. The translation is broadcast to the audience at the meeting place via headphones with a special equipment. Andaş translation type is known as a very difficult type of translation. The translator has to listen to the speaker at the same time and follow the speaker's words and interpret them appropriately, and interpret and translate the



information obtained audibly. The text of the speeches can be given to the translator. In this case, the translator can listen to the speaker while watching the text in his hand and can also benefit from the translation technique by partially considering it. Technical equipment such as microphones and headphones take the form of audio and visual data for the realization of Andaş translation. As Andaş translation practice increases, there is a rapid increase in the expectation of the quality of translations. Because it will force the human head and make a mental load. For this reason, it is important that the conditions are suitable. When it comes to human beings, the factors affecting the translation stage, the change from situation to situation, and the inadequacy of technical equipment can have a negative effect on the translator.

The important aim of the International Conference Interpreting Association, which was founded in 1953, is the quality of interpreting from the very beginning. As an example, as a result of a joint research with the International Standards Foundation, the criteria for interpreting booths are determined.

While Andaş talks about the type of translation and the troubles with the cabins, and one of the other troublesome types is the whispered translation. In this type of translation, the translation is done at the same time by listening to the speaker, but without a cabin and special equipment. Translators sit behind or amongst a small number of listeners and translate in a whisper, using simultaneous translation without disturbing other participants.

It is also worth remembering that there are many types of translations in Arabic. Translation types such as “Consecutive Translation”, “Oral Translation”, “Andaş Translation”, “Dialogue Translation”, “Community Interpreting” and “Conference Interpreting” also play an important role.

**Keywords:** Arabic, Translation, Translation



## SAÇLI MEŞE'DE MEYVE VERİMİ VARYASYONU ACORN PRODUCTION VARIATION IN TURKEY OAK

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### ÖZET

Meşe (*Quercus* sp.) taksonları, 23.1 milyon hektar büyüklüğündeki Türkiye ormanlarının, 6.8 milyon hektar yayılışı ile alan bazında %29.4'lük paya sahiptir. Çalışma, Saçlı Meşe veya Türk Meşesi (*Quercus cerris* L.) olarak adlandırılan türün iki popülasyonuna (P1 ve P2) ait meyve verimi üzerinde gerçekleştirilerek, türün ormancılık uygulamalarına katkı sağlanması amaçlanmıştır. Çalışma kapsamında her bir popülasyondan, rastgele 50'şer birey örneklenerek iki yaşlı olgun meyveleri sayılmıştır.

Çalışma sonucunda popülasyonlarda, ortalama meyve sayıları 269 (P1) ve 416 (P2), popülasyonların genelinde ise 343 bulunmuştur. Uygulanan varyans analizi sonucunda, popülasyonlar meyve verimi bakımından anlamlı ( $p<0.05$ ) fark göstermiştir.

Popülasyon içi ağaçlar meyve verimi bakımından geniş farklılık göstermiştir. Örneğin, meyve sayısı P1 nolu popülasyonda, 54-840 arasında değişim göstermiştir. Varyasyon katsayısı (CV) ise P1 nolu alanda %66, P2 nolu alanda ise %54 bulunmuştur. Bu katsayı popülasyonların genelinde ise %62 hesaplanmıştır. Meyve verimi için hesaplanan bu varyasyon katsayısı değerleri, gen koruma ormanı ve tohum hasad sahaları için kabul edilebilir düzeydedir.

**Anahtar kelimeler:** Genetik, palamut, *quercus*, tohum, varyans.

### ABSTRACT

Oak (*Quercus* sp.) taxa covers 29.4% by 6.8 million ha in Turkish Forestry which of 23.1 million ha. This study was carried out on acorn productions of two populations (P1 and P2) of Turkey oak (*Quercus cerris* L.) to contribute forestry practices of the species. Two year mature acorns were counted from 50 trees sampled randomly of each population.

Averages of acorn production were 269 (P1) and 416 (P2) in the populations, and 343 in pooled populations. Populations showed significant ( $p<0.05$ ) difference for acorn production according to results of analysis of variance.

Individual trees within population showed large differences for acorn production. For instance, numbers of acorns were ranged from 54 to 840 in P1. Coefficient of variations (CV) was 66% in P1, 54% in P2, and 62% in pooled populations. The CVs were acceptable level for gene conservation and seed lot areas of the species.

**Keywords:** Genetic, acorn, oak, seed, variance.



## TOROS SEDİRİ'NDE BAZI ÜREME ÖZELLİKLERİ TEKRARLANMA DERECEŚİ REPEATABILITY FOR SOME REPRODUCTIVE TRAITS IN TAURUS CEDAR

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### ÖZET

Toros Sediri veya Lübnan Sediri olarak bilinen *Cedrus libani*, Türkiye ormancılığı ve Milli Ağaç Islahı Programı'nın önemli türlerinden biridir. Çalışma, türün iki tohum meşçeresine ait iki yıllık kozalak ve tohum verimi (ağaç ve kozalak) üzerinde gerçekleştirilmiştir. Çalışma sonuçlarıyla, Toros Sediri'nin genetik-ıslah (örneğin, tohum kaynaklarının tescil ve tesisi) ve diğer ormancılık uygulamalarına katkı sağlanması amaçlanmıştır.

Çalışma kapsamında türün kozalak ve tohum verimi ile bunlara ait tekrarlanma derecesi tahmin edilmiştir. Çalışma sonucunda, meşçere ve yıllar, kozalak ve tohum verimi bakımından benzerlik göstermiştir. Bu benzerlik varyans analizi sonuçları ile de desteklenmiş olup meşçere ve yıllar anlamlı ( $p>0.05$ ) farklılık göstermemiştir.

Kozalak ve tohum verimine ait tahmin edilen tekrarlanma derecesi 0 ile 0.35 arasında değişim göstermiştir.

**Anahtar kelimeler:** Kalıtım, kozalak, tohum, varyans.

### ABSTRACT

Taurus cedar also known cedar of Lebanon (*Cedrus libani*) is an important tree species for Turkish forestry and National Tree Breeding Programme. This study was carried out on cone and seed productions (tree and cones) of two seed stands based on two year data of the species to contribute genetic-breeding (i.e., selection and establishment of seed sources) and other forestry practices.

Cone and seed productions and their repeatability were estimated in this study. Seed stands and years showed similar performances for the characteristics. Seed stands and years were similar for the characteristics according to results of analysis of variance ( $p>0.05$ ).

Estimated repeatability was ranged from 0 to 0.35 for the numbers of cones, and seed productions of per tree and cone.

**Keywords:** Heritability, cone, seed, variance.



## FLUE-CURED VİRJİNYA TÛTÛNÜNDE TEPE KIRIMI VE FİLİZ KONTROLÜNÜN VERİM VE KALİTE ÜZERİNE ETKİSİ

### THE EFFECT OF TOPPING AND SUCKER CONTROL ON YIELD AND QUALITY IN FLUE-CURED (VIRGINIA) TOBACCO

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#### ÖZET

Muş koşullarında iki yıl süre ile farklı lokasyonlarda T-55 Flue-cured virjinya tütününde tepe kırımı ve filiz kontrolünün verim ve kalite üzerine etkilerini belirlemek için yürütülen çalışmada bitki boyu, toplam kuru yaprak verimi, şeker oranı, nikotin oranı ve şeker/nikotin oranları incelenmiştir. Bitki boyu değerleri 104.7-181.1 cm, toplam kuru yaprak verimi 151.9-322.2 kg/da, kuru yaprakta şeker oranları %10.93-12.64, kuru yaprakta nikotin oranları (%0.48-0.50) ve kuru yaprakta şeker/nikotin oranları 22.30-25.28 arasında bulunmuştur. İncelenen özelliklere göre en iyi sonuçlar tepe kırımı+sürgün kontrolü uygulamasından elde edilmiştir.

**Anahtar kelimeler:** Flue-cured virjinya tütünü, tepe kırımı, sürgün kontrolü, verim, kalite.

#### ABSTRACT

Plant height, total dry leaf yield, sugar ratio, nicotine ratio, and sugar/nicotine ratios were investigated in the study carried out to determine the effects of topping and sucker control on yield and quality in T-55 Flue-cured Virginia tobacco in different locations for two years under Mus conditions. Plant height values were 104.7-181.1 cm, total dry leaf yield was 151.9-322.2 kg/da, sugar ratios in dry leaves were 10.93-12.64%, nicotine ratios in dry leaves (0.48-0.50%) and sugar/nicotine ratios in dry leaves were between 22.30-25.28. According to the properties examined, the best results were obtained from the application of topping + sucker control.

**Keywords:** Flue-cured virginia tobacco, topping, sucker control, yield, quality.



## CLASSIFICATION OF SPIRAL AND NON-SPIRAL GALAXIES USING DECISION TREE ANALYSIS AND RANDOM FOREST MODEL: A STUDY ON THE ZOO GALAXY DATASET

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### ABSTRACT

The goal of this research is to create a precise prediction model that can differentiate between spiral and non-spiral galaxies using the Zoo galaxy dataset. Decision tree analysis and random forest models will be used to construct the model, and various conditions within the dataset will be employed to classify the data accurately. The model's performance will be evaluated using a confusion matrix, and the probability of predicting spiral galaxies will be analyzed. The research will also investigate the differences in Total Power among signal types and identify Peak Frequency and Bandwidth values consistent across all signal types. This study is expected to provide important insights into galaxy classification and signal characteristics, specifically in the fields of astronomy and astrophysics. This study utilized the decision tree analysis research method to create a predictive model for identifying spiral galaxies using the Zoo galaxy dataset. The research approach focused on analyzing data before constructing a prediction model. The study did not involve random sampling, making it an observational study. Decision tree analysis was employed to classify galaxies into homogeneous groups, and a random forest model was used to classify galaxy types. This research provides insights into how decision tree analysis can be utilized to comprehend galaxy classification and can serve as a foundation for future research. To strengthen the conclusions, combining this research with other approaches such as experiments or random sampling can be considered. This study developed a predictive model for classifying galaxies based on their Spiral type using decision tree analysis on the Zoo galaxy dataset. The model divided the data into specific groups based on certain conditions, and the results demonstrated exceptional accuracy of the random forest model in categorizing galaxy types. In addition, the study investigated various signal types in galaxies and found variations in Total Power, but consistent values for Peak Frequency and Bandwidth at 2 in all signals. These findings provide valuable insights into galaxy classification and signal characteristics, which could have practical applications in communication, signal processing, and analysis. The utilization of decision tree analysis and random forest models for galaxy classification and signal analysis represents an innovative approach in this field.

**Keywords:** Galaxy classification, Decision tree analysis, Random forest model, Spiral and non-spiral galaxies, Signal characteristics





## ORİGANUM KEKİK TÜRLERİNİN TÜRKİYE'DEKİ DURUMU STATUS OF *ORIGANUM* SPECIES IN TÜRKİYE

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### ÖZET

Lamiaceae (Labiatae) familyası içerdiği birçok bitkinin tıbbi ve aromatik karakterde olması ile dikkat çekmektedir. Bu familya genellikle kokulu ve tek yıllık ya da çok yıllık bitkiler ile ticari değeri yüksek türleri içerir. Dünyada ciddi değere ve ekonomik öneme sahip olan kekik türleri, bu familyada *Thymus*, *Origanum*, *Satureja*, *Thymbra* ve *Coridothymus* cinsleri içerisinde yer almaktadır. Bu cinlerden biri olan *Origanum*, Dünyada 43 tür ile 52 taksona sahip olup, bunların %60'ı Türkiye'de yetişmektedir. *Origanum* cinsi, Türkiye'de zengin bir gen merkezine sahiptir. Türkiye'de *Origanum* cinsi 23 tür, 27 takson ile temsil edilmekte olup, 21'i endemiktir. Türkiye'de yılda yaklaşık olarak 6-7 ton kekik ihracatı yapılmaktadır. İhraç edilen *Origanum* cinsi türlerin başında ise *Origanum onites*, *O. vulgare* var. *hirtum*, *O. minutiflorum*, *O. syriacum* var. *bevanii*, *O. majorana* türleri bulunmaktadır. Sonuç olarak, bu çalışmada, Türkiye'de dağılım gösteren *Origanum* türleri, tescilli çeşitleri, ekim alanı, üretimi, verimi ve ticareti hakkındaki veriler değerlendirilmiştir.

**Anahtar kelimeler:** *Origanum*, tür, çeşit, verim, ticaret

### ABSTRACT

The Lamiaceae (Labiatae) family attracts attention with the medicinal and aromatic character of many plants it contains. This family usually includes fragrant and annual or perennial plants, as well as species with high commercial value. Thyme/Oregano etc. species, which have serious value and economic importance in the world, are included in the genus *Thymus*, *Origanum*, *Satureja*, *Thymbra* and *Coridothymus* in this family. *Origanum*, one of these genus, has 43 species and 52 taxa in the world, 60% of which grows in Türkiye. *Origanum* genus has a rich gene center in Türkiye. In Türkiye, the genus *Origanum* is represented by 23 species and 27 taxa, 21 of which are endemic. Approximately 6-7 tons of thyme is exported annually in Türkiye. *Origanum onites*, *O. vulgare* var. *hirtum*, *O. minutiflorum*, *O. syriacum* var. *bevanii*, *O. majorana* species are at the top of the exported *Origanum* genus species. As a result, in this study, data on *Origanum* species distributed in Türkiye, registered varieties, cultivation area, production, yield and trade were evaluated.

**Keywords:** *Origanum*, species, variety, yield, trade

**METİL-2-(2-(4-(TERT-BUTYL)FENİL)HİDRAZİNELİDEN)-2-FENİLASETATLARIN E/Z İZOMERLERİNİN SENTEZİ****SYNTHESIS OF E/Z ISOMERS OF METHYL-2-(2-(4-(TERT-BUTYL)PHENYL)HYDRAZINELIDEN) -2-PHENYLACETATES****Abel MAHARROMOV***Department of Organic Chemistry, Baku State University, Baku, Azerbaijan*

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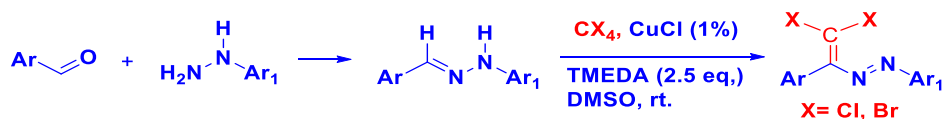
ORCID ID: 0009-0009-6245-4837

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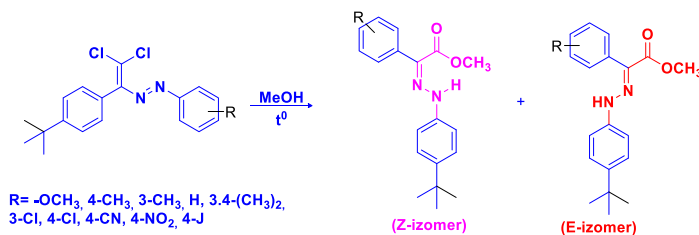
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**ÖZET**

Önceki çalışmalarda CuCl-ün katalitik miktarında N-ikameli hidrozonların CCl<sub>4</sub> ile reaksiyonundan diklorodiazabutadien yapılı bileşiklerin sentezi gerçekleştirilmiştir [1].



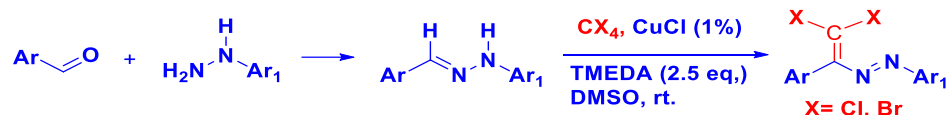
Bileşiğin yapısından da görülebileceği gibi, nükleofiller ile yer değiştirebilen halojen atomlarının ve azo grubunun varlığı, bu bileşiklerin, organik sentezde diğer önemli bileşik sınıflarının elde edilmesi için sinton olarak kullanılmasına izin veriyor. Böylece bu bileşiklerin NaN<sub>3</sub> ile reaksiyonundan uygun azido triazololler elde edilmiş ve aynı zamanda diklorodiazadienin solvoliz reaksiyonundan α-ketoasitlerin arilhidrozo türevleri sentezlenmiştir [2]. Bildiğimiz gibi, fenilasetik asidin aril hidrozo türevleri, farmakolojide ilaç olarak yaygın şekilde kullanılmaktadır. Tüm bunlar dikkate alınarak metil (Z)/(E)-2-(2-(4-(tert-butyl)fenil)hidrazineliden)-2-fenilasetat sentezlendi ve antibakteriyel ve antifungal özellikleri araştırıldı ve olumlu sonuçlar alındı..



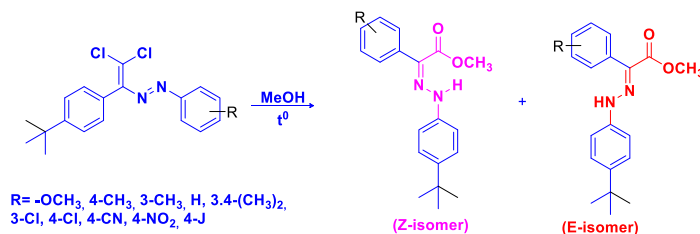
**Anahtar kelimeler:**  $\alpha$ -ketoasitlerin arilhidrozo türevleri,ndiklorodiazadienler

## ABSTRACT

In previous studies, the synthesis of dichlorodiazabutadiene compounds was carried out by reaction of N-substituted hydrazones with  $\text{CCl}_4$  in a catalytic amount of  $\text{CuCl}$ . [1].



As can be seen from the structure of the compound, the presence of halogen atoms and the azo group, which can be replaced by nucleophiles, allows these compounds to be used as synthons to obtain other important classes of compounds in organic synthesis. Thus, suitable azido triazoles were obtained from the reaction of these compounds with  $\text{NaN}_3$ , and at the same time, arylhydrozo derivatives of  $\alpha$ -ketoacids were synthesized from the solvolysis reaction of dichlorodiazadiene. As we know, aryl hydrozo derivatives of phenylacetic acid are widely used as medicine in pharmacology [2]. Considering all these, methyl (Z)/(E)-2-(2-(4-(tert-butyl)phenyl)hydrazinylidene)-2-phenylacetate was synthesized and its antibacterial and antifungal properties were investigated and positive results were obtained.



**Keywords:** Arylhydrozo derivatives of  $\alpha$ -ketoacids, dichlorodiazadienes



## KAYIP YAŞAMIŞ BİREYLERDE BİTMEMİŞ İŞLER VE YASA BAĞLI RUMİNASYONUN YAS DÜZEYİNE ETKİSİ

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### ÖZET

İnsanın, varoluşundan bu yana, sevdiği birinin ölümünün sebep olduğu acıyla baş etmeye çalışması, en büyük zorluklarından biri olmuştur. Ölüm olgusu hiçbir zaman tam anlamıyla kolay kabullenilir hale gelmemiştir. Ölüm sonucu ile kayıp yaşayan bireylerin yas süreci, pek çok yas araştırmasının konusu olmuştur. Her bireyin yas yaşama şekli biriciktir ve yas sürecini birbirinden farklı kılan pek çok faktör bulunmaktadır. Bu faktörlerin yas düzeyi üzerinde etki eden role sahip olduğu bilinmektedir. Yas şiddeti üzerinde etkisinin olduğu düşünülen, bitmemiş işler ve yasa bağlı ruminasyon kavramlarının yas düzeyi bağlamında incelendiği bir çalışmanın literatürde var olmaması, benzer çalışmalara katkı sağlamasının amaçlanmasına sebep olmuştur. Bitmemiş işler ve yasa bağlı ruminasyonun yas düzeyine etkisinin incelenmesi bu çalışmanın temel amacıdır. Çalışmanın amacına bağlı olarak, kayıp yaşayan yetişkin bireylerin sosyo-demografik özellikleri, kaybın özellikleri, bitmemiş işler düzeyi ve yasa bağlı ruminasyon düzeyleri ile yas şiddetleri incelenmiştir. Bu amaç doğrultusunda araştırmaya, bir yakınını veya yakınlarını kaybetmiş 18 yaş ve üzeri 424 kişi katılmıştır. Veri toplama aracı olarak; Sosyodemografik Bilgi Formu, Teksas Düzeltilmiş Yas Ölçeği, Kayıp Yaşantılarında Bitmemiş İşler Ölçeği ve Yasa Bağlı Ruminasyon Ölçeği kullanılmıştır. Araştırmanın sonucundan elde edilen bulgulara göre, bitmemiş işler ve yasa bağlı ruminasyonun yas şiddeti üzerinde anlamlı bir ilişkisinin olduğu saptanmıştır. Ayrıca bitmemiş işler ve yasa bağlı ruminasyon arasında istatistiksel olarak anlamlı ilişkiler olduğu bulunmuştur. Araştırmadan elde edilen bulgular, ilgili literatür bağlamında tartışılmış ve gelecek araştırmalar için katkı sağlayabilecek öneriler vurgulanmıştır.

**Anahtar kelimeler:** kayıp, yas, bitmemiş iş, ruminasyon



## ENGELLİ ÇOCUKLARIN HAKLARI THE RIGHTS OF CHILDREN WITH DISABILITIES

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### ÖZET

Engelli bireyler, tarihsel süreç içerisinde toplumun “dışlanan ve istenmeyen” kesimini oluşturmuştur. Toplumun genelinde, engelli olma hali talihsiz, işe yaramaz, farklı, ezilen ve hasta olarak adlandırılmıştır. Toplum tarafından geliştirilen bu gibi tutumlar, engelli bireylerin toplum içerisinde diğer bireylerle eşit koşullarda yer alamamasına neden olmuştur. Bu durumun bir sonucu olarak engelliler toplumun dezavantajlı gruplarından biri olarak ele alınmıştır. Engelli bireylerin herkesle aynı hak ve özgürlüklere sahip olması, bu hak ve özgürlüklerden tam ve eşit olarak yararlanılması için alınması gereken tüm önlemler devletlerin insan hakları yükümlülüklerindedir.

Dünya nüfusunun yaklaşık üçte birini çocuklar oluşturmaktadır. Yine çocuk nüfusunun yüzde onunun engelli olduğu bildirilmiştir. Tüm canlılar engelli adayolmakla birlikte engelliler toplumun doğal ve ayrılmaz bir üyesidir. Engelli çocukların da toplumun doğal bir üyesi olduğu kabul edilmeli ve onların gereksinimlerinin yetişkinlerden farklı olduğu bilinmelidir. Ancak engelli çocukların karşılaşılabileceği fiziksel, sosyal ve teknik yetersizlikler ve toplumun bu konudaki tutumları ya da bilgisizliği onların haklarının gerçekleşmesini engellemektedir. Engelli çocukların karşılaştığı görünür ve görünmeyen bu gibi engeller yok edilmeli ve onların hakları korunmalıdır.

Bu derlemenin amacı engelli çocukların haklarına yönelik uluslararası ve ulusal düzeyde düzenlenen yönetmelik, yasa ve sözleşmelerin literatür doğrultusunda tartışılmasıdır.

Engelli bireylerin yaşamın her yönüne eşit katılımı beklenmektedir. Toplumdaki en büyük azınlık olarak tanımlanan engelli çocukların haklarını belirlemek ve güvence altına almak gerekmektedir. Literatür tarandığında bu amaçla uluslararası hukukta engelli çocukların ekonomik ve sosyal hakları ile ilgili BM, Avrupa Konseyi ve AB'nin çalışmaları ve pek çok yasal düzenlemelerin bulunduğu görülmüştür. Dünyada en çok kabul göre Birleşmiş Milletler Çocuk Hakları Sözleşmesinde ilk kez çocuğun katılım hakkı tanımlanmış ve engelli çocuğun katılım haklarından bahsedilmiştir. Ulusal açıdan bakıldığında anayasada, 5378 sayılı Engelliler Hakkında Kanun'da, 5395 Sayılı Çocuk Koruma Kanunu'nda ve diğer kanunlarda engelli çocukların haklarına yer verildiği belirlenmiştir. Engelli çocukların yasal hakları ile ilgili bilgiler engelli çocuklara bakım veren tüm meslek grupları tarafından detaylı bilinmeli, aileye bu konuda bilgiler verilmeli ve danışmanlık yapılmalıdır.

**Anahtar kelimeler:** Çocuk hakları, Engelli çocuk, engelli çocukların hakları, engellilere yönelik hizmetler

### ABSTRACT

Disabled individuals have constituted the "excluded and unwanted" segment of society in the historical process. In society, disability has been described as unfortunate, useless, different,



oppressed, and sick. Such attitudes developed by society have caused disabled individuals to not be able to take place in society on equal terms with other individuals. As a result of this situation, the disabled are considered as one of the disadvantaged groups of the society.

Children make up about one-third of the world's population. It has also been reported that ten percent of the child population is disabled. Although all living things can be disabled, disabled people are natural and inseparable members of society. It should be accepted that children with disabilities are also natural members of society and it should be known that their needs are different from those of adults. However, the physical, social, and technical deficiencies that children with disabilities may encounter and the attitudes or ignorance of society on this issue prevent their rights from being realized. Such visible and invisible barriers faced by children with disabilities must be destroyed and their rights must be protected.

The purpose of this review is to discuss the international and national regulations, laws, and conventions on the rights of children with disabilities in light of the literature.

Equal participation of disabled people in all aspects of life is expected. It is necessary to identify and secure the rights of children with disabilities, who are defined as the largest minority in society. When the literature is scanned, it has been seen that there are many legal regulations and studies of the UN, the Council of Europe, and the EU on the economic and social rights of children with disabilities in international law for this purpose. In the United Nations Convention on the Rights of the Child, the child's right to participate was defined for the first time and the participation rights of the disabled child were mentioned. From a national perspective, it has been determined that the rights of children with disabilities are included in the constitution, Law No. 5378 on the Disabled, Child Protection Law No. 5395, and other laws. Information on the legal rights of disabled children should be known in detail by all professional groups that care for disabled children, information should be given to the family and counseling should be provided. In this template, the congress formatting requirements are described. The abstract should be at least 300 words, including spaces and summarizing the paper's main points. The font should be Times New Roman, font size 12 pt. Page Margins: Top, bottom, left and right margins must be set to 2,5 cm. Do not add paragraph spacing. All papers should be written in \*.doc or \*.docx format and they should be submitted to the email address of the conference website.

**Keywords:** Children's rights, Disabled child, rights of disabled children, services for the disabled.



## EVALUATING THE USE OF CHATGPT IN TEACHING AND LEARNING PROCESS: A DESCRIPTIVE SURVEY

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### ABSTRACT

The development and application of Artificial Intelligence (AI) technology in the various fields of education has helped to efficaciously resolve issues involved in teaching and learning process. ChatGPT is a natural language processing tool that is driven by AI technology which allows human-like conversions with the use of chatbot. According to Kasneci, et al. (2023), ChatGPT can serve as tool for learners' research studies supplying them with data and resources on specific subject area thereby allowing them to have deeper knowledge of the subject matter. ChatGPT language model has the potentials that can help to answer questions and assist with the task of composing mails and codes. This paper is a descriptive survey on the use of ChatGPT in teaching and learning process. The paper discussed some of the applications of ChatGPT in education. Some of the limitations of ChatGPT were also mentioned in the paper write-up. In order to collect vital data for the paper work, relevant questions were drafted and administered to respondents using online Google form questionnaire instrument. The responses collected were collated and subjected to reliability analysis. Conclusively, the paper inferred that ChatGPT is already having significant implications and far-reaching applications in education sector.

**Keywords:** Artificial Intelligence, ChatGPT, Teaching and Learning, Chatbot.



## KNİDOS TERİTORYUMU DENİZ ULAŞIM AĞI ÜZERİNE BİR DEĞERLENDİRME AN EVALUATION OF THE MARITIME TRANSPORTATION NETWORK IN THE TERRITORY OF KNIDOS

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### ÖZET

Antik Knidos bölgesi günümüz Datça ya da Reşadiye Yarımadası olarak adlandırılan bölgeyi kapsar. Bu bölge günümüz Balıkaşiran mevkiinden başlayarak Knidos'un bulunduğu Tekir Burnu Mevkii'ne kadar tüm bölgeyi ihtiva eder. Akdeniz ve Ege'nin kesişim noktasında olan Knidos, tüm antikite boyunca deniz ticaret rotaları üzerinde oldukça önemli bir konum olmuştur. Bu stratejik konumu sebebiyle kent kısa sürede zenginleşmiş ve döneminin önemli kentlerinden bir tanesi olmayı başarmıştır. Knidos yarımadası ince-uzun ve engebeli bir topoğrafyaya sahiptir. Bu zorlu topoğrafya Antik Dönem'de içinde yer aldığı Karia bölgesi ana karasıyla olan kara bağlantısını oldukça güçleştirir. Yine bu zorlu topoğrafya nedeniyle Knidos teritoryumu içindeki üretim alanları dağınık ve birbirine uzak mesafededir. Yarımadanın dağınık coğrafyası ve mekânsal yapısı göz önünde bulundurulduğunda, teritoryum içerisindeki ulaşım bağlantısı büyük oranda deniz yoluyla sağlanmıştır. Teritoryumun belli bölümlerinde bulunan limanlar sayesinde üretim ve dağıtım bölgeleri arasında bağlantı sağlanmış ve bu bağlantılar gözetleme kuleleri ve kalelerle güvence altına alınmıştır. Bu çalışmada son yıllarda Knidos Teritoryumu içerisinde yapılan sualtı arkeolojisi çalışmaları ve yüzey araştırmaları ışığında yarımadanın antik dönemdeki deniz ulaşım ağı bütünlüyci bir şekilde incelenecektir.

**Anahtar kelimeler:** Knidos, Sualtı Arkeolojisi, Denizcilik Arkeolojisi, Deniz Rotaları, Liman, Kale.

### ABSTRACT

The ancient region of Knidos encompasses the present-day Datça or Reşadiye Peninsula. This region extends from the Balıkaşiran area to the Tekir Cape, where Knidos is located. Knidos, situated at the intersection of the Mediterranean and Aegean Seas, held a highly significant position along maritime trade routes throughout antiquity. Due to its strategic location, the city rapidly became prosperous and succeeded in being one of the important cities of its time. The Knidos Peninsula has a slender, rugged topography. This challenging terrain made land connections with the mainland, specifically the Caria region it was a part of, quite difficult during ancient times. Furthermore, the production areas within the Knidos territory were scattered and distant due to this demanding topography. Considering the dispersed geography and spatial structure of the peninsula, transportation connections within the territory were largely established through maritime routes. The presence of ports in certain parts of the territory facilitated connections between production and distribution areas, which were further secured through watchtowers and fortresses. This study aims to comprehensively examine the maritime transportation network of the Knidos Peninsula in ancient times, taking into account recent underwater archaeology and surveys conducted within the Knidos territory.

**Keywords:** Knidos, Underwater Archaeology, Nautical Archaeology, Sea Routes, Harbor, Castle.





## KNİDOS KARA VE SUALTI ÇALIŞMALARI IŞIĞINDA “LATE ROMAN 1 AMPHORALARI”

### “LATE ROMAN 1 AMPHORAE” IN LIGHT OF KNIDOS’ LAND AND UNDERWATER STUDIES

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#### ÖZET

Knidos Türkiye'nin en güneybatısında konumlanan, Ege ve Akdeniz'in kesişim noktasında adeta ada görünümünde Antik bir kenttir. Knidos Antik dönemden günümüze dek her zaman konumu ile ön planda olmuştur. Zorlu ve engebeli coğrafi şartlarına rağmen kentin gelişimi, kırk-altmış bin arasındaki nüfusu ve özellikle de ticaretine engel olmamıştır. Kuruluşundan itibaren ününü sürekli ileriye taşıyan kent sanat, kültür, bilim ve ticarete önemli adımlar atmıştır. Kara ve denizi buluşturan iki önemli limanı sayesinde Antik dönem ticaretinin göz bebeği amphoralar dünyaya yayılmıştır. Knidos amphoraları, erken dönemlerden Geç Antik Çağ sonlarına dek yoğun kullanım ve yayılım göstermiştir. Knidos Geç Antik dönem amphoraları da erken dönemlerde olduğu gibi deniz ticaretiyle birçok bölge ve merkeze ulaşmıştır.

Ticari ulaşımda etkin rol oynayan amphoralardan Knidos'un kara-sualtı kazı ve araştırmaları sonucunda ele geçen Geç Roma 1 Amphoraları bu çalışma da ele alınacaktır. Geç Roma 1 amphoraları, Knidos'un kara ve sualtı çalışmaları esnasında en fazla bulunan formları arasındadır. Kentin farklı noktalarına inşa edilen yapı ve mekanlardan ve sualtı çalışmaları sonucunda ele geçen amphoraların farklı yerleşimlerde açığa çıkan amphoralarla benzerlikleri, farklılıkları ve tarihlendirilmelerine yer verilecektir. Kara kontektleri ve Sualtı amphora buluntuları aracılığı ile Knidos'un Geç Antik dönem ticaretine bakış sunulacaktır. Akdeniz coğrafyasında oldukça yaygın üretilen Geç Roma 1 amphoralarının dönem içerisindeki gelişimi, değişimi ve kentteki durumuna ilişkin veriler aktarılacaktır. Ayrıca sualtı ve kara çalışmalarının meyvesi Geç Roma 1 amphoraları ışığında kentin sosyal ve ekonomik yaşantısına da bu çalışma ile değinilecektir.

**Anahtar kelime:** Knidos, Sualtı, Kara, Geç Roma Dönemi, Amphora 1.

#### ABSTRACT

Summary Knidos is an ancient city located in the southwestern part of Turkey, at the intersection of the Aegean and Mediterranean Seas, resembling an island. Knidos has always been prominent due to its strategic location from ancient times to the present. Despite its challenging and rugged geographical conditions, the development of the city, with a population ranging from forty to sixty thousand, has not hindered its trade. Since its establishment, the city has taken significant steps in art, culture, science, and trade. Thanks to its two important ports that connect the land and the sea, the prized amphorae of the ancient world have spread throughout the world. Knidian amphorae have been extensively used and distributed from the early periods to the end of the Late Antique period. The Late Antique Knidian amphorae, like in earlier periods, reached many regions and centers through maritime trade.

This study will focus on the Late Roman 1 Amphorae, which were found as a result of Knidos' land and underwater excavations and research, playing an active role in commercial transportation. The Late Roman 1 amphorae are among the most frequently discovered forms during Knidos' land and underwater investigations. The similarities, differences, and dating of the amphorae found in different settlements, including the structures and spaces constructed in various parts of the city and the findings from underwater research, will be presented. Through the contexts of land and underwater amphora



discoveries, an insight into Knidos' Late Antique trade will be provided. The data regarding the development, changes, and status of Late Roman 1 amphorae, which were widely produced in the Mediterranean region, will be conveyed. Additionally, this study will touch upon the social and economic life of the city based on the fruits of land and underwater research, focusing on the Late Roman 1 amphorae.

**Keywords:** Knidos, Underwater, Land, Late Roman Period, 1 Amphorae.

## SOSYAL MEDYA KULLANAN YETİŞKİN BİREYLERİN BEDEN KÜTLE İNDEKSİ VE SAĞLIKLI YEME DAVRANIŞI YÖNÜNDEN DEĞERLENDİRİLMESİ

### EVALUATION OF ADULT INDIVIDUALS USING SOCIAL MEDIA IN TERMS OF BODY MASS INDEX AND HEALTHY EATING BEHAVIOR

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#### ÖZET

Hayatımızın her alanında kullandığımız sosyal medyanın kullanımını her geçen gün artmaktadır. Açık erişim ve kolay kullanımı ile yetişkinlerin vazgeçilmezi haline gelen sosyal medya, bireylerin beden kütle indeksi ve sağlıklı yeme davranışlarına etki etmektedir. Çalışmamızın amacı, Gaziantep ilinde yaşayan sosyal medya kullanan 18-65 yaş arası yetişkin bireylerin beden kütle indeksi ve sağlıklı yeme davranışı yönünden değerlendirilmesidir. Çalışma dahil edilebilme kriterlerine uygun olan 50 kişi ve yetişkin 25 erkek ve 25 kadın ile yürütülmüştür. Bireylerin demografik özellikleri, antropometrik ölçümleri, sağlık bilgileri, sosyal medya kullanımları ve bununla ilişkili beslenme davranışları, yeme tutum davranışları (YTT-40) hakkındaki sorulardan oluşan anket yüzyüze uygulanmıştır. En çok kullanılan sosyal medya % 32,5 oranı ile Instagram'dır. En az yeme bozukluğuna sahip meslek grubu % 2,4 ile emeklilerdir. Sosyal medyanın, bireylerin beden kütle indeksi ve yeme tutum davranışları üzerinde etkili olduğu görülmüştür. Çalışmamızda yeme tutum davranışı ile beden kütle indeksi arasında anlamlı fark bulunmuştur ( $p<0,05$ ). Vücut ağırlığı ile yeme tutum davranışı arasındaki anlamlı ilişki sadece erkeklerde görülmüştür ( $p<0,05$ ). Toplumda yaşamın ve sağlığın temel faktörü olan sağlıklı beslenme konusunda farkındalık yaratılarak, yeterli ve dengeli beslenme bilinci kirliliğinden arındırılmış bir şekilde oluşturulmalıdır. Yeterli, dengeli ve sağlıklı beslenme bilgisi bu konuda uzman sağlık profesyonelleri tarafından sağlanmalıdır.

**Anahtar kelimeler:** Sosyal Medya Bağımlılığı, Yeme Tutum Davranışı, Beden Kütle İndeksi

#### ABSTRACT

The use of social media, which we use in all areas of our lives, is increasing day by day. Social media, which has become indispensable for adults with its open access and easy use, affects the body mass index and healthy eating behaviors of individuals. The aim of our study is to evaluate adult individuals between the ages of 18-65, living in Gaziantep and using social media, in terms of body mass index and healthy eating behavior. The study was conducted with 50 adults and 25 men and 25 women who met the inclusion criteria. The questionnaire consisting of questions about demographic characteristics, anthropometric measurements, health information, social media usage and related nutritional behaviors of individuals, eating attitude behaviors (YTT-40) was applied face to face. The most used social media is Instagram with 32.5%. The occupational group with the least eating disorders is retirees with 2.4%. Social media has been found to be effective on individuals' body mass index and eating attitude behaviors. In our study, a significant difference was found between eating attitude behavior and body mass index ( $p<0.05$ ). A significant relationship between body weight and eating attitude behavior was observed only in the targets ( $p<0.05$ ). By raising awareness about healthy nutrition, which is the main



factor of life and health in society, awareness of adequate and balanced nutrition should be created in a way that is free from information pollution. Adequate, balanced and healthy nutrition information should be provided by health professionals who are experts in this field.

**Keywords:** Social media platforms, body image, social media addiction, eating behavior



## ÇOCUK KORUMA KANUNU KAPSAMINDA SAĞLIK TEDBİRİNİN UYGULANMASI IMPLEMENTING HEALTH PRECAUTION UNDER CHILD PROTECTION LAW

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### ÖZET

Bir toplumun çocuklara ne kadar önem verdiği ne kadar gelişmiş olduğunu gösteren öğelerden biridir. Her çocuk bakım ve gözetiminin iyi şartlarda yapıldığı, kötü muameleye maruz kalmadığı, kendini güvende hissettiği, korunduğu bir ailede ve ortamda büyüme hakkıyla doğar. Gelişmiş ve gelişmekte olan ülkelerin, çocuk hakları konusuna özellikle önem verdikleri görülür. Çocuk koruma sistemin temel amacı, aileyi destekleyerek, ailenin ve çocuğun gereksinimlerini karşılayarak çocuğun ev içinde korunmasını sağlamaktır. Geçmişte çocuk koruma sistemi, çocukların “korunmaya muhtaç” duruma gelmesinden sonraki süreçte sunulan bakım hizmeti modeline dayanmakta, koruyucu, önleyici hizmetlere yeterince önem verilmemekteydi. Günümüzde ise, çocukların aile yanında bakımı ve korunması çoğu ülkede temel politikayı oluşturmakta ve aile odaklı hizmetler geliştirilmektedir. Çocuklar için koruyucu ve destekleyici tedbirler, çocuğun öncelikle kendi aile ortamında korunmasını sağlamaya yönelik danışmanlık, eğitim, bakım, sağlık ve barınma konularında alınacak tedbirlerdir. 5395 Sayılı Çocuk Koruma Kanunu kapsamında; mahkemelerce alınan sağlık tedbiri, çocuğun fiziksel ve ruhsal sağlığının korunması ve tedavisi için gerekli geçici veya sürekli tıbbi bakım ve rehabilitasyonu ile madde bağımlısı olanların tedavilerinin yapılmasına yönelik tedbirdir. Olumsuz yaşantılara maruz kalan çocuklar, koruyucu-önleyici tedbirlere ve/veya uzun süreli izlem gerektiren tedavi ve müdahalelere ihtiyaç duyarlar. Çocukların tedavisini içeren sağlık tedbir kararları ile, çocuğun fiziksel ve/veya ruhsal sağlığının korunması ve tedavisi için gerekli geçici veya sürekli tıbbî bakım ve rehabilitasyon hizmeti sağlanır. Tedbir kararları, çocuğun anası, babası, vasisi, bakım ve gözetiminden sorumlu kimse, Aile ve Sosyal Hizmetler Bakanlığı ve Cumhuriyet Savcısının istemi üzerine çocuk hâkimince alınır. Aile ve Sosyal Hizmetler Bakanlığı, Sağlık Bakanlığı, Milli Eğitim Bakanlığı ve yerel yönetimler bu tedbir kararlarının yerine getirilmesinde sorumludur. Çocuk hakkında sağlık tedbiri kararı verildiğinde mahkeme, kararı Sağlık Bakanlığına bildirilmekte, Sağlık Bakanlığı bünyesindeki birim tarafından çocuklar tedavileri için hastaneye yönlendirilmektedir. Aileden en az üç ayda bir olmak üzere çocuğun tedavisinin yapıldığı hastaneye gitmesi beklenir. Çocuğun takipleri ya hastanenin tıbbi sosyal hizmet birimi tarafından ya da ilgili poliklinikteki sosyal hizmet uzmanı tarafından yapılır.

Çocuklara hizmet veren sağlık profesyonellerinin çocuk koruma kanununun kapsamında alınan sağlık tedbirinin işleyişi, uygulaması, takibi ve bu konuda kendilerine düzen rol ve sorumlulukları bilmeleri gerekmektedir. Sağlık profesyonelleri sağlık tedbiri alınması gereken çocukların ve ailelerin özelliklerini tanıyabilmelidir. Ayrıca sağlık tedbiri uygulanan çocukların izleminde fiziksel, bilişsel ve ruhsal olarak değerlendirilmesinin yapılması önemlidir.

**Anahtar kelimeler:** Çocuk, çocuk ve ergen ruh sağlığı, sağlık tedbiri, sosyal hizmet



## ABSTRACT

How much a society cares about children is one of the elements that shows how developed it is. Every child is born with the right to grow up in a family and environment where care and supervision are provided under good conditions, where they are not subjected to ill-treatment, where they feel safe and protected. It is seen that developed and developing countries pay particular attention to the issue of children's rights. The main purpose of the child protection system is to ensure the protection of the child at home by supporting the family, meeting the needs of the family and the child. In the past, the child protection system was based on the care service model offered in the period after children became "in need of protection", and not enough attention was paid to protective and preventive services. Today, the care and protection of children in the family setting the basic policy in most countries and family-oriented services are being developed. Preventive and supportive measures for children are measures to be taken in the areas of counseling, education, care, health and housing to ensure that the child is protected primarily in his/her own family environment. Within the scope of Child Protection Law No. 5395; a health measure taken by the courts is a measure aimed at providing temporary or permanent medical care and rehabilitation necessary for the protection and treatment of a child's physical and mental health, as well as treatment for those who are addicted to substances. Children who are exposed to negative experiences need preventive measures and/or treatment and interventions that require long-term follow-up. . With health precautionary measures involving the treatment of children, temporary or permanent medical care and rehabilitation services necessary for the protection and treatment of the child's physical and/ or mental health are provided. Precautionary decisions are taken by the child judge at the request of the child's mother, father, guardian, the person responsible for his care and supervision, the Ministry of Family and Social Services and the Public Prosecutor. The Ministry of Family and Social Services, the Ministry of Health, the Ministry of National Education and local governments are responsible for implementing these precautionary decisions. When a health injunction decision is made against a child, the court notifies the Ministry of Health of its decision, and children are referred to the hospital for treatment by a unit within the Ministry of Health. The family is expected to go to the hospital where the child is being treated at least once every three months. The follow-up of the child is carried out either by the medical social work unit of the hospital or by the social worker at the relevant outpatient clinic.

Health professionals serving children are due to know the functioning, implementation, and follow-up of the health precaution taken within the scope of the child protection law and their roles and responsibilities in this regard. Health professionals should be able to recognize the characteristics of children and families who need health precautions. In addition, it is important to evaluate children physically, cognitively, and psychologically in the follow-up of children who are given health measures.

**Keywords:** Child, child and adolescent mental health, health care, social work

## ALGILANAN PATERNALİST LİDERLİĞİN İŞ TATMİNİ ÜZERİNDEKİ ETKİSİ: SAĞLIK ÇALIŞANLARI ÜZERİNE BİR ÇALIŞMA

### THE EFFECT OF PERCEIVED PATERNALIST LEADERSHIP ON JOB SATISFACTION: A STUDY ON HEALTHCARE PROFESSIONALS

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#### ÖZET

Sağlık çalışanlarının verimliliklerini ve performanslarını artırmak için iş tatmin düzeylerini etkileyebilecek unsurların belirlenmesi büyük önem arz etmektedir. Bu çalışma ile birlikte sağlık çalışanlarının iş tatmin düzeyleri incelenmiş ve paternalist liderlik algısının etkisi değerlendirilmiştir. Ayrıca, paternalist liderlik ve iş tatmin düzeyleri arasındaki ilişkide kurum yapısının düzenleyici bir role sahip olup olmadığı analiz edilmiştir. Araştırma 26.09.2022-21.10.2022 tarihleri arasında Gaziantep ili merkezinde özel ve kamu sağlık kuruluşlarında görev yapan sağlık çalışanları üzerinde yapılmıştır. Katılımcıların paternalist liderlik algılarını ölçmek için Paternalist Liderlik Ölçeği; iş tatmin düzeylerini ölçmek için İş Tatmin Ölçeği kullanılmıştır. Araştırmada örneklem çekilmemiş ve kolayda örneklem yöntemi kullanılmıştır. Gönüllü olarak araştırmaya katılmak isteyen 466 sağlık çalışanı çalışmanın örneklemi oluşturmuştur. Verilerin analizinde korelasyon, regresyon ve tanımlayıcı istatistikler kullanılmıştır. Bunun dışında, düzenleyici etkiyi analiz edebilmek için Hayes Süreç Modeli'nden faydalanılmıştır. Sağlık çalışanların iş tatmin ( $3.39\pm 0.93$ ) ile paternalist liderlik algılarının ( $3.99\pm 1.25$ ) orta seviyede olduğu belirlenmiştir. Paternalist liderlik ve iş tatmin algısı arasında pozitif yönde orta seviyede anlamlı bir ilişki tespit edilmiştir ( $r=0.516$ ;  $p<.01$ ). Aynı şekilde, regresyon analizine baktığımızda algılanan paternalist liderlik algısının iş tatminini pozitif yönde etkileyebileceği görülmüştür ( $\beta=0.384$ ;  $p<.05$ ). Diğer yandan, kamu ve özel sağlık kuruluşlarında bu ilişkinin nasıl olduğu incelenmek istenmiştir. Özel kuruluşlar ile kıyaslandığında az da olsa kamudaki etkinin yüksek olduğu bulunmuş fakat modelde anlamlı bir sonuç elde edilememiştir. Elde edilen bulgulara baktığımızda, paternalist liderlik anlayışını yaygınlaştırmanın sağlık çalışanlarının iş tatmin düzeylerini artırmada pozitif etki yaratabileceği görülmektedir. Özellikle sağlık sektörünün iş yoğun sektörlerden birisi olması ve birçok çalışma disiplini bir arada bulundurması nedeniyle elde edilen bu sonucun literatüre katkı sağlayacağı düşünülmektedir. Bununla birlikte, kişisel bildirim ölçümleri ve kesitsel veriler, bulguların çıkarımlarını sınırlamaktadır. Bu bulguları doğrulamak ve iş tatmini ile paternalist liderlik arasındaki diğer düzenleyici faktörleri araştırmak için boyamsal araştırmalara ihtiyaç vardır.

**Anahtar kelimeler:** İş Tatmini, Paternalist Liderlik, Kurum Yapısı, Sağlık Çalışanları

#### ABSTRACT

In order to increase the productivity and performance of healthcare workers, it is of great importance to determine the factors that may affect their job satisfaction levels. With this study, the job satisfaction levels of health workers were examined and the effect of paternalistic leadership perception was evaluated. In addition, it has been analyzed whether the institutional structure has a regulatory role in the relationship between paternalistic leadership and job satisfaction levels. The research was carried out on health workers working in private and public health institutions in Gaziantep city center between 26.09.2022-21.10.2022. Paternalist Leadership Scale to measure the paternalistic leadership perceptions of the participants; Job Satisfaction Scale was used to measure job satisfaction levels. No sample was drawn in the study and convenience sampling method was used. The sample of the study consisted of 466 health workers who wanted to participate in the study voluntarily. Correlation, regression and



descriptive statistics were used in the analysis of the data. In addition, Hayes Process Model was used to analyze the regulatory effect. It was determined that the job satisfaction ( $3.39 \pm 0.93$ ) and paternalistic leadership perceptions of healthcare professionals ( $3.99 \pm 1.25$ ) were moderate. A moderately significant positive correlation was found between paternalistic leadership and perception of job satisfaction ( $r=0.516$ ;  $p<.01$ ). Likewise, when we look at the regression analysis, it is seen that the perceived paternalistic leadership perception can affect job satisfaction positively ( $\beta=0.384$ ;  $p<.05$ ). On the other hand, it was desired to examine how this relationship is in public and private health institutions. Compared to private institutions, the effect in the public sector was found to be high, albeit slightly, but no significant result could be obtained in the model. When we look at the findings, it is seen that spreading the paternalistic leadership understanding can have a positive effect on increasing the job satisfaction levels of health workers. It is thought that this result will contribute to the literature, especially since the health sector is one of the work-intensive sectors and contains many working disciplines together. However, self-report measures and cross-sectional data limit the implications of the results. Longitudinal studies are needed to confirm these results and explore other regulatory factors between job satisfaction and paternalistic leadership.

**Keywords:** Job Satisfaction, Paternalist Leadership, Institutional Structure, Healthcare Professionals





## OTOMOTİV TASARIMI PROGRAMLARININ KARŞILAŞTIRMALI İNCELENMESİ

&

## YÜKSEKÖĞRETİMDE ÜNİVERSİTE - SANAYİ İŞBİRLİĞİ MODELLERİ

### A COMPARATIVE STUDY OF AUTOMOTIVE / TRANSPORTATION DESIGN PROGRAMS

&

### UNIVERSITY - INDUSTRY COOPERATION MODELS IN HIGHER EDUCATION

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#### ÖZET

Bu çalışma, i) özellikle otomotiv endüstrisine özgü mevcut uzmanlaşmış endüstriyel tasarım eğitim programları ile ii) Türkiye ve Kuzey Kıbrıs Türk Cumhuriyeti başta olmak üzere bir otomotiv tasarımı eğitim modeli önerisini tartışmayı ve karşılaştırmayı amaçlamaktadır.

Otomotiv endüstrisi, dünyanın en büyük 11. endüstrisidir (1,51 trilyon dolar). Tasarım departmanı, satış, pazarlama ve mühendislik ile birlikte bu sektördeki en önemli departmanlardan biridir.

Otomotiv sektörü öncü bir sektör olarak bilirse de Türkiye'nin yüksek öğretim programları içinde uzmanlaşmış bir otomotiv tasarım bölümü bulunmamaktadır. Bu çalışmamız: Avrupa'nın en büyük ikinci otomobil üreticisi ülkesi olan Türkiye ve Kuzey Kıbrıs için sektörün ihtiyaçlarını karşılayan bir program önerisinin sunulmasını da içermektedir.

Endüstriyel tasarım eğitimi, eğitim sektöründe jenerik bir başlık haline geldi. Bunun yanında profesyonel dünyada, otomotiv tasarım stüdyoları; alt uzmanlık alanlarına dahi ayrılmış durumdadır. Yüksek lisans eğitiminde, otomotiv tasarım bölümlerinin; dış tasarım ve iç tasarım gibi alt gruplara ayrıldıkları görülmektedir.

Endüstriyel tasarımın bir alt dalı olan otomotiv tasarımı, Amerika ve Avrupa başta olmak üzere otomotiv tasarımı bölümlerinde yüksek öğretim olarak sunulmaktadır. Bu bölümlerde müfredat, sektörlerin ihtiyaçlarına göre şekillenmektedir. Yüksek öğretimde otomotiv tasarım programları 20. yüzyılın ortalarında başlamıştır. Bu yüksek öğretim programları açılmadan önce sektör ihtiyaçlarını; mimar ve mühendislik mezunları üzerinden gideriyordu ki bugün hala Türkiye'nin endüstriyel tasarım mezunları,



profesyonel anlamda otomotiv sektöründe çok kısıtlı sayıda yer almakta ve etkileri de bir o kadar sınırlı olmaktadır.

Çalışmanın içeriği, bu kurumların derinlemesine karşılaştırılması ve bu konuda sektörün ihtiyaç ve taleplerinin nasıl karşılandığının ortaya konulmasıdır. Bazı kurumlar Avrupa ve ABD'den seçilmiştir. Kadro, dersler, müfredat, üniversite-sanayi işbirliği ve yer seçimi başlıkları altında incelenecektir. Çalışma kısa, orta ve uzun vadeli öneriler ve tartışma için bir hipotez içermektedir. Kısa vadeli bir planın çiktısı olarak bu tezin bir Türk üniversitesine bölüm modeli olarak sunulması planlanmıştır.

Kısacası, bu çalışma yalnızca farklı ülkelerdeki tasarım eğitiminin genel ve özel yönleri hakkında geniş bir karşılaştırmalı bilgi kapsamı sağlamakla kalmayacak, aynı zamanda öğrenme çıktılarına ilişkin gereksinimler, metodoloji ve yapı hakkında sağlam verilerle otomotiv / ulaşım tasarımı için bir yüksek öğretim modeli de önerecektir.

**Anahtar kelimeler:** Tasarım Eğitimi, Otomotiv - Ulaşım Tasarım Programları, Ulaşım Tasarımı, Türkiye / Kuzey Kıbrıs Otomotiv Endüstrisi, Türkiye / Kuzey Kıbrıs Otomotiv Tasarım Eğitimi

#### ABSTRACT

This study aims to discuss and compare i) widespread and generic design, particularly industrial design education in relation to the specific needs of the automotive/transportation industry, and ii) an automotive/transportation design education model within and under to provide the conditions of design education and automotive industry, especially in Turkey and North Cyprus.

The automotive industry is the 11th largest in the world (\$1.51 trillion). The design department is one of the most important departments in this industry, along with sales, marketing and engineering.

The automotive industry is known as the locomotive industry, but there is a non-automotive design department on the academic side of Turkey. This suggestion: includes the presentation of a program proposal that meets the needs of the industry for Turkey and North Cyprus, the second largest automobile manufacturing country in Europe.

On the education side, industrial design education has become a generic title. Automotive design studios are divided into several subgroups. Even in higher graduate education, the automotive design departments get their subgroups like exterior design and interior design.

Transportation design, a subfield of industrial design, is offered as higher education in transportation design departments, particularly in America and Europe. In these departments, the curriculum is shaped to the needs of the sectors. Higher education transportation design programs began in the mid-20th century. Until these high education programs, the industry has adapted architects and engineers for designer workloads. Still today transportation design graduates are not the majority of design studios in Turkey.

The content of the study is an in-depth comparison of these institutions and how the requirements and demands of the industry are met in this regard and revealed. Some of the institutions are selected from Europe and USA. To be analysed under the headings of staff, courses, syllabus, University-Industry collaboration, and location selection. The study includes short, mid, and long-term proposals and a



hypothesis for discussion. As an output of a short-term plan, this thesis is planned to present to a Turkish university as a department model.

In short, the study will not only provide a wide comparative scope of information on generic and specialised aspects of design education in different countries but also propose a higher education model for automotive / transportation design with solid data on requirements, methodology, and structure regarding learning outcomes, and especially industry cooperation.

**Keywords:** Design Education, Automotive - Transportation Design Programs, Transportation Design, Automotive Industry in Turkey / North Cyprus, Automotive Design Education in Turkey / North Cyprus



## EXPERIMENTAL AND MODELING STUDY OF A PHOTOVOLTAIC PANEL OF 160 WATTS INCLUDING THE EFFECT OF THE SERIES AND PARALLEL RESISTANCES

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### ABSTRACT

This paper presents an experimental study and modeling method for a PV panel of 160 watts. The main objective is to find the experimental and modeling parameters of the I(V) and P(V) equations by adjusting the curve at three points: open circuit, maximum power, and short circuit. The three points are listed, which are provided by a commercial PV panel technical data sheet, the method finds the best I(V) and P(V) equation for the single-diode photovoltaic (PV) model including the effect of the series and parallel resistances, and ensures that the maximum power of the model matches the maximum power of reality panel. The main content extracting the experimental data from the real PV panel in real conditions and re-modelling these data in MATLAB software to find the best I(V) and P(V) characteristics, appending effect of the series, and parallel resistances..

**Keywords:** photovoltaic panel, I(V) & P(V) characteristics curves, modeling .

## METİL (E)-4-(2,2-DİBROMO-1-(FENİLDİAZENİL)VİNİL)BENZOAT TÜREVLERİNİN SENTEZİ

### SYNTHESIS OF METHYL (E)-4-(2,2-DIBROMO-1-(PHENYLDIAZENYL)VINYLBENZOATE DERIVATIVES

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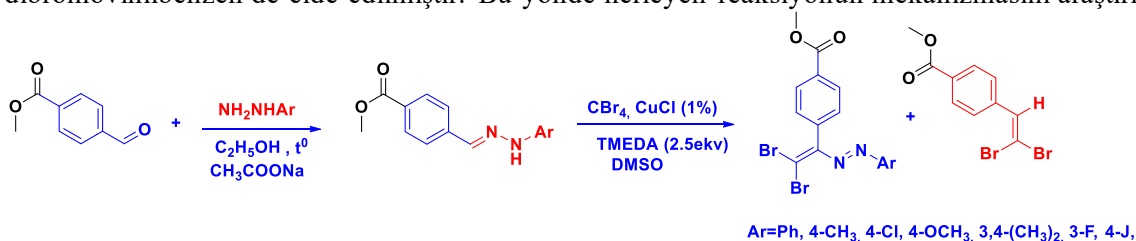
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### ÖZET

Önceki çalışmalarda sentezlenen diklorodiazadienlerde diaza grubu, halojen atomları ve dien sisteminin varlığı nedeniyle zarif organik sentezlerde uygun sentonlar olarak kullanıldılar [1]. Aynı zamanda bileşikte halojen atomlarının, aldehitte metil gruplarının ve hidrazin fragmanının varlığı yüksek antimikrobiyal aktiviteye yol açar [2]. Tüm bunlar dikkate alınarak metil (E)-4-(2,2-dibromo-1-(fenildiazenil)vini)benzoat türevleri sentezlenmiş ve modern araştırma yöntemleri kullanılarak yapıları incelenmiştir. Reaksiyon sırasında ana ürün olan dibromodiazadien ile birlikte yan ürün olarak dibromovinilbenzen de elde edilmiştir. Bu yönde ilerleyen reaksiyonun mekanizmasını araştırıyoruz.

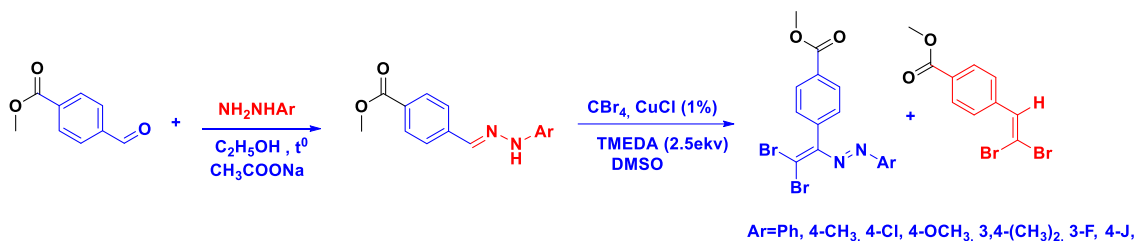


Sentezlenen bileşiklerin yapısı NMR ile doğrulandı.

**Anahtar kelimeler:** dibromodiazadienler, antimikrobiyal aktivite

## ABSTRACT

Due to the presence of diaza group, halogen atoms, and diene system in the dichlorodiazadienes synthesized in previous studies, they have opened the way for their use as convenient synthons in fine organic synthesis [1]. At the same time, the presence of halogen atoms of the compound, methyl groups in the aldehyde and hydrazine fragment leads to the display of their full antimicrobial activity[ 2]. Considering all these, methyl (E)-4-(2,2-dibromo-1-(phenyldiazenyl)vinyl)benzoate derivatives were synthesized and their structure was studied using modern research methods. During the reaction, along with the main product dibromodiazadiene, dibromovinylbenzene was also obtained as a addition product. We are investigating the mechanism of the reaction going in this direction.



The structure of the synthesized compounds was confirmed by NMR.

**Keywords:** dibromodiazadienes, antimicrobial activities

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**OKUL ÖNCESİ ÇOCUKLARA UYGULANAN TEMEL SPORTİF ÇALIŞMALARDA  
KUVVET, SÜRAT VE ESNEKLİK ARASINDAKİ İLİŞKİNİN DEĞERLENDİRİLMESİ**  
**EVALUATION OF THE RELATIONSHIP BETWEEN STRENGTH, SPEED AND  
FLEXIBILITY IN BASIC SPORTING PRACTICES APPLIED TO PRESCHOOL  
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**ÖZET**

Gelişim, dönemler halinde gerçekleşen, her dönemin bir önceki döneme göre farklılıklar gösterdiği ve yaşam boyu devam eden bir süreçtir. İnsanların hiyerarşik bir gelişim sırası vardır ve her çocuk bu sırayı izler. Bir sonraki basamağa geçmek için içinde bulunduğu zamanın özelliklerini tamamlamış olması gerekir. Çocukların hepsi gelişimsel sırayı takip ederler ancak hızları zamanları ve dereceleri birbirlerinden farklıdır. Özellikle okul öncesinde çalışılması gereken kaba ve ince motor beceri formları çocukların gelişimine katkı sağlayan ve bir ömür boyu devam ettirilen özellikleri kapsar. Bu yüzden çocuklarda gelişimi sağlamak için spor dallarından destek alınmalıdır. Bu bağlamda yapılan bu çalışmanın amacı; Okul öncesi çocuklara uygulanan temel sportif çalışmalarda kuvvet, sürat ve esneklik arasındaki ilişkinin değerlendirilmesidir. Araştırmaya Antalya'nın Alanya ilçesinde yer alan özel bir okulun okul öncesi eğitimine devam eden, altı yaşında, en az sekiz hafta temel tenis eğitimi almış, herhangi bir sağlık problemi bulunmayan ve çalışmaya katılımı için ailesinden ve kendisinden izin alınan 14 çocuk gönüllü olarak katıldı. Çalışmaya katılan çocukların boy uzunluğu ve vücut ağırlığı ölçümleri alınarak, beden kitle indeksleri vücut ağırlığı/boy uzunluğu(m)<sup>2</sup> formülüyle hesaplandı. Ayrıca katılımcılara flmingo denge testi, durarak uzun atlama testi, otur- eriş esneklik testi, top fırlatma, 20m sürat ve 5m patlayıcı sürat testleri uygulandı. Verilerin analizi için IBM SPSS 25.0 paket programı kullanıldı ve elde edilen verilerin değerlendirmesi için parametrik olmayan verilerde spearman rho korelasyon analizi yapıldı. Veriler arasındaki ilişkinin değerlendirilmesinde ölçüm farklılıkları p<0,05 anlamlılık düzeyinde değerlendirildi. Araştırma grubunun vücut ağırlığı ortalamaları 21,28±3,3kg, boy uzunluğu ortalamaları 1,15±0,05m, BKİ ortalamaları 15,83±1,9 kg/m<sup>2</sup> olduğu görüldü. Kondisyonel özelliklerin ölçümünde ise; flmingo denge testi ortalamaları 13,92±6,7 sn, DUA ortalamaları 86,07±9,3m, otur eriş ortalamaları 24,42±7,3 cm, top fırlatma ortalama değerleri 6,83±1,6m, 5m sürat testi 1,62±0,3 sn ve 20m sürat testi 5,02±0,6 sn olarak ölçüldü. Ayrıca yapılan ilişki analizine göre de denge ile esneklik ve 20 m sürat, esneklik ile 20 m sürat, kol kuvveti ile beş metre sürat ve kısa ve uzun mesafe sürat arasında anlamlı ilişki bulundu(p<0.05). Sonuç olarak okul öncesinde yapılan temel tenis çalışmalarının bazı kondisyonel özellikler üzerine etkisinin birbirleri arasında ilişkili olduğu görüldü. Bunun gibi farklı spor dallarında da okul öncesi temel çalışmalar yapılarak etkilerinin değerlendirilmesi alanda çalışan antrenör ve öğretmenler için yönlendirici olacaktır.



**Anahtar kelimeler:** okul öncesi, çocuk, tenis, kondisyonel özellik

## ABSTRACT

Development is a life-long process that takes place in periods, each period differs from the previous period. People have a hierarchical developmental order and every child follows this order. In order to move on to the next step, he must have completed the characteristics of the time he is in. All children follow the developmental sequence, but their pace, time and degree differ from each other. Gross and fine motor skill forms, which should be studied especially in preschool, include features that contribute to the development of children and continue for a lifetime. Therefore, support should be taken from sports branches to ensure development in children. In this context, the aim of this study is; It is the evaluation of the relationship between strength, speed and flexibility in basic sports studies applied to pre-school children. 14 children voluntarily participated in the study, who were attending pre-school education in a private school in Alanya, Antalya, were six years old, had at least eight weeks of basic tennis training, had no health problems, and were given permission from their families and themselves to take part in the study. Height and body weight measurements of the children participating in the study were taken, and body mass indexes were calculated with the formula  $\text{body weight/height (m)}^2$ . In addition, flamingo balance test, standing long jump test, sit and reach flexibility test, ball throwing, 20m sprint and 5m explosive sprint tests were applied to the participants. IBM SPSS 25.0 package program was used for the analysis of the data and spearman rho correlation analysis was performed on non-parametric data for the evaluation of the obtained data. In the evaluation of the relationship between the data, the measurement differences were evaluated at the  $p < 0.05$  significance level. The mean body weight of the study group was  $21.28 \pm 3.3$  kg, the mean height was  $1.15 \pm 0.05$  m, and the mean BMI was  $15.83 \pm 1.9$  kg/m<sup>2</sup>. In the measurement of conditional characteristics; flamingo balance test mean  $13.92 \pm 6.7$  sec, DUA mean  $86.07 \pm 9.3$  m, sit and reach mean  $24.42 \pm 7.3$  cm, ball throw mean  $6.83 \pm 1.6$  m, 5m sprint test  $1.62 \pm 0.3$  seconds and 20m sprint test were measured as  $5.02 \pm 0.6$  seconds. In addition, according to the relationship analysis, a significant relationship was found between balance and flexibility and 20 m speed, flexibility and 20 m speed, arm strength and five meter speed, and short and long distance speed ( $p < 0.05$ ). As a result, it was seen that the effects of basic tennis studies done in preschool on some conditional characteristics were related to each other. Evaluating the effects of pre-school basic studies in different sports branches will be a guide for trainers and teachers working in the field.

**Keywords:** preschool, child, tennis, conditional feature





## YAŞLI BİREYLERDE BEDEN KOMPOZİSYONU, BESLENME DÜZEYİ VE YAŞAM KALİTESİ ARASINDAKİ İLİŞKİNİN DEĞERLENDİRİLMESİ

### EVALUATION OF THE RELATIONSHIP BETWEEN BODY COMPOSITION, NUTRITIONAL LEVEL AND QUALITY OF LIFE IN ELDERLY INDIVIDUALS

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#### ÖZET

Bilindiği gibi yaşlanma uzun yıllar devam eden ve fiziksel, sosyal ve psikolojik olarak pek çok faktörden etkilenen bir süreçtir. Bu süreç sonrasında yaşlıların beden kompozisyonunda değişiklikler olur. Bunun yanında beslenme alışkanlıkları değişebilir ve yaşam kaliteleri etkilenebilir. Yapılan bu çalışmada yaşlı bireylerde beden kompozisyonu, beslenme düzeyi ve yaşam kalitesi arasındaki ilişkinin değerlendirilmesi amaçlanmıştır. Çalışmaya Antalya ili Alanya ilçesinde bulunan Alanya Alaaddin Keykubat Üniversitesi 60+ Tazelenme Üniversitesi programına devam eden 53 yaşlı birey arasından katılım onayı vermiş 36 kadın birey örneklem grubunu oluşturmuştur. Çalışmaya katılan yaşlı bireylerin boy uzunluğu ve vücut ağırlığı ölçümleri alınmış, beden kitle indeksleri vücut ağırlığı/boy uzunluğu(m)<sup>2</sup> formülüyle hesaplanmıştır. Ayrıca bel ve kalça çevreleri mesura ile ölçülmüş ve sonrasında bel/kalça oranı hesaplanmıştır. Bunun yanında kişisel özellikleri anket formu ile sorgulanmıştır. Yaşam kalitelerinin belirlenmesi için Dünya Sağlık Örgütü Yaşam Kalitesi Ölçeği Yaşlı Modülü (WHOQOL-OLD) ve beslenme durumlarının değerlendirilmesi için ise Mini Nutrisyonel Değerlendirme (MNA) ölçeği kullanılmıştır. Elde edilen verilerin istatistiksel analizleri IBM SPSS Statistics 25 paket programı ile yapılmıştır. Parametrik olmayan verilerin arasındaki ilişki Spearman's rho testi ile değerlendirilmiş ve anlamlılık düzeyi p<0.05 düzeyinde değerlendirilmiştir. İstatistikte, araştırmaya katılan yaş ortalamaları 68,08 ± 4,5 yıl olan kadın bireylerin vücut kompozisyonu, beslenme durumları ve yaşam kaliteleri arasındaki ilişki incelenmiştir. Kişilerin boy uzunlukları ve beden kitle indeksi arasında, vücut ağırlığı ve beden kitle indeksi arasında, vücut ağırlığı ve bel çevre uzunluğu ile, beden kitle indeksi ve bel çevre uzunluğu arasında, vücut ağırlığı ve kalça çevre uzunluğu ile beden kitle indeksi ile kalça çevre uzunluğu arasında, vücut ağırlığı ile bel kalça oranı arasında, bel çevresi ile kalça çevresi arasında ve bel çevresi ile bel kalça çevresi oranı arasında beklenen bir ilişki bulunmuştur (p<0,05). Bunlara ek olarak bireylerin yaşları ile beslenme durumları arasında ve beslenme düzeyleri ile de yaşam kaliteleri arasında anlamlı bir ilişki bulunmuştur (p<0,05). Sonuç olarak yaşla birlikte varolan değişim sürecinde beden kompozisyonunu destekleyen egzersizler yapılması ve buna bağlı olarak beslenmeye dikkat edilmesi yaşam kalitesini arttıracaktır.

**Anahtar kelimeler:** Yaşlı, Vücut kompozisyonu, Yaşam kalitesi, Beslenme Düzeyi



## ABSTRACT

As it is known, aging is a process that continues for many years and is affected by many physical, social and psychological factors. After this process, changes occur in the body composition of the elderly. In addition, eating habits may change and their quality of life may be affected. In this study, it was aimed to evaluate the relationship between body composition, nutritional level and quality of life in elderly individuals. The sample group consisted of 36 female individuals who gave consent to participate in the study among 53 elderly individuals who attended the 60+ Refreshment University program of Alanya Alaaddin Keykubat University located in the Alanya district of Antalya province. Height and body weight measurements of elderly individuals participating in the study were taken, and body mass indexes were calculated with the formula  $\text{body weight/height (m)}^2$ . In addition, waist and hip circumferences were measured with a tape measure and then the waist/hip ratio was calculated. In addition, waist and hip circumferences were measured with a tape measure and then the waist/hip ratio was calculated. In addition, personal characteristics were questioned with a questionnaire. The World Health Organization Quality of Life Scale Elderly Module (WHOQOL-OLD) was used to determine their quality of life and the Mini Nutritional Assessment (MNA) scale was used to evaluate nutritional status. Statistical analyzes of the obtained data were made with the IBM SPSS Statistics 25 package program. The relationship between non-parametric data was evaluated with Spearman's rho test and the level of significance was evaluated at the  $p < 0.05$  level. In statistics, the relationship between body composition, nutritional status and quality of life of female individuals with a mean age of  $68.08 \pm 4.5$  years participating in the study was examined. Between height and body mass index, between body weight and body mass index, between body weight and waist circumference, between body mass index and waist circumference, between body weight and hip circumference and body mass index and hip circumference, An expected relationship was found between body weight and waist-hip ratio, between waist circumference and hip circumference, and between waist circumference and waist-hip circumference ratio ( $p < 0.05$ ). In addition to these, a significant relationship was found between the age of the individuals and their nutritional status, and between their nutrition levels and their quality of life ( $p < 0.05$ ). As a result, in the process of change with age, doing exercises that support body composition and paying attention to nutrition will increase the quality of life.

**Keywords:** Elderly, Quality of life, Body composition, Nutritional Status



## THE APPLICATIONS OF MACHINE LEARNING AND NEURAL NETWORKS IN DIGITAL MARKETING

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### ABSTRACT

The use of social media and the internet has changed both consumer behavior and how business organizations conduct their operations. By cost reduction, improved brand recognition, and increased revenue, social and digital marketing advises significant changes to business operations. Understanding how consumers make decisions about alternative goods and services is a difficult task.

In recent years, machine learning and artificial intelligence (AI) have been used more and more in digital marketing. A form of machine learning algorithm known as a neural network is based on the structure and operation of the human brain. Neural networks can be applied to digital marketing to enhance targeting, messaging, and overall campaign performance. Predictive analytics is one of the main uses of neural networks in digital marketing. Neural networks can be used, for instance, to forecast which customers are most likely to make a purchase or to spot trends in customer behavior that may result in higher sales. Moreover, customers can be divided into groups based on demographics, hobbies, and behavior using neural networks. A useful technique for corporate strategy orientation for various customer groups is customer segmentation.

In this study, customer segmentation is done using clustering and classification methodologies to enhance business growth. Similar qualities are a need for grouping. Depending on the effectiveness of the outcome, clustering can be accomplished using a variety of algorithms. The customers are divided into groups based on their buying habits and volume.

Due to its broad application, the RFM model, an analysis based on the three factors Recency (R), Frequency (F), and Monetary (M), is used on the Kaggle customer segmentation dataset. Based on the clustered data, the clustered consumers are categorized using DNN (Deep Neural Network). In order to keep the most valued customers and foster corporate growth, this segmentation result enhances the business analysis with specific business ethics. To segment customers and boost corporate growth, clustering, and classification techniques are applied. The segmentation results are quite helpful to digital marketing in terms of enhancing business growth with cutting-edge ethics with regard to each consumer category.

**Keywords:** Machine learning, Neural Network, Deep Neural Network, RFM model, Digital marketing, Customer segmentation.



## INVESTIGATING CONSUMER WILLINGNESS TO USE DIGITAL CURRENCY FOR PURCHASING BY USING THE GRAND THEORY METHOD

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### ABSTRACT

Profit, customer relations, and intense competition are the three current challenges confronting economic and industrial societies. Most businesses have realized that relying solely on traditional competitive levers such as increasing quality, lowering costs, and differentiating in the provision of products and services is insufficient, and concepts such as speed and flexibility have emerged in the competition and have a tendency to provide products and services. The intensity of competition in an industry is heavily influenced by the number and variety of companies involved in the relevant industry.

Companies' competitive success is heavily reliant on their knowledge of their competitors, their products and services, and how they respond to strategic innovations. The ability to analyze competitors' potential and current positions is the tipping point in competitive strategy. All competitors' activities should be thoroughly examined, taking into account factors such as strategic intentions, motivators, goals, and internal situations.

Many changes have occurred in the field of marketing as a result of increased competition and the complexity of expectations. On the other hand, technology is no longer considered merely a facilitator of a company's processes, but rather the primary component of the company's strategy. Rapid advances in technology and science, as well as in standards and values in general, have led many successful organizations and businesses to refocus their goals, orientation, and interests on the use of creativity, innovation, and entrepreneurship.

According to the mentioned contents and the examination of many variables regarding company competitiveness and the design of the organizational competitive intelligence model based on entrepreneurial awareness, it was concluded that by using market sensitivity, companies monitor their activity environment with a comprehensive attitude.

Manufacturers who are aware of communicating with consumers in a digital environment today learn what the consumer's wishes and priorities are to meet their needs.

To establish permanent relationships to learn about his future desires, the impact of competitive intelligence on gaining a competitive advantage, and also that there is a positive and meaningful relationship between competitive intelligence and competitive advantage, the impact of using information technology on organizational performance or competitive advantage, and information technology has the potential to increase the organization's competitive advantage, and In addition to increasing efficiency and effectiveness, increasing the ability to reduce costs and improve service provides a competitive advantage.

**Keywords:** Grand Theory, Digital currency, Consumer behavior, Purchase behavior, Consumer willingness, Trust and security.



## ÇOCUK RUH SAĞLIĞI VE ETKİLEYEN FAKTÖRLER: LİTERATÜR İNCELEMESİ CHILD MENTAL HEALTH AND AFFECTING FACTORS: A LITERATURE REVIEW

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### ÖZET

Dünya sağlık örgütü sağlığı “sadece sakat veya hastalık olarak değil, bireyin fiziksel, ruhsal ve sosyal olarak iyi olma hali olarak tanımlamıştır. Ruh sağlığını da insanların hayatın stresleriyle başa çıkma, yeteneklerini fark etmelerini, iyi öğrenmelerini, iyi çalışmalarını ve toplumlarına katkıda bulunmalarını sağlayan zihinsel iyilik halidir. Karar verme, ilişkiler kurma ve içinde yaşadığımız dünyayı şekillendirme konusundaki bireysel ve toplu yeteneklerimizin temelini oluşturan sağlık ve esenliğin ayrılmaz bir bileşenidir.” olarak tanımlamaktadır. Erişkinler için geçerli olan ruh sağlığı tanımı, genellikle çocuklar için de doğrudur. Ancak çocuğun sürekli gelişen ve değişen bir varlık olduğunu göz önünde tutarak biraz değişik ölçütler kullanmak zorunluluğu vardır

Çocuklar güç ve savunmasızdırlar. Çocukların bakışması ve korunması gerekir. Sürekli deneme ve öğrenme içindedirler. Hızlı bir zihin ve dil gelişmeleri vardır. Duygu ve düşüncelerini anlatım gücü zayıftır. Çevresindeki olayları gerçeğe uygun olarak tartamazlar. Dürtü ve isteklerini dizginlemeyi ve ertelemeyi bilmezler. Duyguları çabuk iniş çıkış gösterir. Çocuklar korku ve kaygılarını abartma eğilimindedirler. Bu makalede çocuk ruh sağlığını etkileyen faktörler tartışılacaktır.

Literatür incelendiğinde çocuk ruh sağlığı etkileyen faktörler doğum öncesi ve doğum sonrası olmak üzere iki grupta incelenebilir. Doğum öncesi faktörler genetik, bu dönemde annenin beslenmesi, kullandığı ilaçlar, madde bağımlılığı, maruz kaldığı fetüse zarar veren etmenlerdir. Doğum sonu faktörlere bakıldığında ailenin en önemli etken olduğu görülmektedir. Ebeveynlerin çocuklarının fiziksel ve ruhsal sağlığını sürdürmede önemli rol ve sorumlulukları vardır. Aile; gerek çekirdek aile, gerekse geniş aile yapısında olsun, sosyal yapısı ve biçimiyle çocukların üzerinde etkilidir. Ailenin çocuk yetiştirme tutumu, yapısı, sosyo-ekonomik durumu, eğitim durumu, kişilerarası ilişkileri aile ile ilgili olan özelliklerdir. Aile, çocuğun ilk sosyal deneyimlerini kazandığı yerdir. Bunun dışında çocuğun cinsiyeti, eğitimi, içindeki yaşadığı toplumun kültürü, çocuğun yaşadığı kazalar, afetler, hastalıklar, istismar ve ihmal durumları ruh sağlığını etkilemektedir.

Çocukların yetişkin dönemde ruhsal açıdan sağlıklı olabilmeleri için çocuklara hizmet veren meslek gruplarının bu konuda bilgili ve farkında olması gerekmektedir. Özellikle sağlık personeli bu konuda toplumda eğitimler düzenlemeli, aileye danışmalık yapmalı ve gerekli kurumlara yönlendirmelidir.

**Anahtar kelimeler:** Çocuk, Çocuk sağlığı, risk faktörleri, ruh sağlığı

### ABSTRACT

The World Health Organization has defined health as “a state of physical, mental and social well-being, not merely a disability or disease. Mental health is a state of mental well-being that enables people to cope with life's stresses, recognize their talents, learn well, work well, and contribute to their



communities. It is an integral component of health and well-being, which underpins our individual and collective abilities to make decisions, form relationships, and shape the world we live in.” defines as. The definition of mental health that applies to adults is often also true of children. However, considering that the child is a constantly developing and changing being, it is necessary to use slightly different criteria.

Children are weak and vulnerable. Children need to be cared for and protected. They are constantly trying and learning. There is rapid mental and language development. His power to express his feelings and thoughts is weak. They cannot weigh the events around them according to reality. They do not know how to restrain and delay their impulses and desires. Emotions fluctuate quickly. Children tend to exaggerate their fears and anxieties. In this article, the factors affecting children's mental health will be discussed.

When the literature is examined, the factors affecting child mental health can be examined in two groups prenatal and postnatal. Prenatal factors include genetics, the mother's diet during this period, the drugs she uses, substance abuse, and the factors that harm the fetus to which she is exposed. Considering the postpartum factors, it is seen that the family is the most important factor. Parents have important roles and responsibilities in maintaining the physical and mental health of their children. Family; Whether in a nuclear family or extended family structure, it is effective on children with its social structure and form. The family's child-rearing attitude, structure, socio-economic status, educational status, and interpersonal relations are the features related to the family. The family is where the child gains his first social experiences. Apart from this, the child's gender, education, culture of the society in which he lives, accidents, disasters, diseases, abuse, and neglect of the child affect mental health.

In order for children to be mentally healthy in adulthood, occupational groups serving children should be knowledgeable and aware of this issue. In particular, health personnel should organize pieces of training in the society, consult the family and direct them to the necessary institutions.

**Keywords:** Child, Child health, risk factors, mental health



## LİMRA MERMERLERİNİN KARSTİK ÖZELLİKLERİNİN BLOK ÜRETİMİNE VE YERALTI SUYU AKİFERLERİNE POTANSİYEL ETKİSİ (DEMRE/ANTALYA/TÜRKİYE)

### POTENTIAL EFFECT OF KARSTIC FEATURES OF LIMRA MARBLES ON BLOCK PRODUCTION AND GROUND WATER AQUIFERS (DEMRE/ANTALYA/TÜRKİYE)

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#### ÖZET

Karstlaşmanın yoğun olduğu mermer sahalarında jeolojik faktörlerin işletme öncesinde çok iyi araştırılmasıyla ticari boyuttaki mermer üretimi az kayıpla gerçekleştirilebilmektedir. Ocak üretim yeri ve yönünün doğru belirlenmesi, sahada mevcut süreksizlik sistemlerine göre planlanması büyük önem taşımaktadır. Planlanan mermer sahasından ticari boyutlarda blok alınması her zaman en öncelikli durumdur. Özellikle karstik bölgelerdeki karbonatlı kayaçların süreksizlik özellikleri ile beraber eklem takımları gibi yapısal unsurların iyi araştırılması gerekmektedir. Elde edilen saha verilerine göre ocak işletmeciliğine karar verilmesi gerekmektedir. Diğer taraftan mermeri oluşturan karbonatlı kayaçlar genel olarak dünya genelinde önemli su akiferleridir. Bazen madencilik gibi tehlikeli antropojenik faaliyetler durumunda yeraltı suyu akiferinin kirlenmekte ve insan sağlığı için yüksek risklerle sonuçlanmaktadır. Bu nedenle, karstik arazilerdeki mermer sahalarının yeraltı su kaynaklarına olası kirlilik etkilerini değerlendirmek ve sürdürülebilir su yönetimini planlamak için kapsamlı ve ayrıntılı araştırmalar gereklidir. Bu çalışmada, Batı Toroslarda bulunan Demre bölgesinde açılmış ve açılması planlanan mermer ocaklarının karstik yeraltı su akiferlerine olası etkilerine dikkat çekilmek istenmiştir.

**Anahtar kelimeler:** Karst, Limra mermeri, Mermer üretimi

#### ABSTRACT

In marble areas where karstification is severe, commercial marble production can be carried out with little loss if the geological factors are very well studied before operation. It is of great importance to determine the proper location and direction of quarry production and plan it according to the discontinuity systems present in the field. The removal of commercial blocks from the planned marble field is always the top priority. In particular, the discontinuity features of carbonate rocks in karst areas and structural elements such as joint sets should be well studied. Based on the obtained field data, a decision on quarry management must be made. On the other hand, the carbonate rocks that make up marble are generally important aquifers around the world. Hazardous anthropogenic activities such as mining sometimes result in contamination of aquifers, posing a high risk to human health. Therefore, comprehensive and detailed studies are needed to evaluate the potential pollution effects of marble fields in karst areas on groundwater resources and to plan sustainable water management. The objective of this study is to draw attention to the potential impacts of marble quarries opened and planned in the Demre region of the Western Taurus Mountains on the underground karst aquifers.

**Keywords:** Karst, Limra marble, Marble production

## GLUKONİK ASİT (GA) VE 5-HİDROKSİMETİL FURFURAL (HMF)'İN EŞ ZAMANLI OLARAK ÜRETİLMESİ

### CO-PRODUCTION OF GLUCONIC ACID (GA) AND 5-HYDROXYMETHYL FURFURAL (HMF)

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#### ÖZET

Kimya endüstrisi için yeşil ve sürdürülebilir bir hammadde olarak kullanılan biyokütle, çeşitli çok yönlü platform kimyasallarına dönüştürülebilir bol miktarda pentoz ve heksoz kaynağıdır. Bu platform kimyasallarından biri Glukonik asit (GA)'tir. GA ve türevleri, toksik ve aşındırıcı olmayan karakterlerinden dolayı süt, içecek ve tekstil endüstrilerinin yanı sıra metal temizleme, bulaşık yıkama, çamaşır deterjanları, sağlık ürünleri ve kozmetiklerde geniş uygulama alanı bulmuştur. Diğer platform kimyasalı ise 5-Hidroksimetil furfural (HMF)'dir. HMF, polimerler, farmasötikler, kimyasallar, sıvı yakıtlar, eterler, amino alkoller ve diğer organik türevlerin üretimi için ara madde olarak kullanılan çok yönlü ve işlevli bir bileşiktir. Bu çalışmada, halihazırda farklı tesis, metot ve hammaddeler kullanılarak üretilen GA ve HMF'nin tek bir proste ucuz bir biyokütle kaynağı olan sakkarozdan eş zamanlı olarak üretilmesi amaçlanmıştır. Bu kapsamda, ilk olarak ucuz hammadde kaynağı olan sakkaroz oda sıcaklığında 200 g/L olacak şekilde invertaz enzimi yardımıyla monomerlerine (glukoz-fruktoz) hidroliz edilmiştir. Daha sonra, rekombinant *E. coli* Waksman pqq<sup>+</sup> suşları yardımıyla hidrolizattaki glukozdan fermantasyon tekniğiyle GA üretilmiştir. Fermantasyon boyunca her 12 saatte alınan örneklerde GA ve şeker takibi yapılarak GA veriminin 132. saatte %94,45'e ulaştığı ve fruktoz miktarının neredeyse değişmeden kaldığı görülmüştür. Çalışmanın ikinci aşamasında, basınçlı reaktör içerisinde GA ve fruktoz (95 g/L) bulunan fermantasyon sıvısının sulu faz ve 2-Metiltetrahidrofuranın organik fazı oluşturmasıyla hazırlanan bifazik reaksiyon ortamında fruktozdan HMF üretimi gerçekleştirilmiştir. Reaksiyon sonucunda sulu fazda GA ve reaksiyona girmeyen fruktoz, organik fazda ise HMF'nin konsantrasyonları HPLC ile analiz edilmiştir. Analiz sonucunda HMF verimi %46,01 olarak belirlenmiştir. Sonuç olarak, glukoz ve fruktoza göre daha ekonomik biyokütle kaynağı olan sakkarozdan tek bir proste eş zamanlı olarak GA ve HMF'nin üretiminin uygun maliyetlerle ve yüksek bir verimle üretilbileceği görülmüştür.

**Anahtar kelimeler:** Glukonik asit, 5-Hidroksimetil furfural, biyokütle, sakkaroz.

#### ABSTRACT

Biomass, used as a green and sustainable raw material for the chemical industry, is an abundant source of pentose and hexose that can be converted into a variety of versatile platform chemicals. One of these platform chemicals is gluconic acid (GA). GA and its derivatives have found wide application in metal cleaning, dishwashing, laundry detergents, health products, and cosmetics, as well as the dairy, beverage, and textile industries, due to their non-toxic and non-corrosive character. The other platform chemical is 5-Hydroxymethyl furfural (HMF). HMF is a versatile and functional compound used as an intermediate for the production of polymers, pharmaceuticals, chemicals, liquid fuels, ethers, amino alcohols, and other organic derivatives. In this study, it is aimed to co-produce GA and HMF, which are





currently produced using different facilities, methods, and raw materials, from sucrose, an inexpensive biomass source, in a single process. In this context, firstly, sucrose, which is a cheap raw material source, was hydrolyzed to its monomers (glucose-fructose) with the help of the invertase enzyme at room temperature to 200 g/L. Then, GA was produced from glucose in the hydrolyzate by fermentation techniques with the help of recombinant *E. coli* Waksman pqq+ strains. By monitoring GA and sugar in the samples taken every 12 hours during the fermentation, it was observed that the GA yield reached 94.45% at the 132nd hour and the fructose amount remained almost unchanged. In the second stage of the study, HMF production from fructose was carried out in the biphasic reaction medium prepared by the fermentation liquid containing GA and fructose (95 g/L) in the pressurized reactor, forming the aqueous phase and 2-Methyl Tetrahydro Furan organic phase. As a result of the reaction, the concentrations of GA and unreacted fructose in the aqueous phase and HMF in the organic phase were analyzed by HPLC. As a result of the analysis, the HMF yield was determined to be 46.01%. As a result, it has been seen that the co-production of GA and HMF in a single process from sucrose, which is a more economical biomass source than glucose and fructose, can be produced at affordable costs and with a high yield.

**Keywords:** Gluconic acid, 5-Hydroxymethyl furfural, biomass, sucrose.

## PRİMER DİSMENOREDE NONFARMAKOLOJİK YÖNTEMLERİN ETKİSİ EFFECT OF NONPHARMACOLOGICAL METHODS IN PRIMARY DYSMENORRHOEA

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### ÖZET

Dismenore, üreme çağındaki kadınlarda sıklıkla görülen ve menstüal döngü boyunca ağrı, halsizlik ve duygu-durum değişikliklerinin olduğu semptomlarla ilerleyen bir jinekolojik hastalıktır. Sosyal, toplumsal, ekonomik ve iş hayatında yarattığı sıkıntılar sebebiyle kadınları tedaviye yönlendirmektedir. Dismenore, primer ve sekonder olmak üzere iki grupta sınıflandırılmaktadır. Primer dismenore, pelvik patoloji olmaksızın menstrüasyonla başlayan ve 24-48 saat içinde suprapubik bölgede hissedilen şiddetli kramp tarzında veya sürekli hissedilen künt ağrı ile seyreden bir sendromdur. Menstrüal siklusunun yeni başladığı ergenlik döneminde daha yaygın olarak görülmekte olup yaşla birlikte görülme olasılığı azalmaktadır. Sekonder dismenore ise, endometriozis gibi pelvik patolojik bir durumdan kaynaklanan menstrüel ağrı ile karakterizedir. Literatürde dismenore prevalansının %16 ile %93 arasında değişmekte olduğu ve kadınların %2'si ile %29'unun şiddetli ağrı yaşadığı belirtilmektedir. Primer dismenorede ağrıya bulantı, kusma, diyare, baş ağrısı ve sıcak basması gibi semptomlar da eşlik edebilmektedir. Primer dismenore tedavi yönetiminde farmakolojik ve nonfarmakolojik birçok yöntem kullanılmaktadır. Farmakolojik yöntemler olarak nonsteroid antiinflamatuar tedaviler, oral kontraseptifler, kalsiyum kanal blokerleri, transdermal gliseril trinitrat ve nitrik oksit kullanılmaktadır ancak birçok yan etkileri ve farmakolojik yöntemlerin ortaya çıkardığı ekonomik yükü azaltması sebebiyle kadınlar sıklıkla nonfarmakolojik yöntemlere yönelmektedirler. Nonfarmakolojik yöntemler olarak ise; suprapubik bölgeye termoterapi, masaj, egzersiz, akupressür, akupunktur, yoga, pilates, meditasyon, alternatif tedaviler, vitamin-mineral takviyesi, transkütanöz elektriksel stimülasyon, kinezyo bant uygulaması, pelvik taban egzersizleri, nefes egzersizleri ve gevşeme egzersizleri kullanılmaktadır. Literatürde özellikle ergenler ve genç kadınlarda dismenorenin yaşam kalitesi üzerine olumsuz etkisi olduğu ve okul/iş yaşamlarını kısıtladığı, akademik performans ve spor aktivitelerine katılımı azalttığına yönelik birçok çalışma yer almaktadır. Bu nedenle kadınların dismenorede kullanılan nonfarmakolojik yöntemler konusunda bilgilendirilmesinin yaşanan sorunları azaltması açısından önemli olacağı düşünülmektedir. Bu doğrultuda, primer dismenore yaşayan kadınlara kanıta dayalı nonfarmakolojik yöntemlerin kullanılmasının önemini vurgulamak amacıyla bu sunum güncel literatüre uygun olarak irdelenmiştir.

**Anahtar kelimeler:** Dismenore, primer dismenore, nonfarmakolojik yöntemler, hemşirelik.

### ABSTRACT

Dysmenorrhoea is a gynaecological disease that is common in women of reproductive age and progresses with symptoms of pain, weakness and mood changes during the menstrual cycle. It leads women to treatment due to the problems it creates in social, social, economic and business life. Dysmenorrhoea is classified in two groups as primary and secondary. Primary dysmenorrhoea is a syndrome that begins with menstruation without pelvic pathology and is characterised by severe cramping or constant blunt pain in the suprapubic region within 24-48 hours. It is more common in adolescence when the menstrual cycle has just started and the likelihood of occurrence decreases with age. Secondary dysmenorrhoea is characterised by menstrual pain caused by a pelvic pathological condition such as endometriosis. In the literature, it is reported that the prevalence of dysmenorrhoea varies between 16% and 93% and between 2% and 29% of women experience severe pain. In primary dysmenorrhoea, pain may be accompanied by symptoms such as nausea, vomiting, diarrhoea, headache



and hot flushes. Many pharmacological and nonpharmacological methods are used in the treatment management of primary dysmenorrhoea. Nonsteroidal anti-inflammatory therapies, oral contraceptives, calcium channel blockers, transdermal glyceryl trinitrate and nitric oxide are used as pharmacological methods, but women often turn to non-pharmacological methods because of their many side effects and the reduced economic burden caused by pharmacological methods. Nonpharmacological methods include thermotherapy, massage, exercise, acupuncture, yoga, pilates, meditation, alternative therapies, vitamin-mineral supplementation, transcutaneous electrical stimulation, kinesio tape application, pelvic floor exercises, breathing exercises and relaxation exercises. In the literature, there are many studies showing that dysmenorrhoea has a negative effect on quality of life especially in adolescents and young women, restricts their school/work life, and reduces academic performance and participation in sports activities. Therefore, it is thought that informing women about nonpharmacological methods used in dysmenorrhoea will be important in terms of reducing the problems experienced. In this direction, this presentation was examined in accordance with the current literature in order to emphasise the importance of using evidence-based nonpharmacological methods for women with primary dysmenorrhoea.

**Keywords:** Dysmenorrhoea, primary dysmenorrhoea, nonpharmacological methods, nursing.



## VEFA SOSYAL DESTEK GRUPLARINDA GÖREV ALAN BİREYLERİN SOSYAL BAĞLILIKLARI İLE ÖZGECİLİK DAVRANIŞLARI ARASINDAKİ İLİŞKİNİN İNCELENMESİ

### INVESTIGATION OF THE RELATIONSHIP BETWEEN THE SOCIAL COMMITMENT AND THE ALTHOUGH BEHAVIORS OF THE INDIVIDUALS AT VEFA SOCIAL SUPPORT GROUPS

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#### ÖZET

“Vefa Sosyal Destek Grupları”, Covid-19 pandemisi döneminde tam kapanma veya yarı kapanma zamanlarında 65 yaş ve üstü ile bakıma muhtaç kronik hastalığı olan bireylerin her türlü ihtiyacının karşılanabilmesi amacıyla il valilikleri koordinatörlüğünde oluşturulmuş, gönüllülük esaslı bir hizmet modelidir. İller bazında oluşturulan ekipler pek çok kişinin ihritaçlarının karşılanmasında pandemi dönemi boyunca etkin rol oynamıştır. Bu kapsamda Vefa sosyal destek gruplarına katılım sağlayan kişilerin özelliklerinin incelenmesi önemlidir. Bu araştırmanın amacı Covid-19 pandemi döneminde oluşturulan vefa sosyal destek gruplarında görev alan bireylerin sosyal bağlılık ve özgecilik düzeylerinin tespitinin yapılarak; katılımcıların özgecilik davranışları ile sosyal bağlılık duyguları aralarındaki ilişkinin incelemesinin yapılmasıdır. Araştırmanın evrenini Covid-19 pandemi döneminde Isparta ilinde oluşturulmuş olan vefa sosyal destek grubunda görev alan katılımcılar oluşturmaktadır. Grup içerisinde basit tesadüfi örnekleme yöntemi ile 187 katılımcıya ulaşılarak, veriler elde edilmiştir. Araştırmada Özgecilik (Altruism) Ölçeği ve Sosyal Bağlılık Ölçeği kullanılmıştır. Yapılan analizler sonucunda verilerin normal dağılım göstermediği anlaşılmış ve bu kapsamda non-parametrik testler uygulanmıştır. Sosyal bağlılık boyutu ile özgecilik boyutları arasındaki ilişkinin incelenmesinde ise spearman korelasyon analizi uygulanmıştır. Ölçeklerin güvenilirliğini ölçmek amacıyla Cronbach Alfa katsayısı hesaplanmış (sosyal bağlılık: 0.917, özgecilik: 0.965) ve güvenilirliğin çok iyi seviyede olduğu tespit edilmiştir. Ek olarak özgecilik ölçeğinin alt boyutlarının Cronbach Alfa katsayılarına bakıldığında her birinin 0.80’in üzerinde ve iyi seviyede güvenilir olduğu tespit edilmiştir. Araştırmada, katılımcıların eğitim durumunun, yaşlarının ve görevlerinin boyutları açısından anlamlı bir farklılığa yol açmadığı görülmüştür. Yaşlı/hastalara yardım boyutunun puanlarının katılımcıların medeni durumlarına göre kıyaslaması yapıldığında anlamlı şekilde farklılaştığı tespit edilmiş olup ( $p=0.001$ ), evli bireylerin evli olmayanlara göre daha fazla yaşlı ve hastalara yardım etme eğiliminde olduğu anlaşılmıştır. Ek olarak yapılan analizler sonucunda; istatistiki biçimde anlamlı olarak ( $p=0.011$ ), kadınların erkeklere kıyasla



yakınlık duygusundan kaynaklanan yardım boyutundan daha yüksek puanlar aldığı görülmüştür. Katılımcıların sosyal bağlılık ve özgecilik seviyeleri arasındaki ilişkinin incelenmesi sonucunda; sosyal bağlılık boyutu ile özgecilik ölçeğinin her bir alt boyutu arasında pozitif yönlü, istatistiksel olarak anlamlı bir ilişkinin olduğu anlaşılmıştır.

Buradan sosyal bağlılık duyguları yüksek olan kişilerin özgeci davranışlar sergileme eğilimlerinin de daha yüksek olduğu sonucuna ulaşılmaktadır.

**Anahtar kelimeler:** Vefa Sosyal Destek Grupları, Özgecilik, Sosyal Bağlılık, COVID-19, Pandemi

#### ABSTRACT

“Vefa Social Support Groups” are a volunteer-based service model created under the coordination of provincial governorships in order to meet all the needs of individuals aged 65 and over and in need of care during full or semi-closure times during the Covid-19 pandemic. The teams formed on the basis of provinces played an active role throughout the pandemic period in meeting the expulsions of many people. In this context, it is important to examine the characteristics of people who participate in Vefa social support groups. The aim of this research is to determine the social commitment and altruism levels of individuals who work in vefa social support groups created during the Covid-19 pandemic period; the aim of this study is to examine the relationship between the altruistic behaviors of the participants and their feelings of social commitment. The universe of the research consists of the participants in the fidelity social support group established in Isparta during the Covid-19 pandemic period. Data were obtained by reaching 187 participants from the group by simple random sampling method. Altruism Scale and Social Commitment Scale were used in the research. As a result of the analysis, it was understood that the data did not show normal distribution, and in this context, non-parametric tests were applied. Spearman correlation analysis was used to examine the relationship between social commitment and altruism dimensions. In order to measure the reliability of the scales, the Cronbach Alpha coefficient was calculated (social connectedness: 0.917, altruism: 0.965) and it was determined that the reliability was at a very good level. In addition, when the Cronbach Alpha coefficients of the sub-dimensions of the altruism scale were examined, it was determined that each of them was above 0.80 and was reliable at a good level. In the study, it was determined that the educational status, age and duties of the participants did not cause a significant difference in terms of dimensions. When the scores of helping the elderly/patients dimension were compared according to the marital status of the participants, it was determined that there was a significant difference ( $p=0.001$ ), and it was understood that married individuals tended to help the elderly and patients more than unmarried ones. As a result of additional analyzes; statistically significant ( $p=0.011$ ), it was seen that women scored higher on the help dimension arising from the sense of closeness compared to men. As a result of examining the relationship between the social commitment and altruism levels of the participants; it has been understood that there is a positive, statistically significant relationship between the social commitment dimension and each sub-dimension of the altruism scale. From this, it is concluded that people with high feelings of social connectedness have a higher tendency to exhibit altruistic behaviors.

**Keywords:** Vefa Social Support Groups, Altruism, Social Commitment, COVID-19, Pandemic



## POSSIBLE BENEFICIAL EFFECTS OF RUTIN ON GENTAMICIN-INDUCED HEPATOTOXICITY

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### ABSTRACT

Gentamicin (GM) is an aminoglycoside antibiotic that is clinically useful against infections caused by gram-negative bacteria. Despite their beneficial effects, aminoglycosides have significant side effects. Rutin, a natural flavone derivative, is a well-known agent with numerous pharmacological effects against oxidative stress, with strong antioxidant properties. This study was conducted to evaluate the protective effects of rutin, a natural antioxidant, against gentamicin-induced liver toxicity in rats. For this purpose, experimental animals were divided into four groups (n=6). The rutin agent was administered to the rats orally at a dose of 150 mg/kg, and gentamicin was administered intraperitoneally at a dose of 80 mg/kg for 8 days. At the end of the experiment, the rats were sacrificed and liver tissue was removed. Malondialdehyde (MDA) and glutathione (GSH) levels and superoxide dismutase (SOD), catalase (CAT) and glutathione peroxidase (GPx) enzyme activities were measured in rat liver tissue. Additionally, the liver was analyzed histopathologically. GM increased oxidative damage by decreasing SOD, CAT, GPx enzyme activities and GSH levels and increasing MDA level in liver tissue ( $p < 0.05$ ). Rutin treatment attenuated gentamicin-induced liver toxicity by lowering MDA levels and increasing SOD, CAT and GPx activity, and GSH levels ( $p < 0.05$ ). Additionally, rutin supplementation ameliorated GM-induced increased histopathological changes (inflammatory cell infiltration, sinusoidal dilatation, necrosis, congestion, etc.). The results of this study revealed that its rutin administration may be a promising strategy to protect against increased oxidative damage and pathological changes in GM-induced liver tissue.

**Keywords:** Gentamicin, liver, rutin, rat.



## KAYNAŞTIRMA SINIFLARINDA YENİ BİR UYGULAMA OLARAK GÖLGE ÖĞRETİCİLİK

### SHADOW TEACHING AS A NEW PRACTICE IN INCLUSION CLASSES

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#### ÖZET

Kaynaştırma uygulamalarında başarının anahtarı ekip ile yapılan bir çalışma olmasıdır. Ancak ekip üyelerinden birinin ya da birkaçının sürece ilişkin bilgi, beceri ya da deneyim sahibi olmaması süreci olumsuz etkilemektedir. Kaynaştırma uygulamalarında ülkemizde yeni bir kavram olarak ortaya çıkan “gölge öğreticilik” yurtdışında uzun zamandır yapılan bir uygulamadır. Yeni uygulanmaya başlanması sebebi ile pek çok sorunla karşılaşmaktadır. Bunlardan en önemlisi de konuya ilişkin alanda çalışanlara yön gösterecek akademik çalışmaların sayıca az olması ve gölge öğreticiliğe ilişkin mesleki bir tanımın olmamasından kaynaklanan mesleki özelliklerin, çalışma koşullarının ve bu alanda çalışmak isteyen kişilerin görevlerine ilişkin bir bilginin olmamasıdır. Ülkemizde gölge öğreticiliğe ilişkin verilen sertifika programları bulunmaktadır. Ancak yapılan bu programlara katılmak isteyen bireylerin hangi özelliklere göre seçilmesi gerektiğine ilişkin bulunan belirsizliğin yanı sıra bu programlarda verilen eğitimlerin içeriğinin neler olması gerektiğinin nasıl belirlendiğine ilişkin hiçbir kaynak bulunmamaktadır. Dolayısı ile ülkemizde gölge öğreticilik kavramı Milli Eğitim Bakanlığı’nın yayınlamış olduğu makam oluru yazısında belirtildiği ismi ile “kolaylaştırıcı kişi” olarak çalışacak kişilerin taşınması gereken özelliklerin belirlenmemiş olması, sınıf içerisindeki görev ve sorumluluklarının tanımlanmamış olması, alanda yapılmış bir çalışmaya rastlanmamış olması uygulamaya başlanan bu sistemin pek çok problemle karşı karşıya kaldığını göstermektedir.

**Anahtar Kelimeler:** Gölge öğreticilik, kolaylaştırıcı kişi, kaynaştırma, kaynaştırma ekibi.

#### ABSTRACT

The key to success in inclusion practices is working with a team. However, the fact that one or more of the team members does not have the knowledge, skills or experience in the process negatively affects the process. "Shadow teaching", which has emerged as a new concept in inclusion practices in our country, is a practice that has been done abroad for a long time. Many problems are encountered due to the new implementation. The most important of these is the low number of academic studies that will guide those who work in the field, and the lack of information about the professional characteristics, working conditions and duties of people who want to work in this field due to the lack of a professional definition of shadow teaching. There are certificate programs regarding shadow teaching in our country. However, in addition to the uncertainty about the characteristics of individuals who want to participate in these programs, there is no source about how the content of the training given in these programs is determined. Therefore, the concept of shadow teaching in our country, with the name stated in the authority approval letter published by the Ministry of National Education, has not been determined, the characteristics of the people who will work as "facilitator" have not been determined, their duties and



responsibilities in the classroom have not been defined, and there has been no study in the field. shows that it faces many problems.

**Keywords:** Shadow teacher, facilitator, inclusion, inclusion team.





**HERPES SİMPEKS VİRÜS TİP 1 VE TİP 2 ENFEKSİYONLARININ MOLEKÜLER  
YÖNTEMLERLE SAPTANMASI**  
**DETECTION OF HERPES SIMPLEX VIRUS TYPE 1 AND TYPE 2 INFECTIONS BY  
MOLECULAR METHODS**

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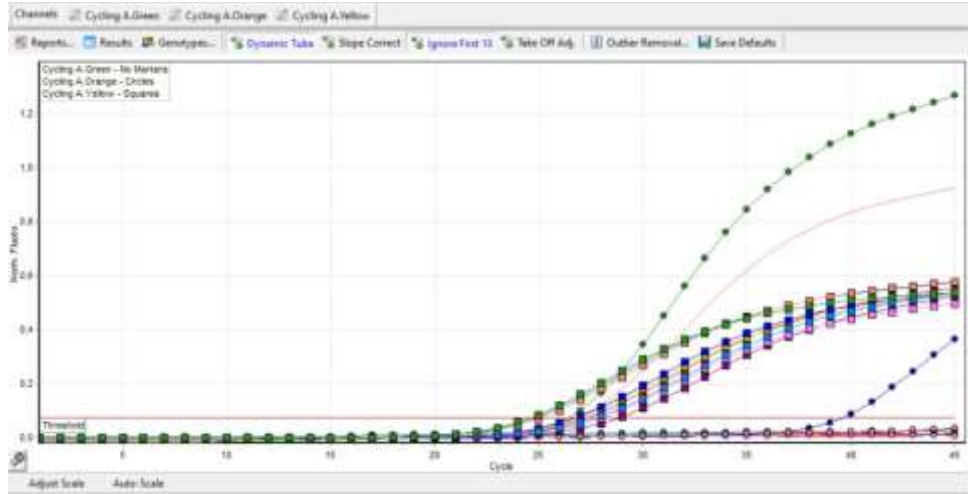
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**ÖZET**

Herpes simpeks virüs tip 1 ve tip 2, Herpesvirüs ailesinin Alphaherpesvirinae alt familyasına dahil edilmektedir. Enfekte olan hücrelerde kısa bir zaman aralığında hızla çoğalma, hücrelerde hızlı yıkıma neden olması ve duyuşal gangliyonlardaki tutulumu ile tanımlanabilirler. HSV-1; çocuklarda ve yetişkinlerde orofasiyal lezyonlara ve ensefalite neden olabilirken, HSV-2; genital herpes, aseptik menenjit ve yenidoğanda yıkıcı enfeksiyonlara neden olur.

Çalışmamıza, Ocak 2020 ile Mayıs 2023 tarihleri arasında Gaziantep Üniversitesi Şahinbey Araştırma ve Uygulama Hastanesi'nin çeşitli poliklinik ve servislerinde tedavi gören hastalardan HSV şüphesi ile moleküler mikrobiyoloji laboratuvarına gönderilen 403 [209 (%51,9) erkek, 194 (%48,1) kadın] hastaya ait 5936 örnek dahil edildi. Bu örneklerin, 683'ü (%11,5) Beyin Omurilik Sıvısı (BOS), 5253'ü (%84,5) ise serum örneğiydi. BOS örnekleri jelsiz, steril tüp içerisinde kabul edildi. Kan örnekleri ise 4000 rpm'de 5 dakika santrifüj edilip, serumu ayrılarak çalışmaya alındı. DNA izolasyonları, moleküler mikrobiyoloji laboratuvarında, EZ1 Advanced XL (Qiagen, Hilden, Germany) cihazında, EZ1&2™ Virus Mini Kit v2.0 (48) (Qiagen, Hilden, Germany) kullanılarak otomatize olarak yapıldı. İzolasyona başlarken her hasta örneği için ayrı ayrı olmak üzere izolasyonun olup olmadığı ve testin çalışıp çalışmadığını kontrol etmek için HSV internal kontrol kullanıldı. İzolasyon ürünleri Artus HSV-1/2 QS-RGQ Kit'i kullanılarak Rotor Gene Q (Qiagen, Hilden, Germany) Real Time PCR cihazında amplifikasyonları yapıldı (Resim 1). Her yapılan çalışma için negatif kontrol, HSV 1 pozitif kontrol ve HSV 2 pozitif kontrol kullanıldı. Kontroller sonuçları ve amplifikasyon eğrileri dikkate alınarak analizleri yapıldı. Elde edilen veriler kliniklere bildirildi (Tablo 1).



Resim 1. Herpes simplex tip 1-2 Amplifikasyon eğrileri

Tablo 1. Herpes simpleks tip 1 ve 2 pozitiflik dağılımı

HSV	Pozitif		Negatif		Toplam n (%)
	Erkek n (%)	Kadın n (%)	Erkek n (%)	Kadın n (%)	
Tip 1	2 (0,5)	3 (0,7)	206 (51,1)	191 (47,4)	403 (100)
Tip 2	1 (0,2)	0 (0)			

HSV tip 1 olarak bulunan 5 örneğin 2'si Dispepsi ön tanılı iki erkek hastaya ait serum örneğiyken, biri ensefalit ön tanılı BOS, ikisi böbrek yetmezliği ön tanılı serum olmak üzere 3'ü kadın hastadan gönderilen örneklerdi. HSV tip 2 olarak tespit ettiğimiz BOS örneği 57 yaşındaki hastaya ait ve Serebrovasküler ön tanısı ile tedavi görmekteydi. Hem HSV tip 1 hem de HSV tip 2 pozitif olarak tespit edilen hastalar tedavilerini tamamlayarak taburcu olmuşlardır. Erken tedaviye başlanması ile mortalite ve nörolojik sekel gelişmesinin önemli ölçüde önüne geçilmektedir.

HSV tip 1, Dünya genelinde sporadik ensefalitin en sık izole edilmiş olan etkenlerinden bir tanesidir. Genellikle, çocuklarda ve yetişkinlerde enfeksiyöz ensefalitlerin %5 ile %15'ini temsil eder. HSV tip 2, Herpedik menenjitte ve genital herpeslere neden olabilmektedir. Klinik belirtiler, rasyonel bir teşhis yaklaşımı, hızlı tanı ve tedavi hayat kurtarıcı olabilmektedir. Moleküler yöntemler kullanılarak hastalara ait tüm vücut sıvı ve dokularında virüsün tespiti, kantitatif analizi hızlı tanıya yardımcı olabilmektedir.

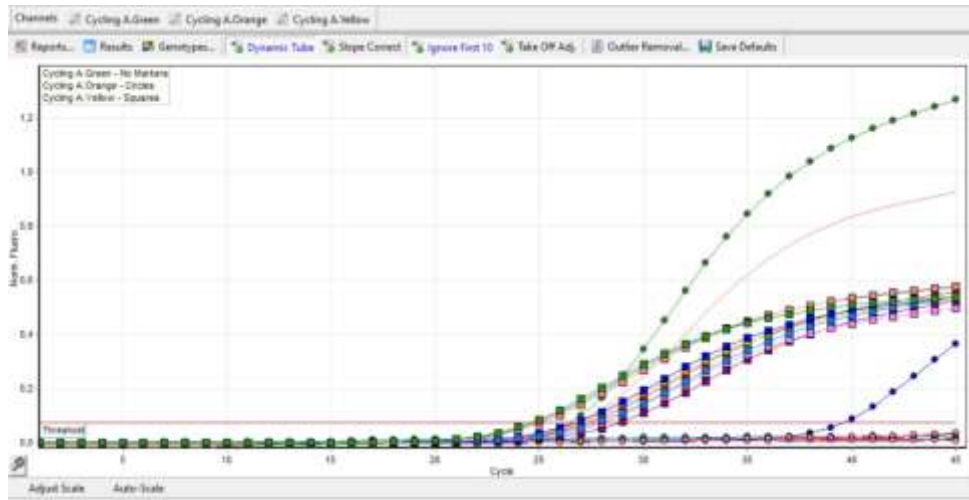
**Anahtar kelimeler:** Herpes simpleks, HSV tip 1, HSV tip 2, BOS

## ABSTRACT

Herpes simplex virus type 1 and type 2 are included in the Alphaherpesvirinae subfamily of the Herpesvirus family. They can be defined by their rapid proliferation in a short period of time in infected cells, their rapid destruction in cells, and their involvement in sensory ganglia. HSV-1 can cause orofacial lesions and encephalitis in children and adults, while HSV-2 causes genital herpes, aseptic meningitis, and devastating infections in the newborn.

Our study included 5936 samples of 403 patients [209 (51.9%) male, 194 (48.1) female) who were sent to the molecular microbiology laboratory with the suspicion of HSV from patients who were treated in various outpatient clinics and services of Gaziantep University Şahinbey Research and Application Hospital between January 2020 and May 2023. Of these, 683 (11.5%) were Cerebrospinal Fluid (CSF) and 5253 (84.5%) were serum samples. CSF samples were accepted in a gel-free, sterile tube. Blood samples, on the other hand, were centrifuged at 4000 rpm for 5 minutes, serum separated and included in the study.

DNA isolations were performed automatically in the molecular microbiology laboratory on the EZ1 Advanced XL (Qiagen, Hilden, Germany) device, using the EZ1&2™ Virus Mini Kit v2.0 (48) (Qiagen, Hilden, Germany). When starting the isolation, HSV internal control was used to check whether the isolation was present and whether the test was working, separately for each patient sample. Amplification of the isolation products was performed on the Rotor Gene Q (Qiagen, Hilden, Germany) Real Time PCR device using the Artus HSV-1/2 QS-RGQ Kit (Figure 1). Negative control, HSV 1 positive control and HSV 2 positive control were used for each run. Analyzes were made by taking into account the results of the controls and the amplification curves. The data obtained were reported to the clinics (Table 1).



**Figure 1.** Herpes simplex type 1-2 Amplification curves

**Table 1.** Herpes simplex type 1 and 2 positivity distribution

HSV	Positive		Negative		Total n (%)
	Male n (%)	Female n (%)	Male n (%)	Female n (%)	
Type 1	2 (0,5)	3 (0,7)	206 (51,1)	191 (47,4)	403 (100)
Type 2	1 (0,2)	0 (0)			

While 2 of the 5 samples detected as HSV type 1 were serum samples from two male patients with a pre-diagnosis of dyspepsia, the other 3 samples were belongs to female patients, one of whom was CSF with a pre-diagnosis of encephalitis, and two of which were serum samples with a pre-diagnosis of kidney failure. The CSF sample, which we identified as HSV type 2, belonged to a 57-year-old patient and was being treated with a preliminary diagnosis of Cerebrovascular. Both HSV type 1 and HSV type 2 positive patients were discharged after completing their treatment. With the initiation of early treatment, mortality and neurological sequelae are prevented to a great extent.

HSV type 1 is one of the most frequently isolated agents of sporadic encephalitis worldwide. It usually represents 5% to 15% of infectious encephalitis in children and adults. HSV type 2 can cause herpetic meningitis and genital herpes. Clinical symptoms, a rational diagnostic approach, rapid diagnosis and treatment can be life-saving. Detection and quantitative analysis of the virus in all body fluids and tissues of patients using molecular methods can help rapid diagnosis.

**Keywords:** Herpes simplex, HSV type 1, HSV type 2, CSF



## Ti-30Nb-20Ni, Ti-30Zr-20Ni ve Ti-30Ta-20Ni ALAŞIMLARININ TERMAL VE YAPISAL ÖZELLİKLERİNİN BELİRLENMESİ

### DETERMINATION of THERMAL and STRUCTURAL PROPERTIES of Ti-30Nb-20Ni, Ti-30Zr-20Ni and Ti-30Ta-20Ni ALLOYS

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#### ÖZET

Farklı elementler ilave edilerek geliştirilmesi amaçlanan şekil hatırlamalı alaşımlar, şekil hatırlama etkisi ve süper elastikiyetlerinden dolayı ticari uygulamalarda en yaygın kullanılan malzemelerdir. Bu çalışmada Ti-30Nb-20Ni, Ti-30Ta-20Ni ve Ti-30Zr-20Ni şekil hatırlamalı alaşımların termal ve yapısal özelliklerinin karşılaştırılması amaçlanmıştır. Bu numunelerin bazı termodinamik parametreleri DSC (Diferansiyel Taramalı Kalorimetre), yapısal analizi SEM-EDX (Taramalı Elektron Mikroskobu-Enerji-Dağıtıcı X-ışını spektroskopisi) ve XRD (X-ışını kırınımı) ile incelenmiştir. TiNbNi alaşımının diğerlerine göre daha iyi şekil hatırlama özelliği gösterdiği belirlenmiştir. Ti-30Nb-20Ni alaşımının martensit fazdan austenit fazına dönüşümündeki termal aktivasyon enerjisi Kissinger ve Ozawa yöntemleri kullanılarak hesaplanmıştır. İki yöntemden elde edilen ortalama termal aktivasyon enerjisi 134.16 kJ/mol'dür. XRD ve SEM-EDX analizleri dentritik yapılarda sırasıyla  $\beta$ -Nb fazı ve  $\beta$ -Ta fazının Ti-30Nb-20Ni, Ti-30Ta-20Ni alaşımlarında baskın olduğunu göstermektedir. TiNbNi alaşımının SEM görüntülerinde üç boyutlu dentritik yapılar belirlenmiştir.

**Anahtar kelimeler:** Şekil hatırlamalı alaşım, Ni-Ti, Aktivasyon enerjisi.

#### ABSTRACT

Shape memory alloys, which are aimed to be developed by adding different elements, are the most widely used materials in commercial applications due to their shape memory effect and super elasticity. In this study, it is aimed to compare of the thermal and structural properties of Ti-30Nb-20Ni, Ti-30Ta-20Ni and Ti-30Zr-20Ni shape memory alloys. Some thermodynamic parameters of these samples were investigated by DSC (Differential Scanning Calorimeter), structural analysis by SEM-EDX (Scanning Electron Microscopy-Energy-Dispersive X-ray spectroscopy) and XRD (X-ray Diffraction). It was determined the TiNbNi alloy showed better shape memory properties if compared to others. The thermal activation energy of Ti-30Nb-20Ni alloy, which is transformation from martensite phase to austenite phase, was calculated using the Kissinger and Ozawa methods. The average thermal activation energies obtained from the two methods are 134.16 kJ/mol. The XRD and SEM-EDX analyses show that the  $\beta$ -Nb phase and  $\beta$ -Ta phase was dominant in dendritic structures at Ti-30Nb-20Ni, Ti-30Ta-20Ni alloys, respectively. Three-dimensional dendritic structures were determined in SEM images of TiNbNi alloy.

**Keywords:** Shape memory alloy, Ni-Ti, Activation energy.



## TERMOELEKTRİK HİPOTERMİ PED CİHAZI THERMOELECTRIC HYPOTHERMIA PAD DEVICE

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### ÖZET

Vücut sıcaklığı normal seviyenin üzerine çıktığı zaman hipertermi meydana gelirken vücut sıcaklığı normalin altına düştüğünde ise hipotermi meydana gelir. Hipoterminin sadece bir tedavi yöntemi değil aynı zamanda bir anestezi ve tanı yöntemi olduğu İbn-iSina'dan beri bilinmektedir. Beyin travmalarında ve açık kalp ameliyatlarında kalbin herhangi bir nedenle durması durumunda, kısa süre içerisinde beyinde hücre ölümü başlar. Bunu önlemek için; beyin hipotermi uygulanarak beyin hızlı bir şekilde soğutulması gerekmektedir. Günümüzde hipotermi veya kriyoterapi her çeşit vakalarda kullanılmaktadır. Bunların başında akut kas iskelet yaralanmaları ve ortopedik vakalar gelmektedir. Dışarıdan uygulanan hipoterminin veya kriyoterapinin sağladığı avantajlar, ağrı ve ödemin ilaçsız bir şekilde azaltılması, konforlu ve güvenli olup doku hasarı riski olmaması, kolay kullanımı olarak sıralanabilir. Dolayısıyla kriyoterapi, aşırı soğukun canlıların biyolojik yapıları üzerindeki etkilerinden yararlanılarak geliştirilen anestezi, tanı ve tedavi yöntemidir.

Dünyada olduğu gibi Türkiye'de de hipotermi ve kriyoterapi yöntemi çok az kullanılmaktadır. Bunun nedeni mevcut hipotermi ve kriyoterapi cihazların çok pahalı olmasının yanı sıra pratik ve kullanışlı olmamalarıdır. Günümüzde beyin hipotermi işlemi, tüm vücudu soğuk suyun içine daldırarak gerçekleştirilmektedir. Bu yöntemle beyin sıcaklığının kısa bir sürede istenilen sıcaklığa kadar düşürülmesi mümkün değildir. Diğer taraftan kafaya buz koyarak yapılan lokal hipotermi de ise istenen soğutma hızı ve sıcaklık düşüşü sağlanamamaktadır. Bir çok vakalarında kullanılan buz torbaları (dondurulmuş temiz su) sadece kontrolsüz soğutma yapmaktadır. Ayrıca buzun kullanılması çevre kirliliğine ve temiz su israfına yol açmaktadır. Bu uygulamadaki temel problemleri çözecek olan teknoloji patenti ve PCT'si alınmış (Patent TR 2020-22699, PCT/TR/2021/051301) Akıllı Termoelektrik Beyin Hipotermi Termoelektroterm ve Beyin Termografi Cihazıdır. Patentle korunan yeni soğutma yöntemi ve teknolojileri kullanarak çevre dostu, ucuz, pratik ve kullanışlı termoelektrik hipotermi ped cihazı üretilmiş ve test edilmiştir. Geliştirilen Termoelektrik Hipotermi Ped Cihaz'ı (THPC) istenilen süre boyunca kontrollü olarak hem soğutma hem ısıtma yapabilmektedir. Bu özelliğe sahip olmasının nedeni termoelektrik teknolojisinin kullanılmasıdır. Ayrıca THPC sadece hastalar için değil aynı zamanda sağlıklı insanların örneğin futbolcuların veya diğer sporcuların müsabaka esnasında kullandıkları buz torbalarının yerine kullanılacak soğutma veya ısıtma yapabilen bir cihazdır.

Bu çalışmada, lokal hipotermiyi gerçekleştirmek için dünyada ilk kez Ankara Medipol Üniversitesi ve TES Termoelektrik Ltd. şirketinde tasarlanan ve üretilen bir adet THPC yapılmış ve test edilmiştir. Laboratuvar ve ön klinik çalışmaların sonuçları, cihazın yaygın kullanılacağını göstermiştir.

**Anahtar kelimeler:** Termoelektrik, hipotermi, kriyoterapi, ped

### ABSTRACT

Hyperthermia occurs when the body temperature rises above the normal level, while hypothermia occurs when the body temperature falls below normal. It has been known since İbn-i Sina that hypothermia is not only a treatment method but also an anesthesia and diagnosis method. In brain traumas and open heart surgeries, if the heart stops for any reason, cell death begins in a short time. To prevent this; Brain hypothermia should be applied and the brain should be cooled rapidly. Today, hypothermia or



cryotherapy is used in all kinds of cases. These include acute musculoskeletal injuries and orthopedic cases. The advantages of externally applied hypothermia or cryotherapy can be listed as drug-free reduction of pain and edema, comfortable and safe, no risk of tissue damage, and easy use. Therefore, cryotherapy is a method of anesthesia, diagnosis and treatment developed by utilizing the effects of extreme cold on the biological structures of living things.

As in the world, hypothermia and cryotherapy methods are used very little in Turkey. This is because existing hypothermia and cryotherapy devices are not only very expensive, but also not practical and useful. Today, brain hypothermia is performed by immersing the whole body in cold water. With this method, it is not possible to reduce the temperature of the brain to the desired temperature in a short time. On the other hand, in local hypothermia performed by putting ice on the head, the desired cooling rate and temperature decrease cannot be achieved. The ice packs (frozen clean water) used in many cases only provide uncontrolled cooling. In addition, the use of ice causes environmental pollution and waste of clean water. It is the Intelligent Thermoelectric Brain Hypothermia Thermoehypotherm and Brain Thermography Device, which will solve the main problems in this application, with a technology patent and PCT (Patent TR 2020-22699, PCT/TR/2021/ 051301). Using new patent-protected cooling methods and technologies, environmentally friendly, inexpensive, practical and useful thermoelectric hypothermia pad device has been produced and tested. The developed Thermoelectric Hypothermia Pad Device (THPC) can perform both cooling and heating in a controlled manner for the desired time. The reason for having this feature is the use of thermoelectric technology. In addition, THPC is a device that can cool or heat not only patients but also healthy people, such as football players or other athletes, that can be used instead of ice packs used during competition.

In this study, Ankara Medipol University and TES Thermoelectric Ltd. for the first time in the world to perform local hypothermia. One THPC designed and produced in the company was built and tested. The results of laboratory and preliminary clinical studies have shown that the device will be widely used.

**Keywords:** Thermoelectric, hypothermia, cryotherapy, pad

## GEERTGEN TOT SINS JANS'IN, MERYEM'İN YÜCELTİLMESİ ADLI ESERİN ÇÖZÜMLENMESİ

### ANALYSIS OF GEERTGEN TOT SINS JANS' THE EXALTATION OF MARY

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#### ÖZET

Araştırmada Geertgen Tot Sins Jans'ın Meryem'in Yüceltilmesi adlı eserinin analizi gerçekleştirilmektedir. Bu analizde; Künye ve Form-İfade Analizi, Konu Anlatım Elemanlarının Analizi, Konu ve Anlatım Elemanlarının Estetik Analizi, Form-İfadeye, Konu-Anlatıma Dair Biçimsel ve Estetik Öğelerin Anlamlandırılması, Anlamlandırılan Biçimsel ve Estetik Verilerin Yorumlanması, Yargı, Eserin Sanat Piyasasındaki Yerine Dair Değerlendirme, Açıklama ve Tartışma olarak sekiz ana başlıktan, yirmi iki alt başlıktan oluşmaktadır. Jans'ın Geertgen Tot Sins Jans eseri 1490-5 yıllarında ahşap panel üzerine 24,5x18,1 cm ebadında yapılmıştır. Dinsel bir uygulamanın resmedilmiş hali olan bu eser, kuzey rönesans etkisiyle döneminin tipik bir örneğidir. Meryem'in tasviri kutsal kitabın bir bölümünü dayanmaktadır. Araştırmanın yöntemi nitel araştırma yöntemlerinden olan literatür taraması olarak belirlenmiştir. Betimsel analizde görseller ve analizler ışığında Rönesans sanatçılarından olan Geertgen Tot Sins Jans'ın sanat anlayışı tespit edilmektedir.

**Anahtar kelimeler:** Geertgen Tot Sins Jans, Meryem'in Yüceltilmesi, Ahşap panel, Tasvir, Kutsal kitap, Kuzey Rönesans, Rönesans.

#### ABSTRACT

In the research, the analysis of Geertgen Tot Sins Jans' The Exaltation of Mary is carried out. In this analysis; Imprint and Form-Expression Analysis, Analysis of Subject and Expression Elements, Aesthetic Analysis of Subject and Expression Elements, Making Meaning of Formal and Aesthetic Elements of Form-Expression, Subject-Expression, Interpretation of Formal and Aesthetic Data Connoted, Judgment, Evaluation of the Place of the Work in the Art Market, Explanation and Discussion, it consists of eight main titles and twenty-two sub-titles. Geertgen Tot Sins Jans by Jans was made in 1490-5 on a wooden panel with a size of 24.5x18.1 cm. This work, which is a depiction of a religious practice, is a typical example of its period with the influence of the northern renaissance. The depiction of Mary is based on a portion of scripture. The method of the research was determined as a literature review, which is one of the qualitative research methods. In the descriptive analysis, the artistic understanding of Geertgen Tot Sins Jans, one of the Renaissance artists, is determined in the light of visuals and analysis.

**Keywords:** Geertgen Tot Sins Jans, Exaltation of Mary, Wood panel, Depiction, Scripture, Northern Renaissance, Renaissance.

## CRADIS YÖNTEMİ İLE İSTİFLEYİCİ SEÇİMİ

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### ÖZET

Lojistik uzun zamandır işletme yönetiminde kilit faktör olarak rol almaktadır. Çünkü işletme maliyetlerinin en yüksek gider kalemini lojistik etkinlikler oluşturmaktadır. Lojistik depolardaki fiziksel kaynakların operasyonları verimli bir şekilde destekleyebilmesi için malzeme taşıma ekipmanlarının iyi seçilmiş olması gerekmektedir. Depolama ve istifleme alanlarında sıklıkla kullanılan istifleyici araç alım kararı hem uzun vadeli kullanım beklentisi hem de yüksek maliyetleri nedeniyle önemli yatırım kararları arasında sayılabilir. Bu sebeple temin edilecek istifleme aracı sayısındaki artış maliyeti de artıracığından önemli bir karar verme problemini teşkil etmektedir. Bu çalışmada küçük depolar için en iyi manuel istifleyici seçimi yapılmıştır. Çalışmada 8 istifleyici 5 kritere (Fiyatı, Kapasite, Kaldırma Yüksekliği, Garanti Süresi ve Çatal Uzunluğu) göre değerlendirilmiştir. Bu seçim probleminde ÇKKV yöntemlerinden CRADIS (Compromise Ranking of Alternatives from Distance to Ideal Solution) yöntemi kullanılmıştır. Çalışma sonucunda en iyi performansa sahip istifleyici alternatif 8 olurken, en kötü performansa sahip istifleyici ise alternatif 6 olarak gerçekleşmiştir. CRADIS yöntemiyle yapılan Türkçe çalışma sayısı az olduğundan çalışma bu yönüyle literatüre katkı sunmaktadır.

**Anahtar kelimeler:** İstifleyici, ÇKKV, CRADIS.

### ABSTRACT

Logistics has long been a key factor in business management. Because logistics activities constitute the highest expense item of operating costs. Material handling equipment must be well-chosen so that physical resources in logistics warehouses can support operations efficiently. The decision to purchase a forklift truck, which is frequently used in storage and stacking areas, can be counted among important investment decisions due to both long-term usage expectation and high costs. For this reason, the increase in the number of forklift trucks to be procured constitutes an important decision-making problem as it will increase the cost. In this study, the best manual stacker selection was made for small warehouses. In the study, 8 stackers were evaluated according to 5 criteria (Price, Capacity, Lift Height, Warranty Period and Fork Length). In this selection problem, CRADIS (Compromise Ranking of Alternatives from Distance to Ideal Solution) method, one of the MCDM methods, was used. As a result of the study, the best performing stacker was alternative 8, while the worst performing stacker was alternative 6. Since the number of Turkish studies conducted with the CRADIS method is low, the study contributes to the literature in this respect.

**Keywords:** Stacker, MCDM, CRADIS.



## PNÖMATİK YAPAY KASLI ROBOT KOLUN YAPAY SİNİR AĞLARI İLE KONUM KONTROLÜ

### ARTIFICIAL NEURAL NETWORKS APPLICATION FOR POSITION CONTROL OF ROBOT ARM WITH PNEUMATIC ARTIFICIAL MUSCLE

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#### ÖZET

Bu çalışmada pnömatik yapay kaslarla hareket eden 3 serbestlik dereceli robot kol tasarlanmıştır. Kendi eksenini etrafında 360 derece dönebilen bir döner taban ve uzayıp kısalan yapay kaslarla desteklenmiş 2 kolun uç noktasının konumunun kontrolü amaçlanmıştır. Pnömatik yapay kaslı robot kolun tasarımı ve kinematik analizi önce Solidworks programı ile yapılmıştır. Ardından Matlab Simulink ile bu analiz tekrarlanmış ve robot kolun konum kontrolü simülatif olarak gerçekleştirilmiştir. 3 serbestlik derecesi olan bu robot kolun ucunun, taban dönme açısı ve pnömatik kol uzunluklarının değişimiyle  $x$   $y$   $z$  kartezyen koordinatlarda hangi noktaya gideceği böylece hesaplanmıştır.

Son olarak, simülatif olarak yukarıda elde edilen ve girişin taban dönme açısı ve kol uzunlukları, çıkışın ise kol ucunun geldiği nokta ( $x$   $y$   $z$  değerleri olarak) olarak tanımlandığı sayısal değerler ile oluşturulan data, bir yapay sinir ağı programının eğitilmesinde kullanılmıştır. Sonra program, eğitimde kullanılan giriş çıkış değerleri ile test edilmiş ve elde edilen sonuçlar gerçek değerlere oldukça yakın çıkmıştır. Böylece sistemin konum kontrolü, yapay sinir ağları ile, makul fiziksel sınırlar içinde kalan ve fakat farklı giriş değerlerine göre cevap verebilen bir duruma yükseltilmiştir.

**Anahtar kelimeler:** Pnömatik Yapay Kaslar, Konum Kontrolü, Yapay Sinir Ağları

#### ABSTRACT

In this study, a 3-degree-of-freedom robot arm driven by pneumatic artificial muscles is designed. The aim is to control the position of the end point of robot arm which has a rotating base that can rotate 360 degrees around its own axis and two arms supported by expandable artificial muscles. The design and kinematic analysis of the robot arm with pneumatic artificial muscles were initially carried out by using Solidworks software. Then, this analysis was repeated using Matlab Simulink, and the position control of the robot arm was simulated. The Cartesian coordinates ( $x$ ,  $y$ ,  $z$ ) of 3-DOF robot arm end are obtained due to the change of base rotation angle and pneumatic arm lengths.

Finally, the data that are obtained above are used for training an artificial neural network program. The base rotation angle and arm lengths are taken as input values while the coordinates of the arm end ( $x$ ,  $y$ ,  $z$ ) are taken as output values, as well. The program is tested with the input-output values used in training, and the results seemed very close to the real ones. Thus, the position control of the system is elevated to a situation which can respond to different input values within reasonable physical limits by using artificial neural networks.

**Keywords:** Pneumatic Artificial Muscles, Position Control, Artificial Neural Networks

## DANTE GABRIEL ROSSETTI'NİN "PROSERPİNE" ESERİNİN ÇÖZÜMLENMESİ ANALYSIS OF DANTE GABRIEL ROSSETTI'S "PROSERPINE"

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### ÖZET

Akademik ve Disiplinler arası Yeni Sanat Eleştirisi Kuramı, sanat yapıtını tüm disiplinleri kullanarak sistematik ve çok yönlü bir yaklaşımla incelemektir. Kuramın eseri ele alış şekli, karmaşık olduğu düşünülen yapıtların dahi anlaşılır şekilde çözümlenmesi üzerine kuruludur. Sanatın çok yönlü ve karmaşık yapısını tüm boyutlarıyla etkili şekilde vurgulamaktadır. Kuram 8 ana başlık, 22 alt başlıkta ele alınmaktadır.

Başlangıçta eserin künyesi incelenmektedir devamında, biçimsel olguların tespiti ve bu olgulara yüklenen anlamların tanımlanması yapılmaktadır. Yapıtın konusunun tespit edilmesinin ardından, sembolik unsurlar ve amblemler irdelenerek çözümlenmektedir. Eserde yer alan, esere konu edilen figürlerin kimliklerinin tespiti ile anlatım elemanları ve konunun sanatsal ve estetik analizi yapılmaktadır. Bu analiz kısmında eserin kompozisyon ve desen anlayışı, grafik ve renk düzeni, ışık-gölge düzeni, mekân anlayışı, hareket şeması incelenmektedir.

Araştırmada Dante Gabriel Rossetti'nin resmettiği "Proserpine" adlı eserinin analizi gerçekleştirilmektedir. Dante Gabriel Rossetti, yapıtlarında sıkça psikolojik ve sembolik çözümlenmelere başvurmuştur. Sembolik anlatıma verdiği büyük önem, nesnelere, renklere ve çeşitli bitki tasvirleriyle kendini belli etmektedir. Sanatçının özgün yanlarından biri de figürün anatomisindeki hacim duygusudur. Bunların yanı sıra Esere konu olan figürün yani Proserpine'nin hikayesi Yunan mitolojisine uzanmaktadır. Ancak ressam kendi özel hayatını ve ahlak anlayışını, resmettiği konulara göre şekillendirmesiyle de dikkat çekmektedir. Eserde anlatım elemanlarının analizi gerçekleştirilmektedir. İnceleme yöntemi yeni sanat eleştirisi kuramına göre literatür taraması olarak belirlenmiştir. Betimsel incelemede, yazınsal ve görsel araştırmalar rehberliğinde Raphael-Öncesi Kardeşliği akımının en önemli temsilcilerinden D. Gabriel Rossetti'nin sanat anlayışı incelenmektedir. Yunan Tanrıçası Proserpine'yi konu alan bu eserin kurgulanmasında kullanılan semboller ve sembollere yüklenen anlamlar üzerinde durulmaktadır. Eserin yapıldığı dönemin sanat ortamı içindeki yeri, çağdaşı olan dünya sanatı örnekleriyle ilişkisi, yapıldığı günden bugüne sanat tarihi içindeki yeri gibi başlıklarla incelenerek yargıya varılmaktadır.

**Anahtar kelimeler:** Eser Analizi, Sanat Eleştirisi, Dante Gabriel Rossetti, Proserpine, Raphael-Öncesi Kardeşliği, Sembolizm.

### ABSTRACT

The Academic and Interdisciplinary New Theory of Art Criticism is to examine the work of art with a systematic and multifaceted approach using all disciplines. The way the theory deals with the work is based on the intelligible analysis of even the works that are thought to be complex. It effectively



emphasizes the multifaceted and complex nature of art in all its dimensions. The theory is covered under 8 main titles and 22 sub-titles.

At the beginning, the title of the work is examined, then the formal facts are determined and the meanings attributed to these facts are defined. After determining the subject of the work, symbolic elements and emblems are analyzed and analyzed. Determination of the identities of the figures in the work and the subject of the work, the elements of expression and artistic and aesthetic analysis of the subject are made. In this analysis part, the composition and pattern understanding of the work, the graphic and color scheme, the light-shadow scheme, the understanding of space, the movement scheme are examined.

In the research, the analysis of Dante Gabriel Rossetti's painting "Proserpine" is carried out. The great importance he gives to symbolic expression is evident in the objects, colors and various plant depictions. One of the unique aspects of the artist is the sense of volume in the anatomy of the figure. In addition to these, the story of the figure that is the subject of the work, namely Proserpine, goes back to Greek mythology. However, the painter also draws attention by shaping his private life and morality according to the subjects he paints. In the work, the analysis of the narrative elements is carried out. The analysis method was determined as a literature review according to the new art criticism theory. In the descriptive analysis, the artistic understanding of D. Gabriel Rossetti, one of the most important representatives of the Pre-Raphaelite Brotherhood movement, is examined under the guidance of literary and visual studies. The symbols used in the editing of this work, which is about the Greek Goddess Proserpine, and the meanings attributed to the symbols are emphasized. The place of the work in the art environment of the period in which it was made, its relationship with the contemporary examples of world art, its place in the history of art from the day it was made to the present, are examined and judged.

**Keywords:** Analysis of Artifacts, Art Criticism, Dante Gabriel Rossetti, Proserpine, Pre-Raphaelite Brotherhood, Symbolism.

**MİHRİ MÜŞFİK HANIM'IN, HARİCİYE NAZIRI ASIM BEY'İN EŞİ LETTA ASIM,  
BALOYA GİDERKEN ESERİNİN ÇÖZÜMLENMESİ**

**ANALYSIS OF MIHRI MÜŞFİK HANIM'S ARTWORK BY LETTA ASIM, THE WIFE OF  
MINISTER OF FOREIGN AFFAIRS ASIM, WHILE GOING TO THE BALL**

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## ÖZET

Tayfun Akkaya'nın Akademik Disiplinlerarası Yeni Sanat Eleştirisi Kuramına göre, sanat eserinin tüm disiplinleri kullanarak sistematik ve çok yönlü bir yaklaşımla ele almaktadır. Kuramın eseri ele alış şekli, karmaşık olduğu düşünülen yapıtların dahi anlaşılır şekilde çözümlenmesi üzerine kuruludur. Sanatın çok yönlü ve karmaşık yapısını tüm boyutlarıyla ele alıp etkili şekilde vurgulamaktadır. Kuram, anlaşılır ve öznlü olmasına karşın, sanat yapıtının derinlikli şekilde kavranmasına imkân sunmaktadır.

Eserin künyesi ele alınarak başlanılan araştırmada, biçimsel olguların tespiti ve bu olgulara yüklenen anlamların tanımlanması yapılmaktadır. Yapıtın konusunun tespit edilmesinin ardından sembolik unsurlar ve imgeler incelenerek çözümlenmektedir. Eserde yer alan, esere konu edilen figürlerin kimliklerinin tespiti ile anlatım elemanları ve konunun sanatsal ve estetik analizi yapılmaktadır. Bu analiz kısmında eserin kompozisyon ve desen anlayışı, grafik ve renk düzeni, ışık-gölge düzeni, mekân anlayışı, hareket şeması incelenmektedir.

Araştırmada Mihri Müşfik Hanım'ın, Hariciye Nazırı Asım Bey'in Eşi Letta Asım, Baloya Giderken eserinin analizi yapılmaktadır. Mihri Müşfik Hanım, Türk resim sanatında önemli bir yere sahiptir. 1911-12 yılları arasında yapılmış olan eser, konu olarak Cumhuriyet dönemi öncesi kadın temasını yansıtan Çağdaş Türk resim sanatına tanıklık eder. Eserin, plastik elemanların nasıl, hangi amaçlarla hareketlerin, sanatçı ve üslubun, kullanılan simgeler, yapıldığı dönemin toplumsal yaşama kadar her yönüyle incelenmiştir. İnceleme yöntemi yeni sanat eleştirisi kuramına göre literatür taraması olarak belirlenmiştir. Betimsel incelemede, yazınsal ve görsel araştırmalar rehberliğinde Çağdaş Türk resim sanatının önemli temsilcilerinden Mihri Müşfik Hanım'ın sanat anlayışı incelenmektedir. Cumhuriyet dönemi öncesi kadını konu olarak yer aldığı bu eserin kurgulanmasında kullanılan imgeler ve bu imgelere yüklenen anlamlar üzerinde durulmaktadır. Eserin yapıldığı dönemin sanat ortamı içindeki yeri, çağdaşı olan dünya sanatı örnekleriyle ilişkisi, yapıldığı günden bugüne sanat tarihi içindeki yeri gibi başlıklarla incelenerek yargıya varılmaktadır.

**Anahtar kelimeler:** Sanat Eleştirisi, Mihri Müşfik, Eser Analizi, Çağdaş Türk Kadını, Çağdaş Sanat.

## ABSTRACT

According to Tayfun Akkaya's Academic Interdisciplinary Theory of New Art Criticism, it deals with the work of art with a systematic and multifaceted approach using all disciplines. The way the theory deals with the work is based on the intelligible analysis of even the works that are thought to be complex. It deals with the multifaceted and complex structure of art in all its dimensions and effectively



emphasizes it. Although the theory is comprehensible and concise, it provides an opportunity for a deep understanding of the work of art.

In the research, which started by considering the title of the work, the determination of the formal facts and the definition of the meanings attributed to these facts are made. After determining the subject of the work, symbolic elements and images are analyzed and analyzed. Determination of the identities of the figures in the work and the subject of the work, the elements of expression and artistic and aesthetic analysis of the subject are made. In this analysis part, the composition and pattern understanding of the work, the graphic and color scheme, the light-shadow scheme, the understanding of space, the movement scheme are examined.

In the research, the work of Mihri Müşfik Hanım, Letta Asım, the Wife of Minister of Foreign Affairs Asım Bey, Going to the Ball is analyzed. Mihri Müşfik Hanım has an important place in Turkish painting. The work, which was made between 1911-12, witnesses the Contemporary Turkish painting art, which reflects the theme of women before the Republican period. How the work, the plastic elements, the movements, the artist and the style, the symbols used, the social life of the period in which it was made, were examined in every aspect. The analysis method was determined as a literature review according to the new art criticism theory. In the descriptive analysis, the artistic understanding of Mihri Müşfik Hanım, one of the important representatives of Contemporary Turkish painting art, is examined under the guidance of literary and visual researches. The images used in the editing of this work, in which the pre-republican woman is the subject, and the meanings attributed to these images are emphasized. The place of the work in the art environment of the period in which it was made, its relationship with the contemporary examples of world art, its place in the history of art from the day it was made to the present, are examined and judged.

**Keywords:** Art Criticism, Mihri Müşfik, Artifact Analysis, Contemporary Turkish Woman, Contemporary Art.

## MEASURING INTENSITY OF NUMBER OF EUR/USD QUOTATION CHANGES: A WAVELET ANALYSIS

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### ABSTRACT

With its estimated USD 7.5 tn daily average trading volume; foreign exchange (FX) market is the largest financial market in the world (Triennial report, BIS 2022). Unlike other regulated financial markets such as the equity and/or futures, there is no central trading venue in which all FX transactions and respective clearing takes place. FX markets are mostly unregulated. Predominant share of transactions take place over-the-counter (OTC). Trading, uninterrupted, takes place from Sunday 22:00 GMT to Friday 22:00 GMT. EUR/USD is the most traded currency pair (23% by traded volume).

In this project, we investigate cyclical patterns and intensity of change in number of mid price of EUR/USD quotations obtained from a Swiss-based broker company. In particular, we investigate data at the top of the order book, i.e. level 1 order book data, for January of each year over the 2008-2022 period. Our raw data is at the tick level at millisecond granularity and, to compensate for market microstructure effects, we aggregated to 5-min intervals.

We apply wavelet decomposition to identify important periods in terms of wavelet power. As a result, we select 3 important periods (about 6-hour, 8-hour and 24-hour) and try to reconstruct original series. As a result of reconstruction with the selected periods, we observe that the original and the reconstructed series, mostly, move in tandem. As a next step, averaging reconstructed series yields per minute quotation intensity (can also be deemed as a proxy for the number of EUR/USD transactions).

With this novel approach, we are in a position to document how the intensity of quotation changes for the EUR/USD exchange rate evolve over time. We observe significant changes, both in number of quotations and the associated distribution, from 2008 to 2022. Significant decreases in intensity of quotation changes, in January 2020, can also be attributed to early periods of Covid-19 and the increased risk perception.

**Keywords:** Foreign exchange markets, tick data, EUR/USD, wavelet analysis.



## DEFINITION OF HALAL SUPPLY CHAIN MANAGEMENT

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### ABSTRACT

Halal supply chain management is defined as management of the halal network with the aim of extending halal integrity from the source to the consumer's point of purchase. Halal supply chain management as the process of managing halal food products from various points of supplier to various points of buyers or consumers, involving various parties, who are in different places, which may at the same time, be involved in managing halal food products, with the aim of meet the needs and requirements of customers. Activities in the halal supply chain are warehousing, procurement, transportation, product handling, inventory management, procurement and order management which must follow the perspective of Islamic sharia. There are six main components that are very important to get an integrated halal supply chain system. These components are human resources, process, environment, Accreditation, logistics services, traceability system. There is a committee that evaluates all components of the halal supply chain that have been implemented by the company. Where a member of the integrated halal supply chain committee must be a professional Muslim in various fields such as human resources, manufacturing processes, environment, accreditation, logistics and traceability technology. This member will evaluate each component of the chain whether it meets halal standards or not.

**Keywords:** Chain management, halal supply, products, human resources



## EDREMİT (BALIKESİR)'DE FARKLI ZEYTİN ÇEŞİTLERİNİN BULUNDUĞU BAHÇEDEKİ LEPIDOPTERA TÜRLERİ

### LEPIDOPTERA SPECIES IN ORCHARD WHERE DIFFERENT OLIVE VARIETIES IN EDREMIT (BALIKESİR)

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#### ÖZET

Çalışma, 2019-2020 yıllarında Balıkesir Üniversitesi, Edremit Meslek Yüksekokulu bahçesinde, farklı onüç zeytin çeşidinin bulunduğu zeytin koleksiyon bahçesinde yürütülmüştür. Çalışmanın amacı, her iki yılda da nisan ayı başından aralık ayı sonuna kadar Robinson tipi ışık tuzağı kullanılarak kelebek türlerinin (Lepidoptera) belirlenmesi olmuştur. Tuzaklar haftalık olarak kontrol edilmiş ve tuzakta bulunan kelebekler laboratuvara götürülerek teşhise hazır hale getirilmiştir. Böylelikle farklı zeytin çeşitlerinin bulunduğu bir bahçedeki zeytinin ana zararlısı, Zeytin güvesi (*Prays oleae* Bern.) (Lepidoptera: Yponomeutidae) dışındaki kelebek faunası tespit edilebilmiştir. Çalışma süresince elde edilen kelebek türlerinin sayısı yıl içerisinde meteorolojik verilerle karşılaştırılmıştır.

Kelebeklerin ışığa yönelme davranışlarından faydalanılarak, çalışma sonucunda 11 familyaya bağlı 22 altfamilyaya dahil olan 47 kelebek türü belirlenmiştir. Elde edilen 103 adet Lepidoptera bireyi: Geometridae (%30.1), Noctuidae (%21.4), Tortricidae (%12.6), Crambidae (%10.7), Cossidae ile Erebidae (%6.8) ve Plutellidae (%4.9) familyalarına dahil olarak bulunmuşlardır. Oecophoridae, Pyralidae, Sphingidae (%1.9) ve Notodontidae (%1.0) familyalarına dahil olanlar en az yakalanan türler olmuşlardır. *Dasyorsa modesta* (Staudinger, 1879) (Geometridae: Ennominae) (%10.7), *Archips rosanus* L. (Tortricidae: Tortricinae) (%6.8), *Dyspepsa ulula* Staudinger (Cossidae: Cossinae) (%6.8), *Helicoverpa armigera* (Hübner) (Noctuidae: Heliothinae) (%6.8), *Hoplodrina ambigua* (Denis & Schiffermüller, 1775) (Noctuidae: Amphipyridae) (%4.9) ile *Plutella xylostella* (Linnaeus, 1758) (Plutellidae: Plutellinae) (%4.9) en fazla elde edilen türler olmuşlardır. Çalışmadaki diğer türler 2 ya da 1 adet birey olarak elde edilmişlerdir. En fazla kelebek Nisan 2019 (14 birey) ve Haziran 2020 (15 birey)'de yakalanmıştır. Birey sayılarının meteorolojik verilere göre yıl içerisinde dağılmadığı, bunun kelebeklerin döl sayısına bağlı olarak değiştiği belirlenmiştir.

**Anahtar kelimeler:** Edremit, zeytin çeşitleri, Lepidoptera, ışık tuzağı



## MARKA TOPLULUĞU FAYDALARININ ALGILANAN RİSK ÜZERİNDEKİ ETKİSİ THE EFFECT OF BRAND COMMUNITY BENEFITS ON THE PERCEIVED RISK

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### ÖZET

Pazarlama anlayışının gelişimine paralel olarak tüketicilerin sahip olduğu tüketim alışkanlıkları da değişmiştir. Tüketim günümüzde fizyolojik ve fonksiyonel ihtiyaçları karşılamanın yanı sıra sosyolojik ve psikolojik ihtiyaçlar için de çözüm olmaktadır. Bu şartlar altında oluşan tüketim ortamında daha geniş kitlelere ulaşmak, ulaşılan kitlede tatmin yaratmak ve sürdürülebilir firma başarısı elde etmek için kritik bir bileşen olan marka kavramı hem firmaların hem de tüketicilerin odak noktası haline gelmiştir. Öyle ki bir markaya karşı duyulan merak, sevgi ve ilgi tüketiciler tarafından ortak bilince, ritüellere ve ahlaki sorumluluklara sahip olan marka toplulukları oluşturulmasına kaynaklık etmektedir. Bu marka toplulukları içinde yaşanan süreçler üyelerine öğrenme faydaları, sosyal faydalar, eğlence faydası, kişisel fayda ve ekonomik faydalar gibi farklı alanlarda bir takım fayda ve motivasyonlar sunmaktadır. Günümüz pazarlarında gözlemlenen yüksek rekabet ortamı her ne kadar müşteri odaklı olsada tüketicilerin karar verme sürecinde başvurduğu farklı değerlendirme kriterleri bulunmaktadır. Bu kriterler içinde algılanan risk faktörleri önemli bir yere sahiptir. Algılanan risk fonksiyonel, fiziksel, finansal, psikolojik, sosyal ve zaman riski olmak üzere 6 farklı başlıkta sınıflandırılmaktadır. Verilen risk faktörleri ürünün karmaşıklığı, kullanım amaçları, pazardaki rekabet düzeyi, ulaşılabilirlik ve dağıtım kanallarının yaygınlığı, sunulan ek hizmetler, tüketicilerin bilgi ve gelir seviyesi vb. konulara bağlı olarak farklı seviyelerde algılanmaktadır. Tüketiciler algılanan risk düzeyini azaltmak için farklı çözüm arayışları içine girdiklerinde marka toplulukları bu arayışa cevap veren kaynaklardan biri olmaktadır.

Bu çalışmada marka topluluklarının sunduğu fayda unsurlarının tüketici davranışlarında önemli bir yeri olan algılanan risk üzerindeki etkisini tespit etmek amaçlanmıştır. Örneklem olarak Africa Twin Türkiye marka topluluğu seçilmiş ve grup üyelerine sosyal medya üzerinden ulaşılmıştır. İki farklı ölçek ile oluşturulmuş anket vasıtasıyla 401 kişiden toplanan verilerin analizi IBM SPSS programı ile yapılmıştır. Çalışma sonunda marka topluluğunun sunduğu faydaların algılanan risk üzerindeki etkisi ortaya konmuştur.

**Anahtar kelimeler:** Marka topluluğu, marka topluluğu faydaları, algılanan risk.

### ABSTRACT

Consumption habits of consumers have also changed in parallel with the development of marketing understanding. Today, consumption is a solution for sociological and psychological needs as well as meeting physiological and functional needs. The concept of brand, which is a critical component to reach wider masses in the consumption environment formed under these conditions, to create satisfaction in the reached audience and to achieve sustainable company success, has become the focal point of both companies and consumers. So much so that the curiosity, love and interest towards a brand is the source of the creation of brand communities with common consciousness, rituals and moral responsibilities by consumers. The processes experienced within these brand communities offer their members a number of benefits and motivations in different areas such as learning benefits, social benefits, entertainment benefits, personal benefits and economic benefits. Although the highly competitive environment observed in today's markets is customer-oriented, there are different evaluation



criteria that consumers apply in the decision-making process. Perceived risk factors have an important place in these criteria. Perceived risk is classified under 6 different headings as functional, physical, financial, psychological, social and time risk. Given risk factors are the complexity of the product, its intended use, the level of competition in the market, the prevalence of accessibility and distribution channels, additional services offered, the level of knowledge and income of consumers, etc. are perceived at different levels depending on the subject matter. When consumers seek different solutions to reduce the perceived risk level, brand communities are one of the sources that respond to this search.

In this study, it is aimed to determine the effect of the benefits offered by the brand communities on the perceived risk, which has an important place in consumer behavior. As a sample, Africa Twin Turkey brand community was chosen and group members were reached through social media. The analysis of the data collected from 401 people through a questionnaire created with two different scales was made with the IBM SPSS program. At the end of the study, the effect of the benefits offered by the brand community on the perceived risk was revealed.

**Keywords:** Brand community, brand community benefits, perceived risk.

## PIŞİRME TEKNİĞİ VE SÜRESİNİN YER ELMASININ RENK VE BESİN DEĞERLERİNE ETKİSİ

### THE EFFECT OF COOKING TECHNIQUE AND TIME ON THE COLOR AND NUTRITIONAL VALUES OF JERUSALEM ARTICHOKE

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#### ÖZET

Sebzeler zengin vitamin, mineral ve lif içerikleri nedeniyle beslenmede oldukça önemlidir. Yer elması (*Helianthus tuberosus* L.) *Asteraceae* familyasına aittir. Patatese benzeyen etli yumrular şeklinde bir sebzedir. Yapılan çalışmalar yer elmasındaki fitokimyasal bileşiklerin antioksidan, antimikrobiyal, antifungal ve antikanser özellikte olduğunu göstermektedir. Yer elması yumruları fazla enerjiyi fruktozun polimeri olan inulin şeklinde depo ederler. Sindirilemez olduğu için diyet lifi özelliği gösteren inulin, gıdalarda prebiyotik, yağ ve şeker ikamesi olarak ve lif içeriğini zenginleştirmede kullanılmaktadır. Son yıllarda haşlanmış veya çiğ şekilde yer elması tüketimi yaygınlaşmaktadır. Sebzeler tüketilmeden hemen önce pişirilmekte ve pişirme işlemleri ile fiziksel karakteristikleri ve kimyasal kompozisyonları değişebilmektedir. Pişirme işlemleri ile sebze dokusu yumuşayarak daha kolay çiğnenebilir bir form kazanmaktadır. Ayrıca çeşitli lezzet bileşenleri oluşmaktadır. Pişirmenin bir diğer etkisi de mikroorganizmaların inaktive edilmesi ve toksik maddelerin yok edilmesidir. Tüketiciler besin değeri yüksek ve tazeye en yakın gıdalara ulaşmak istemektedir. Bu nedenle pişirme sonrasında gıdaların besin değerini ve fiziksel özelliklerini korumak oldukça önemlidir. Bu çalışmada; yer elması suda haşlama, buharda pişirme, fırın ve mikrodalga ile pişirme teknikleri ile farklı sürelerde pişirilmiştir. Seçilen yöntemler gıda pişirmede yaygın olarak tercih edilen ekonomik yöntemlerdir. Suda haşlama, buharda pişirme ve fırında pişirme işlemleri 2, 5, 10, 15, 20 dak süreyle, mikrodalga pişirme işlemi ise 10, 30, 120, 180, 240 s süreyle yapılmıştır. Pişirilen yer elması örneklerinin renk değerleri, toplam fenolik madde miktarları ve antioksidan aktivite analizleri gerçekleştirilmiştir. Taze yer elmasının  $L^*$ ,  $a^*$ ,  $b^*$  değerleri sırasıyla 74,70; -2,06 ve 17,14 olarak bulunmuştur. Rengin açıklığını ifade eden  $L^*$  değerinde ve sarılığı ifade eden  $b^*$  değerinde pişirme süresi arttıkça azalma olmuştur. Yeşilliği ifade eden negatif  $a^*$  değerinde ise ilerleyen sürelerde artış olduğu gözlenmiştir. Çiğ yer elmasının Toplam fenolik madde içeriği 192,79 mg GAE/100 g kuru yer elması olarak bulunmuştur. Toplam fenolik madde içeriği ve DPPH radikali süpürme aktivite sonuçları 20 dk suda haşlanan ve 5, 10, 20 dk buharda haşlanan örneklerde diğer örneklere göre daha yüksektir. Fırında pişirme işlemi ile toplam fenolik madde içeriğinde azalma olduğu görülmüştür.

**Anahtar kelimeler:** Yer elması, Pişirme, Renk, Besin içeriği

#### ABSTRACT

Vegetables are very important in human nutrition because of their rich vitamin, mineral and fiber content. Jerusalem artichoke (*Helianthus tuberosus* L.) belongs to *Asteraceae* family. It is in the form of fleshy tubers similar to potatoes. Studies show that phytochemical compounds in Jerusalem artichoke have antioxidant, antimicrobial, antifungal and anticancer properties. Jerusalem artichoke tubers store excess energy in the form of inulin, a polymer of fructose. Inulin shows dietary fiber properties because



it is indigestible. It is used in foods as a prebiotic, fat and sugar substitute, and to enrich the fiber content. In recent years, the consumption of boiled or raw Jerusalem artichoke has become widespread. Vegetables are cooked just before consumption, and their physical characteristics and chemical compositions may change with the cooking process. With the cooking processes, the texture of the vegetable softens and gains a more easily chewable form. In addition, various flavor components are formed as a result of cooking. Another effect of cooking is the inactivation of microorganisms and the destruction of toxic substances. Consumers want to reach foods with high nutritional value and closest to fresh. For this reason, it is very important to preserve the nutritional value and physical properties of foods after cooking. In this study; Jerusalem artichokes were cooked at different times by boiling, steaming, oven and microwave cooking techniques. The selected methods are economical methods that are widely preferred in food cooking. Boiling in water, steaming and baking in the oven were done for 2, 5, 10, 15, 20 minutes, and microwave cooking for 10, 30, 120, 180, 240 seconds. Color values, total phenolic content and antioxidant activity analyses of cooked Jerusalem artichoke samples were performed.  $L^*$ ,  $a^*$ ,  $b^*$  values of fresh tubers were 74.70; -2.06 and 17.14, respectively. The  $L^*$  value, which expresses the lightness of the color, and the  $b^*$  value, which expresses the yellowness, decrease as the cooking time increases. It was observed that there was an increase in the negative  $a^*$  value, which expresses the greenness, in the long cooking times. Total phenolic content of raw Jerusalem artichoke was found to be 192.79 mg GAE/100 g dried Jerusalem artichoke. Total phenolic content and DPPH radical scavenging activity results were higher in samples boiled in water for 20 minutes and boiled in steam for 5, 10, 20 minutes compared to other samples. It was observed that there was a decrease in the total phenolic content with the baking process.

**Keywords:** Jerusalem artichoke, Cooking, Color, Nutrient content



## TF-IDF VE TEXTRANK ALGORİTMASI KULLANARAK METİN ÖZETİ OLUŞTURMA TEXT SUMMARIZATION USING TF-IDF AND TEXTRANK ALGORITHM

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### ÖZET

İnternetin hızlı büyümesi, özellikle metin belgeleriyle ilgili olarak mevcut bilgi miktarında büyük bir artışa neden olmaktadır. Ancak, internet üzerindeki devasa bilgi hacmi nedeniyle, yararlı bilgileri verimli bir şekilde elemek artık mümkün olmamaktadır. Tüm kuruluşlarda yapılandırılmış veya yarı yapılandırılmış verilerin işlenmesi, verilerin muazzam bir şekilde artması nedeniyle çok zor hale gelmektedir. Verileri işlemek için birçok teknik veya algoritma kullanılabilir, ancak bu çalışmada, TF/IDF ve TF/IDF-TextRank algoritmasına odaklanmaktadır. Haber içerikleri ve bu içeriklerin özetinin yer aldığı BBC veri setinden rastgele seçilmiş 10 haber kullanılmıştır. Bu veriler üzerinde TF/IDF ve TF/IDF-TextRank algoritmaları kullanarak bu iki yaklaşımın karşılaştırmalı bir çalışması sunulmuştur. İki yaklaşımla elde edilen veriler Rouge değerlendirme yaklaşımı ile puanlanmıştır. TF/IDF-TextRank'ın TF/IDF'den daha iyi sonuçlar verildiği görülmüştür.

**Anahtar kelimeler:** TF-IDF, TextRank, Metin özetleme, Cümle sıralaması, Kelime sıklığı

### ABSTRACT

The rapid growth of the internet has led to a significant increase in the amount of available information, particularly related to text documents. However, due to the massive volume of information on the internet, efficiently filtering out useful information has become increasingly challenging. Processing structured or semi-structured data in all organizations has become very difficult due to the exponential growth of data. There are several techniques or algorithms that can be used to process data, but this study focuses on the TF/IDF and TF/IDF-TextRank algorithms. Ten randomly selected news articles from the BBC dataset, including the content and summaries of these articles, were used in this study. Comparative analysis of these two approaches was presented by using the TF/IDF and TF/IDF-TextRank algorithms on these data. The data obtained from both approaches were evaluated using the Rouge evaluation approach. It was observed that TF/IDF-TextRank outperforms TF/IDF in terms of results.

**Keywords:** TF-IDF, TextRank. Text summarization, Sentence ranking, Word frequency

## MUHASEBEDE RENKLER COLORS IN ACCOUNTING

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### ÖZET

Eski çağlardan beri insanlar renkleri çeşitli anlamlarla donatarak kendi yaşam biçimlerini, alışkanlıklarını ve statülerini belirlemişler ve bu statüyü içinde yaşadıkları topluma yerleştirmeye çalışmışlardır. Rengin anlamı bir toplumun tarihine, kültürüne ve coğrafyasına göre değişiklik gösterebilir. Tarihsel olarak toplumların yaşadığı coğrafi bölgelerde renklere yüklenen farklı anlamlar günümüzde de geçerlidir. Renklerin insan ruhunu etkilediği ve bizi duygusal olarak etkilediği genel kabul görmüş ve bilimsel olarak kanıtlanmıştır. Tarih boyunca renkler farklı alanlarda kullanılmıştır. Renkler, kültür, sanat, dinler, edebiyat, ekonomi, işletme ve muhasebe gibi bilim dünyasının farklı alanlarında kullanılmıştır. Bu çalışmanın amacı, farklı muhasebe alanlarını renkler ile ifade ederek tanıtmaktır. Muhasebe, faaliyetlerinin çevreye duyarlı olması, bulunduğu özel çevreye uygun bir ad alması, hukuka uygunluğu ve kayıt dışı işlemlerin incelenmesi bakımından renkler ile ilişkilendirilerek ifade edilebilmektedir. İfade edilen hususların renkler ile ilişkisi kurulduğunda; yeşil muhasebe, mavi muhasebe, beyaz muhasebe ve gri muhasebe gibi muhasebede yeni kavramlar ortaya çıkmaktadır.

**Anahtar kelimeler:** Muhasebe, Renkler, Muhasebede Renkler

### ABSTRACT

Since ancient times, people have determined their own lifestyles, habits and status by equipping colors with various meanings and have tried to place this status in the society they live in. The meaning of color can vary according to the history, culture and geography of a society. Different meanings attributed to colors in the geographical regions where societies lived historically are still valid today. It is generally accepted and scientifically proven that colors affect the human psyche and affect us emotionally. Throughout history, colors has been used in different areas. Colors have been used in different areas of the scientific world such as culture, art, religions, literature, economy, business and accounting. The aim of this study is to introduce different accounting fields by expressing them with colors. Accounting actions can be expressed by associating them with colors in terms of being sensitive to the environment, taking a name suitable for the specific environment, their compliance with the law and examining unregistered transactions. When the relationship between the expressed issues and colors is established; New concepts in accounting such as green accounting, blue accounting, white accounting and gray accounting are emerging.

**Keywords:** Accounting, Colors, Colors in Accounting.



## TÜRKYE'DE HEYKEL SANATI VE GÜZEL SANATLAR AKADEMİSİ SCULPTURE ART AND THE ACADEMY OF FINE ARTS IN TURKEY

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### ÖZET

1883'te Osmanlı döneminde kurulan Sanayi-i Nefise Mektebi, 1928'de Güzel Sanatlar Akademisi adını alır. Bu kurum, Genç Türkiye Cumhuriyeti'nin çağdaşlaşma hedefinin sanat alanındaki önemli göstergesi ve temsilcisi olmuştur. Kurumun önemli birimlerinden olan heykel bölümü, heykelin ülkemizde var olmasının koşullarını hazırlayıp; yaptığı reformlarla öncülük sağlamıştır.

Türkiye'de Heykel Sanatı ve Akademi başlıklı bu makalede heykel sanatının gelişim süreci ve bu gelişim sürecini belirleyen belli dönemler alt başlıkları içinde ele alınmaktadır. Bu dönemlerden birincisi: Sanayi-i Nefise Mektebinin açıldığı 1883 tarihi ile başlayan ve 1933'e kadarki süreci içine alan heykeltraş Yervant Osgan ve İhsan Özsoy'un şekillendirdiği, Mahir Tomruk ve Nijat Sirel'in görev aldığı heykel eğitimi; İkincisi, Genç Türkiye Cumhuriyeti'nin reformları doğrultusunda Yurtdışından eğitimcilerin davet edildiği dönemdir. Bu dönemde Akademi Heykel eğitiminin başına Heykeltraş Rudolf Belling getirilir. 1937'den 1954'e kadar heykel eğitimi onun yönetiminde devam eder. Bu dönemde İhsan Özsoy'un öğrencilerinden Hadi Bara ve Zühtü Müridoğlu'nun yurtdışı deneyimlerinden sonra eğitime katılmalarıyla ivme hızlanır. Üçüncü olarak ta 1950 ve 1970 tarihleri arasında kapsayan dönem yer alır. Bu dönemde Türk heykeltraşlar ana heykel atölyelerinde Belling ile birlikte görev almaya başlar. 1954 tarihinde Belling görevinden ayrılmasıyla dönemin en önemli isimleri Hadi Bara ve Zühtü Müridoğlu olur. Bu tarihlerde heykel sanatında değişim yaratan bu öncü isimlere 1950 tarihinde Hüseyin Gezer, 1951 tarihinde İlhan Koman ve 1959 tarihinde de Şadi Çalık dahil olur. Özellikle bu sanatçıların 1950 sonrasındaki Türk heykel sanatının modernist açılımlarına katkıları önemli etkiler yaratır.

Türkiye'de Güzel Sanatlar Akademisinin şekillendirdiği ve yön verdiği heykel sanatı ve sanatçıları bugün dünya sanatı içerisinde rol alabilen, temsil gücüne sahip bir geleneğin sürdürücüleri olarak ülkemiz kültür dünyasına önemli katkılar sunmaktadır.

**Anahtar kelimeler:** Akademi, Heykel, Sanat, Öncü, Heykeltraş, Eğitimci

### ABSTRACT

The Sanayi-i Nefise Mektebi, established during the Ottoman period in 1883, became known as the Güzel Sanatlar Akademisi in 1928. This institution served as an important indicator and representative of the modernization goals of the young Turkish Republic in the field of art. The sculpture department, as one of the significant units of the institution, prepared the conditions for the existence of sculpture in our country and pioneered reforms.

In this article titled "Sculpture Art and the Academy in Turkey," the development process of sculpture art and the specific periods that shaped this process are discussed under subheadings. The first period begins with the opening of the Sanayi-i Nefise Mektebi in 1883 and extends until 1933, shaped by the sculptors Yervant Osgan and İhsan Özsoy, with the involvement of Mahir Tomruk and Nijat Sirel in sculpture education. The second period is characterized by the invitation of foreign educators in line with the reforms of the young Turkish Republic. During this period, Sculptor Rudolf Belling was appointed as the head of the Academy's sculpture education. Sculpture education continued under his leadership from 1937 to 1954. The participation of Hadi Bara and Zühtü Müridoğlu in education after



their experiences abroad, as students of İhsan Özsoy, accelerated the momentum during this period. The third period covers the years between 1950 and 1970. In this period, Turkish sculptors started to work in the main sculpture studios alongside Belling. When Belling left his position in 1954, the most important figures of the period became Hadi Bara and Zühtü Müridođlu. These pioneering figures were joined by Hüseyin Gezer in 1950, İlhan Koman in 1951, and Şadi Çalık in 1959, contributing to the transformative and modernist aspects of Turkish sculpture art after 1950. Their contributions had significant influences on the development of Turkish sculpture art.

The sculpture art and artists shaped and guided by the Güzel Sanatlar Akademisi in Turkey today contribute significantly to our country's cultural world as the carriers of a tradition capable of playing a role and possessing representational power within the global art scene.

**Keywords:** Sculpture, Art, Academy, Sculptor, Education, Pioneer.



## AĞRI İLİ'NİN VERGİ YAPISINA İLİŞKİN GENEL BİR DEĞERLENDİRME A GENERAL EVALUATION OF THE TAX STRUCTURE OF AĞRI PROVINCE

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### ÖZET

Bu çalışmanın amacı Ağrı ilindeki mükellef sayıları, tahakkuk ve tahsilat oranlarının incelenmesi ve Ağrı ilinin Türkiye tahsilat geliri içerisindeki payının sebepleri ile birlikte sunulmasıdır. Ağrı ilinde geçim kaynağının tarım ve hayvancılık temelli olması vergi tahakkuk miktarlarını etkilemiştir. Sanayileşmemiş bir bölge olması, gençlerin istihdamının inşaat ve yurt dışında yapılması bu verileri doğrudan etkilemektedir. Son 5 yılda incelenen mükellef sayılarında artış görülse de yeterli orana gelmemiştir. Gelir İdaresi Başkanlığının 2023 yılı faaliyet raporu incelenmiş, son 6 yıla göre tahakkuk miktarlarında düzenli artış olmakla birlikte, tahsilat ve tahakkuk/ tahsilat oranlarında azalış ve artışların olduğu görülmektedir. Bunun sebepleri olarak vergi bilincindeki eksiklikler, denetim eksiklikleri, süreç içerisinde yaşanan Covid-19 salgın süreci gösterilebilmektedir. Ağrı iline ilişkin yapılacak daha detaylı çalışmalar ve mükelleflere sunulacak eğitimlerin ilin tahsilat oranındaki katkısını artıracığı düşünülmektedir.

**Anahtar kelimeler:** Vergi, Ağrı İli, Mali Yapı, Vergilendirme.

### ABSTRACT

The aim of this study is to examine the number of taxpayers, accrual and collection rates in Ağrı province and to present the reasons for the share of Ağrı province in Turkey's collection revenue. The fact that the source of livelihood in Ağrı province is based on agriculture and animal husbandry has affected the tax accrual amounts. Being non-industrialized region and the employment of young people in construction and abroad directly affects these data. Although there has been an increase in the number of taxpayers examined in the last 5 years, it has not reached a sufficient rate. The annual report of the Revenue Administration for 2023 has been examined although there has been a steady increase in the amount of accruals compared to the last 6 years while it is observed that there are decreases and increases in collection and accrual / collection ratios. As the reasons for this, deficiencies in tax awareness, audit deficiencies, the Covid-19 pandemic process experienced during the process can be cited. It is thought that the more detailed studies to be carried out on the province of Ağrı and the trainings to be offered to taxpayers will increase the contribution of the province in the collection rate.

**Keywords:** Tax, Ağrı Province, Financial Structure, Taxation.



## FARKLI DÖNEMLERDE SANAT ESERİNİN MÜHRÜ OLARAK İMZA VE ÇAĞDAŞ SANATTA KİMLİK SORUNSALI

### SIGNATURE AS THE SEAL OF AN ARTWORK IN DIFFERENT PERIODS AND THE PROBLEM OF IDENTITY IN CONTEMPORARY ART

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#### ÖZET

Sanat eserinin yaratıcısı konumunda olan sanatçının imzası eserin kendisi kadar öznel bir varlıktır ve estetik bir değere sahiptir. İmza, sanatçının kendini özgün bir şekilde ifade ettiği ve eserin kaynağı-sahibi-icracısı olarak onay verdiği bir simge olarak önemli bir işleve sahiptir. Bu kapsamda araştırmada sanat eserlerinin sahibini işaret eden imzaların sanat tarihinde nasıl bir değişim içinde olduğu, farklı dönemde ve farklı sanatçılarda biçimlerine ve yapılarına göre hangi anlamda kullanıldıkları, hangi somut göstergelere gönderme yaptıkları ve neyi temsil ettikleri analiz edilmektedir. Rönesans dönemi eserlerinde belirgin olarak gözlemlenmeye başlayan sanatçı imzaları, güncel sanata gelinceye kadar farklı biçim ve anlayış doğrultusunda değişime uğramıştır. Tarihsel koşullar, toplumsal değerler, kültürel öğeler, sanat eserlerinin biçimsel değişimini etkilerken, sanatçı imzalarında da önemli başkalaşımaları beraberinde getirmiştir. Farklı dönemlerde sanatçı-eser ilişkisini izleyici ile bir araya getirerek eserin kimliğine ilişkin tanımlamanın yapılabilmesine olanak sunan imzalar kendi içinde biçimsel, yapısal ve kaligrafik unsurlarına göre (imzanın karakteristik nitelikleri) değişim gösterebildiği gibi eserin kimliğini tanımlamaya yönelik sanatçı tarafından kullanılan belirteç formunda (kimliği tanımlayan bir unsur) nesnel bir biçimin parçası, plastik bir unsura dönüşen bir form, farklı sembol ve göstergeler, gizli ya da takma isim şeklinde farklılaşabilmektedir. Bununla birlikte imza sanat alımlayıcısının/alıcısının yönelimlerini ve beğenisini doğrudan etkileyen birer göstergelere de dönüşebilmektedir. Bu kapsamda araştırmanın konusunu oluşturan imza, adli bilimlerin araştırma alanına giren karakter analizi yönüyle ele alındığı gibi, sanatın konusu kapsamında hem kimliğe gönderme yapan bir unsur hem de kendi başına plastik bir değer olarak ele alınmakta ve incelenmekte, modern sonrası dönemin kültür üretimi sürecinde (kavramsal enstalasyonlar, dijital sanat üretimleri vb.) imzanın yerini neyin aldığı ve eserin yaratıcısına ilişkin tanımlamanın hangi kriterlere göre yapıldığı analiz edilmektedir.

**Anahtar kelimeler:** İmza, Sanatçı imzası, Kimlik, Sanatçı kimliği, Özgünlük belgesi, Modern kültür, Çağdaş sanat

#### ABSTRACT

The signature of the artist, who is the creator of the work of art, is as subjective as the work itself and has an aesthetic value. The signature has an important function as a symbol in which the artist expresses himself in a unique way and approves as the source-owner-performer of the work. In this context, in the research, it is analyzed how the signatures indicating the owner of the works of art have changed in the history of art, in which sense they are used according to their forms and structures in different periods



and by different artists, what concrete sign they refer to and what they represent. The signatures of the artists, which began to be clearly observed in the works of the Renaissance period, have changed in line with different forms and understandings until they come to contemporary art. While historical conditions, social values, cultural elements affect the stylistic change of works of art, they also brought along important transformations in the artist's signatures. The signatures, which enable the definition of the identity of the work by bringing together the artist-work relationship with the audience in different periods, can vary according to their formal, structural and calligraphic elements (characteristic features of the signature); It can be differentiated as a part of an objective form (an element that defines identity), a form that turns into a plastic element, different symbols and indicators, a hidden or pseudonym, in the form of a marker used by the artist to define the identity of the work. In addition, the signature can also turn into an indicator that directly affects the orientation and taste of the art buyer/recipient. In this context, the signature that constitutes the subject of the research; As it is handled with the aspect of character analysis, which is in the research field of forensic sciences, it is considered and examined both as an element that refers to identity and as a plastic value on its own within the scope of the subject of art. In the cultural production process of the post-modern period (conceptual installations, digital art productions, etc.), what replaces the signature and according to which criteria the definition of the creator of the work is made is analyzed.

**Keywords:** Signature, Artist signature, Identity, Artist identity, Certificate of authenticity, Modern culture, Contemporary art

## PISA SINAVI VERİLERİNE GÖRE ÖĞRENCİLERİN BAŞARAMAMA KORKUSUNU ETKİLEYEN FAKTÖRLERİN ÇOKLU DOĞRUSAL REGRESYON ANALİZİ İLE BELİRLENMESİ

### DETERMINING THE FACTORS AFFECTING STUDENT FAILURE FEAR BY MULTIPLE LINEAR REGRESSION ANALYSIS ACCORDING TO PISA EXAM DATA

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#### ÖZET

Öğrenci başarısına etki eden birçok faktör vardır, bunlar psikolojik, sosyal, ekonomik gibi farklı boyutlardan oluşmaktadır. Öğrencinin başarısına etki eden bu bağımsız değişkenlerin incelenmesi son derece önemlidir. Bireyin başarısını etkileyen faktörlerden olan bireyin psikolojik durumunun incelenmesi ve bireyde psikolojik dezavantaja sebebiyet verebilecek durumların belirlenmesi adına ölçümler yapılması bireyin başarısı hakkında fikir sahibi olmak adına son derece önemlidir. PISA öğrencilerin okul içinde ve dışında öğrendikleri bilgi ve becerilerinin ölçülmesini amaçlayan bir sınavdır. PISA ayrıca öğrencilerin içinde bulunduğu eğitim iklimini, derslere yönelik ilgi ve performanslarını, sosyal ve psikolojik olarak öğrencilerin ve ebeveynlerinin durumlarını ortaya koymaktadır. Literatür incelendiğinde öğrencilerin başaramama korkusunun bireyin başarısı üzerinde son derece etkili olduğu sonucuna ulaşılmıştır. Başaramama korkusuna sahip bireylerin stres ve kaygıya kapılarak başarısız olduğu gözlemlenmiştir. Bu çalışmada öğrencilerin başaramama korkusuna etki eden sosyoekonomik ve psikolojik çeşitli değişkenlerin belirlenmesi adına adimsal çoklu doğrusal regresyon analizi kullanılmıştır. Bu amaç doğrultusunda OECD ülkelerinin PISA2018 başaramama korku indeksleri ile PISA sınavından elde edilen 17 adet psikolojik, ekonomik, sosyal ve kültürel değişkenler ele alınmıştır. Yapılan backward adimsal regresyon analizi sonucunda, başaramama korkusunu açıklamak için kurulacak en uygun modelde anne eğitimi, ekonomik-sosyal-kültürel indeks, aidiyet duygusu, öğrenci için okul iklimi, öğrencinin öğrenme tutumu ve okul disiplin iklimine ait değişkenler açıklayıcı değişkenler olarak belirlenmiştir. Yapılan çoklu doğrusal regresyon analizi sonucunda seçilen ilgili değişkenlerin öğrencilerin başaramama korkusunu anlamlı bir şekilde açıkladığı gözlemlenmiş ( $F=13,392$ ;  $p=0,001 < 0,05$ ) ve modelde çoklu belirleme katsayısı  $R^2= 0,763$  olarak bulunmuştur. Bu sonuçlara göre anne eğitim durumu ( $\beta_1= -0,034$ ), aidiyet duygusu ( $\beta_2= -0,726$ ) ve öğrenci için okul iklimi ( $\beta_3= -0,182$ ) değişkenlerinin öğrencide başaramama korkusunu azalttığı gözlemlenmiştir. Ekonomik-sosyal-kültürel indeks ( $\beta_4= 0,458$ ), öğrencinin öğrenme tutumu ( $\beta_5= 0,819$ ) ve okul disiplin ikliminin ( $\beta_6= 0,177$ ) de öğrencilerde başaramama korkusunu arttırdığı görülmüştür.

**Anahtar kelimeler:** Çoklu Doğrusal Regresyon, Başaramama Korkusu, PISA Sınavı

#### ABSTRACT

There are many factors that affect student success, they consist of different dimensions such as psychological, social and economic. It is extremely important to examine these independent variables that affect the success of the student. It is extremely important to examine the psychological state of the



individual, which is one of the factors affecting the success of the individual, and to make measurements in order to determine the situations that may cause psychological disadvantage in the individual in order to have an idea about the success of the individual. PISA is an exam that aims to measure the knowledge and skills that students learn in and out of school. PISA also reveals the educational climate of the students, their interest and performance in the lessons, and the social and psychological situation of the students and their parents. When the literature is examined, it has been concluded that the fear of failure of the students is highly effective on the success of the individual. It has been observed that individuals who have a fear of failure fail due to stress and anxiety. In this study, stepwise multiple linear regression analysis was used to determine various socioeconomic and psychological variables that affect students' fear of failure. For this purpose, the PISA 2018 fear of failure indexes of OECD countries and 17 psychological, economic, social and cultural variables obtained from the PISA exam were discussed. As a result of the backward stepwise regression analysis, in the most appropriate model to be established to explain the fear of failure, the variables related to mother education, economic-social-cultural index, sense of belonging, school climate for the student, student's learning attitude and school discipline climate were determined as explanatory variables. As a result of the multiple linear regression analysis, it was observed that the relevant variables selected significantly explained the fear of failure of the students ( $F=13.392$ ;  $p=0,001<0.05$ ) and the multiple determination coefficient in the model was found to be  $R^2= 0.763$ . According to these results, the variables of mother's education status ( $\beta_1 =-0.034$ ), sense of belonging ( $\beta_2 =-0.726$ ) and school climate for the student ( $\beta_3 =-0.182$ ) decreased the fear of failure in students. Economic-social-cultural index ( $\beta_4=0,458$ ), student's learning attitude ( $\beta_5=0,819$ ) and school discipline climate ( $\beta_6=0,177$ ) also increased the fear of failure in students.

**Keywords:** Multiple Linear Regression, Fear of Failing, PISA Exam



## HEYDƏR ƏLİYEV VƏ AZƏRBAYCAN ƏDƏBİYYATI

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### ÖZET

Hakimiyyəti boyu ziyalıların və ziyalılığın himayədarı olan Heydər Əliyev ədəbiyyat insanlarını həmişə diqqətində saxlamışdır. Hələ sovetlər dönməində yazarların V, VI, VII, IX qurultaylarında iştirak etmişdir. 12 avqust 1969-cu ildə Qazaxda Molla Pənah Vaqifin ev muzeyinin yaradılması qərarını vermişdir. 1978-ci ildə Şamaxıda Ədəbiyyat muzeyi yaratmaq haqqında qərar qəbul edilməsi, qədim Şamaxı torpağının hələ orta əsrlərdən söz-sənət yuvası olduğuna bələdçilik və ona qayğının təzahürü idi. 1980-ci ilin 11 dekabrında Naxçıvan şəhərində Hüseyn Cavid kimi bir şəxsiyyətin ev muzeyinin yaradılması, sovet imperiyasının məhv etdiyi bir dahini hələ o imperiyanın mövcud olduğu zamanda, məhvindən yarım əsr keçməmiş öz vətəninə təmtəraqlı surətdə təhvil vermək, tarixi ədalətsizlik üzərində milli qələbə idi. Heydər Əliyev 15 yanvar 1982-ci ildə Şuşada M.P.Vaqifin məqbərəsinin açılışında iştirak etmişdir.

13 sentyabr 1973-cü ildə İmadəddin Nəsiminin 600 illik yubileyinin Bakı ilə yanaşı, Moskvada keçirilməsi bütün imperiyanı Azərbaycana diqqət ayırmağa sövq etmək idi. Bəşəri şair Nizami Gəncəvinin yubileyləri münasibətlə 6 yanvar 1979-cu ildə “Azərbaycanın böyük şairi və mütəfəkkiri Nizami Gəncəvinin irsinin öyrənilməsinə, nəşrinə və təbliğini daha da yaxşılaşdırmaq tədbirləri haqqında” qərar qəbul etmişdir. Qərarda Nizami Gəncəvinin Azərbaycanın şairi olmasının qabarıq vurğulanması siyasətin ədəbiyyatda qələbəsi idi. Böyük bir imperiya Nizami Gəncəvinə Azərbaycanın şairi olaraq öyrənir və təbliğ edirdi. Qərarın icrasından irəli gələrək 1981-ci ildə şairin 840, 1991-ci ildə isə 850 illiyi dövlət səviyyəsində keçirilmişdir. Heydər Əliyev 27-31 oktyabr 1980-ci ildə Bakıda keçirilən dünya yazıçılarının “Ədəbiyyatların dostluğu-xalqların dostluğudur” Ümumittifaq konfransını təşkil edərək o cür tarixi dövəmdə bu qədər dünya yazarlarını Moskvaya yox, məhz Bakıya yığmışdır.

12 iyun 1981-ci ildə yazarların VII qurultayında Heydər Əliyev birbaşa Cənubi Azərbaycan ədəbiyyatı məsələlərinə toxunmuşdur. 29 oktyabr 1997-ci ildə Cənubi Azərbaycan şairi “Məhəmməd Hüseyn Şəhriyarın anadan olmasının 90 illik yubileyinin keçirilməsi haqqında” sərəncam imzalamışdır. 1995-ci ildə ilk dəfə Heydər Əliyev tərəfindən Bəxtiyar Vahabzadəyə verilən “İstiqlal” ordeninə sonralar Məmməd Araz və Xəlil Rza Ulutürk də layiq görülmüşdür. Heydər Əliyev 6 noyabr 1996-cı ildə Türk Dünyası Yazıçılarının III Qurultayında çıxışı zamanı bəşəri və ortaq türk abidələrinin adlarını vurğulamaqla böyük türk coğrafiyasının xəritəsini cızmışdır: “Qədim dövrlərdə “Dədə Qorqud”, “Manas”, “Alpamiş”, “Koroğlu” dastanları, xalqlarımızın hamısına mənsub olan dahi şairlərimiz, yazıçılarımız – Nizami, Yunus Əmrə, Əlişir Nəvai, Füzuli, Nəsimi, Məhtimqulu, Abay və digərləri xalqlarımızın tarixini, mənəvi dəyərlərini əks etdirən, xalqlarımızı dünyada tanıdan ölməz əsərlər yaratmışlar...” Sitatda adı çəkilən dahi Azərbaycan şairi Məhəmməd Füzulinin 500 illik yubileyi UNESCO çərçivəsində keçirilmişdir. Heydər Əliyev sovet hakimiyyəti illərində olduğu kimi müstəqillik illərində də yazıçıların qurultayında iştirak etmişdir. 1997-2000-ci illərdə “Dədə Qorqud” dastanının Bakı ilə yanaşı, Drezden və YUNESKO-da yubileyləri təşkil edilmişdir. 2000-ci ildə “Kitabı-Dədə Qorqud” eposunun 1300 illiyi münasibətlə kütləvi silsilə tədbirlər həyata keçirilmişdir. 1986-cı ildən təsis edilən Beynəlxalq Atatürk Sülh Mükafatının 1 noyabr 1999-cu ildə Heydər Əliyevə verilməsi də onun türx xalqları qarşısında tarixi xidmətinə verilən dəyərdir.



## FİKRET DEMİRAG'IN LİMNİDİ ATEŞİNDEN BUGÜNE VE HÜZÜN ANA ADLI ŞİİR KİTAPLARI ÜZERİNE BİR ÜSLUP İNCELEMESİ

### A STYLISH ANALYSIS ON THE POETRY BOOKS OF FİKRET DEMİRAG NAMED AS LİMNİDİ ATEŞİNDEN BUGÜNE AND HÜZÜN ANA

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#### ÖZET

Yazarın duygu ve düşüncelerini okuyucuya dil aracılığıyla doğru ve etkili bir şekilde aktarması açısından eserin ilgi çekiciliğini ve okunabilirliğini etkileyen en önemli unsur üsluptur. Anlatılmak istenenin uzun veya kısa olması; ağır anlamlarla yüklü olması; edebi sanatlara yer verilip verilmemesi; söz diziminde kurallara bağlı kalınması veya günlük konuşmalarda olduğu gibi doğal olunmasına dikkat edilmesi; konu seçimi gibi durumlarda yazarla okuyucu arasında dil anlayışının sağlanması, güçlü bir anlatım özelliği açısından oldukça önemlidir ve bu özelliklere sahip eserlerin her zaman zevkle okunmasını sağlamaktadır.

Üslup, sözün ifade yapısı ve şekline ilişkin dilsel niteliklere bağlıdır. Anlatılmak istenenler doğru bir şekilde aktarılmadığı sürece konunun iletilmesi ve kavranması mümkün olamaz. Şiirdeki duygunun doğru anlaşılması; yorumlanarak kavranabilmesi ve dilin etkili bir şekilde okuyucuya iletilmesi açısından üslup oldukça önemlidir. Şairler okuyucuya ulaşabilmek ve aktarılmak istenen duyguları doğru yansıtabilmek için dili etkili bir araç olarak kullanmakta; kendine özgü anlatım tarzıyla şiiri daha da güzelleştirmektedirler.

Kıbrıs Türk Edebiyatı açısından önemli bir yere sahip olan Fikret Demirağ; şiir dünyasına 1960'lı yıllardan itibaren girmiş ve Mehmet Kansu'yla birlikte yeni arayışlar sürecine giren Kıbrıs Türk şiirinin öncü isimlerinden biri olmuştur. Uzun yıllar öğretmenlik yapan Demirağ, şiirlerindeki kendine özgü anlatım tarzı ve toplumculuk anlayışıyla büyük ölçüde farklılık yaratarak ön plana çıkmaktadır. Tabiat unsurlarından coğrafi bölgelere kadar tasvirlerle dolu olan lirik şiirler, tarihi duygularla birleştirilerek aktarılmaktadır. Ada şairi olarak bilinen ve edebi yönden büyük önem taşıyan şairimiz, dil özellikleri dışında eserlerinde mitolojik unsurlara yer vererek şiire yenilik katması açısından da önem taşımaktadır. Bu çalışmada şairin ulusal kimlik ve milliyetçilik konularını farklı açılardan ele aldığı Limnidi Ateşinden Bugüne ve Hüzün Ana adlı şiir kitaplarındaki dil unsurları ele alınarak anlatım açısından incelenmiştir. Şairin yansıttığı toplumculuk anlayışı ve insanlara karşı eleştirel yaklaşımı göz önüne çıkarılmıştır. İncelenen şiir kitaplarında Fikret Demirağ'ın tarihi yaşanmışlıkların arkasına saklanarak derin etki yaratan duyguları sade, anlaşılır bir üslup ve düz anlatımlarla başarılı bir şekilde ortaya koyduğu görülmektedir.

**Anahtar kelimeler:** Şiir, üslup, üslup incelemesi, Limnidi, Hüzün Ana.



## ABSTRACT

Style is the most important factor affecting the attractiveness and readability of the work in terms of conveying the author's feelings and thoughts to the reader correctly and effectively through language. Whether the intended story is long or short; including deep meanings; whether to include literary arts; adhering to the rules in syntax or being natural as in everyday speech; ensuring language understanding between the author and the reader in situations such as topic selection is very important in terms of a strong narrative feature, and it ensures that the works with these features are always read with pleasure.

The style depends on the linguistic qualities related to the expression structure and form of the word. Unless what is meant to be told is conveyed correctly, it is not possible to convey and comprehend the subject. Style is very important for understanding the emotion in the poem truly; in terms of being able to be interpreted and comprehended, and conveying the language to the reader effectively. Poets use language as an effective tool in order to reach the reader and accurately reflect the emotions to be conveyed. They make poetry even more beautiful with their unique style of expression.

Fikret Demirağ, who has an important place in terms of Turkish Cypriot Literature, entered the world of poetry since the 1960s. He became one of the pioneers of Turkish Cypriot poetry, who entered the process of new searches with Mehmet Kansu. Demirağ, who had been teaching for many years, stands out by making a great difference with his unique style of expression and socialism in his poems. Lyrical poems, which are full of descriptions from natural elements to geographical regions, are conveyed by combining historical feelings. Demirağ, who is known as the island poet and has great literary importance, is also important in terms of adding novelty to poetry by including mythological elements in his works, apart from language features. In this study, the language elements in the poetry books *Limnidi Ateşinden Bugüne* and *Hüzün Ana*, in which the poet deals with the issues of national identity and nationalism from different perspectives, are examined in terms of expression. The poet's understanding of socialism and his critical approach to people are taken into consideration. In the analyzed poetry books, it is seen that Fikret Demirağ successfully puts forward the emotions that create deep effects by hiding behind the historical experiences, with a simple, understandable style and plain expressions.

**Keywords:** Poetry, style, stylistic analysis, *Limnidi*, *Hüzün Ana*.





## ORAL STORYTELLING AND INTERGENERATIONAL AND TRANSGENERATIONAL TRANSMISSION OF HISTORICAL TRAUMA IN CYPRUS

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### ABSTRACT

This paper looks into historical traumas that are transferred from one generation to the next through oral storytelling which shapes collective identity. Historical trauma is a psychological and emotional collective and subjective injury which are transmitted from adults to children in a cycle process and it continues over a life span of individuals and across generations (Atkinson, et al., 2010). Because social trauma occurs collectively, it is transmitted as part of the cultural memory of people belonging to that group and it is transmitted the same way culture is transmitted across generations, transmission of historical trauma becomes normalized (Duran and Duran, 1995). A person does not need to experience trauma first-hand to experience post-traumatic stress disorder or historical grief. People who are exposed to the transgenerational transmission of trauma may also feel depression, reduced energy, insomnia, exaggerated independency or dependency, intergenerational survivor guilt, nightmares about traumatizing experiences, anger, substance abuse and similar other symptoms (Denham, 2008). Existing research suggests that groups that experienced trauma in their collective history have a higher vulnerability to psychological health issues in its later generations (Mohatt et al., 2014).

History is partially a collective memory and is a process of reconstruction that is shapeable (Mohatt et al., 2014). Fundamental to recalling memories and remembering is to look at the past and look towards the future at the same time. Therefore, just like the ancient Roman god Janus, to have a spatiotemporal association remembering is crucial so that present changes and developments can be elaborated in understanding the construction of memory (Six-Hohenbalken, 2018).

This paper examines transcribed oral stories of first-hand trauma survivors and transcribed oral narratives of second-generation trauma survivors within the socio-political context of Cyprus in relation to the past and the present. It examines historical trauma discourses of two generations through a thematic analysis and provides a reflective presentation of the experiences in relation to the present day socio-political context.

**Keywords:** Historical Trauma, Social Trauma, Oral Storytelling, Collective Memory, Cyprus



## YENİ MEDYA SANATI OLAN GLITCH SANATINDA KULLANILAN YÖNTEMLER METHODS USED IN GLITCH ART, THE NEW MEDIA ART

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### ÖZET

Formların çarpıtılması veya deforme edilmesi tarih boyunca çeşitli sanat akımları tarafından araştırılmış ve bir araç olarak kabul edilmiştir. Teknolojinin ilerlemesiyle birlikte, biçimlerin çarpıtılması ya da başka bir deyişle deformasyona uğraması, dijital sanatta da dâhil olmak üzere diğer sanat biçimlerini etkilemiş ve görüntünün bozulmasıyla Glitch sanatı ortaya çıkmıştır. Glitch sanatıyla beraber teknoloji ve sanatta deformasyonun kullanılması, sanatsal ifade biçimleri için yeni arayışlara neden olmuş ve estetik kavramlara meydan okuyarak resim sanatı gibi diğer sanat alanlarını da etkilemiştir. Bununla birlikte Glitch sanatının grafik tasarıma yansımaları ele alındığında, dijitalleşen sistem üzerinden tasarım sürecini etkilediği açık bir şekilde görülmektedir.

Bu araştırmada, glitch sanatını anlamak ve teknolojinin sanatta yapı bozukluğuna olan etkisi araştırılarak, glitch sanatında kullanılan yöntemlere yönelik incelemelerde bulunulacaktır. Bununla birlikte, glitch sanatında kullanılan yöntemlere yönelik tasarımlar ile çalışma desteklecektir. Çalışmayı desteklemek amaçlı belirlenen örneklemeler glitch sanatı üzerine tasarlanmış görseller arasından rastgele olarak seçilecektir. Araştırmada elde edilecek veriler, nitel araştırma yöntemi üzerinden literatür taraması ile gerçekleştirilecek olup; örneklemeler betimsel analiz ile çözümlenerek yorumlanacaktır. Teknolojinin, spesifik olarak glitch sanatı ve glitch yöntemleri üzerinde yapılan araştırmalar sınırlı olduğundan bu alanlara açıklık getirmesi açısından alanyazına katkı sağlayacağı düşünülmektedir.

**Anahtar kelimeler:** Dijital Teknoloji, Glitch Sanatı, Sanatta Deformasyon, Tasarım, Yeni Medya

### ABSTRACT

The distortion or deformation of forms has been researched and accepted as a tool by various art movements throughout history. With the advancement of technology, the distortion of forms or in other words their deformation affected other art forms, including digital art, and Glitch art emerged with the deterioration of the image. The use of technology and deformation in art, together with the glitch art, has led to new searches for artistic expression forms and has also affected other art fields such as painting by challenging aesthetic concepts. However, when the reflections of glitch art on graphic design are considered, it is clearly seen that it affects the design process through the digitalized system.

In this research, understanding the art of glitch and the effect of technology on deconstruction in art will be investigated, and investigations will be made on the methods used in the art of glitch. However, work will be supported by designs for the methods used in glitch art. The samples determined to support the study will be randomly selected from the visuals designed on the art of glitch. The data to be obtained in the research will be carried out by literature review through the qualitative research method; The samples will be analyzed and interpreted with descriptive analysis. It is thought that technology will contribute to the literature in terms of clarifying these areas, since the researches on glitch art and glitch methods are limited.

**Keywords:** Digital Technology, Glitch Art, Art Deformation, Design, New Media



## ÖZEL GEREKSİNİMLİ BİREYLER VE AİLELERİNİN TOPLUMSAL BÜTÜNLEŞMEDE YAŞANTILARI/İSTEKLERİ

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### ÖZET

Alanyazın araştırmalarına göre özel gereksinimli bireyler ve ailelerine yönelik buldukları toplum içerisindeki tutumların farklı olduğuna ulaşılmıştır. Farklılıkların kimi zaman olumlu yönde kimi zaman da olumsuz yönde olduğu saptanmıştır. Toplumun özel gereksinimli kişilere yönelik olumsuz tutumlarının değiştirilmesi adına araştırmacıların alanyazına katkıları olmuştur. Bu araştırmayla özel gereksinimli birey ve ailelerine toplumdaki nasıl bir davranış istedikleri sorularak alanyazına katkı sunmaya çalışılmıştır. Araştırmada rastgele seçim yöntemi ile 29 özel gereksinimli birey ve aile üyesi topluluk içerisindeyken özel durumları sebebiyle kendilerine sergilenen davranışlar sorulmuş ve topluma kendi adlarına mesaj vermeleri talep edilmiştir. Nitel yöntemle alınan bu veriler araştırma bulguları rahatsız eden davranışların acıma, rahatsız edici bakış, bilgisizlik, kaba davranış, erişilebilirlik, duyusuz kalma/yok sayma, ötekileştirme, birey olarak görmeme başlıklarıyla sekiz tema; istenilen davranışların anlayışlı, normal/doğal, saygılı, sevecen, kibar, eşit, destekleyici, sabırlı, normal bir birey olarak başlıklarıyla dokuz tema tespit edilmiştir. Özel gereksinimli bireyler ve ailelerinin toplumun farklı kesimlerine kendilerine/özel gereksinimli yakınlarına ilişkin mesajları sorulduğunda ise bireylerin kendilerinin/yakınlarının ötekileştirilmeden, destekleyici tutumla, saygı çerçevesinde iletişime geçilmesi gerektiği belirtilmiş ve özel gereksinimleri dışında özelliklerinin olduğuna dair vurgular yapılmıştır. Araştırma sonucunda özel gereksinimli birey ve ailelerinin toplum içerisinde karşılaştıkları olumsuz tutumların kaldırılması adına toplumun özel gereksinimli bireylere yönelik bilgilendirilmesi, toplumun farkındalık düzeyinin artırılması adına eğitim politikalarına bu başlıkların eklenmesi ve özel gereksinimli bireylerin toplumsal katılımında daha aktif yer alarak normalleştirme ve bütünleştirmenin sağlanmasına yönelik çalışmaların artırılması önerilmektedir.

**Anahtar kelimeler:** Özel gereksinimli aileler, toplum, tutum değişikliği



## ÖZEL GEREKSİNİMLİ BİREYLER VE AİLELERİNİN TOPLUMSAL BÜTÜNLEŞMEDE YAŞANTILARI/İSTEKLERİ

### EXPERIENCES/REQUESTS OF INDIVIDUALS WITH SPECIAL NEEDS AND THEIR FAMILIES IN SOCIAL INTEGRATION

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#### ÖZET

Alanyazın araştırmalarına göre özel gereksinimli bireyler ve ailelerine yönelik buldukları toplum içerisindeki tutumların farklı olduğuna ulaşılmıştır. Farklılıkların kimi zaman olumlu yönde kimi zaman da olumsuz yönde olduğu saptanmıştır. Toplumun özel gereksinimli kişilere yönelik olumsuz tutumlarının değiştirilmesi adına araştırmacıların alanyazına katkıları olmuştur. Bu araştırmayla özel gereksinimli birey ve ailelerine toplumdan nasıl bir davranış istedikleri sorularak alanyazına katkı sunmaya çalışılmıştır. Araştırmada rastgele seçim yöntemi ile 29 özel gereksinimli birey ve aile üyesi topluluk içerisindeyken özel durumları sebebiyle kendilerine sergilenen davranışlar sorulmuş ve topluma kendi adlarına mesaj vermeleri talep edilmiştir. Nitel yöntemle alınan bu veriler araştırma bulguları rahatsız eden davranışların acıma, rahatsız edici bakış, bilgisizlik, kaba davranış, erişilebilirlik, duyarsız kalma/yok sayma, ötekileştirme, birey olarak görmeme başlıklarıyla sekiz tema; istenilen davranışların anlayışlı, normal/doğal, saygılı, sevecen, kibar, eşit, destekleyici, sabırlı, normal bir birey olarak başlıklarıyla dokuz tema tespit edilmiştir. Özel gereksinimli bireyler ve ailelerinin toplumun farklı kesimlerine kendilerine/özel gereksinimli yakınlarına ilişkin mesajları sorulduğunda ise bireylerin kendilerinin/yakınlarının ötekileştirilmeden, destekleyici tutumla, saygı çerçevesinde iletişime geçilmesi gerektiği belirtilmiş ve özel gereksinimleri dışında özelliklerinin olduğuna dair vurgular yapılmıştır. Araştırma sonucunda özel gereksinimli birey ve ailelerinin toplum içerisinde karşılaştıkları olumsuz tutumların kaldırılması adına toplumun özel gereksinimli bireylere yönelik bilgilendirilmesi, toplumun farkındalık düzeyinin artırılması adına eğitim politikalarına bu başlıkların eklenmesi ve özel gereksinimli bireylerin toplumsal katılımında daha aktif yer alarak normalleştirme ve bütünleştirmenin sağlanmasına yönelik çalışmaların artırılması önerilmektedir.

**Anahtar kelimeler:** Özel gereksinimli aileler, toplum, tutum değişikliği

#### ABSTRACT

According to the literature research, it has been found that the attitudes towards individuals with special needs and their families in the society they live in are different. It has been determined that the differences are sometimes positive and sometimes negative. Researchers have contributed to the literature in order to change the negative attitudes of the society towards people with special needs. With this research, it has been tried to contribute to the literature by asking the individuals with special needs and their families what kind of behavior they want from the society. In the study, with the random selection method, 29 individuals with special needs and their family members were asked about the behaviors exhibited to them due to their special circumstances, and they were asked to give a message to the society on their behalf. These data obtained with the qualitative method show that the behaviors



that disturb the research findings are pity, eight themes with the titles of disturbing gaze, ignorance, rude behavior, accessibility, being insensitive/ignoring, othering, not seeing as an individual; Nine themes were identified with the titles of desired behaviors as understanding, normal/natural, respectful, affectionate, polite, equal, supportive, patient, normal individual. When asked about the messages of individuals with special needs and their families to different segments of the society about themselves/relatives with special needs, it was stated that individuals/relatives should be communicated without marginalizing, with a supportive attitude and within the framework of respect, and it was emphasized that they had characteristics other than their special needs. As a result of the research, it is suggested that in order to remove the negative attitudes of individuals with special needs and their families in the society, it is recommended to inform the society about individuals with special needs, to add these topics to the education policies in order to increase the awareness level of the society, and to increase the efforts to ensure normalization and integration of individuals with special needs by taking a more active part in social participation.

**Keywords:** Families with special needs, society, attitude change



## SOX2 GENİNDE VARYANTA SAHİP NADİR BİR OLGU: SOL GÖZ ANOFTALMİ/ SAĞ GÖZ MİKROFTALMİ

### A VERY RARE CASE WITH A VARIANT IN THE SOX2 GENE: LEFT EYE ANOPHTHALMIA/ RIGHT EYE MICROPHTHALMIA

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#### ÖZET

**Giriş:** Göz küresinin yokluğuna veya boyutunda küçülmeye yol açan gelişimsel kusurlar anoftalmi/mikroftalmi (A/M) olarak adlandırılmaktadır. Sendromik konjenital A/M'den en sık 3q26.33 kromozomal lokasyonundaki *SRY-BOX 2* (*SOX2*, OMIM no \*184429) genindeki patojenik varyantlar sorumlu tutulmaktadır. Burada sol gözde anoftalmi, sağ gözde mikroftalmi, kriptorşidizm ve öğrenme güçlüğü ile başvuran 6 yaşındaki erkek olgunun moleküler genetik tanı algoritmasını sunmayı amaçladık.

**Yöntem:** Hastanın periferik venöz kan örneğinden High Pure PCR Template Preparation Kit (Roche, Pleasanton, CA 94588 USA) prosedürüne göre DNA izolasyonu yapılmıştır. Elde edilen genomik DNA'lar, Twist CES (South San Francisco, USA) kiti ile kullanılarak DNBSEQ-G400 (MGI, China) ile dizilenmiştir. GenomizeSeq (Sürüm 6.13.1) yazılımı, ortalama 20X okuma derinliği ve %94,17 kapsama ile analiz için kullanılmıştır.

**Bulgular:** Bu olguda *SOX2* geni: NM\_003106.4: c.70\_89del: (p.Asn24ArgfsTer65) heterozigot patojenik varyantı tespit edildi. Yapılan ailesel segregasyon sonucunda varyantın de novo olduğu görüldü. Hastaya Sendromik Mikroftalmi 3 (MCOPS3, OMIM no#206900) tanısı koyuldu.

**Tartışma ve Sonuç:** Bu varyanta sahip hastalarda bilateral anoftalmi, bilateral mikroftalmi, işitme kaybı, beyin malformasyonları, hipogonadotropik hipogonadizm, gelişme geriliği ve/veya öğrenme güçlüğü bildirilmiştir. Oldukça nadir görülen *SOX2* varyantlarının fenotipik spektrumu daha fazla hastaya ekzom dizileme yapıldıkça genişlemeye devam edecektir. Bu nedenle başlıca anoftalmi/mikroftalmi, öğrenme güçlüğü ve/veya genital anomalilere sahip olan olgularda oldukça nadir olan Sendromik Mikroftalmi 3 akılda tutulmalıdır. Ayrıca multifaktöriyel ve heterojen hastalıklarda genetik testlerin kullanılması tanı verimini artırmaktadır.

**Anahtar kelimeler:** Microphthalmia, Anophthalmia, SOX2, c.70\_89del

#### ABSTRACT

**Introduction:** Anophthalmia /microphthalmia (A/M) are developmental defects that lead to the absence or reduced size of the eyeball. Pathogenic variants in the *SRY-BOX 2* (*SOX2*, OMIM no \*184429) gene at chromosomal location 3q26.33 are most commonly responsible for syndromic congenital A/M. We aimed to present the molecular genetic diagnosis of a 6-year-old boy who presented with anophthalmia in the left eye, microphthalmia in the right eye, cryptorchidism and learning disability.

**Methods:** DNA was isolated from the patient's peripheral venous blood sample according to the standard procedure of High Pure PCR Template Preparation Kit (Roche, Pleasanton, CA 94588 USA). The genomic DNAs obtained were sequenced with DNBSEQ-G400 (MGI, China) using the Twist CES kit (South San Francisco, USA). GenomizeSeq (Version 6.13.1) software was used for analysis with an average read depth of 20X and 94.17% coverage.



**Results:** In this case, *SOX2* gene: NM\_003106.4: c.70\_89del (p.Asn24ArgfsTer65) heterozygous pathogenic variant was detected. As a result of familial segregation, the variant was evaluated as de novo. The patient was diagnosed as Microphthalmia, Syndromic, 3 (MCOPS3, OMIM no#206900).

**Discussions:** Bilateral anophthalmia, bilateral microphthalmia, hearing loss, brain malformations, hypogonadotropic hypogonadism, developmental delay and/or learning disabilities have been reported in patients with this variant. The phenotypic spectrum of extremely rare *SOX2* variants will continue to expand as more patients underwent exome sequencing. Therefore, the extremely rare Microphthalmia, Syndromic, 3 should be kept in mind in patients with anophthalmia/microphthalmia, learning disabilities and/or genital anomalies. In addition, the use of genetic testing in multifactorial and heterogeneous diseases increases the diagnostic yield.

**Keywords:** Microphthalmia, Anophthalmia, *SOX2* gene, c.70\_89del



## TUZAK PAZARLAMADA ETİK KONUSUNUN İNCELENMESİ EXAMINATION OF ETHICS IN AMBUSH MARKETING

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### ÖZET

Rekabet koşullarının her geçen gün arttığı pazarlama çevresinde işletme yöneticileri farklı pazarlama iletişimi yöntemlerinden yararlanarak rekabette öne geçme çabası göstermektedir. Bu bağlamda başvurulan yöntemlerden biri de büyük kitlelere ulaşma fırsatı sunan sportif etkinliklere sponsorluk desteği sunma yöntemidir. Dünya çapında erişime sahip olan etkinliklerde zaman kısıtı, sınırlı reklam alanı ve kategori münhasırlığı gibi sebeplerle oldukça yüksek bütçelere sponsorluk anlaşması yapma imkânı sunulmaktadır. Bu yüksek bütçelere katılmak istemeyen pazarlama yöneticileri herhangi bir sponsorluk anlaşması yapmadan sızma şeklinde etkinlik içinde görünür olma arzusu ile tuzak pazarlama yöntemlerine başvurmaktadır. Resmi sponsorlar için beklenen faydaları azaltan ve sponsorluk ücretlerinin sürekli olarak artmasına neden olan tuzak pazarlama, alınan önlemlere rağmen uygulanmaya devam etmektedir. Bu çalışmada tuzak pazarlamada etik konusunun incelenmesi amaçlanmaktadır.

**Anahtar kelimeler:** tuzak pazarlama, sponsorluk, etik

### ABSTRACT

In the marketing environment where competition conditions are increasing day by day, business managers make an effort to stay ahead of the competition by making use of different marketing communication methods. In this context, one of the methods applied is the method of providing sponsorship support to sports events that offer the opportunity to reach large masses. Due to time constraints, limited advertising space, and category exclusivity, events with worldwide reach offer the opportunity to make sponsorship agreements with very high budgets. Marketing managers who do not want to endure these high budgets resort to ambush marketing methods with the desire to be visible in the event in the form of infiltration without any sponsorship agreement. Ambush marketing, which reduces the expected benefits for official sponsors and causes sponsorship fees to increase continuously, continues to be practiced despite the measures taken. In this study, it is aimed to examine the issue of ethics in ambush marketing.

**Keywords:** ambush marketing, sponsorship, ethics





**OTOMOBİL RADYATÖR SOĞUTMA SİSTEMLERİNDE NANO AKIŞKAN TABANLI ISI GEÇİŞİ ÇALIŞMALARI**  
**NANOFLUID-BASED HEAT TRANSFER STUDIES IN AUTOMOBILE RADIATOR COOLING SYSTEMS**

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**ÖZET**

Motorun verimli çalışma sıcaklığında tutulması, yüksek sıcaklıklar sebebiyle hareketli parçalarda oluşabilecek zararın ve düşük sıcaklıklarda ısı verimliliğinin azalmasının önlenmesi bakımından önem arz etmektedir. Araç soğutma sistemlerinde, soğutucu akışkan fazla ısıyı motordan radyatöre taşır ve burada hava akışıyla birlikte taşınım ve ışıma yoluyla soğutulur. Soğuyan akışkan, daha fazla ısı çekmesi için motora geri gönderilir. Isı geçişi verimliliğinin artırılmasına yönelik yapılan son araştırmalar, nanoakışkanların güneş enerjisi sistemleri ve elektronik soğutma gibi birçok alanda olduğu gibi motor soğutma sistemlerinde de kullanılmasını önermektedir. Bu çalışma, otomobil radyatörlerinde nanoakışkan kullanımının ısı geçişine etkisini araştırmaktadır. Literatürde önerilen soğutma sıvıları genellikle uygulamada da sıklıkla kullanılan su ve etilen-glikol bazlı sıvılardır. Nanoakışkanlar ile yapılan çalışmalar baz akışkanın ısı geçişi özelliklerini nanoakışkanların (mono ve hibrit) kullanıldığı durumlarla karşılaştırmaktadır. Bu amaçla genellikle deneysel yöntemlerin kullanılmasıyla birlikte, Hesaplamalı Akışkanlar Dinamiği (HAD) çalışmaları da mevcuttur. Çalışmalarda verilen ortak sonuçlar, nanopartiküllerin (karbon bazlı, organik, inorganik) soğutucu akışkanın ısı geçişi özelliklerini iyileştirdiği ve bu iyileştirme oranının Reynolds sayısı arttıkça azaldığı yönündedir. Ancak ısı geçişi üzerindeki olumlu etkisine rağmen nanoakışkanların uygulamada kullanılabilmesi için aracın çalışma verimini etkileyen diğer parametreler ve kararlılık gibi soğutma sıvısı özelliklerini de dikkate alan analizler gerekmektedir.

**Anahtar kelimeler:** Isı Geçişi, Radyatör, Nanoakışkan.



## ABSTRACT

Keeping the engine at its most efficient operating temperature is important to prevent high temperatures from damaging moving parts and low temperatures from reducing thermal efficiency. In cooling systems, coolant carries heat from the engine to the radiator, where it is cooled by convection with airflow and thermal radiation. After cooling, coolant is returned to the engine to absorb heat. Recent studies on improving heat transfer efficiency suggest using nanofluids in engine cooling systems as well as in many areas, such as solar energy systems and electronic cooling. This work briefly reviews the effect of nanofluid use on heat transfer in automobile radiators. The proposed coolants in literature are generally water and ethylene-glycol based liquids, which are also frequently used in practice. Although studies in this field are generally experimental, Computational Fluid Dynamics (CFD) studies are also available to compare the heat transfer characteristics of the base fluid with the nanofluids (mono and hybrid) case. The common results of the studies are that nanoparticles (carbon-based, organic, inorganic) improve the heat transfer properties of the coolant, and this improvement rate decreases with increasing Reynolds number. However, despite the positive effect on heat transfer, for nanofluids to be used in practical area, analyses that take into account other parameters affecting the operating efficiency of the vehicle and coolant properties, such as stability, are required.

**Keywords:** Heat transfer, radiator, nanof



## EĞİTİM HAKKININ HUKUKSAL DAYANAĞI VE KKTC ÖRNEĞİ LEGAL BASIS OF THE RIGHT TO EDUCATION AND THE CASE OF TRNC

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### ÖZET

Toplumların gelişmesinde ve refah düzeylerinin yükselmesinde eğitim en önemli unsurlardan biridir. Eğitim hukuku, hukuk sistemi içinde yeni bir dal olarak ortaya çıkmaktadır. Özellikle ABD ve İngiltere’de eğitim hukukunun uzantısı olan okul hukuku konusunda çok sayıda çalışma yapılmış ve eser üretilmiştir. Toplumun gelişmesini sağlayacak insan gücünün yönetilmesi gerekir. Buna bağlı olarak bireylerin eğitiminin hukuksal zeminde yasalarla düzenlenmesi, planlanması ve toplumlardaki tüm bireylerin eğitimden eşit olarak yararlanması önemlidir. KKTC’de bu konuda herhangi bir çalışmaya rastlanmamıştır. Eğitim hakkı konusunda *İnsan Hakları Evrensel Bildirgesi*, *Birleşmiş Milletler Çocuk Hakları Sözleşmesi*, *Avrupa İnsan Hakları Sözleşmesi* gibi bireyin tüm diğer hakları yanında eğitim hakkını da belirleyen ve bu hakkını koruma altına alan yazılı belgeler hazırlanmıştır. Uluslararası kuruluşların hazırladıkları sözleşmeleri ve bildireleri kabul eden ülkeler bu sözleşme ve bildirelere imza koyarak, içerdiği maddeleri uygulamakla yükümlü olmuşlardır. Bugüne kadar en fazla ülkenin imza koyduğu, Birleşmiş Milletler Genel Kurulu tarafından kabul edilerek yürürlüğe giren *Çocuk Hakları Sözleşmesi* 196 ülke tarafından onaylanan insan hakları belgesidir. Buna bağlı olarak bu çalışmada, KKTC Anayasası, Milli Eğitim Yasası, ve KKTC Meclisi tarafından kabul edilen bildirelerde eğitim hakkı incelenmiştir. Çalışma yapılırken yalnız vatandaş olan bireylerin değil, vatandaş olmasa da bu coğrafyada yaşayan her bireyin eğitim hakkı, hukuksal zeminde farklı boyutları ile incelenmek üzere ele alınmıştır.

**Anahtar kelimeler:** Eğitim Hukuku, Eğitim Hakkı, KKTC

### ABSTRACT

Education is one of the most important elements in the development of societies and the increase of their welfare level. Education law is emerging as a new branch in the legal system. Particularly in the USA and England, a large number of studies have been carried out and research have been conducted on the subject of schooling law, which is an extension of education law. It is crucial for countries to manage the manpower which will enable the development of a society. Accordingly, it is important that the education of individuals is regulated and planned on a legal basis and that all individuals in societies benefit from education equally. No studies have been found in on this subject within TRNC context. Written documents on the right to education, such as the Universal Declaration of Human Rights, the United Nations Convention on the Rights of the Children, and the European Convention on Human Rights, have been prepared which determine the right to education as well as all other rights of an individual and protect individuals rights. Countries that have accepted and signed these conventions and declarations that are prepared by international organisations have been obliged to implement the articles contained in these conventions and declarations. The Convention on the Rights of the Children, which has been signed by the United Nations General Assembly and entered into force, is the human rights document ratified by 196 countries. Thus, in this study, the TRNC Constitution, the National Education Law, and the right to education in the declarations adopted by the TRNC Assembly were examined. This study explores not only the citizens’ right to education but also every individual who lives in this geography from multi-dimensional perspective in a legal context.

**Keywords:** Education Law, Right to Education, TRNC



## BİR ÜRETİM İŞLETMESİ İÇİN EN UYGUN TESİS YERLEŞİM PLANINI TASARLAMAYA YÖNELİK BİR KARAR VERME YAKLAŞIMI

### A DECISION MAKING APPROACH FOR DESIGNING OPTIMAL FACILITY LAYOUT PLAN FOR A MANUFACTURING COMPANY

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## ÖZET

Mevcut tesis yerleşim tasarımları çoğu zaman işletmelerde verimsizliğe neden olan kronik bir problem haline gelmektedir. Yanlış yerleşim düzenlemeleri işletme içerisinde gereksiz taşımalara, dolayısıyla artan üretim sürelerine ve daha az üretim miktarlarına neden olmaktadır. Aynı zamanda, geleceğin talep belirsizlikleri de işletmelerin etkin planlama yapmalarında en önemli engellerden birisi olmaktadır. Etkin bir şekilde tasarlanmış işletme yerleşimleri her türlü israf kaynaklarını bertaraf ederek işletmenin daha üretken olmasını sağlamaktadır. Bu çalışma bir işletmenin gelecek yıllardaki talep koşullarını da dikkate alarak en uygun tesis yerleşim tasarımını belirlemek için üç farklı yöntemi (Tahmin, tesis yerleşim planlaması ve simülasyon) entegre eden bir karar verme yaklaşımı geliştirmektedir. Öncelikle, işletmeye ait beş farklı tesis yerleşim tasarımı geliştirilmiştir. Bu farklı tesis yerleşim alternatifleri, işletmedeki iş istasyonları arasındaki (ilişki diyagramı, sefer sayıları, from-to matrisi ve alan ihtiyaçları gibi) birtakım parametreler dikkate alınarak geliştirilmiştir. Daha sonra, işletmeye ait 2020-2023 yılları arasındaki talep verileri dikkate alınarak ARIMA, üstel düzeltme ve çoklu regresyon yöntemleri ile aylık talep tahmin modelleri geliştirilmiş ve en iyi tahmin değerlerini üreten yöntemden elde edilen aylık talep tahmin değerleri dikkate alınmıştır. Son olarak, işletmenin gelecek talep koşullarında en uygun tesis yerleşim tasarımını seçmek için simülasyon modeli geliştirilmiş ve geliştirilen tesis tasarımlarının toplam akış şiddeti %95 güven aralığında hesaplanmıştır. Elde edilen sonuçlar geliştirilen tüm alternatif tesis yerleşimlerinin mevcut tesis yerleşiminden daha verimli (yaklaşık %61, %53, %38, %33 ve %20) olduğunu ortaya koymaktadır. Bu çalışma farklı disiplinlerin bir araya getirilip gerçek yaşam problemlerinin daha kolay bir şekilde çözülebildiğini göstermektedir. Ayrıca, böyle bir entegre çalışma işletmelerin yaşamış olduğu operasyonel zorluklara karşı işletme yöneticilerine ve karar vericilerine önemli fikirler sunmaktadır.

**Anahtar kelimeler:** Tesis Yerleşim Tasarımı, Tahminleme, Simülasyon, Karar Verme



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## ABSTRACT

Existing facility layout designs often become a chronic problem that causes inefficiency in companies. Incorrect layout plannings cause unnecessary transportation within the company, thus increasing production times and less production quantities. At the same time, future demand uncertainties are one of the most important challenges for companies to make effective planning. Effectively designed facility layouts eliminate all sources of waste and make the companies more productive. This study develops a decision-making approach that integrates three distinct methods (i.e., forecasting, facility layout desing and simulation) to determine the optimal facility layout design, taking into account the demand conditions of a company in future. First of all, five different facility layout designs belonging to the company are developed. These different facility layout alternatives have been developed by considering a number of parameters (i.e., relationship diagram, number of transportations, from-to matrix and space requirements) amongst the workstations in the company. Then, considering the demand data of the company between the years 2020-2023, monthly demand forecasting models are developed using ARIMA, exponential smoothing and multiple regression methods, and monthly demand forecasts obtained from the best forecasting model that produced the best forecast values are taken into account. Finally, a simulation model is developed in order to determine the optimal facility layout design for the future demand conditions and the total flow intensities of the developed facility designs are calculated within the 95% confidence interval. The results illustrates that all alternative facility layouts developed are more efficient (i.e., approximately 61%, 53%, 38%, 33% and 20%) than the existing facility layout. This study shows that real life problems can be solved more easily by bringing different disciplines together. In addition, such an integrated study offers important ideas to business managers and decision makers against the operational difficulties faced by companies.

**Keywords:** Facility Layout Design, Forecasting, Simulation, Decision Making

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## SINIF ÖĞRETMENLERİNİN ÖRGÜTSEL GÜVEN VE ÖĞRETMEN PERFORMANSI ARASINDAKİ İLİŞKİNİN İNCELENMESİ (KAYSERİ İLİ ÖRNEĞİ)

### EXAMINATION OF THE RELATIONSHIP BETWEEN CLASS TEACHERS' ORGANIZATIONAL TRUST AND TEACHER PERFORMANCE (CASE OF KAYSERİ PROVINCE)

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#### ÖZET

Performans bireyin göstermiş olduğu çaba sonucu oluşan çıktıdır. Güven ise insanları bir arada tutan, yaşamsal öneme sahip, pozitif bir duygudur. Örgütsel güven de bireyin örgüt içindeki oluşumlardan zarar görmeyeceği, örgütün kendisine yarar sağlayacağı düşüncesidir. Örgütsel güven düzeyi de çalışanların kuruma, yöneticiye, çalışma arkadaşlarına duydukları güvene göre değişir. Örgütsel güvenin yüksek olduğu kurumlarda bağlılık, iletişime açıklık, olumlu tutum, duyguları rahat ifade etme artacaktır. Dolayısıyla sorun çözümü kolaylaşacak, ekip çalışması artacak, stres azalacaktır. Bir örgütün amacı hedeflere ulaşmayı sağlamaktır. Okul da bir örgüt olduğuna göre okulda hedeflere ulaşmayı sağlayacak baş aktör öğretmenlerdir. Öğretmenlerin performansını etkileyen her unsur geleceğin mimarı öğrencilerimizi de etkileyecektir. Bu çalışmada da amaç örgütsel güven düzeyinin öğretmen performansına etkisini incelemektir.

Araştırma Kayseri iline bağlı 2022-2023 eğitim öğretim yılında MEB' de görevli Melikgazi, Kocasinan, Hacılar, Talas, İncesu ilçelerine bulunan devlet okullarında görev yapmakta olan 370 sınıf öğretmenine uygulandı.

Çalışma için hazırlanan anket formu 3 bölümden oluşmaktadır. Birinci bölüm demografik özelliklerden, ikinci bölüm Çalışkan tarafından hazırlanmış "Örgütsel Güven Ölçeği" sorularından, üçüncü bölüm ise Özgenel tarafından hazırlanmış "Öğretmen Performans Değerlendirme Ölçeği" sorularından oluşmaktadır.

Tüm veriler bilgisayarda SPSS 26 programına kaydedilerek analiz edilmiştir. Dağılımın normalliğine karar vermek için Kolmogorov-Smirnov testinden yararlanılmıştır ve verilerin çarpıklık-basıklık katsayılarının  $\pm 2,0$  arasında olmasından, normal kabul edilmiştir. Normal dağılım gösteren verilerde bağımsız iki grup karşılaştırmasında t-testi, ilişkisiz ikiden fazla grupların karşılaştırılmasında Tek yönlü Varyans analizi ve farkın kaynağının belirlenmesi için post-hoc analizi için varyanslarının homojen bulunduğu durumlarda Bonferroni testi, homojen bulunmadığı durumlarda Tamhane's testleri kullanılmıştır. Varyansın homojenliğini belirlemek için Levene istatistiği ile varyansların homojen olup olmadığı tespit edilmiştir. Ölçek Toplam Puanları arası ilişkiye pearson korelasyon katsayısı ile bakılmıştır.

Öğretmenlerin Örgütsel Güven puanı ile Performans Değerlendirme Ölçek puanı arasında pozitif yönde ilişki çıkmıştır. "Örgütsel Güven Ölçeğinde" öğretmenlerin güven düzeyleri cinsiyet ve kurumdaki öğretmen sayısına göre farklılık göstermiştir. "Öğretmen Performans Değerlendirme Ölçeğinde" ise ölçeğin alt boyutlarında cinsiyet, kurumdaki öğretmen sayısı ve unvana göre farklılık göstermektedir.



**Anahtar kelimeler:** Güven, Örgütsel Güven, Performans

## ABSTRACT

Performance is the output of the effort of people. On the other hand, confidence is a vital, positive emotion that holds people together. Organizational trust is the idea that the individual will not be harmed in the organization and will benefit himself. The level of organizational trust also varies according to the trust of the employees to the institution, the management and colleagues. In institutions where organizational trust is high, commitment, openness to communication, positive attitude, and comfortable expression of emotions will increase. Therefore, problem solving will be easier, teamwork will increase, and stress will decrease. The purpose of an organization is to achieve its goals. Since the school is an organization, the main actor in achieving the goals in the school is the teachers. Every factor that affects the performance of teachers will also affect our students, who are the architects of the future. The aim of this study is to examine the effect of organizational trust level on teacher performance.

The research was applied to 370 classroom teachers working in public schools in the districts of Melikgazi, Kocasinan, Hacılar, Talas, İncesu in 2022-2023 academic year of the city of Kayseri.

The questionnaire form of the study consists of 3 parts. The first part is about demographic characteristics, the second part is about "Organizational Trust Scale" prepared by Abdullah Çalışkan consists of 17 questions. The third part of the "Teacher Performance Evaluation Scale" prepared by Özgenel consists of 34 questions.

All data were recorded in SPSS 26 program on the computer and analyzed. The Kolmogorov-Smirnov test was used to determine the normality of the distribution and it was accepted as normal since the skewness-kurtosis coefficients of the data were between  $\pm 2.0$ . T-test was used for the comparison of two independent groups in normally distributed data, one-way analysis of variance was used for the comparison of more than two unrelated groups, and for post-hoc analysis to determine the source of the difference, the Bonferroni test was used in cases where the variances were found to be homogeneous, and Tamhane's tests were used in cases where it was not found homogeneous. In order to determine the homogeneity of the variance, it was determined whether the variances were homogeneous with the Levene statistic. The relationship between the Scale Total Scores was examined using the Pearson correlation coefficient.

There was a positive correlation between teachers' Organizational Trust score and Performance Evaluation Scale score. In the "Organizational Trust Scale", teachers' trust levels differed according to gender and the number of teachers in the institution. In the "Teacher Performance Evaluation Scale", on the other hand, the sub-dimensions of the scale differ according to gender, number of teachers in the institution and title.

**Keywords:** Trust, Organizational Trust, Performance

**KONTENJANS TABLOLARDA LOG-LİNEER MODEL KULLANIMI VE ÖZEL EĞİTİMDE  
EĞİTSEL TANILAMA SÜRECİ ÜZERİNE UYGULAMA**  
**USAGE OF LOG-LINEAR MODEL IN QUOTA TABLES AND APPLICATION ON  
EDUCATIONAL DIAGNOSTIC PROCESS IN SPECIAL EDUCATION**

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**ÖZET**

İki yönlü kontenjans tabloların istatistiksel analizlerinde ki-kare analizi kullanılmakta ancak daha büyük boyutlu kontenjans tabloların analizinde yetersiz kalmaktadır. Üç veya daha çok boyutlu kontenjans tablolarında ilişki yapılarının belirlenmesi için log-lineer modeller kullanılabilir. Log-lineer modeller yardımıyla nitel değişkenler arasındaki etkileşimler sorgulanabilmektedir. Özel gereksinimli bireylerin eğitsel tanılama süreçlerine birçok değişken etki etmektedir. Bireylere rapor ve tanı konma süreçlerinde bireylerin sağlık raporları detaylı olarak incelenmekte yaş, hamilelik dönemi geçirilen hastalıklar, genetik testi sonuçları ve sosyal çevre iletişimi ile ilgili test sonuçları genel skora etkisi olduğu düşünülmektedir. Bu çalışmanın amacı, 2023 yılında ülkemizde eğitsel tanılama raporu alan bireylerin, log-lineer analiz yöntemini kullanarak zihinsel raporu, tıbbi raporu, bireysel yeterliliği, eğitim hizmetlerinden yararlanma süresi değişkenleriyle incelemek, değişkenlerin kategorileri arasındaki bağımlılık yapılarını en iyi açıklayan istatistiksel olarak anlamlı bir model önermektir. Yapılan araştırmada kategorik veriler üzerinde log-lineer çalışması planmış ve değişkenler arasındaki ilişkinin yordanması hedeflenmiştir.

**Anahtar kelimeler:** Log-Linear Model, Kontenjans Tablo, Özel Eğitim

**ABSTRACT**

Chi-square analysis is used in the statistical analysis of two-way quota tables, but it is insufficient in the analysis of larger quota tables. Log-linear models can be used to determine relationship structures in three or more dimensional contingency tables. Interactions between qualitative variables can be questioned with the help of log-linear models. Many variables affect the educational diagnosis processes of individuals with special needs. Health reports of individuals are examined in detail during the reporting and diagnosis processes, and it is thought that the test results related to age, diseases during pregnancy, genetic test results and social environment communication have an impact on the overall score. The aim of this study is to examine the mental report, medical report, individual efficacy, duration of use of educational services by using log-linear analysis method of individuals who received educational diagnostic report in our country in 2023, and to propose a statistically significant model that best explains the dependency structures between the categories of the variables. In the research, log-linear study was planned on categorical data and it was aimed to predict the relationship between the variables.

**Keywords:** Log-Linear Model, Quota Table, Special Education





## DEMOGRAFİK ÖZELLİKLER KAPSAMINDA ÖĞRENİLMİŞ ÇARESİZLİK LEARNED HELPLESSNESS WITH DEMOGRAPHIC CHARACTERISTICS

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### ÖZET

**Amaç:** Bu araştırmanın amacı , demografik özellikler açısından öğrenilmiş çaresizlik üzerinde anlamlı bir farklılık oluşup oluşmadığını tespit etmektir.

**Önemi:** Kamu personelinin demografik özellikler ile öğrenilmiş çaresizlik üzerindeki algısını analiz ederek bulgularla literatüre katkı sağlamak ve personel durumu ile ilgili veri oluşturmak kurum yapısının gelişmesi açısından çok önemlidir.

**Yöntem:** Bu çalışmada ticaret bakanlığında çalışan personellerin demografik özellikleri ile öğrenilmiş çaresizlik algıları bakımından farklılık olup olmadığı araştırılmak istenmiştir. 563 kişiyle yapılan anket kullanılarak sonuçların analizi SPSS programı yardımı ile yapılarak analize tabi tutulmuştur.

**Bulgular:** P(Sigma) değerinin 0,05 değeri ile karşılaştırılarak anlamlı farklılığa göre değerlendirme yapılmıştır. Analizler neticesinde, demografik özelliklerin öğrenilmiş çaresizlik üzerinde genel itibariyle anlamlı farklılık olduğu belirlenmiştir. Eğitim durumu (p=0,001), yaş (p=0,001), çalışma süresi (p=0,001), meslek (p=0,024), gelir (p=0,000), sosyal aktiviteye katılım (evet- p=0.05, hayır p=0.044), katılma sıklığı (p=0.000), işi sevme (p=0.000), toplantı (p=0.000), meslek içi eğitim ( evet-0.038 , hayır- p=0.013) gibi demografik özelliklerin anlamlı farklılık gösterirken; cinsiyet (Örneklemin yüzde 75'ini erkekler- p=-0,871 ,yaklaşık yüzde 25'ini kadınlar p=-0,861 oluşturmaktadır.) ve medeni durumda evlilerin (yüzde 30' u bekar- p=-0,468, yaklaşık yüzde 70'i evli- p=-0,507) anlamlı farklılık göstermediği tespit edilmiştir.

**Sınırlılıklar:** Ticaret Bakanlığı taşra teşkilatı personelleri üzerinde evren oluşturulmuş buradan oluşan örneklem üzerinde analiz yapılmıştır. Merkez teşkilatına sonradan yapılacak analizler çalışmaya katkı sağlayacağını düşünmekteyiz.

**Anahtar sözcükler:** Öğrenilmiş çaresizlik, Ticaret Bakanlığı, Türkiye



## ABSTRACT

**Purpose:** The aim of this study is to determine whether there is a significant difference on learned helplessness in terms of demographic characteristics.

**Importance:** It is very important to contribute to the literature with the findings by analyzing the demographic characteristics and the perception of the public personnel on learned helplessness and to create data about the personnel situation in terms of the development of the institutional structure.

**Method:** In this study, it was aimed to investigate whether there is a difference in terms of demographic characteristics and learned helplessness perceptions of the personnel working in the ministry of commerce. The analysis of the results was made with the help of SPSS program by using the questionnaire made with 563 people.

**Results:** The P(Sigma) value was compared with the value of 0.05 and an evaluation was made according to the significant difference. As a result of the analyzes, it was determined that there was a significant difference between the demographic characteristics on learned helplessness in general. Educational status ( $p=0.001$ ), age ( $p=0.001$ ), working time ( $p=0.001$ ), occupation ( $p=0.024$ ), income ( $p=0.000$ ), participation in social activities (yes-  $p=0.05$ , no  $p=$  While demographic characteristics such as 0.044), frequency of participation ( $p=0.000$ ), liking the job ( $p=0.000$ ), meeting ( $p=0.000$ ), in-service training (yes-0.038, no- $p=0.013$ ); gender (75 percent of the sample is men-  $p=-0.871$ , about 25 percent women are  $p=-0.861$ .) and married in marital status (30 percent are single  $p=-0.468$ , about 70 percent are married).  $p=-0.507$ ), it was determined that there was no significant difference.

**Limitations:** The universe was created on the personnel of the provincial organization of the Ministry of Commerce, and the analysis was made on the sample consisting of this. We think that subsequent analyzes of the central organization will contribute to the study.

**Keywords:** Learned helplessness, Ministry of Trade, Türkiye,



## OSMANLI TOPLUMSAL YAPISI VE MİLLET SİSTEMİ ÜZERİNE TARTIŞMALAR DISCUSSIONS ON THE OTTOMAN SOCIAL STRUCTURE AND THE MILLET SYSTEM

*Filiz YAŞAR*

*Dr.*

### ÖZET

Osmanlı, imparatorluk yapısı gereği birçok kültüre ev sahipliği yapmıştır. Egemen olduğu farklı coğrafyalardaki birbirinden farklı dile, dine, geleneğe sahip toplulukları aynı çatı altında yüzyıllarca uyum içinde yaşatmayı başarmıştı. Bu başarının arkasında toplumsal yapı bakımından güçlü bir politika sürdürmüş olmasının katkısı büyüktür. Bu politikanın dayanağı ise oluşturmuş olduğu toplumsal düzendir. Osmanlı, bünyesinde barındırdığı, Müslüman ve gayri-müslim unsurları ortak bir düzen içinde buluşturmuştu. Osmanlı'daki toplulukları, dönemin diğer topluluklarından ayıran özellik bu ortak düzende yüzyıllarca uyum içinde yaşamış olmalarıydı. Bu toplum, zengin bir kültürel mozayığe sahipti: Müslüman, Hristiyan, Türkmen, Arap, Rum, Ermeni, Bulgar ve daha birçok farklı topluluk aynı dokunun parçasıydı. Farklı dillerde kendini ifade eden, farklı dine inanıp ibadet eden bu topluluklar Osmanlı toplumsal yapısının büyük bir harmoniyi oluşturduğunu göstermektedir. Bu harmoniyi sürdürmek güçlü bir toplumsal sisteme sahip olmayı gerektirir. Osmanlı, birbirinden farklı toplumsal unsurların bir arada ve bir düzen içinde yaşatılması amacıyla yapılan hukuki, idari, toplumsal ve ekonomik düzenlemelerden oluşan bir sistem kurmuştu. Buna göre toplum, Müslüman, Ortodoks Rum, Ermeni, Yahudi unsurlardan oluşan dört farklı grup olarak sınıflandırılmıştı. Adına "Millet Sistemi" denilen bu hiyerarşik düzen dinsel, mezhepsel veya etnik yapılara göre değil toplumsal farklılıklara göre oluşturulmuştu. Bunlardan Müslüman milleti egemen sınıfı oluşturuyordu. Zaten devlet sistemi İslam devleti niteliklerini taşıdığından bu sınıfa dair hukuki, idari, ekonomik ve toplumsal düzenlemeler devletin genel yapısı içinde yer almaktaydı ve ayrıca bir düzenlemeye ihtiyaç duyulmamaktaydı. Bu nedenle pratikte millet sistemine dair düzenlemeler gayrimüslim milletleri kapsamaktaydı.

Millet sisteminin net bir tanımını yapmak çok zordur. Çünkü sistemin dayandığı esaslara ve temel özelliklerine bakıldığında ortak bir toplumsal nokta bulmak güçtür. Bu yüzdendir ki sistemin işleyişine ve hatta tanımına yönelik tarihçiler arasında farklı görüşler mevcuttur. Bu tebliğde bu görüşlere yer verilerek bu konudaki fikir ayrılıkları ortaya konmaktadır. Ayrıca konu üzerindeki temel tartışmalar üzerinde durularak bu sistemle ilgili iddialar değerlendirilmektedir. Bütün bunların ardından "millet sistemi" konusunda güncel fikirlere yer verilerek tarihçilerin bugün gelinen noktada bu konudaki düşüncelerinin son durumu tartışılmaktadır. Bu çalışma için mevcut literatür kronolojik olarak incelenip "millet sistemi" konusunda geçmişten bugüne kadarki gelişmeler değerlendirilmektedir. Böylece Osmanlı toplumsal yapısına dair teorik bazda analizlerin yapılmasına olanak verilmesi amaçlanmaktadır.

Sonuç olarak belirli bir tanıma sığdırılmaya çalışılan ve adına millet ya da cemaat sistemi denilen bu toplumsal yapı, esasları ve koşulları sabit genel bir yapı arz etmemektedir. Osmanlıda dinsel, dinsel mezhepsel, kültürel, siyasal, idari, ekonomik gibi tek bir parametreye göre sınıflandırılmayan bir toplumsal sistem gözlemlenmektedir. Bu nedenle Osmanlı toplumunu; Müslüman ve gayrimüslim esasına dayalı, yerel geleneklerle oluşmuş, coğrafi ve kültürel şartlara ek olarak dönemin koşullarına göre şekillenmiş bir yapı olarak nitelemek yanlış olmayacaktır.

**Anahtar kelimeler:** Osmanlı, Millet sistemi, Cemaat sistemi, Osmanlı toplumu, Osmanlı toplumsal yapısı

### ABSTRACT



The Ottoman Empire hosted many cultures due to its imperial structure. The Ottomans managed to keep communities with different languages, religions and traditions in different geographies under the same roof in harmony for centuries. Behind this success, the contribution of maintaining a strong policy in terms of social structure was great. The basis of this policy is the social order it has created. The Ottoman Empire brought together the Muslim and non-Muslim elements in a common order. The feature that distinguishes the Ottoman communities from the other communities of the period was that they lived in harmony for centuries in this common order. This society had a rich cultural mosaic: Muslim, Christian, Turkmen, Arab, Greek, Armenian, Bulgarian and many other communities were part of the same fabric. These communities, expressing themselves in different languages, believing and worshiping different religions, showed that the Ottoman social structure formed a great harmony. Maintaining this harmony required having a strong social system. The Ottoman Empire established a system consisting of legal, administrative, social and economic arrangements made in order to keep different social elements alive together and in an order. Accordingly, the society was classified as four different groups consisting of Muslim, Orthodox Greek, Armenian and Jewish elements. This hierarchical order, called the "Millet System", was created not according to religious, sectarian or ethnic structures, but according to social differences. Of these, the Muslim nation was the ruling class. Since the state system had the characteristics of an Islamic state, the legal, administrative, economic and social regulations of this class were included in the general structure of the state and there was no need for a separate regulation. Therefore, in practice, the regulations on the millet system covered non-Muslim millets.

It is very difficult to give a clear definition of the millet system. Because when we look at the principles and basic features of the system, it is difficult to find a common social point. For this reason, there are different views among historians regarding the functioning of the system and even its definition. In this paper, these views are included and the differences of opinion on this issue are revealed. In addition, the main discussions on the subject are emphasized and the claims about this system are evaluated. After all these, current ideas on the "millet system" are included, and the current state of the historians' thoughts on this issue is discussed. For this study, the existing literature is examined chronologically and the developments in the "millet system" from the past to the present are evaluated. Thus, it is aimed to allow the analysis of the Ottoman social structure on a theoretical basis.

As a result, this social structure, which is tried to fit into a certain definition and called the millet or community system, does not present a general structure with fixed principles and conditions. In the Ottoman Empire, a social system that cannot be classified according to a single parameter such as linguistic, religious, sectarian, cultural, political, administrative and economic is observed. Therefore, Ottoman society; It would not be wrong to describe it as a structure based on Muslim and non-Muslim principles, formed with local traditions, and shaped according to the conditions of the period in addition to geographical and cultural conditions.

**Keywords:** Ottoman, Millet system, Community system, Ottoman society, Ottoman social structure



## YARI İLETKEN LAZER DİYOTUN SICAKLIK DEĞİŞİMİNE BAĞLI DALGA BOYU KAYMASI VE EŞİK AKIMINI DEĞİŞİMİN İNCELENMESİ

### SEMICONDUCTOR LASER DIODE WAVELENGTH SHIFT DUE TO TEMPERATURE CHANGE AND INVESTIGATION OF THRESHOLD CURRENT CHANGE

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#### ÖZET

Bu çalışmada yüksek güçlü yarı iletken dizgi lazer diyotların çalışma sıcaklığına bağlı olarak eşik akımlarındaki ve merkez dalga boyundaki kaymaların gözlemlenmesi amaçlanmıştır. Yarı iletken lazer diyotların dalga boyu kayması, genellikle sıcaklığın değişmesi veya akımın artması gibi etkilerle ortaya çıkan bir fenomendir. Bu kayma, lazer diyotun ürettiği ışığın dalga boyunu değiştirir. Lazer diyotların dalga boyu kayması, genellikle lazer diyotunun yarı iletken malzemesinin sıcaklık katsayısı ile ilgilidir. Yarı iletken malzeme, sıcaklığı arttıkça ışığın dalga boyunu kısaltacak şekilde davranır. Bu nedenle, yüksek sıcaklıklarda lazer diyotlarının dalga boyu daha kısa olabilir. Sıcaklık arttıkça, lazer diyotunun eşik akımı genellikle artar. Bunun nedeni, sıcaklığın lazer diyotunun iç yapısındaki elektron ve delik hareketini etkilemesidir. Artan sıcaklık, iletkenlik batınıdaki elektronların sayısını artırır ve lazer diyotunun eşik akımına ulaşabilmesi için daha fazla elektronun uyarılması gerektiği anlamına gelir. Genel olarak, lazer diyotlarındaki eşik akımı kontrol etmek için sıcaklığın dikkate alınması önemlidir. Yüksek sıcaklıkta çalışan lazer diyotları, soğutma önlemleri veya sıcaklık dengeleme teknikleri gerektirebilir. Bu şekilde, istikrarlı bir çalışma performansı sağlanabilir ve lazer diyotunun ömrü uzatılabilir. Bu çalışmada yarı iletken lazer diyot optik masa üzerine kurulan test sistemine entegre edilerek oda sıcaklığından 50 °C'ye kadar ısıtılmış, her 1°C sıcaklık artışı için dalga boyu ve eşik akımı değeri kayıt edilmiş, elde edilen sonuçlar gerekli hesaplamalar yapılarak dalga boyu kayması için 0.3 nm/°C, eşik akımı için 0.27 A/°C olarak hesaplanmıştır.

**Anahtar kelimeler:** Yarı iletken lazer diyot, Optik Test, Sıcaklık kontrolü, Optik Karakterizasyon

#### ABSTRACT

Points where shifts in threshold currents and center wavelengths should be observed depending on the operating temperature of these high semi-power conductive array laser diodes. The wavelength shift of semiconductor laser diodes is a phenomenon that is usually brought about by the effects of temperature or current. This shift changes the wavelength of the light produced by the laser diode. The wavelength shift of laser diodes is generally related to the temperature range of the semiconductor material of the laser diode. Semiconductor material, electrical charge such that temperature shortens the wavelength of light. Therefore, the wavelength of higher children laser diodes may be shorter. As the temperature exceeds, the threshold current of the laser diode usually increases. This is because the temperature affects the electron and hole movement in the internal structure of the laser diode. Increasing temperature reduces the conduction of electrons in the conduction field and means that more electrons are adapted for the laser diode to reach the threshold current. In general, it is important to observe the temperature



to control the threshold current in laser diodes. High-running laser measurements may require cooling measures or temperature couplings. In this way, the operation can be ensured a working performance and the life of the laser diode can be extended. The test system installed on this semiconductor laser optical optical table protects from room temperature to 50 °C after integration, the wavelength and threshold current value are recorded for each 1 °C temperature increase, the results are required for calculations for wavelength shift. 0.3 nm/°C calculated as 0.27 A/°C for threshold current.

**Keywords:** Semiconductor laser diode, Optical Testing, Temperature control, Optical Characterization



**MATEMATİK DERSİNDE ÖĞRENCİLERİN MATEMATİĞE KARŞI KAYGILARINI  
AZALTMAYA YÖNELİK KULLANILAN YÖNTEM VE TEKNİKLERİN ÖNEMİ**  
**THE IMPORTANCE OF METHODS AND TECHNIQUES TO REDUCE STUDENTS' MATH  
ANXIETY IN MATHEMATICS CLASSES**

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**ÖZET**

Matematik dersinde öğrencilerin matematikle ilgili kaygılarını azaltmaya yönelik kullanılan yöntem ve tekniklerin önemi büyüktür. Matematik, birçok öğrenci için zorlu ve korkutucu bir konu olabilir ve bu da matematikle ilgili kaygıların ortaya çıkmasına neden olabilir. Ancak, matematik kaygısının azaltılması, öğrencilerin matematikle daha olumlu bir şekilde ilişki kurmasını sağlayarak, matematik başarısını artırabilir.

Matematik kaygısını azaltmada kullanılan yöntemler arasında pozitif bir öğrenme ortamı sağlama, öğrencilerin özgüvenini artırma, matematikle ilişkili olumsuz inançları değiştirme ve matematikle ilgili gerçek yaşam bağlantılarını vurgulama gibi stratejiler bulunur. Ayrıca, probleme dayalı öğrenme, işbirlikçi çalışmalar, oyunlar ve manipülatif materyaller gibi etkileşimli ve ilgi çekici matematik öğretim yöntemleri de kaygıyı azaltmada etkili olabilir.

Matematik kaygısının azaltılması, öğrencilerin matematik derslerine daha istekli bir şekilde katılmalarını, daha fazla özgüvenle sorunları çözmelerini ve matematikle ilgili kariyer seçeneklerini daha olumlu bir şekilde değerlendirmelerini sağlayabilir. Bu nedenle, matematik eğitiminde matematik kaygısını azaltmaya yönelik yöntem ve tekniklerin kullanımı büyük önem taşır.

**Anahtar kelimeler:** Matematik, matematik kaygısı, öğrenme ortamı, öğrenci özgüveni, öğretim yöntemleri.

**ABSTRACT**

The importance of methods and techniques used to reduce students' math anxiety in mathematics classes is significant. Mathematics can be a challenging and intimidating subject for many students, leading to the emergence of math-related anxieties. However, reducing math anxiety can enhance students' positive relationship with mathematics and improve their math achievement.

Methods employed to alleviate math anxiety include creating a positive learning environment, boosting students' self-confidence, challenging negative beliefs associated with math, and emphasizing real-life connections to mathematics. Additionally, interactive and engaging teaching methods such as problem-based learning, collaborative activities, games, and manipulative materials can be effective in reducing anxiety.

Reducing math anxiety can result in increased student engagement, improved problem-solving confidence, and a more positive evaluation of career options related to mathematics. Therefore, the utilization of methods and techniques to reduce math anxiety holds great importance in mathematics education.

**Keywords:** Mathematics, math anxiety, learning environment, student confidence, teaching methods.



## THE ANALYSIS OF CAUSES OF DEATH IN TURKEY WITH CLUSTERING ANALYSIS TECHNIQUES

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### ABSTRACT

A cluster is defined as a collection of objects that are brought together or considered to be together according to one or more of their properties. Cluster analysis techniques are one of the multivariate statistical methods that are defined as a collection of methods developed to cluster (divide into homogeneous subgroups) cases (or variables) within the framework of their properties. The determination of the number of clusters (k) has great importance in clustering analysis. The input data (variables) and algorithm (methods) are both important issues in the determination of “k” in clustering analysis. Good clustering is possible in data sets with significant variables and when appropriate clustering algorithms are used. This study is a study in which the mentioned sensitivities of cluster analysis are given importance. In this study, the causes of death in Turkey in 2020 by province-based were analyzed through clustering analysis. The data are taken from the official website of the Turkish Statistical Institute and analyzed with the SPSS program. Alternative techniques were compared with each other using reasonable variables to determine the appropriate number of clusters. All findings point to a two-cluster solution. The province of Istanbul, which is in the first cluster, differs from the rest of the provinces in the second cluster.

**Keywords:** Clustering Analysis, Multivariate Statistics, Causes of Death, Turkey.





## BAZALT KUMAŞLARININ DAYANIMI DÜŞÜK BETON ÜZERİNDE GÜÇLENDİRİCİ MALZEME OLARAK KULLANIMI

### USAGE OF BASALTIC FABRICS AS STRENGTHENING MATERIAL ON LOW STRENGTH CONCRETE

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#### ÖZET

Türkiye'de 6 Şubat 2023 depreminde çok sayıda bina yıkıldı. Çoğu yapı da hafif hasar gördü. Hafif hasarlı yapıların güçlendirilmesi gerekiyor. Mühendislik yapılarının güçlendirilmesi ve onarımında kompozit malzemelerin kullanımı son yıllarda hızla artmaktadır. Elyaf takviyeli polimer (FRP) kumaşlar, kolay ve hızlı uygulanmaları, hafif olmaları ve yüksek mukavemetleri ile geniş bir uygulama alanına sahiptir. Bu çalışmada, bazalt ile güçlendirilmiş düşük dayanımlı betonarme betonun basınç altında özellikleri incelenmiştir. Laboratuvarında C10 sınıfı silindirik beton numuneleri üretilmiştir. Standart kür sürelerinden sonra betonlar bazalt kumaş ile sarılmıştır. Bu betonların basınç-deformasyon özelliklerini belirlemek için sarılmamış beton ile karşılaştırılmıştır. Elde edilen sonuçlara göre, düşük dayanımlı beton sınıfının, bazaltik doku saran normal dayanımlı beton sınıfına yükseldiği gözlenmiştir. Betonun yük altında deformasyon kabiliyeti de önemli ölçüde artar. Mevcut güçlendirme yöntemleri yerine güçlendirme uygulamalarına alternatif olarak bazalt kumaşların tercih edilebileceği ve daha ekonomik olacağı görülmüştür

**Anahtar kelimeler:** Beton, Düşük Mukavemet, Donatı, FRP kumaş

#### ABSTRACT

Many buildings were destroyed in the earthquake of February 6, 2023 in Turkey. Most structures were also slightly damaged. Slightly damaged structures are in need of reinforcement. The use of composite materials for strengthening and repairing engineering structures has been increasing rapidly in recent years. Fiber reinforced polymer (FRP) fabrics have a wide application area with their easy and fast application, light weight and high strength. In this study, the properties of low strength reinforced concrete reinforced with basalt were investigated under compression. C10 class cylindrical concrete samples were produced in the laboratory. The concretes were wrapped with basalt fabric after standard curing periods. To determine the compressive-deformation properties of these concretes, they were compared to the concrete which is not wrapped. According to the results, it was observed that the class of low-strength concretes have increased to the class of normal-strength concretes wrapping of basaltic fabric. The deformation ability of the concrete under load is also significantly increased. It was found that basalt fabrics could be preferred as an alternative to reinforcement applications instead of existing strengthening methods and they would be more economical.

**Keywords:** Concrete, low strength, reinforcement, FRP fabric.



## TUT VE YERLEŞTİR (PICK AND PLACE) SİSTEMİ İLE PCB DİZGİ MAKİNESİ UYGULAMASI

### PCB LAYING MACHINE APPLICATION WITH PICK AND PLACE SYSTEM

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#### ÖZET

Bu çalışmada, kartezyen sistemde çalışan 3 eksenli bir hareket sistemine bağlı olan vakumlu bir gripper tutucusu bulunmaktadır. Daha önce manuel olarak el yardımı ile baskı devre kartı (PCB) üzerine dizilimi yapılan elektronik kartların, yapılan proje ile bu komponentlerin daha hassas ve hızlı olarak PCB üzerine dizgisinin yapılması amaçlanmaktadır. PCB kart üzerinde yer alacak SMT (Surface Mount Technology) komponentlerin PCB karta yerleşiminden önce "Vacuum Gel Pack(VGP)" ismi verilen taşıyıcı tepsi üzerine dizilimleri gerçekleştirilmesi gerekmektedir. Çalışmada yer alan step motorlar, TB6600 motor sürücülerine bağlantıları yapılmış ve Arduino Mega 2560 kartı üzerinden kontrolü gerçekleştirilmiştir. Gripper kısımda bulunan vakum tutucuda kullanılan 24V selenoid valfin Arduino Mega 2560 ile kontrolünü sağlamak için "2'li 5V Röle Kartı" kullanılmaktadır. Komponentin vakum tutucu tarafından alınıp alınmadığını kontrol amacıyla "Autonics PSAN" marka vakum sensörü kullanılmaktadır. Sistemin programlanması GBRL yazılımı ile gerçekleştirilmektedir. Projenin mekanik modellenmesi Solidworks programı ile yapılmıştır.

**Anahtar kelimeler:** Pick and Place, Endüstriyel Robot, Vacuum Gripper, TB6600, Tut-Yerleştir, PCB, Arduino Mega 2560, Step Motor

#### ABSTRACT

In this study, there is a vacuum gripper holder connected to a 3-axis motion system operating in a cartesian system. Previously, manually arranged on the PCB with the help of it is aimed to make the electronic card more sensitive and faster with the project. Before the SMD (Surface Mounted Diode) components to be placed on the PCB board are placed on the PCB board, they must be arranged on the carrier tray called "Vacuum Gel Pack (VGP)". Stepper motors in the project were connected to TB6600 drivers and controlled via Arduino Mega 2560 board. "Two 5V Relay Board" is used to ensure that the 24V solenoid valve used in the vacuum holder in the gripper part communicates with the Arduino Mega 2560. "Autonics PSAN" brand vacuum sensor is used to control whether the component is taken by the vacuum holder. Programming the system GBRL performed with software. Modeling of the project was done with Solidworks program.

**Keywords:** Pick and Place, Industrial Robot, Vacuum Gripper, TB6600, PCB, Arduino Mega 2560, Step Motor, Vacuum Gel Pack

## KÜLTÜREL BİR İMGE OLARAK KİTAP KAPAĞI TASARIMLARININ ÇAĞDAŞ DÖNÜŞÜMÜ

### THE CONTEMPORARY TRANSFORMATION OF BOOK COVER DESIGNS AS A CULTURAL IMAGE

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#### ÖZET

Kitap kapağı tasarımları, yayın grafiği kapsamında, grafik tasarımın bir alt çalışma alanı olarak öne çıkmakta olup; kitabın konusu ve bağlamıyla doğru orantıda tasarımcının hayal gücüne yönelik tasarlanmaktadır. Kitap kapağı tasarımlarında, kitabın konusu ve içeriği, bulunduğu coğrafya, dönemin özellikleri vb. gibi değişkenler göz önünde bulundurularak tasarım gerçekleştirilmektedir. Bu yönüyle bakıldığında, kitap kapağı tasarımları tasarımcının yaratım sürecinden geçen kültürel bir imge olarak raflarda yerini almaktadır.

Kitap kapağı tasarımları, yeni baskılarında ve çağdaşlaşma sürecinde, birer imge olarak yeni tasarım anlayışları ile dönüşüme girmektedirler. Her bir dönüşüm, yeni bir dönemi ve o dönemin çağdaş tasarım anlayışını yansıtmaktadır. Bu çalışma, kitap kapağı tasarımlarının çağdaşlaşma süreci üzerinden gelenekselden olan değişimini ele almayı amaçlamaktadır. Araştırma ile, yenilenen ve çağdaşlaşan kitap kapağı tasarımları, geleneksel örnekleri ile birlikte ele alınarak; tasarım anlayışının kültürü ve dönemi yansıtması bakımından değerlendirilecektir. Örnekler, klasik kitap örneklerinden seçilerek, popüler yayın evlerinden Can Yayınevi ve İş Bankası Yayınları'nın son baskıları üzerinden rastgele olarak seçilecek 5 kitap kapağı tasarımı üzerinden sunulacaktır.

Araştırma, nitel araştırma yöntemi üzerinden gerçekleştirilecek olup; alan yazın taraması ve araştırma bulguları sonucu elde edilen veriler üzerinden betimsel analiz ile yorumlanacaktır. Kitap kapağı tasarımları, biçimsel olarak görsel imaj ve tipografi gibi kriterler aracılığıyla tasarım ilke ve elemanlarına yönelik değerlendirmeler ile tartışmaya sunulacaktır. Araştırmanın, çağdaş tasarım anlayışına ve tasarım eğitimi sunacağı katkılar üzerinden literatüre fayda sağlayacağı ön görülmüştür.

**Anahtar kelimeler:** Kitap Kapağı, Yayın Grafiği, Tasarım.

#### ABSTRACT

Book cover designs stand out as a sub-field of graphic design within the scope of publication graphics; It is designed for the imagination of the designer in direct proportion to the subject and context of the book. In book cover designs, the subject and content of the book, the geography of the book, the characteristics of the period, etc. The design is carried out taking into account such variables. From this point of view, book cover designs take their place on the shelves as a cultural image that goes through the designer's creation process.

Book cover designs, in their new editions and in the modernization process, are being transformed as an image with new design approaches. Each transformation reflects a new era and the contemporary design approach of that period. This study aims to deal with the change of book cover designs from the traditional through the modernization process. With the research, the renewed and modernized book cover designs were handled together with their traditional examples; The design concept will be evaluated in terms of reflecting the culture and the period. Samples will be presented over 5 book cover



designs that will be chosen randomly from the latest editions of popular publishing houses Can Publishing House and İşbank Publishing, chosen from classic book samples.

The research will be carried out through the qualitative research method; The data obtained as a result of literature review and research findings will be interpreted with descriptive analysis. Book cover designs will be presented for discussion with evaluations of design principles and elements through criteria such as visual image and typography. It is foreseen that the research will benefit the literature through its contributions to contemporary design understanding and design education.

**Keywords:** Book Cover, Publication Graphics, Design.



## NEVROTİK BİR OLGU: DEPRESYONEL HİSTERİNİN ROSRSCHACH TESTİNDE GÖRÜNÜMÜ VE HİSTERİK KİŞİLİĞE DAİR BİR ÇALIŞMA

### A NEUROTIC CASE: THE APPEARANCE OF DEPRESSIONAL HYSTERIA IN THE ROSRCHACH TEST AND A STUDY ON HYSTERIC PERSONALITY

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#### ÖZET

Bu çalışmada önce 'nevroz', 'histriyonik kişilik' terimleri tanımlanmış, poliklinikte ele alınan hasta ile ilgili olarak histriyonik kişilik özelliklerinin belirtilerine yer verilmiş, depresyon ve tanı kriterleri açıklanmış, kişilik süreçlerine dair sıkıntılar, uykuda sorunlar, enerji kaybı, değersizlik ve üzüntü hislerini de dile getiren hastaya rosrchach test uygulaması yapılmış, kodlama ve içerik analizinden sonra raporu oluşturulmuş, histerik kişilere yardım edecek öneriler ile çalışma sonlandırılmıştır.

**Anahtar kelimeler:** Nevroz, histriyonik kişilik, rosrchach test

#### ABSTRACT

In this study, first the terms 'neurosis' and 'histrionic personality' were defined, the symptoms of histrionic personality traits were included in relation to the patient who was examined in the out patient clinic, depression and diagnostic criteria were explained. The rosrchach test was applied to the patient who expressed this, a report was created after coding and content analysis, and the study was concluded with suggestions to help hysterical people.

**Anahtar Kelimeler:** Neurosis, histrionic personality, rosrchach test



## OKUL ÖNCESİ DÖNEM ÇOCUĞU OLAN EBEVEYNLERİN BARIŞ EĞİTİMİNE YÖNELİK GÖRÜŞLERİNİN BELİRLENMESİ

### DETERMINING THE VIEWS OF PARENTS WITH PRESCHOOL CHILDREN ON PEACE EDUCATION

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#### ÖZET

Bu araştırmada, okul öncesi dönem çocuğu olan ebeveynlerin barış eğitimine yönelik görüşlerinin belirlenmesi amaçlanmıştır. Çalışmada nitel araştırma yöntemi kullanılmıştır. Araştırmanın çalışma grubu, 2021-2022 eğitim-öğretim yılında KKTC’de MEB’e bağlı devlet ve özel anaokullarında eğitim alan 5 yaş grubu çocukların 62 ebeveyninden oluşmaktadır. Veriler, kişisel bilgi formu ve yarı yapılandırılmış görüşme formu ile toplanmıştır. Araştırmada elde edilen veriler içerik analizi ile çözümlenerek veriler temalaştırılıp kategorilere ayrılmıştır. Araştırmanın alt amaçları arasında yer alan barış eğitimi nasıl tanımlarsınız? sorusuna; ebeveynler, “Farklı kültürel özelliklere sahip kişilerin bir arada yaşayabilmesi” olarak, Barış eğitimi hangi değerleri içermelidir? sorusuna; “saygı, sevgi, barışçıl tutum, hoşgörü, arkadaşlık” olarak, barış eğitimine yönelik okuldan beklentilerinin ne olduğu sorusuna ise; “Kültürel etkinlik düzenleme, değerler eğitimine yönelik eğitimler düzenleme ve aile eğitimleri düzenleme” ifadelerinde buldukları sonucuna ulaşılmıştır. Elde edilen sonuçlar çerçevesinde, ebeveynler için barış eğitimine yönelik aile eğitimlerinin düzenlenmesi, okul öncesi eğitimde aile katılımı etkinliklerin yaygınlaştırılması ve okul öncesi dönem barış eğitimine yönelik ebeveynlerle yapılacak araştırmaların artırılması ve yapılacak olan araştırmalardan elde edilen sonuçların bu araştırma sonuçları ile ilişkilendirilmesi önerilmiştir.

**Anahtar kelimeler:** Barış değer algısı, erken çocukluk dönemi, okul öncesi dönem ebeveynleri

#### ABSTRACT

This care aims to determine the perspective of parents with preschool children on peace education. Qualitative research method was used in the study. The study group of the research consists of 62 parents from Europe in the age group of 5 who were educated in public and private kindergartens affiliated to the Ministry of National Education in the TRNC in the 2021-2022 academic year. The data were collected with the personal information formula and the semi-recipient interview formula. The dimensions obtained in the research were analyzed by content analysis, and the dimensions were



thematized and divided into categories. How do you determine peace education, which is among the sub-objectives of the research? to the question; Parents, what values should Peace education include as “people of different cultural backgrounds can live together”? to the question; As for the question of what are the results from the school for peace education as “respect, love, peaceful attitude, tolerance, friendship”; The results they showed in the expressions of "organizing cultural events, organizing trainings for values education and organizing family trainings" were achieved. It has been suggested that the framework of the results obtained, the nests of family education for peace education for parents, the dissemination of family participation dimensions in pre-school education, the nests of research to be conducted with parents on pre-school peace education and the results obtained from the environments in which these results will be made are associated with the research.

**Keywords:** Peace value perception, early childhood, preschool parents



## THE IMPORTANCE OF AFGHANISTAN FOR THE FOREIGN POLICY OF CHINA

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### ABSTRACT

Afghanistan has always been at the center of attention of the global and regional actors due to its geopolitical and geoeconomic position. Throughout history, its invasion by the Persians, Greeks, Mongols, Great Britain, and Russians, as well as facing the U.S. intervention in 2001, were all related to its geopolitical importance. A power that dominates Afghanistan will also have the opportunity to control the regions such as Central Asia, the Middle East, and South Asia very easily because Afghanistan is a country that makes it possible for the above-mentioned regions to get connected and carries a “bridge role” for them. Likewise, the increasing importance of Afghanistan in the foreign policy of China, which has developed rapidly in recent years and is nominated as a hegemonic power, is undoubtedly related to its geographical location, rich minerals, and energy resources.

In this study, the geopolitical importance of Afghanistan in the foreign policy of rising China has been analyzed descriptively, and while doing that, the geopolitical approaches in International Relations have been utilized. As a result of the study, it has been found that Afghanistan still maintains its geopolitical importance and the significance that China attaches to Afghanistan, its efforts to be an effective actor in Afghanistan’s policies and its investments are all related to the geographical location, geostrategic and geoeconomic importance of Afghanistan. The improvement of bilateral relations after 2001 and its rapid increase especially after 2014 indicate that China will be an influential power in Afghanistan shortly. The study consists of three parts. The first part focuses on the geopolitical theories. In the second part, the political history and geopolitical, geostrategic, and geoeconomic importance of Afghanistan are discussed. Lastly in the third part, Chinese foreign policy, the geopolitical and geoeconomic importance of Afghanistan for China, and recent Chinese activities there are analyzed.

**Keywords:** Geopolitical Theories, China, Afghanistan, USA, Belt and Road Initiative, Taliban.





## IMPROVING PRODUCTIVITY OF HEAT STRESSED BT COTTON USING EXOGENOUS SELENIUM AS POTENT MODULATOR OF BIOCHEMICAL TRAITS

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### ABSTRACT

**Background:** Coincidence of reproductive stages of cotton with high temperature is chief constraint to accomplish potential of seed cotton yield.

**Objectives:** The present study was conducted with objectives to determine comparative thermo-sensitivity of squaring and flowering, to optimize exogenous selenium as potent alleviator of heat and to explore either selenium modulated physiochemical regulation impart heat tolerance at morphological level.

**Methodology:** The experiment was conducted during 2013 and repeated during 2014 at University of Agriculture Faisalabad, Pakistan. The experiment was laid out in Randomized Complete Block Design under split arrangement and replicated thrice. Treatments were comprised of heat stress in main plot viz.  $H_0$  = No heat imposition;  $H_1$  = Heat imposition at squaring and  $H_2$  = Heat imposition at flowering and varying foliar selenium concentrations in split plot viz.  $Se_0$  = Water spray (control);  $Se_{50}$  = 50 mg L<sup>-1</sup> selenium;  $Se_{100}$  = 100 mg L<sup>-1</sup> selenium and  $Se_{150}$  = 150 mg L<sup>-1</sup> selenium.

**Results:** Heat imposition at either stage deleteriously impacted all the recorded attributes compared to no heat stress while exogenous selenium improved these responses significantly compared to water spray. Yet, significant interactions of heat and selenium were observed for all recorded attributes. Significantly more antioxidants, chlorophyll contents, water relation attributes, seed cotton yield and lesser hydrogen peroxide were recorded with 150 mg L<sup>-1</sup> foliar selenium compared to other concentrations under no heat stress. While under heat imposition at squaring and flowering, statistically similar and significantly more antioxidants, chlorophyll contents, water relation attributes, seed cotton yield and lesser hydrogen peroxide were observed for 100 and 150 mg L<sup>-1</sup> selenium compared to other selenium concentrations.

**Conclusion:** Conclusively, flowering stage proved relatively more thermolabile compared to squaring stage and application of 150 mg L<sup>-1</sup> foliar selenium effectively alleviated adverse effect of heat. Moreover, strong and significant associations of all physiochemical attributes with seed cotton yield were recorded.

**Keywords:** Antioxidants, climate, correlation, oxidative stress, phenology, thermo-sensitivity



## THERAPEUTIC NATURE OF OLD TESTAMENT LITERATURE FOR AFRICANS

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### ABSTRACT

This article assesses the therapeutic nature of Old Testament literature and its import for Africans in the midst of daunting challenges. Africans seem to be heralded with many challenges, ranging from physical to spiritual. African physical challenges include health, economics, stroke, and addictions. Some of the spiritual challenges include fear of death, the impacts of powers beyond man in human activities, and the feeling of the subordinate nature of man. This has made African Christians seek therapies to find solutions to their daunting challenges. For African Christians, the wisdom corpus fills this gap. In therapeutic healing, the counsellor uses several strategies to find solutions to problematic behaviours, beliefs, feelings, and related physical symptoms. The book of Psalms is one of the wisdom corpus that possess the therapeutic nature of serving as a counsellor in resolving some of the challenges that have befallen the African man. The book of Psalms is made up of songs of people who cry out to God in the midst of loss, trials and persecutions from friends and foes, and other challenges. Findings reveal that depression, protection, and patience, which are core themes in the book of Psalms, have helped form a form of bibliotherapy for Africans. This is a qualitative study using a phenomenological approach. Data was gotten from relevant academic literature and also from in-depth interviews with some Africans, through purposive sampling. Content analysis was adopted.

**Keywords:** therapy, Old Testament, Africans, depression, Psalms



**THE EFFECT OF NUTRIENTS FROM VERMICOMPOST EXTRACT AS A NUTRITIONAL SUPPLEMENT AB MIX ON THE GROWTH AND YIELD OF MUSTARD PLANTS (*Brassica juncea* L. ) ON NFT HYDROPONIC SYSTEMS**

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**ABSTRACT**

Hydroponic system cultivation techniques usually use inorganic nutrients such as AB-Mix but inorganic nutrients have the disadvantage of being relatively expensive, less environmentally friendly than the absence of hormones and organic amino acids that can help plants absorb nutrients from the growing media. One solution in reducing excessive use of inorganic fertilizers is to find sources of fertilizer base materials that have not been optimally utilized such as POC vermicompost extract. POC vermicompost extract itself has advantages such as environmentally friendly, the presence of growth hormones such as auxin, cytokinins, gibberellins and rich in micronutrients. This study aims to (1) determine the effect of organic nutrition of vermicompost extract on mustard plants. (2) knowing the best treatment concentration of vermicompost extract organic nutrients in NFT hydroponic systems. This research will be carried out from January 2023 to February 2023. Located at Field Garden, Harapan street, Sepang City Village, Bandar Lampung. This study used 4 kinds of treatments, namely: (1) 100% AB-mix (P0), (2) AB-mix 75% and 25% vermicompost extract (P1), (3) AB-mix 50% and 50% vermicompost extract (P2), (4) 100% vermicompost extract (P3). The treatment was prepared using a Complete Randomized Design (RAL) consisting of 4 treatments and 6 repeats so that 24 experimental units were obtained. The results showed that all observed variables in the AB-Mix 75% + POC treatment of 25% vermicompost extract gave results that were not significantly different from AB-Mix 100%.

**Keywords:** AB-Mix, hydroponics, POC vermicompost, mustard plant.



## CREATION AN ELECTRON CANNON IN ORDER TO STUDY THERMOELECTRONIC EMISSION

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### ABSTRACT

Our objective is to make details on crystal surfaces by diffraction of electrons .In this case, we interested in the width and intensity of these electron beams which prevented us from studying sufficiently small crystalline beaches.

So this led us to study an electron cannon, which is one of the essential components of a cathode tube or instruments such as electron microscopes.[1]

In our work we are interested in to realize it to provide a bundle of focused and energetic electrons. We are also interested in the study of Thermoelectronic emission.

Our problem is controlled the electronic spot on different matters or the sample to be fine, intense and stable.

A high intensity in a smallest possible spot requires a brilliant source. The intensity will only be stable if the emission of the source is too.

For this, our purposes elaborate the different mecanisme to produce this electron and the principle used to extract it. As part of this work, we have treated in the first part the of Construction the cannon under vacuum or by area and the difference between the two.

In electron cannon we can designate three important elements [2] (filament, Wehnelt cylinder and the anode), the electrons emitted by a filament with an electrical voltage are applied to the outlet of the room allowing the acceleration of the latter. This beam then crosses an electric field, which is focused and then accelerated to energies between 10 Kev and 100 Kev

Depending on the distinctions and the operating mode, electron canons have different properties and characteristics. There are physical quantities to characterize them. The main one is shine but the lifespan is also particularly important, but also stability. The maximum available current can also be taken into account, but also the energy dispersion

**Keywords:** Diffraction of electrons , cathodic tube , electrons , Thermoelectronic emission

## FORMULATION OF TERNARY SYSTEM OF COPPER OXIDE-TITANIUM OXIDE SUPPORTED CHITOSAN PHOTOCATALYST FOR TREATMENT OF WATER EFFLUENTS

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### ABSTRACT

Using a straightforward sol-gel method and a suitable amount of CuO doping, the TiO<sub>2</sub>/CuO/CS photocatalysts were successfully created, reducing recombination. The improved photocatalytic activities are likely the result of photo-generated electron-hole pairs and increased visible light absorption. Under a Xenon lamp (= 464 nm) with a cut-off filter, the photocatalytic degradation rate of MO at 240 min is 85.29% for the ideal sample of TiO<sub>2</sub>/CuO/CS (1:4:1). These results are 56.55 % more significant than the commercial P25 under the same circumstances. The influence of the initial pH on the photocatalytic degradation of MO in the presence of TiO<sub>2</sub>/CuO/CS under visible light irradiation is another parameter being watched. The results showed that low pH regions (pH 3) and high dopant concentrations were favourable for MO's adsorption capabilities. Additionally, a crucial step in the process of photocatalytic oxidation is the early-stage adsorption of dye molecules onto the catalyst surface. After adsorption capacity rose, dyes' photocatalytic reaction became more effective. Chitosan was used to deposit CuO onto TiO<sub>2</sub>, and as a result, the surface plasmon resonance and prevention of electron-hole recombination are responsible for the increased activity when exposed to visible light. Due to the electron transfer from the TiO<sub>2</sub> conduction bands to the CuO conduction band, doping of Cu significantly increased the photocatalytic activity of TiO<sub>2</sub> in the breakdown of MO under visible light irradiation with the ideal doping ratio of 1:4:1.



## FUTURE OF MOLECULAR DIAGNOSTICS POST-CORONA PANDEMIC

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### ABSTRACT

Molecular diagnostics is an emerging field of biological science that helps in diagnosing diseases by studying molecules such as DNA, RNA, and proteins in tissue or fluid samples. It also encompasses proper treatment plan designing along with monitoring of the efficacy of treatment. Molecular diagnostics can diagnose a wide array of diseases including infectious diseases like COVID-19, HIV/AIDS, Hepatitis B and C, Tuberculosis, and Sexually Transmitted Infections (STIs). Apart from these, genetic disorders caused by mutations or variations in specific genes or chromosomes including Cystic Fibrosis, Duchenne Muscular Dystrophy, and Down Syndrome have been successfully diagnosed by molecular diagnostics. Also, breast and ovarian cancer, solid tumours, leukaemia and neurological diseases are widely detected by molecular diagnostics. However, molecular diagnostics can be divided into pre- and post-Corona pandemic, since, Corona pandemic has globally aroused a warning bell towards rapid diagnosis and point-of-care testing (POCT) for infectious diseases. No wonder the global market of molecular diagnostics in public health emergencies is on a surge. According to the most recent studies, molecular diagnostics will play a pivotal role in shaping the future of healthcare. Emerging technologies in molecular diagnostics include CRISPR-based diagnostics, digital PCR, Next-generation Sequencing (NGS), Isothermal Nucleic Acid Amplification Technology (INAAT), and single-cell analysis. The integration of molecular diagnostics with artificial intelligence and digital health technologies is really promising. The availability of large genomic data coupled with sophisticated bioinformatics tools has made the idea of personalized medication possible. Moreover, non-invasive methods like liquid biopsies and circulating tumour DNA analysis are emerging as sensitive tools. Undoubtedly, the post-covid era will witness an increase in the accessibility and affordability of molecular diagnostics. However, it should be noted that along with the opportunities this technique has ethical, legal, and social implications which can only be sorted out by wise collaborations between researchers, clinicians, and policymakers for a more responsible application of molecular diagnostics in healthcare systems worldwide. In conclusion, mention may be made that molecular diagnostics holds immense potential in the post-Corona pandemic and can revolutionize the healthcare system worldwide if applied sensibly.



## INFLUENCE OF RICE HUSK ASH ON COMPRESSIVE STRENGTH OF CONCRETE BY THE REPLACEMENT OF FINE AGGREGATES WITH QUARRY DUST

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### ABSTRACT

Concrete is versatile building substance which is utilized in almost all establishment works. The most important component of concrete is cement. Cement is a binder which is a material utilized in construction industry that solidifies, and clings or holds fast to other particles of different material to bind them together. Cement consumption is often heavily linked to the demand from the construction industry. Pakistan is the country where the utilization of cement is 225-250 kg per capita. We trust that the government could impel cement utilization by chasing guidelines that motivate industries and raise the housing and construction sector apart from expanding its development spending on infrastructure. In this research rice husk ash was used as a substitution of cement on a specific fixed percentage by 10% and quarry dust by partial replacing with sand varies with the percentages of 0%, 10%, 20%, 30%, 40% and 50%. After performing the mix design, the concrete was prepared with the mixing ratio of 1:2:4 and w/c of 0.5. Keeping in this view, an experimental study is conducted to reduce structure cost and make it more economical and feasible without compromising the strength and workability of concrete made by the replacement of cement with rice husk ash and sand with quarry dust. In this connection, thirty-six cylinders of mixes were prepared and curing was done at 7, 14, 21 and 28 days. Slump test was performed for all mixes which showed that as we increase the quantity of quarry dust the workability of concrete was reduced. Similarly, compressive strength test results showed that strength was increased initially but it was reduced by increasing the quantity of quarry dust. Test results showed that rice husk based concrete gives good strength at 30% to 40% replacement of sand with quarry dust. .

**Keywords:** Recycled aggregate concrete, Rice husk ash, workability test, rapid curing, Compressive strength



## VIABILITY ASSESSMENT OF HYBRID ENERGY SYSTEM FOR AN EDUCATIONAL INSTITUTE IN PAKISTAN

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### ABSTRACT

This work presents a comprehensive analysis of the viability of implementing a hybrid energy system to power the Admin Block of King Abdullah Campus of the University of Azad Jammu & Kashmir. The study explores the potential benefits and challenges associated with integrating renewable energy sources and conventional energy systems. By considering various technical, economic, and environmental factors, the research aims to provide valuable insights into the viability and effectiveness of such a system in meeting the energy demands of the building while reducing its carbon footprint. The results indicate that the integration of renewable energy sources, such as solar and wind, with conventional energy systems presents a promising solution for the energy requirements. The proposed hybrid energy system demonstrates considerable potential in enhancing energy security, and reducing operational costs. Furthermore, the system's performance is found to be highly dependent on the availability and reliability of renewable resources, necessitating careful resource assessment and forecasting. The outcomes of this research contribute to the required resource assessment, robust system design, and effective management strategies for hybrid energy systems and provide valuable insights for future energy planning and sustainability initiatives.





## THE AWARENESS OF SAVING BEHAVIOR AMONG STUDENTS

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### ABSTRACT

Over the course of several decades, a large number of researchers have focused their attention, rather than on young adults, on the factors that determine the personal saving behavior of households and employees. Even if there aren't many studies that concentrate on the saving behavior of students in higher education, the vast majority of those studies weren't driven by theory and instead just focused on individual aspects. As a result, the purpose of this study is to apply the theory of planned behavior in an effort to determine whether or not factors such as self-control, peer influence, financial attitude and financial knowledge have a considerable impact on the saving behavior of university students in Malaysia. Specifically, the research will look at the relationship between these factors and saving behavior. Self-administered questionnaires will be used to obtain the primary data for this study. 357 students from Bahasa University in Malaysia were selected at random to participate in the study. In the meantime, Pearson Correlations and Multiple Regression Analysis will be utilized in order to determine whether or not the four criteria have a relationship with the saving behavior of college students. This study is carried out for the purpose of discovering the elements that influence the saving behavior of university students in order to raise their financial awareness regarding saving. Therefore, the study will focus on self-control, peer influence, financial attitude, and financial knowledge on saving behavior among students in Malaysia. The findings of this study will eventually help fill a gap in the literature on financial management and will contribute to the expansion the concept's scope in a number of crucial ways. This study is believed to be highly essential for the young people of Malaysia since it will assist them in improving their ability to make sound financial decisions in the market, which would ultimately be to their advantage. Furthermore, this study is important for those with the authority to govern the financial decision-making process for individuals. Hence, this will assist the youth and students to develop abilities necessary for future decision making. Furthermore, on the basis of the identification of fundamental issues, educators and regulators will be able to establish suitable programs and design pertinent financial courses for the purpose of assisting students in the management of their personal finances and in avoiding the paths that lead to debt. Additionally, retail banks in Malaysia are able to implement more relevant marketing tactics in order to tap into and further penetrate the market of youthful savers. It is possible to increase both the profitability and the competitiveness of retail banks by taking this action. In addition, given that college students are the demographic of interest and that there is a dearth of research focusing on the savings habits of college students, this study has the potential to serve as a source of motivation for additional researchers to continue their investigations into the subject matter. The study can also enable parents to better understand the elements that influence their children's propensity to save money. As a result, they are better able to keep an eye on their children and make sure they are on the right path when it comes to handling their financial matters.

**Keywords:** Financial Attitude, Financial Knowledge, Peer Influence, Self-Control, Saving Behavior



## IMPACT OF MICRO CREDITS ON WOMEN EMPOWERMENT IN RURAL AREAS OF DISTRICT FAISALABAD PUNJAB-PAKISTAN

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### ABSTRACT

The aim of this study was to demonstrate that microfinance positively affects women's entrepreneurship and exposure to business opportunities. Women have considerable economic influence over a nation. Pakistan, where women constitute half the population, is unable to progress socially, economically, or politically without their participation. Women should be given more authority through education, access to resources, fair employment opportunities, and microcredit programs. Most often, women receive loans, but their male family members spend the entire amount, leaving the woman only with anxiety and depression over how she would pay back the debt. The reduction of hunger and poverty, as well as household and national financial sustainability are only a few of the many effects of microfinance on women's empowerment in society. 120 women who were receiving PRSP credit from Tehsil Faisalabad were chosen as respondents by purposeful sampling. A schedule of interviews was created in order to gather information from respondents. With the help of the program (SPSS), data were evaluated. The results imply that microcredit has a favorable effect on the socioeconomic condition and empowerment of women. It boosts women's self-esteem and sense of identity in society to some extent. The results also showed that microcredit has two effects on borrowers' lives. It not only aided women in growing their businesses but also in enhancing the education of their offspring. In daily life, they experience a great deal of independence and autonomy. Additionally, it has raised their standing and reputation among their family and community. Women who operate their own enterprises or who already have some knowledge of the industry might greatly benefit from microcredit. Women who lack the necessary business knowledge or competence are unable to improve their standing in any way. Microcredit, on the other hand, added the additional burden of repayment at a high rate of interest. They spent the loan money on personal costs, which made it challenging for them to repay it. The study also revealed that microfinance positively affects women's entrepreneurship and exposure to business opportunities.

**Keywords:** Women Empowerment, Micro-Credit, Poverty, PRSP, Financial sustainability



## WATER QUALITY INDEX ASSESSMENT IN THE GROUND WATER OF GUDLAVALLERU KRISHNA DISTRICT, A.P, INDIA

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### ABSTRACT

The Krishna and Godavari (East and West) districts of Andhra Pradesh, They have a flourishing agriculture and the farmers of these districts effectively use the mineral rich alluvium of the Krishna and Godavari deltas. The farmers extensively pump groundwater for irrigation and industries, resulting in excessive drawdown of freshwater. Also, saltwater intrusion is occurring along coast of these deltas due to over pumping. The nutrients generated by using fertilizers in agriculture are leaching subsurface as well as are discharging to the coast of Bay of Bengal. The project work is aimed at assessing the water quality index (WQI) for the groundwater in and around Gudlavalleru mandal. This will be determined by collecting groundwater samples and subjecting the samples to a comprehensive physicochemical analysis. The results of analyses will be used to predict various treatment models before consumption of water.

**Keywords:** Groundwater, WQI, Minerals in groundwater, Gudlavalleru mandal.



## RESOURCE-SAVING MEASURES OF GROWING AGRICULTURAL CROPS IN UKRAINE DURING THE POST-WAR PERIOD

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Already in 2022, the military actions in Ukraine did not allow to obtain constant levels of winter and spring crops on the land use area of about 10%. This happened precisely in the zone of placement of highly fertile lands, mainly chernozems and dark-chestnut soils.

In particular, in the southern region, grain, vegetable, melon, oilseed, energy, medicinal and other crops were successfully grown to obtain high-quality products.

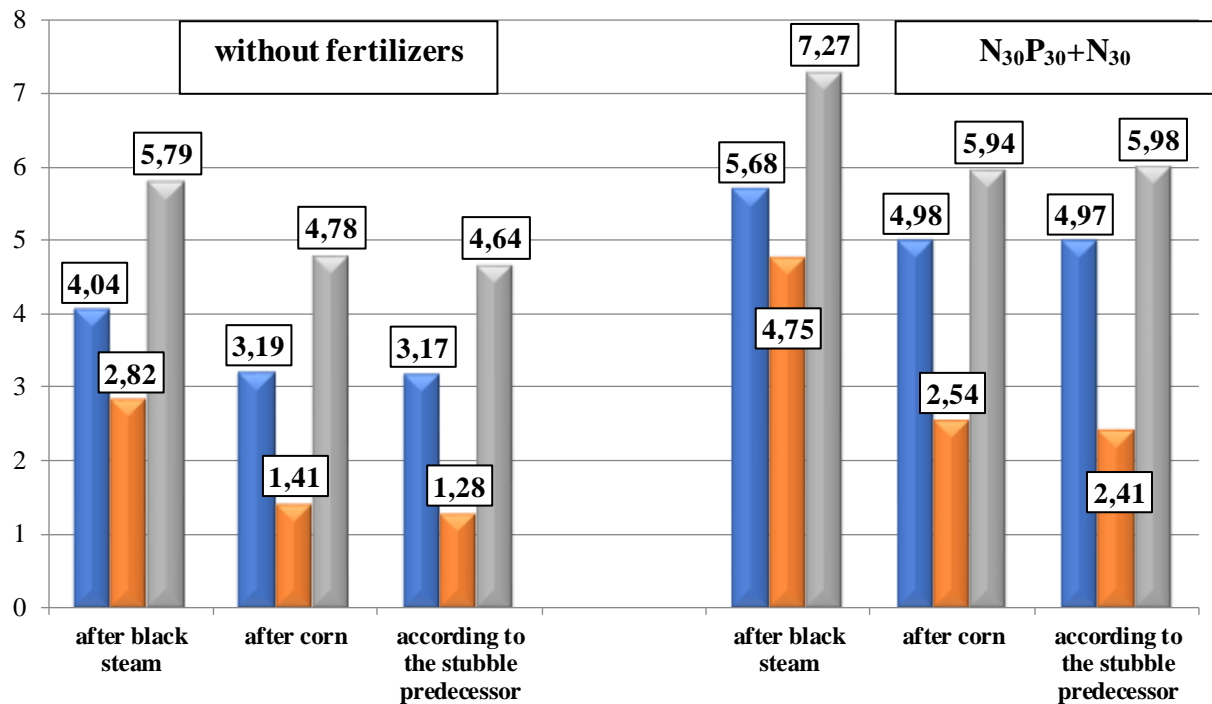
During the war, the soils in this region were contaminated by rocket emissions, fragments from them and other residues, which will require measures to significantly improve the basic indicators of their fertility after preliminary cleaning from foreign objects. After all, it is well known that the soil is the main means of production of agricultural products. Both yield levels and the quality of grown products depend on its quality, structural indicators, and supply of nutrients. In addition, in the Southern Steppe zone of Ukraine, the first limiting factor in the formation of the harvest level is moisture. As a rule, the level of productivity depends on its amount in the soil during the sowing period and rainfall during the growing season of the crop. This is particularly evident in recent decades in connection with climate change. Under such conditions, soils with a sufficient supply of organic matter are able to accumulate and retain moisture, which plants can use sparingly and effectively during the growing season. At the same time, it is necessary to take into account the actual condition of the plants, the development phase of a specific crop and its needs for the main factors in the current growing season [1,2].

In order to accumulate more moisture in the soil, as a rule, along with other measures of soil cultivation, periodic plowing is recommended. However, in order to save resources, it is advisable to replace it with deep loosening of the soil, or splitting.

The efficient use of moisture by plants is facilitated by the optimization of their nutrition, which creates a larger above-ground biomass, the habit of plants, and the field surface is more densely and completely shaded, which prevents unproductive losses of moisture [3-5].

As for nutrition, it should also be based on the principles of frugal use of resources. If it is possible to use mineral fertilizers, it is advisable to apply them in the calculated dose for the planned level of crop productivity, taking into account the content of mobile nutrients in the soil of a particular field. Currently, the cost of mineral fertilizers has increased dramatically, it is not always possible to apply the determined or recommended for the zone optimal dose for a certain plant. Under this condition, when growing agricultural crops, it is desirable to apply a complex starting fertilizer in a moderate amount - N15P15K15 (1 t/ha of nitroammophos). When growing row crops, it is advisable to apply fertilizers locally in the rows at the same time as sowing.

In the zone of the Southern Steppe of Ukraine, the productivity of plants increases to the greatest extent with the introduction of nitrogen fertilizer. It is this element of nutrition that is in the first priority and affects both the significant increase in the yield and the main indicators of its quality. We will show this on the example of long-term studies conducted under conditions of crop rotation with winter wheat (Fig. 1).



**Fig. 1.** Grain yield of winter wheat under the influence of the predecessor and background of nutrition (average of 5 varieties of the steppe ecotype for 2007-2017), t/ha

Notes:

- average for 11 years
- the lowest in the most unfavorable year (2007)
- maximum in a favorable year (2016)

Due to the high cost of mineral fertilizers, including nitrogen fertilizers, which is associated with natural gas reserves, the composition of crop rotation should include leguminous plants that are able to accumulate nitrogen thanks to symbiotic nitrogen fixation and meet the needs of subsequent crops in this nutrient element [6, 7]. Unlike mineral nitrogen, such nitrogen is free, ecologically safe, it is not lost from the soil, but is fully used by plants for several years. To fix a larger amount of nitrogen by nodule bacteria, leguminous seeds must be treated with nitrogen-fixing and phosphate-mobilizing microorganisms before sowing [8]. In addition, leguminous plants have the ability to release hard-fixed soil phosphates due to their specific root secretions.

The most appropriate and completely free measure that does not require additional costs is crop rotation. After all, the optimal amount of post-harvest root residues, i.e. fresh organic matter, will enter the soil with a scientifically justified rotation of agricultural crops. Crop rotation will reduce the number of weeds, pests, etc. in the field. Also, in years favorable for moisture, after harvesting the main crop, it is advisable to place post-harvest or post-harvest crops, which will also significantly enrich the soil with organic matter, humus substances, improve its structure, water permeability, etc. In addition, the soil will be shaded by vegetation, which will prevent moisture loss.

Selection of crop varieties or hybrids that are well adapted to the soil and climatic conditions of the growing area and are able to form stable productivity regardless of the conditions of the year of cultivation should also be included in the free measures. At the same time, it is necessary to determine the optimal sowing dates and sowing rates for them. After all, both thickened and thinned crops will not be able to ensure high crop productivity, optimal shading of the field and effective use of moisture.



The implementation of the resource-saving measures proposed by us will allow to preserve and partially improve the main indicators of soil fertility, to obtain constant levels of crop yields with correspondingly high indicators of their quality, to improve the ecological situation in the post-war period of management at insignificant economic costs.



## ENSURING SUSTAINABLE GRAIN PRODUCTION IN THE CONDITIONS OF THE SOUTHERN STEPPE OF UKRAINE

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Ukraine is recognized in the world as a country that produces high-quality grain. It is in great demand in many countries of the world. In the regions that provide the largest volumes of grain production, which is mainly the Southern Steppe zone, in most of the territory it became impossible to grow and obtain stable volumes of grain of all grain crops as a result of military operations. In the last period, moreover, the price of grain and the possibility of its export have decreased, while the cost of all energy resources, on the contrary, has increased significantly.

The measures for growing grain crops developed by scientific institutions and tested in production were based on the introduction of valuable elements of intensive technologies. This made it possible to obtain stable productivity of grain crops with high grain quality at the same time. In the modern period, measures that do not require significant costs, but on the contrary, are based on the principles of resource conservation, are becoming expedient. First of all, this should include the use in production of such elements as the selection of varieties and hybrids most adapted to the conditions of the region, determination of optimal sowing dates for them, sowing rates, etc.

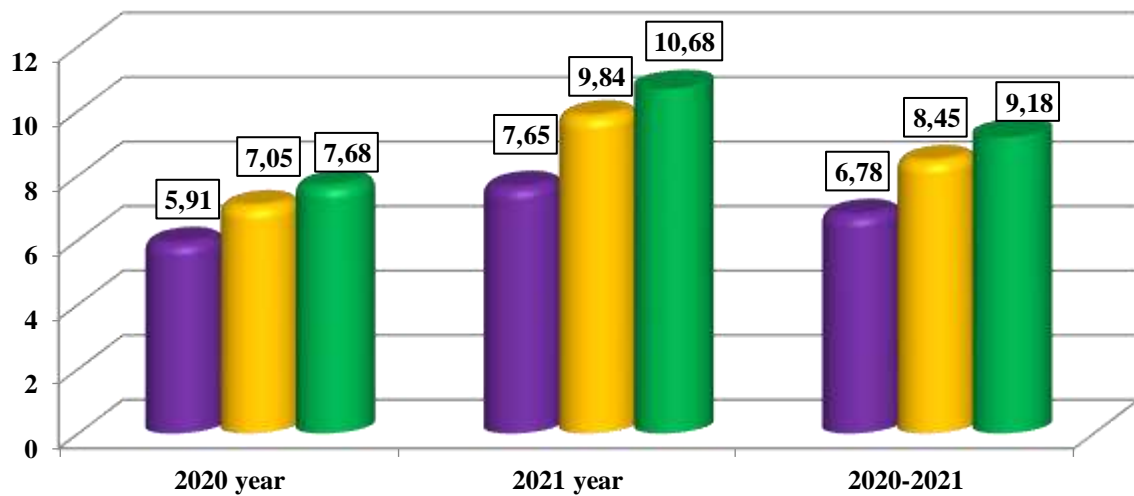
When growing all agricultural crops, the main attention should be paid to preserving and improving the main indicators of soil fertility, enriching them with organic matter. Soil is the main foundation of the agricultural industry. Its resistance to adverse environmental conditions and the level of crop yields depend on its fertility. Under favorable hydrophysical and structural indicators, the soil is able to accumulate and retain moisture [1, 2]. After all, both in the zone of the Southern Steppe, and in general in Ukraine and other countries of the world, especially in recent decades due to changes in climatic conditions, the supply of moisture to plants is of primary importance. It is this factor that limits crop yields to the greatest extent. The levels of the crop formed by them directly depend on the initial reserves of moisture in the soil during the sowing period and the amount of precipitation during the growing season of the plants.

Thus, during the three-year period of research conducted in the fields of the Educational and Scientific Practical Center of the Mykolaiv National University (2020-2022), the grain yield in the section of more than 50 varieties of winter wheat from various breeding institutions of Ukraine and abroad ranged from 3.6 to 7, 24 t/ha. This once again confirms that under the same growing conditions (both soil and climate), variety selection is an extremely important element in ensuring grain production.

A significant share in providing the total amount of grain belongs to the most productive crop - corn. It is grown mainly on irrigated lands, but corn is a fairly drought-resistant plant. Research with corn, conducted in the same zone on the fields of the Institute of Irrigated Agriculture of the National Academy of Sciences of Ukraine (Kherson region) on dark chestnut soil, established that the level of grain yield fluctuated significantly depending on the components of cultivation and the maturity group of the hybrid. Thus, depending on the climatic conditions and the amount of precipitation during cultivation without irrigation, the grain productivity of corn in dry years ranged from 3.54 to 7.83 t/ha of grain, and in more favorable years, from 5.74 to 9.87 t/ha Ha. At the same time, it should be noted

that in years with insufficient rainfall during the growing season, higher productivity is formed by corn hybrids of early ripening groups, and in years with favorable moisture and irrigation, on the contrary, mid-ripening and medium-late groups. Of course, the highest grain yield (17-20 t/ha and more) can be formed under drip irrigation, which fully satisfies the plants' need for moisture without excessive evaporation.

Optimizing their nutrition, which is based even on the principles of resource conservation, contributes to the effective use of moisture, increasing the productivity of all agricultural crops. We will show this on the example of growing corn hybrids of different maturity groups (Fig. 1).



**Figure 1.** The importance of the selection of the hybrid maturity group in the formation of the grain yield in the years of cultivation (on average by the feeding factor), t/ha

Notes:

■ Stepoviy ■ Darunok ■ Gileya

Economic consumption of moisture, as established by our research with various crops, is facilitated by measures to optimize plant nutrition. They should also be based on the principles of resource conservation. Under most agricultural crops, N15P15K15 (1 t/ha of nitroammophos) was applied as a starter fertilizer before sowing, and seeds were treated with modern growth regulators or biological preparations before sowing and during the main growing season. This helps to strengthen the growth processes of plants, increases the growth of above-ground biomass, the area of the leaf surface, and therefore more fully shades the soil and prevents unproductive moisture losses. In addition, with this approach, the resistance of plants to adverse environmental conditions, aridity, and temperature changes increases, which in general contributes to the growth of productivity. The grain yield of spring wheat and triticale, spring and winter barley, winter wheat, sunflower, sorghum, millet and other crops in terms of weather conditions of the years of cultivation and variety composition increases by 29.2-37.3% compared to the control [3 – 5].

It is positive that at the same time as the crop yield increases, more post-harvest root residues remain after harvesting. To speed up their decomposition, it is advisable to treat fresh organic matter with modern biopreparations and biodestructors of the Ecostern type. Enrichment of the soil with fresh organic matter will contribute to the improvement of soil fertility and, first of all, this will affect the indicators of its structure, water permeability and water-holding capacity [6-8].

Conclusion. Thus, the production of grain and other agricultural crops in the post-war period should be accompanied and based on resource-saving principles. First of all, this requires a return, at least in part,





to the optimization of the selection of crops in crop rotations, the cultivation of post-harvest and post-harvest plants where possible, which will allow enriching the soil with organic matter and improving their main fertility indicators. At the same time, in order to obtain higher productivity of grain and other crops, it is recommended to apply moderate starting doses of NPK before sowing, to treat the seeds before sowing and during the growing season with modern biopreparations or growth-regulatory substances. This measure will make it possible to strengthen the resistance of plants to adverse environmental conditions, increase the yield and quality of products and ensure the efficient use of moisture, which is extremely important for the arid conditions of the Southern Steppe of Ukraine.

Also, it is necessary to carefully select not only agricultural crops adapted to the growing zone, but also varieties or hybrids among them, which under the same growing conditions are able to ensure constant productivity and, regardless of the weather and climatic conditions of the region, to fulfill the planned volumes of grain production.



## IMPLIED METHODS OF INDICATING CONSENT OF DATA SUBJECTS TO THE PROCESSING OF PERSONAL DATA

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### ABSTRACT

The paper approaches the taxonomy of the implied methods of indicating consent of data subjects to the processing of personal data in contexts related to the formation of business-to-consumer contracts. Firstly, the data controllers' assessing whether consent to the processing of personal data has been collected through affirmative actions remains central for the performance of contractual obligation, including the provision of digital services. Secondly, consumer's consent to data processing can be collected as an opt-in consent, implying a positive action or as an indicator of the 'opt-out consent' validity to data processing. Thirdly, data controllers may provide granular consent options for each separate type of processing, in hypotheses in which the opting-in consents specifically cover the data processing activities. The paper addresses the possibility of admitting consent requests which are derived from the transparency obligations under the data subjects' right to be informed, applicable whether data controllers are relying on consent or on the contractual performance. The study argues that the valences of the opting-in methods of consent collecting are preferable in terms of transparency; affirmative opt-in methods of consent collecting might include signing a consent statement, consumer's verbal confirmation of consent towards the engaging in data processing operations, and binary choices of consent presented with equal prominence in the pre-contractual stage.

**Keywords:** personal data, implicit consent, data subjects, data controllers, processed data.



## A NOVEL HETEROCYCLIC ORGANIC COMPOUND AS AN EFFICIENT INHIBITOR AGAINST CARBON STEEL CORROSION IN HYDROCHLORIC ACID MEDIUM

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### ABSTRACT

In this work, the corrosion inhibition effect of a novel heterocyclic organic compound (**Y5**) on carbon steel in 1 M hydrochloric acid solution was investigated using electrochemical measurements, namely potentiodynamic polarization (PDP) and electrochemical impedance spectroscopy (EIS). During this study, the influence of inhibitor concentration and temperature variation on the inhibitive effect of **Y5** was evaluated. The obtained results demonstrated that the corrosion inhibition efficiency increased by increasing the inhibitor concentration, whereas the inverse trend is observed by temperature increasing. The inhibitory efficiency was reached an optimum value of 85% at  $5 \cdot 10^{-3}$  M as a concentration of **Y5**. The carbon steel surface was analyzed by scanning electronic microscopy (SEM) coupled with energy dispersion spectroscopy (EDS) that revealed the formation of a protect film on the carbon steel surface.

**Keywords:** Corrosion, inhibitor, PDP, EIS, carbon steel, acidic medium.



## THE RAMIFICATIONS OF INTERCULTURAL LEGAL COMMUNICATION: AN EXONERATION FOR UNIVERSAL LINGUA-FRANCA

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### ABSTRACT

Intercultural legal communication takes place within different legal frameworks using different languages and should therefore take into contemplation the crucial parameters for legal translation. Bilingualism and multilingualism are often regarded as an issue or a substantial obstacle to individual and/or social growth. Beyond that, monolingualism seems more alluring, and monolinguals, particularly those who speak a language of broader conversation, seem very enthralled with their multitude, frequently adopting a patronizing approach towards marginalized native speakers of a mother tongue who have to discover their native language. In utmost state of affairs, the only advantage identified by the bilingual person is the potential to use different dialects. This paper emphasizes the vital role of legal translation in intercultural communication. Effective intercultural correspondence necessitates efficient linguistic skills and also prodigious understanding of the cultures involved, which entail the protocols of official social conduct enacted in the applicable law structures. The linguistic diversity illustrated by multilingualism is a blasphemy because of the complexities inherent in creating a pluralistic society in the context of linguistic and cultural diversity. However, there is copious evidence worldwide, that, multilingualism is the standard and monolingualism is the exception and the implications of bilingualism and multilingualism need to be appreciated, explored and used for individual growth and national advancement. This chapter ought not to refer to the fact that bilingualism or multilingualism is more desirable than monolingualism; however, it ascertains a collection of multidimensional data that has been retrieved from a number of empirical results, exemplifying the implications of bilingualism in individuals or of pluralism and multilingualism in diverse cultures. This article reports some of the precise issues that occur in the field of intercultural legal communication. The international legal community is a congregation dwelling for researchers from diverse countries who construct partnerships and accomplish legal practices. In order to facilitate contact through linguistic and cultural boundaries, either the language of one of the communicating parties or a third impartial language outlandish to them, but accepted as a universal medium of communication – the lingua franca – must be decided. In any scenario, this communication would entail a positive amount of subtle or formal translation and interpretation. The second segment of this article will deal with the probable advantages of "societal multilingualism," i.e., the perks to communities and the nation of multilingualism. The two sections – individual and societal bilingualism/multilingualism—are integrated by our review of how they can be a boon to any democratic nation, which wraps up in final conclusion that stabilize the outcomes of the study.

**Keywords:** Linguistic Diversity, Intercultural Legal Communication, Societal Multilingualism, Bilingualism, Legal Translation.



## MODULATION OF OPTICAL PROPERTIES IN QUANTUM WELLS UNDER INTENSE LASER FIELDS: INSIGHTS FOR OPTOELECTRONICS AND ULTRAFAST SWITCHING DEVICES

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The interaction between intense laser fields and quantum wells has garnered significant attention in recent years due to its potential applications in optoelectronics, quantum computing, and ultrafast switching devices. In this study, we delve into the impact of intense laser fields on the optical properties of quantum wells. Initially, we propose a theoretical model that elucidates the interaction between the laser field and the quantum well, employing the time-independent Schrödinger equation. Subsequently, we utilize this model to compute the optical absorption and refractive index spectra of the quantum well under varying laser intensities and frequencies.

Our findings demonstrate that intense laser fields can significantly alter the optical properties of quantum wells. At lower laser intensities, we observe a shift in the absorption and refractive index spectra towards higher energies, attributable to the laser-induced Stark effect. As the laser intensity increases, we observe additional spectral features, such as new peaks and shoulders, resulting from the strong coupling between the laser field and the excitonic states in the quantum well. Furthermore, we identify that laser-induced changes in optical properties strongly depend on the laser frequency. At specific frequencies, we detect a complete suppression of the absorption and refractive index spectra, indicating the formation of a Floquet-Bloch band structure induced by the laser field. Our research outcomes hold crucial implications for the design of novel optoelectronic devices based on quantum wells. By precisely adjusting the laser parameters, it becomes feasible to exert control over the optical properties of the quantum well, thereby enabling applications such as ultrafast switching, quantum information processing, and sensing.

**Keywords:** ILF, Oscillators, Quantum Wells, Optical Properties, Indium-gallium-nitride



## AN APPRAISAL ON POST-COVID-19 EMERGING TRENDS TOWARDS SUSTAINABLY SMART FUTURE IN ENGINEERING APPLICATIONS

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### ABSTRACT

With increasing advancement of 5G and Open AI technologies among academia and businesses personnel in the developing economies, the open AI and 5G adoption in most developing countries in the post covid-19 era signaled a quantum leap in harnessing remarkable potentials that will be common in most cities around the world. This is becoming more and more common in many cities, inspiring new developments in Smart City technologies riding the Internet of Things (IoT) wave. However, information and communication technology (ICT) has advanced rapidly in recent times, and the COVID-19 epidemic was one triggering factor that affected the globe which prompted smart innovative trends to evolve. Considering the future of open AI and 6G, this paper examined the prospects of 6G technology, Open AI and other technologies as it relates to smart future, digital, sustainable cities and robust privacy protection. The various drifts towards sustainable trends inherent to 6G technology and open AI in driving the world's economy post COVID 19 pandemic were highlighted and expatiated. While the highlights indicated the digital transformations enormous promise, it also revealed the lacunas that still needs to be filled. Despite the fact that certain digital barriers have closed in recent times, others have not, leaving some people behind in the COVID-driven digital acceleration. Concerns observed about privacy and digital security have also become very significant as a result of overdependence on digital solutions in the 21<sup>st</sup> Century.

**Keyword:** Smart cities, Covid-19, Sustainable goals, Smart future, Engineering applications



## DIRECT TORQUE AND FLOW CONTROL BASED ON FEED FORWARD TECHNOLOGY OF ROTARY INDUCTION MOTOR IN MAGNETIC FIELD WEAKENING SYSTEM

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### ABSTRACT

This paper describes an innovative feed-forward stator flux regulator for induction machines, which is particularly effective for controlling the torque and flux of induction machines operating in the flux weakening regime, where the only available control variable is the stator flux angle. The proposed regulator is analytically described and its performance is evaluated through computer simulations.

**Keywords:** Induction, Motor, Torque, Control, Field Weakening



## PHENOTYPICALLY DETERMINATION OF NAT2 ACETYLATION STATUS IN FEMALE VOLUNTEERS

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### ABSTRACT

A genetic polymorphism of human liver arylamine N-acetyltransferase (NAT) enzyme activity leads to wide variation in the disposition of many drugs and potential carcinogens, resulting in differential susceptibility to chemical-induced toxicity. Polymorphisms in NAT-2 gene are also associated with higher incidences of cancer and drug toxicity. Therefore the present research was designed to check and establish the acetylation rate of NAT-2 Enzyme. The acetylation status of N-acetyltransferase2 (NAT2) enzyme was determined in female volunteers phenotypic by HPLC method. The research work was conducted by using Isoniazid (INH) as probe drug. All subjects were the healthy female volunteers, 50 in number of age greater than 18 years of the Punjab-pakistan. Phenotypically the acetylation was determined by HPLC assay by NAT2 specific probe drug isoniazid. The 62 % of the male volunteers were found to be fast acetylators while the 38 % were the slow acetylators by isoniazid. Our NAT2 findings of acetylation phenotype will be helpful for the treatment optimization of targeted population.





## PERSULFATE ACTIVATION BY SEWAGE SLUDGE DIGESTATE-DERIVED BIOCHAR FOR ORANGE G DEGRADATION

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### ABSTRACT

The disposal of solid waste digestate generated from anaerobic digestion of sewage sludge poses a significant challenge. To address this issue, the present investigation focused on the synthesis of low-cost biochar from sewage sludge digestate (SSD) via pyrolysis, with the aim of exploring its efficacy in activating persulfate (PS) for the treatment of simulated textile wastewater contaminated with pollutants. The experimental outcomes exhibited that the introduction of biochar at a concentration of 0.5 g/L, along with PS (persulfate) at a concentration of 10 mM, into the wastewater resulted in the removal of over 99% of a representative azo dye pollutant (orange G, 0.1 g/L) within a time frame of 60 minutes, without necessitating any adjustments to the pH levels. This high removal efficiency was attributed to the presence of catalytic sites within the biochar, such as defective sites on the surface of biochar, graphitic carbon and nitrogen, pyridinium nitrogen, and oxygen-containing groups, which effectively activated PS and facilitated the generation of reactive oxygen species ( $O_2^{\bullet-}$ ,  $^1O_2$ ,  $OH^{\bullet}$ , and  $SO_4^{\bullet-}$ ). The present study provides scientific evidence that biochar produced from sewage sludge digestate (SSD) has the ability to activate persulfate (PS), thereby offering an alternative approach for the utilization of anaerobic SSD.

**Keywords:** Food waste digestate, Persulfate Activation, Heterogeneous catalysis, Biocher, Organic pollutant removal



## SIMULATION OF INTERNET OF THINGS: CORRELATION, CONTRAST AND EXPLORATION

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### ABSTRACT

In recent years, the Internet of Things (IoT) has emerged as a quickly expanding and significant field that has the potential to fundamentally alter how we live and work. IoT systems are made up of a sizable network of interconnected devices that may be utilized to automate and optimize a variety of operations as well as collect and share data. IoT system design, testing, and deployment, however, can be a difficult process that necessitates a thorough comprehension of the underlying technologies and protocols.

To overcome these challenges, IoT simulators have emerged as a powerful tool for IoT engineers and developers. An IoT simulator is a software tool that can replicate the behavior of an IoT system in a virtual environment, allowing developers to test and validate their IoT devices, networks, and applications before deploying them in the real world. This paper provides a comprehensive overview of IoT simulators, including their purpose, functionality, and potential applications.

The first section of the article discusses the value of IoT simulators for creating and deploying IoT systems. It highlights the difficulties faced by IoT designers and developers while creating and testing IoT systems, such as the requirement to represent intricate devices, protocols, and network topologies. The paper then explains how IoT simulators, which offer a realistic and adaptable testing environment that can model a wide range of IoT scenarios, can assist in addressing these difficulties.

The major characteristics of an IoT simulator are then covered in detail, including its capacity to represent various IoT devices and protocols, simulate various network scenarios, and produce accurate data for testing and analysis. It also discusses the many kinds of IoT simulators that are accessible, such as open-source, paid, and cloud-based simulators. The report contrasts and analyzes these various simulator types, outlining each simulator's advantages and disadvantages.

The aim, functionality, and prospective applications of IoT simulators are highlighted in this paper's comprehensive and educational review. It claims that IoT simulators are a vital tool for guaranteeing the dependability, scalability, and security of IoT systems and underlines their

significance in the development and deployment of IoT systems. Anyone interested in the topic of IoT development and implementation will find this article to be a useful resource. It offers a helpful overview of the fundamental ideas and technologies involved.

**Keywords:** Internet of Things, security, simulators, scalability, network, system simulation



## A COMPARISON ANALYSIS OF SIMULATION TOOLS FOR IoT

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### ABSTRACT

The Internet of Things (IoT) paradigm promises to bring about substantial advancements in a variety of fields, including smart housing and infrastructure, smart agriculture, smart cities, smart energy, smart transportation and portability, smart manufacturing and retail, and so on. This study provides a thorough review and analysis of some Internet of Things (IoT) simulation tools, including IoTify, Cooja Simulator, Netsim, NS-3, Mat lab, J-Sim, and Omnet, to assist researchers and developers in selecting the best device for research investigations while navigating ongoing IoT application scenarios and addressing issues in the real world. This study also examines and compares IoT simulation tools in detail for the benefit of the future.

**Index Terms:** IOT, Simulation Tools, networks, pros, and cons, working



## EFFECT OF THERMAL RADIATION AND CHEMICAL REACTION ON MAGNETO HYDRODYNAMICS 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.



## KNOWLEDGE AND UTILIZATION OF STATISTICAL TOOLS AMONG MEDICAL TRAINEES AT THE COLLEGE OF MEDICINE, UNIVERSITY OF LAGOS

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### ABSTRACT

The study aimed to assess the level of computer literacy and the use of statistical tools for medical analysis among first-year medical students at the College of Medicine. The research involved 71 participants from the college located in Ijanikin. Data was collected using a semi-structured questionnaire; researchers analyzed the data via IBM SPSS Statistics 28.0. Two computer science lecturers validated its content to ensure the validity of the instrument; likewise, the instrument was then subjected to Chronbach's Alpha statistic, resulting in a reliability index of 0.88, indicating a high level of instrument reliability. The study's findings revealed that most medical students had an average to advanced level of knowledge regarding primary computer usage and statistical tools. Among the statistical software options, IBM SPSS was identified as one of the most commonly utilized tools for medical analysis. Furthermore, the study highlighted the benefits of using computational tools for medical analysis, as they facilitated the execution and visualization of medical reports. However, it also identified several constraints, including limited time, internet connectivity issues, and resource availability, which hindered the effective utilization of statistical tools in medical data analysis. Overall, the research shed light on the computer literacy levels among medical trainees and the significance of statistical tools in medical analysis while acknowledging the existing challenges that need to be addressed for optimal technology integration in medical schools and practice.

**Keywords:** Information, Communication, Technology, Statistical tools, Medical Analysis



## STUDY OF INSTABILITY FOR TWO INTERFACIAL WAVES IN THE PRESENCE OF A BASIC CURRENT SHEAR

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### ABSTRACT

Evolution equations are derived for two obliquely interacting interfacial waves in the presence of a basic current shear. Using these equations modulational instability analysis is carried out for a pair of obliquely interacting uniform wave trains considering both unidirectional and bidirectional perturbations. It is found that the region of instability reduces in the presence of a basic current shear. Variations in the perturbed wave number at marginal stability due to changes in wave steepness and vorticities in the two mediums are displayed graphically. The maximum growth rate of instability for unidirectional perturbations increases with the increase in vorticity in the lower layer, but the reverse effect is observed when the vorticity in upper layer increases.

**Keywords:** Basic current shear, Crossing seas, Evolution equation, Modulational instability



## A NOVEL BHP ELECTRODE FOR THE ELECTROCHEMICAL DEGRADATION OF RHODAMINE B DYE

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### ABSTRACT

A wide range of organic compounds are detected in industrial and municipal wastewater, which pose serious problems in the environment due to their resistance to biodegradation and traditional filtration processes. Advanced oxidation processes (AOPs) are favourable technologies that can generate radicals such as hydroxyl and sulphate radicals for the degradation of toxic substances in water due to their high degradation efficiencies, complete mineralisation capacity and environmentally friendly nature. Compared to other hydroxyl-based AOPs such as Fenton reactions and ozonation, electro-degradation and photo-electro-degradation have proven to be more cost-effective and environmentally friendly. The objective of this work is focused on the development of various phosphate-based catalysts and their use in the degradation of organic pollutants.

In this work, a facile method was performed to synthesise a new BaHPO<sub>4</sub> anode by a one-step electrodeposition technique. The anode is characterised by a variety of methods: structural (XRD), morphological (scanning electron microscopy coupled to energy dispersive X-ray spectroscopy SEM-EDX) and electrochemical. The electrocatalytic activity (EC) of the samples is determined by studying the degradation of Rhodamine B (RhB) as a model organic dye. The EC performance varied depending on the type of substrate.

**Keywords:** Electrodeposition, BaHPO<sub>4</sub>, Thin films, Dyes removal, Electrocatalysis.



## WORDWALL WEB2.0 ARACININ FEN ÖĞRETİMİNDE KULLANIMI USING THE WORDWALL WEB 2.0 TOOL IN SCIENCE EDUCATION

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### ÖZET

Web 2.0 uygulamaları, kullanan öğrencilere yaparak-yaşayarak öğrenme imkanı sağlamaktadır. Öğrencilerin öğrenme süreçlerini bireyselleştirmesine de katkıda bulunan web 2.0 uygulamaları, öğrenme zamanının ve yönteminin esnekliği ile öğrencilerin kendi öğrenme stratejilerini geliştirmelerine fayda sağlayabilir. Bu bağlamda Web 2.0 araçları fen bilimleri öğretim sürecinde öğrencilerin derse olan ilgilerini ve katılımlarını arttırmak, kavramsal anlama ve öğrenme süreçlerine katkıda bulunmak, üst düzey düşünme becerilerini geliştirmek gibi avantajlar sağlamaktadır. Web 2.0 araçlarından kendine fazlaca kullanım alanı oluşturmuş Wordwall, içerisinde çoktan seçmeli, eşleştirme, doğru-yanlış, sürükle bırak gibi interaktif testler oluşturmaya yarayan oyunlaştırma tabanlı bir çevrimiçi değerlendirme aracıdır. Eğlenerek öğrenmeyi sağlayan bu araç Türkçe dil desteği, dijital ürünleri basılı hale getirebilme, başkalarının oluşturduğu içeriği kullanabilme, etkinlik çeşitliliği gibi cazip özelliklere sahiptir. Günlük hayatta oynanan oyunların dijital versiyonu gibi düşünülebilecek Wordwall, öğretmenlerin öğrencileri ile birlikte çalışabilecekleri ve geri bildirim alabilecekleri bir sosyal paylaşım özelliği de sunmaktadır. Ücretsiz kullanıma da olanak sağlayan Wordwall platformu, Fen Bilimleri dersinde her bir kazanım için bol seçenekli sunumlar hazırlama imkanı vermektedir. Bu çalışmada Wordwall aracının öğrencilere keşfetme, sorgulama, problem çözme, bilimsel düşünme becerileri kazandırma gibi önemli etkileri olan fen derslerinde uygulanabilirliğinin ortaya çıkarılması hedeflenmiştir. Bu amaca istinaden Wordwall aracının çeşitli ünitelerde ve farklı seviyelerde programın tüm öğelerine uygun olarak kullanımının örneklendirilmesi çalışmanın alt amacını oluşturmuştur. Çalışma, nitel araştırma yöntemlerinden durum çalışması deseni ile yürütülmüştür. Durum olarak kastedilen Wordwall aracının fen öğretiminde kullanılmasıdır. Uygulama örnekleri detaylandırılarak anlatılacağından, bu yöntem ve desenin seçilmesi uygun görülmüştür. Çalışma içerik doküman analizi tekniğine uygun olarak betimlemeli analizle çözümlenecektir. Çalışmanın bulgularına göre fen bilimleri dersi ünitelerinin Wordwall aracı ile öğretiminin dikkat çekici düzeyde, öğrencileri heveslendirici, teşvik edici nitelikte ve diğer derslerde de kullanılabilir özellikte olduğu ifade edilebilir. Bu çalışmanın, Wordwall web 2.0 aracının kullanımının yaygınlaştırılmasına olanak sağlaması ve fen derslerinde diğer öğretmenler tarafından kolaylıkla kullanılabilir Wordwall şablonlarının literatüre kazandırılması açısından faydalı olacağı düşünülmüştür.

**Anahtar kelimeler:** dijital eğitim, fen öğretimi, teknoloji, web araçları, wordwall





## ABSTRACT

Web 2.0 applications provide students with the opportunity to learn by doing and experiencing. Web 2.0 applications, which also contribute to the individualization of students' learning processes, can help students develop their own learning strategies with the flexibility of learning time and method. In this context, web 2.0 tools provide advantages such as increasing students' interest and participation in the course in the science teaching process, contributing to conceptual understanding and learning processes, and developing high-level thinking skills. Wordwall, which has created many uses among web 2.0 tools, is a gamification-based online assessment tool that is used to create interactive tests such as multiple choice, matching, true-false, drag and drop. This tool, which provides learning while having fun, has attractive features such as Turkish language support, printing digital products, using content created by others, and variety of activities. Wordwall, which can be thought of as a digital version of the games played in daily life, also offers a social sharing feature where teachers can work with their students and receive feedback. The wordwall platform, which also allows free use, provides the opportunity to prepare presentations with plenty of options for each acquisition in the science education. In this study, it is aimed to reveal the applicability of the Wordwall tool in science lessons, which have important effects such as discovering, questioning, problem solving and scientific thinking skills. For this purpose, the sub-objectives of the study is to exemplify the use of the Wordwall tool in various units and at different levels in accordance with all elements of the program. The study was carried out with the case study pattern, which is one of the qualitative research methods. What is meant by the case is the use of the Wordwall tool in science teaching. Since the application examples will be explained in detail, it was deemed appropriate to choose this method and pattern. The study will be analyzed with descriptive analysis in accordance with the document analysis technique. According to the findings of the study, it can be stated that the teaching of science course units with the Wordwall tool is remarkable, encouraging students and can be used in other courses. It was thought that this study would be beneficial in terms of enabling the use of Wordwall web 2.0 tool to become widespread and bringing Wordwall templates to the literature that can be easily used by other teachers in science lessons.

**Keywords:** digital education, science education, technology, web tools, wordwall



## SURVEYING THE QUALITY OF GROUNDWATER RESOURCES IN GOLD MINING COMMUNITIES IN EASTERN REGION, GHANA

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### ABSTRACT

The primary source of water for the population of middle and southern parts Ghana is surface water resources. However, the increased gold mining activities within these parts of the country has resulted in the pollution of many surface water resources hence compelling the population to rely on groundwater resource as an alternative source of drinking water. This work present findings of the levels of naturally occurring radionuclides in groundwater samples collected from selected gold mining communities in Eastern Region, Ghana. Water samples from different locations were collected using standard methods. The samples were analyzed with low background High Purity Germanium gamma spectrometer. Radioactivity levels of  $^{226}\text{Ra}$ ,  $^{228}\text{Ra}$  and  $^{40}\text{K}$  were then determined. The mean activity concentrations were  $0.10 \text{ Bq l}^{-1}$  for  $^{226}\text{Ra}$ ,  $0.36 \text{ Bq l}^{-1}$  for  $^{228}\text{Ra}$  and  $1.41 \text{ Bq l}^{-1}$  for  $^{40}\text{K}$ . Apart from  $^{228}\text{Ra}$ , the obtained concentrations were below the WHO recommended drinking water guideline levels of  $1.0 \text{ Bq l}^{-1}$ ,  $0.1 \text{ Bq l}^{-1}$  and  $10 \text{ Bq l}^{-1}$  for  $^{226}\text{Ra}$ ,  $^{228}\text{Ra}$  and  $^{40}\text{K}$ , respectively. The corresponding committed effective dose due to the ingestions of groundwater from the mining communities were below the United Nations Scientific Committee on the Effects of Atomic Radiation guideline value of  $0.3 \text{ mSv y}^{-1}$ . On the other hand, in the case of infants and children, the committed effective dose was above this guideline value. In this study, it was realized that study area had high activity concentrations of the  $^{228}\text{Ra}$  radionuclide which contributed to the high committed effective doses.

**Keywords:** environmental radioactivity, groundwater, health risk, dose, population



## SUSTAINABLE DEVELOPMENT AND CLIMATE CHANGE

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### ABSTRACT

One of the most important issues facing global policy makers is global warming climate change and sustainable development. These issues are not new as they have been on the global agenda 4 several decades. What is undeniable is the fact that they have become quite pressing issues whereas in the past they were limited to the scientific elites and specialised agencies. What one can witness is that these issues have gone at tremendous civil societal support worldwide. Equally important however is the lack of consensus that has been achieve the maintained despite a very gloomy outlook if change in attitudes and policies are not forthcoming. This paper investigates the challenges related to climate change and sustainable development and provide some perspective on which measures must be taken.

**Keywords:** sustainable development, climate change, global warming, United Nations, politics

### ÖZET

Küresel karar vericilerin karşı karşıya olduğu en önemli konulardan biri küresel ısınma, iklim değişikliği ve sürdürülebilir kalkınmadır. Bu konular, onlarca yıldır küresel gündemde oldukları için yeni değiller. İnkâr edilemez olan ise, geçmişte bilimsel seçkinler ve uzmanlaşmış ajanslarla sınırlıyken, oldukça acil konular haline geldikleri bir gerçektir. Şahit olunan, bu sorunların dünya çapında muazzam bir sivil toplum desteğine ulaştığıdır. Bununla birlikte, aynı derecede önemli olan, tutum ve politikalarda değişiklik olmayacağı takdirde, çok kasvetli bir görünüme rağmen sürdürülen bir fikir birliğinin olmamasıdır. Bu araştırma, iklim değişikliği ve sürdürülebilir kalkınma ile ilgili zorlukları araştırmakta ve hangi önlemlerin alınması gerektiğine dair bazı perspektifler sunmaktadır.

**Anahtar kelimeler:** sürdürülebilir kalkınma, iklim değişikliği, küresel ısınma, Birleşmiş Milletler, siyaset



## IDENTIFICATION OF *MYCOBACTERIUM AVIUM* SUBSPECIES *PARATUBERCULOSIS* IN FAECAL AND TISSUE SMEARS FROM SMALL RUMINANTS

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### ABSTRACT

Paratuberculosis (Johne's disease) is a contagious chronic, incurable disease of ruminants that can reduce productivity and is challenging to diagnose and control. It is caused by *Mycobacterium avium* subspecies *paratuberculosis* (MAP). Ruminant paratuberculosis is pathologically similar to human inflammatory bowel disease (IBD), which includes three pathological forms; Crohn's disease (CD), ulcerative colitis (UC) and indeterminate colitis or unclassified IBD. The zoonotic concern is much to be detained since MAP is heat resistant and can hide inside white blood cells. In the current study, the presence of acid-fast bacilli compatible with MAP in faecal and tissue smears was microscopically examined using the Ziehl-Neelsen stain technique. During the period from November 9th 2017, to March 7th 2018, a total of 27 faecal smears and 14 tissue smears gathered from 12 sheep and 15 goats were tentatively infected with paratuberculosis (depending on the clinical features). These animals representing 19 commercial herds in various locations in Northwestern Libya. Eighteen (66.6%) faecal smears demonstrated clumps compatible with acid-fast bacilli. Ten animals (71.4%) were positive depending on the presence of the same microorganism in tissue smears. Moreover, positivity of the combination of both faecal and tissue smears was 85.7%. Additionally, our results indicate the importance of the ileocecal lymph node as a target tissue for detecting MAP. The present study's findings reveal that the Ziehl-Neelsen stain procedure is indicated for the rapid identification of MAP existing in faeces and tissues. Furthermore, this high occurrence showed a requirement for a vigorous programme to control small ruminants paratuberculosis, established on more sensitive tests, improving juvenile livestock administration, and rising biosecurity procedures.

**Keywords:** *Mycobacterium avium*; Paratuberculosis; Sheep; Goats; Zoonotic; Crohn's Disease; Ulcerative colitis



## FOREIGN DIRECT INVESTMENT IN NIGERIA; HOW EFFECTIVE IS THE IMPLEMENTATION?

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### ABSTRACT

The world has become a global village with people from diverse cultural background living and working together, carrying on international commercial transactions and commerce. Foreign Direct Investment (FDI) is one aspect of commercial expansion in Nigeria that has given lot of concerns to both the indigenous and foreign investors. It is often seen by governments of developing countries of the world as a vehicle of financial liberalization targeted at developing a more prosperous economy. The policies tend to encourage foreign investors to invest in the economy of these developing countries and Nigeria through constitutional and other legislation have tried to encourage foreign direct investment in its economy. This paper looks at the impact of foreign direct investment on the economic growth of Nigeria as a country, the mechanism adopted by government to encourage foreign investment in the country and the effectiveness of such policies. While government policies are targeted towards a production based economy, study shows the application, rather than promoting production and boost export growth, it is used to supplement consumption, substitute for saving and devoted to the importation of consumer goods and services at the expense of investments and exports. The policies are sometimes used to control the activities of multinational corporations, attract foreign investors and encourage industrialization in Nigeria.

**Keywords:** foreign direct investment, legislation, economic growth, transaction, commercial



## NUMERICAL STUDY OF THICKNESS ON THE EFFICIENCY OF SIMULATED SNS BASED SOLAR CELL USING SCAPS-1D

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### ABSTRACT

Solar energy is the collection of light and heat emitted by the sun. It is a good alternative to fossil fuels, which are today's main source of energy. The ever-increasing demand for sustainable, renewable energy has prompted researchers to develop highly efficient solar cells. Thin films with nanometric structures represent a new class of materials. Over the last few decades, researchers have devoted their efforts to finding semiconductor materials that are environmentally friendly, non-toxic, inexpensive and abundant on earth. Among these is SnS tin sulfide, which can be grown in a cubic or orthorhombic structure. The aim of this paper is to numerically analyze the expected performance of photovoltaic devices based on SnS absorbers, which can be analyzed by simulation software such as SCAPS. The structure used for this numerical study is the metal/p-SnS/CdS/n-ZnO/ITO/glass contact, where SnS is the absorber layer. This particular junction is simulated with the SCAPS-1D software in order to study and optimize the various device parameters such as layer thickness, recombination and overall performance. The main objective of the study is to examine the effect of absorber layer thickness. This simulation work provides a guide for optimizing the performance of a SnS heterojunction solar cell with CdS and ZnO as buffer and window layer respectively.

**Keywords:** solar cells, wide bandgap, abundant earth, environmentally friendly.



## NUCLEOPLASMIC RATIO IN THE EPITHELIAL CELLS OF THE NASAL MUCOSA IN SMOKERS

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### ABSTRACT

This study intends to determine the impact of smoking on a number of cytomorphological characteristics in the smoker's nasal epithelial cells, including cell surface, cytoplasmic surface, nuclear surface, and nucleoplasmic ratio.

Living conditions and way of life are the cornerstones of leading a healthy life. Tobacco exposure and consumption have detrimental effects on both active and passive smokers, and 20 people from the Shtime municipality region—10 smokers and 10 non-smokers—were selected as samples for research and analysis. After collecting the samples, they were taken to the Department of Biology's lab at the Faculty of Mathematical Sciences.

After washing the nasal cavity with water, each person's epithelial cells were gently scraped with a cytobrush from the inside for about 30 seconds, and then the cytobrushes were immersed in 5 ml of salt solution (0.9% NaCl) that had previously been transferred to sterile samples. This process was done to prepare the cytological preparations and analyze the parameters. After performing a 10-minute, 1200 rpm centrifugation, the supernatant was decanted, and the cells were then fixed in 5 ml of fixative (a solution of methanol and acetic acid, in a 1:3) for 20 minutes. The samples were centrifuged for 10 minutes at 1200 rpm after fixing. Following the supernatant's decantation, 200 l of new fixative.

The mean value and standard deviation used to describe the findings of this study. Sigma STAT, version 3.1, a statistical processing tool, was used to perform the data's statistical processing on a computer.

As a conclusion, we found that the ratio of the cell surface, cytoplasm, nucleus, and nucleoplasm in the smokers' group was higher than in the non-smokers' group.

**Keywords:** Effects, parameters, preparations, smokers, and tobacco



## EVALUATING AND STRENGTHENING THE STABILITY OF THE SLIP SLOPE AT THE "TAFOUGHLT" PK 23 INTERCHANGE (TIZI-OUZOU TO BOUIRA)

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### ABSTRACT

The region of Tizi-Ouzou in Algeria is prone to frequent landslides, causing significant damage to the road infrastructure. The "TAFOUGHLT" interchange at PK23, part of the Tizi-Ouzou penetrating project in Bouira, is one such heavily impacted area. The purpose of this study is to assess and reinforce the slope stability in order to facilitate the construction of a highway connecting Tizi-Ouzou state to the East-West highway. A comprehensive study was conducted, including geological and hydrogeological investigations, analysis of physico-mechanical properties, and examination of chemical conditions. The Plaxis calculation software, utilizing the finite element method, was employed to evaluate the slope stability. Three scenarios were considered: initial state, partial emergence, and full emergence. The calculation results revealed instability in all three scenarios, with safety coefficients significantly below the recommended threshold of 1.5. The safety coefficients were found to be as follows: initial state = 1.174, partial emergence = 0.452, and full emergence = 0.662. These results indicate the urgent need for an effective solution to stabilize the slope. The presence of highly weathered, moderately weathered, and hard shale layers contributes to the slope's instability. The low safety coefficients obtained underscore the risks posed by the unstable terrain. It is crucial to address these challenges to ensure safe construction and long-term stability of the slope. In conclusion, the study highlights the unstable nature of the slope at the "TAFOUGHLT" interchange in Tizi-Ouzou, Algeria. To mitigate the risk of landslides and prevent further damage to the road infrastructure, a proposed support system involving excavation and reinforcement of the top layer of the slope, along with the installation of drilled piles, is recommended. Implementing these measures will enhance slope stability, providing a safe and reliable connection between Tizi-Ouzou state and the East-West highway.

**Keywords:** Landslide, Geotechnical Parameters, Safety Coefficient, Reinforcement, Exchanger, TAFOUGHLT.





## AN ASSESMENT OF FUNGI SPECIES PRESENT IN BIRD FEEDS IN LOKOJA AND ANYIGBA, KOGI STATE, NIGERIA

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### ABSTRACT

To ensure food safety and environmental risk reduction among birds and consumers of poultry product, a study to establish the incidence of fungi species was conducted in bird feeds, from Lokoja and Anyigba in Kogi State was conducted. Ten (10) random feed samples were collected from major retail outlets in both locations, for laboratory analysis. Fungi isolates and subsequent pure cultures were obtained after a repeated sub culture on a PDA media for  $5 \pm 2$  days. Identification of the fungi was done using a light microscope with the help of mycological keys, charts and illustrations. The result showed that *Rhizopus* sp., *Aspergillus niger*, *Fusarium solani*, *Aspergillus flavus*, *Colletotrichum gloeosporoides*, *Rhizoctonia solani* and *Fusarium oxysporum* were present in the samples from each locations at different percentage abundance. The result indicated that *Aspergillus niger* appeared in four (4) samples in Lokoja and two (2) in Anyigba with a the highest percentage abundance (30%), followed by *Rhizopus* sp. registering its presence in Lokoja feeds (4 samples) and Anyigba feeds (1 sample) respectively with a percentage abundance of 25%. The least occurrence was noticed in feeds from Anyigba, where *Colletotrichum gloeosporoides*, *Rhizoctonia solani* and *Fusarium oxysporum* were not found in all the samples but appeared in one sample each in Lokoja feeds. This findings has however formed the baseline for the authorities to monitor the contamination level of bird feeds in the locations particularly Lokoja axis as these fungi were known to produce toxins that may pose serious danger to human health. Control measures to reduce the risk of fungi contamination and ensure environmental safety were discussed.

**Keywords:** Fungi, Bird, feeds, Lokoja, Anyigba



## EFFICIENT REMOVAL OF HAZARDOUS DYE FROM AQUEOUS SOLUTIONS USING MAGNETIC KAOLINITE NANOCOMPOSITE

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### ABSTRACT

This study presents the synthesis and characterization of a novel magnetic kaolinite nanocomposite, CoFe<sub>2</sub>O<sub>4</sub>@Kaol, for the efficient removal of methylene blue (MB) dye from aqueous solutions. Physicochemical properties of the nanocomposite were characterized using XRD, FTIR, SEM, and EDX. The adsorption performance of the CoFe<sub>2</sub>O<sub>4</sub>@Kaol nanocomposite was systematically investigated by varying adsorbent dosage, contact time, pH, temperature, and initial dye concentration. Remarkably, the nanocomposite exhibited a high adsorption capacity of 175.28 mg g<sup>-1</sup> at pH 10 and a contact time of 60 min. The Langmuir model accurately described the adsorption isotherms. The adsorption kinetics followed the pseudo-second-order kinetic model (R<sup>2</sup> = 0.999). Thermodynamic analysis revealed the spontaneous and exothermic nature of the MB removal process. Notably, Monte Carlo simulations integrated with a simulated annealing algorithm demonstrated the superior affinity of the CoFe<sub>2</sub>O<sub>4</sub>@Kaol nanocomposite for MB adsorption compared to unmodified kaolinite adsorbent. The study elucidated the synergistic effects of hydrophilic interactions and hydrogen bonding at the interface between MB and CoFe<sub>2</sub>O<sub>4</sub>@Kaol. Overall, this research highlights the potential of CoFe<sub>2</sub>O<sub>4</sub>@Kaol as a highly effective adsorbent for the removal of MB from aqueous media, emphasizing its significant findings.

**Keywords:** Adsorption Kaolinite Cobalt ferret Nanocomposite Methylene blue dye.



## MICROSTRUCTURAL CHARACTERISTICS, PROPERTIES, SYNTHESIS AND APPLICATIONS OF MULLITE

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### ABSTRACT

Mullite, an intermediate phase of the binary alumina-silica system, is one of the most important phases of ceramic products containing alumina and silica in the initial composition. Its stoichiometry ranges from  $3\text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$  (3:2) to  $2\text{Al}_2\text{O}_3 \cdot \text{SiO}_2$  (2:1) and its crystalline structure is orthorhombic, characterized by the presence of octahedral chains of  $\text{AlO}_6$  interconnected by tetrahedral chains of aluminum-oxygen and/or silicon-oxygen ( $\text{AlO}_4/\text{SiO}_4$ ). Properties such as high chemical and thermal stability, low thermal expansion and conductivity, and good mechanical strength enable a wide range of applications. Due to the relevance of this material, it is important for the scientific community to understand its microstructural characteristics, properties, methods of synthesis, and various applications. Therefore, this article aimed to make a comprehensive review on the mullite to gather and present to the reader a series of relevant information that makes it possible to deepen the knowledge about mullite.

**Keywords:** Mullite, Kaolin, Sintering, Aluminum, Industrial ceramics, alumina-silica, Granulometry...



## DETERMINATION OF THE PHYSICO-CHEMICAL PROPERTIES OF LAVANDULA STOECHAS ESSENTIAL OIL AFTER LOW-TEMPERATURE EXTRACTION

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### ABSTRACT

For a long time, the search for new natural medicinal molecules has been based on medicinal plants and ethnobotanical studies, which make it possible to draw up inventories of the plants in a region, determining their qualities through phytochemical and pharmacological studies. As a result, the development of natural resources is becoming an increasingly important concern in many countries. Morocco, a country renowned for its natural resources, has a singularly rich and varied flora. The various natural substances derived from plants have a wide range of uses in traditional healthcare systems and in various industries such as food, cosmetology and dermopharmacy. Among these substances are secondary metabolites such as essential oils, which are particularly well known in therapeutics. In this context, and as part of our work on medicinal plants and essential oils, we were interested in extracting and processing the essential oil of lavandula stoechas harvested in the south of Morocco. In this way, we were able to determine its physico-chemical properties, such as density, refractive index and acid number, and to measure its pH, which gave us a lot of information about this oil.

**Keywords:** essential oils, therapeutic, extraction, medicinal plants, Lavender

**c \* GENERALIZED  $\eta$ -MAPPINGS  
IN TOPOLOGICAL SPACES****Raja Mohammad LATIF***Department of Mathematics and Natural Sciences, College of Sciences and Human Studies, Prince  
Mohammad Bin Fahd University, P.O. Box 1664 Al Khobar, Kingdom of Saudi Arabia**ORCID ID: 0000-0003-3140-9581***ABSTRACT**

Analysis is one of the greatest achievements in the history of mathematics. The achievement opens a new era of mathematical progress and plays an important role in the development of physics, astronomy, signal processing and other disciplines. At the end of the 19th century, mathematicians deduced many properties of continuous functions on closed intervals, which undoubtedly promoted the development of analytical theory. Bolzano's Function Theory gives the earliest proofs of the Boundedness theorem and the Extreme value theorem and Weierstrass proved the Extreme value theorem in Berlin lecture. The Intermediate value theorem was first proved in 1817 by Bolzano, and then Cauchy gave a proof in 1821. The definition of uniform continuity is proposed by Heine, and he published a proof of the Uniform continuity theorem. There are some important properties of continuous functions on closed intervals including Weierstrass second theorem: Boundedness theorem, Weierstrass first theorem: Extreme value theorem, Bolzano-Cauchy second theorem: Intermediate value theorem, Cantor theorem: Uniform continuity theorem. Continuous functions have four fundamental properties on closed intervals: Boundedness theorem, Extreme value theorem, Intermediate value theorem, Uniform continuity theorem. These theorems are the basis of mathematical analysis and the direct expression of real number theory in functions. In 2022, Hamant Kumar introduced a new notion of  $c^*$  generalized  $\eta$ -closed ( $c^*g\eta$ -closed) set in topological spaces and studied their basic properties. He established the relationship between this new class of closed sets with other existing classes of generalized closed sets in general topology. We introduce  $c^*g\eta$ -continuous function,  $c^*g\eta$ -irresolute function,  $c^*g\eta$ -open function,  $c^*g\eta$ -closed function, pre- $c^*g\eta$ -open function, pre- $c^*g\eta$ -closed function and investigate several properties and characterizations of these new types of mappings in topological spaces.

Mathematics Subject Classification (2020): 54C05, 54C08, 54C10.

**Keywords:** Topological space,  $c^*g\eta$ -open set,  $c^*g\eta$ -closed set,  $c^*g\eta$ -interior set,  $c^*g\eta$ -closure set,  $c^*g\eta$ -continuous function,  $c^*g\eta$ -irresolute function,  $c^*g\eta$ -open function,  $c^*g\eta$ -closed function, pre- $c^*g\eta$ -closed function, pre- $c^*g\eta$ -open function.

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Most references on topological spaces seem to define a compact space in terms of open coverings of a space having finite sub coverings. Formally, we say that a collection of open sets  $\{U_i : i \in I\}$ , indexed by some set  $I$ , is an open covering of a topological space  $K$  if  $K \subseteq \bigcup_{i \in I} U_i$ . We define  $K$  to be compact if there exist finitely many open sets  $U_{i_1}, U_{i_2}, \dots, U_{i_n}$  in the open covering such that  $K \subseteq \bigcup_{j=1}^n U_{i_j}$ . There exists a number of equivalent definitions of a compact space, which we briefly mention here. A topological space  $K$  is compact if and only if  $K$  has the finite intersection property: if  $\{E_i : i \in I\}$  is a collection of a closed sets indexed by a set  $I$  such that, for any finite subset  $I_0 \subseteq I$ ,  $\bigcap_{i \in I_0} E_i \neq \emptyset$ , then  $\bigcap_{i \in I} E_i \neq \emptyset$ . Another equivalent definition is in terms of nets. A topological space  $K$  is compact if and only if every net  $(x_\alpha : \alpha \in \Lambda)$  in  $K$  has a convergent subnet. In 2022, Hamant Kumar introduced a new notion of  $c^*$  generalized  $\eta$ -closed ( $c^*g\eta$ -closed) set in topological spaces and studied their basic properties. He established the relationship between this new class of closed sets with other existing classes of generalized closed sets in general topology. We will extend the concept of compactness via  $c^*g\eta$ -open sets by introducing  $c^*g\eta$ -compact spaces in topological spaces and will investigate its characterizations by making use of generalized mappings including  $c^*g\eta$ -continuous functions and  $c^*g\eta$ -irresolute functions. The objective of this paper is to introduce the new concepts called  $c^*g\eta$ -compact space and  $c^*g\eta$ -Lindelof space, countably  $c^*g\eta$ -compact space, almost  $c^*g\eta$ -compact space, and mildly  $c^*g\eta$ -compact space in topological spaces and investigate fundamental properties and characterizations of these new notions of spaces in topological spaces.

2020 AMS Subject Classification. Primary: 54B05, 54D20, 54D30.

**Keywords:** Topological space,  $c^*g\eta$ -open set,  $c^*g\eta$ -closed set,  $c^*g\eta$ -compact space,  $c^*g\eta$ -Lindelof space, countably  $c^*g\eta$ -compact space, almost  $c^*g\eta$ -compact space, mildly  $c^*g\eta$ -compact space.



## EMOTIONAL INTELLIGENCE AND HAPPINESS GIVING IMPACT ON PSYCHOLOGICAL WELL-BEING IN MALAYSIA

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### ABSTRACT

This study will be carried out to evaluate the role of spiritual intelligence as a significant mediating variable in the relationship between emotional intelligence and psychological well-being and evaluate the role of happiness as a mediating variable between emotional intelligence and psychological well-being. A survey method will be used to collect data from individuals involved in counseling sessions in Malaysia. SmartPLS software was used to evaluate 100 questionnaire data and test the research hypotheses. The results of the analysis produced two important findings: First, the relationship between emotional intelligence has a significant relationship with psychological well-being. Second, the relationship between happiness has a significant relationship with psychological well-being. The findings of this study confirm that the relationship between emotional intelligence and psychological well-being is mediated by spiritual intelligence, while the relationship between spiritual intelligence and psychological well-being is mediated by happiness. Next, the findings of this study can be used as important certificates to help practitioners understand the diversity of perspectives on the constructs of spiritual intelligence and happiness and draw up a client's emotional management plan in counseling sessions to help achieve and maintain their emotional well-being in everyday life.

**Keywords:** emotional intelligence, spiritual intelligence, happiness, psychological well-being



## PERSONALITY AFFECT THE ENVIRONMENTAL AWARENESS OF COASTAL RESIDENTS IN MALAYSIA

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### ABSTRACT

This study will be carried out to give a detailed picture of personality factors, emotional awareness and awareness of the population about the importance of the coastal environment in Malaysia. The method of distribution of 90 questionnaires to the surrounding population was used to collect data. The findings of this study can be used as important certificates to help practitioners understand the diversity of perspectives on personality and population awareness to help achieve and maintain psychological and environmental well-being in facing the challenges of environmental sustainability.

**Keywords:** Personality, Emotional Intelligence, Environmental Awareness, Malaysia





## PERSONALITY AFFECTS THE DECISION-MAKING AMONG UNIVERSITY STUDENTS

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### ABSTRACT

The lack of emotional management among students is very worrying even though the issue has long existed in society in Malaysia. This study will be conducted to see the relationship between personality and emotional intelligence. This survey method will collect 110 data from students at a public university in Pahang, Malaysia. SmartPLS was used to evaluate the data content of the questionnaire and test the research hypothesis. The findings of this study confirm that there is a positive and significant relationship between personality and decision making. Furthermore, the findings of this study can be used as important recommendations to help practitioners understand the diversity of perspectives on the construct of decision making and make decisions and develop student personality management plans to help achieve and maintain their emotional well-being in daily life.

**Keywords:** Personality, Emotional Intelligence, Public University, Malaysia



## A MODEL BASED STUDY ON INTERFACIAL SOLITARY WAVE PROFILES IN THE PRESENCE OF A FREE SURFACE

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### ABSTRACT

We have developed a mathematical model to study internal wave propagation. The model arrangement consists of a two-fluid domain, considering the lower layer to be of finite depth. We have further studied the velocity potentials and interface of each of the two layers by the help of the three coupled nonlinear equations. A numerical study is conducted to obtain internal solitary wave profiles as well as free surface wave profiles, for varied wave speeds, density and depth ratios. Our results are in very good agreement with the Experimental Data of Zhao et al. presented in their paper “Experimental and numerical studies on internal solitary waves with a free surface”, *Journal of Fluid Mechanics* 899, A27, 2020.

**Keywords:** Interfacial waves, Free surface waves, Wave propagation.

## NANO PARTICLES OF NICKEL OXIDE- ACACIA NILOTICA LEAF EXTRACTS: GREEN SYNTHESIS AND THEIR BIOLOGICAL ACTIVITIES

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### ABSTRACT

Green synthesis of nanoparticles (NPs) has attracted the researcher's attention due to its rapid, cost effective, sustainable and eco-friendly nature. Current studies were carried out to perform and investigate the green synthesis of NiO NPs with aqueous (NiO<sub>(aqueous)</sub>) and ethanolic extracts (NiO<sub>(ethanolic)</sub>) of *Acacia nilotica* leaves respectively in the basic medium. The NPs were characterized by spectroscopic, microscopic and thermometric techniques including Fourier transform infra-red (FTIR), Raman, x-ray diffraction (XRD), scanning electron microscopy (SEM), thermal gravimetric analysis (TGA) and differential scanning calorimetry (DSC) respectively. The electrochemical properties, antibacterial potential and hemolytic activities of the synthesized NPs were also examined. FTIR and Raman spectroscopies confirmed the presence of Ni-O vibrations in the synthesized NPs. XRD patterns revealed the face-centered cubic structures of NiO NPs and a high degree of crystallinity. The average crystallite size of NiO<sub>(aqueous)</sub> NPs was significantly smaller (16 nm) than that of NiO<sub>(ethanolic)</sub> NPs (28 nm). SEM images show that the shape of the NiO NPs is spherical. The prepared NPs demonstrate a good thermal stability up to 600 °C temperature. Cyclic voltammetry (CV) measurements show a prominent oxidation and reduction peaks for NiO<sub>(ethanolic)</sub> at 0.19 V and 0.31 V and for NiO<sub>(aqueous)</sub> at 0.21 V and 0.36 V, respectively. The synthesized NiO NPs demonstrate good electrochemical stability at an operating potential of -0.5 to 0.5 V and thus can be used as electrode materials in supercapacitors. The inhibition effect of NiO NPs<sub>(ethanol)</sub> against *B. subtilis* ATCC 6051, was considerable and comparable to the ciprofloxacin with zone of inhibition of 18.30 ± 0.58 mm which was used as standard drug. NiO NPs have shown negligible toxic hemolytic effects as compared to Triton X-100.

**Keywords:** NiO nanoparticles, Green Synthesis; Spectroscopic; Electrochemical; Biological



## EFFECTIVE HYBRIDIZATION OF ANT COLONY OPTIMIZATION AND QUANTUM ANNEALING FOR GRAPH COLORING PROBLEM

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### ABSTRACT

Graph coloring problem is a well-known NP-complete combinatorial optimization problem where the goal is to assign colors to the vertices of a graph such that no adjacent vertices share the same color. It is important in computer science due to its wide range of applications and its fundamental role in addressing practical and real-world computational problems. Understanding and solving graph coloring problems contribute to developing efficient algorithms, optimization techniques, and problem-solving methodologies. Since graph coloring is NP-complete, finding an optimal solution for large graphs can be computationally intractable. As the size of the graph increases, the number of possible colorings grows exponentially, making it challenging to find the best solution within a reasonable amount of time. Despite extensive research, no known polynomial-time algorithm exists for finding the optimal coloring of an arbitrary graph. This lack of efficient algorithms makes it necessary to resort to approximation algorithms or heuristic approaches, which may not guarantee optimal solutions because of many reasons, including lack of problem-specific knowledge, sensitivity to problem characteristics, representation complexity, scalability, objective function designing, premature convergence, getting stuck in local optima, and many more. However, meta-heuristic algorithms often solve such optimization problems, providing efficient and effective solutions. Ant Colony Optimization (ACO) and Quantum Annealing (QA) are common meta-heuristic approaches for solving graph coloring problems. QA is the quantum version of Simulated Annealing (SA) – a classical age-old meta-heuristic technique. ACO algorithm can give faster convergence for simple graphs with small, medium, and even large numbers of vertices, whereas QA overcomes the limitations of getting stuck in local optima for some complex graph instances because of the quantum fluctuations. However, these approaches have certain limitations. ACO algorithm can get stuck in local optima for some difficult graph instances, while the runtime of QA is very high, even for a simple graph with a large number of nodes. This research elucidates an effective hybridization technique of ACO and QA to solve graph coloring problems that can overcome the limitations stated earlier. Experimental results obtained by applying the hybridization technique on some of the DIMACS benchmark instances show the algorithm's effectiveness and prove the algorithm promising.

**Keywords:** Average Neighborhood, Chromatic Number, Ising Model, Pheromone Trail, Quantum Hamiltonian, Tunable Multiplier.



## THERMODYNAMIC STUDY OF BPA ADSORPTION IN AQUEOUS SOLUTION ON RAW AND ACID-ACTIVATED BENTONITE

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### ABSTRACT

Bisphenol-A (BPA) is a common plasticizer that has been considered a chemical of concern due to its endocrine disruption potential. The removal of Bisphenol A (BPA) from aqueous solutions by raw and activated bentonite was studied. The morphology and characterization of raw and activated bentonite were observed and characterized using scanning electron microscopy (SEM), Fourier Transform Infrared spectroscopy (FTIR), and X-ray diffraction (XRD) which confirmed the success of the activation. Bentonite is a highly absorbent clay which is primarily constituted of montmorillonite. It has physical and synthetic characteristics such as small particle size, large surface area, high porosity, and high adsorption capacity, which make it a great option for the removal of emerging contaminants. Bentonite can be used as a low-cost, environmentally friendly sorbent. During this work, a temperature increases from 25 to 65°C resulted in a decrease in adsorbent characteristics, and the thermodynamic parameters reflected spontaneous, chemical adsorption in nature and exothermic.

**Keyword:** Acid-activated, Adsorption, Bentonite, Bisphenol A, Thermodynamic.



## ELIMINATION OF ORGANIC POLLUTANTS BY ADSORPTION ONTO TREATED BIOMASS IN BATCH REACTOR AND FIXED-BED COLUMN

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### ABSTRACT

Organic pollutants, especially dyes, have specific chemical properties that make them toxic to humans as well as to living organisms in the animal and plant species. Dyes, especially synthetic dyes, are widely used in many industries. Due to their bioaccumulation, non-biodegradable properties and toxicity, dye-laden effluents pose a threat to human health and the environment. The objective of this work was to determine the optimum conditions for adsorption/desorption of reactive dye, using both batch experiments and fixed bed columns with treated plant. Cristal Violet (CV, cationic dye) adsorption was studied in both batch system and column system. The effect of various factors such as biosorbent dosage,



pH, temperature, and initial dye concentration on the adsorption process was also evaluated. The acid and basic treatment allows a reduction of the soluble organic matters characterized by a decrease of COD and BOD<sub>5</sub>. The adsorption kinetics and equilibrium processes onto the adsorbents were predicted by pseudo-second order kinetic model and Langmuir model, respectively. The maximum adsorption quantity of HCl-modified *C. edulis* (HMCE) toward CV was found to be 135.1 mg/g, and 166.6 mg/g for NaOH-modified *C. edulis* (NMCE) at 318 K and the process was endothermic. The thermodynamic properties showed that the CV adsorption onto the *C.edulis* modified was feasible and spontaneous in nature. Thus, in order to examine the applicability and effectiveness of biomaterials prepare to remove dyes on an industrial scale, we also studied the dynamic system in a continuous column. Experimental results showed that removal efficiency of CV, RB and CR in dynamic system are slightly close to those obtained in batch system. In brief, the biosorbents presents excellent performance in removal of reactive dyes, with the advantage that it can be regenerated and reused.

**Keywords** Biomass, Adsorption; Dye, Chemical treatment, Batch system, Column system



## TURMERIC FARMERS AND THEIR SOCIAL PARTICIPATION IN TAMIL NADU OF INDIA

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### ABSTRACT

India accounts about 80 per cent world's turmeric production and 60 per cent of exports. Tamil Nadu ranks second in both production and area under turmeric cultivation among all the states in India. Dharmapuri district comprised of seven taluks namely Dharmapuri, Pappireddipatti, Harur, Pennagaram, Palacode, Karimangalam and Nallampalli. Among seven taluks, Pappireddipatti taluk was selected for this present study because it has more turmeric area. Nearly fifty per cent of the respondents had low (50.83 per cent) level of social participation followed by high (26.67 per cent) level of social participation. Only 22.50 per cent of the respondents had medium level of social participation. public library facilities with farm magazines, newsletters, farm publications, etc., can be made available with local language to have access with latest information regarding turmeric cultivation.





## WEAK-HOPFCITY OF MODULES

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### ABSTRACT

The Hopfcity of modules has great been of interest in the literature. A module  $X$  is named Hopfian if each its epimorphism is an automorphism and  $X$  is named co-Hopfian if any its injective endomorphism is an automorphism. A perfect generalization of Hopfian modules was introduced, called gH modules (generalized Hopfian).  $X$  is called gH, if the kernel of every its epimorphism is small. Another generalization, called wH (weakly Hopfian), was given.  $X$  is called wH  $R$ -module, if every small epimorphism of  $X$  is a monomorphism. Therefore  $X$  is Hopfian iff  $X$  is both gH and wH. The notion of  $\gamma$ -Hopfian was investigated. A module  $X$  is named  $\gamma$ -Hopfian if the kernel of each its epimorphism is  $\gamma$ -small.

In this article we present the notion of  $\delta$ -weakly.  $X$  is named  $\delta$ -weakly Hopfian if every its  $\delta$ -small epimorphism is a monomorphism

**Keywords:** Hopfian modules, co-Hopfian modules,  $\delta$ -weakly Hopfian.



## CARDIOPROTECTIVE EFFECT OF SAMWA (*CLEOME DROSERIFOLIA*) METHANOLIC EXTRACT AGAINST ADRENALINE-INDUCED MYOCARDIAL INJURY

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### ABSTRACT

Catecholamines-induced myocardial injury in rats serves as a well-standardized model for studying the effects of various potential cardio protective agents. This study aims to assess the possible cardioprotective effect of SAMWA against adrenaline-induced myocardial injury (MI) in rats. Furthermore the effect of SAMWA on cardiac function biomarkers, electrocardiogram (ECG) alterations, oxidative stress, inflammation and histopathological changes was assessed. MI was induced by adrenaline (2 mg/kg, s.c.) injected as a single dose for 2 consecutive days (24 h apart). Normal and control groups received the vehicle for 21 consecutive days. The other 2 groups were orally administered SAMWA methanolic extract (100, 200 mg/kg) for 21 consecutive days and on day 22, adrenaline was injected as a single dose for 2 consecutive days. Then ECG examination, biochemical, histopathological, immunohistochemical analyses were carried out. SAMWA methanolic extract reversed adrenaline-induced reduction of heart rate, prolongation of QRS interval and elevation of ST interval. SAMWA pretreatment significantly reduced serum aspartate dehydrogenase (AST), lactate dehydrogenase (LDH), and creatine kinase-MB (CK-MB) levels in MI rats. Oral pretreatment with SAMWA methanolic extract increased reduced glutathione (GSH), total antioxidant capacity (TAC) and reduced malondialdehyde (MDA), total oxidative stress (TOS), interleukin-6(IL-6), interleukin-1 $\beta$  (IL-1 $\beta$ ) and tumor necrosis factor (TNF- $\alpha$ ) cardiac contents in MI rats. Additionally, SAMWA methanolic extract administration significantly decreased protein expression of PI3K and AKT in cardiac tissue and ameliorated histopathological changes. This study reveals that SAMWA methanolic extract exerted cardioprotective effect against adrenaline-induced MI in rats evidenced by improving cardiac function, attenuating ECG and histopathological changes which may be partly mediated through its anti-oxidant, anti-inflammatory and anti-apoptotic effect.

**Keywords:** *Cleome droserifolia; Adrenaline; Heart; Antioxidant; Oxidative stress.*



## AN AB INITIO STUDY OF THE STRUCTURAL, ELASTIC, ELECTRONIC AND OPTICAL PROPERTIES OF $\text{AgCaX}_3$ (X = Br, and F) PEROVSKITES

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### ABSTRACT

In this study, we conducted an ab initio investigation of the structural, elastic, electronic and optical properties of  $\text{AgCaBr}_3$  and  $\text{AgCaF}_3$  Calcium-based halide perovskites. Our findings suggest that these materials exhibit a high degree of stability in the cubic structure, with optimized lattice parameters that agree well with previous theoretical predictions. We estimated the monocrystalline elastic constants ( $C_{ij}$ ) for these compounds via the strain-stress method. Using the predicted  $C_{ij}$  values, we were able to deduce various elastic moduli for  $\text{AgCaBr}_3$  and  $\text{AgCaF}_3$  polycrystalline aggregates, including bulk modulus, Young's modulus, shear modulus, Lamé coefficients, Poisson's ratio, and Debye temperature. Band structure, density of states and band gap pressure coefficients are also given. Our calculations show that  $\text{AgCaBr}_3$  and  $\text{AgCaF}_3$  has an indirect band gap ( $R-\Gamma$ ). We present calculations of the frequency-dependent complex dielectric function  $\epsilon(\omega)$ . We find that the values of zero-frequency limit  $\epsilon_1(0)$  increase with decreasing the energy band gap. The origin of the peaks and structures in the optical spectra is determined in terms of the calculated energy band structures. We hope that our study provides valuable insights into the structural, elastic, electronic and optical properties of  $\text{AgCaX}_3$  perovskites compounds that may be reference data for future investigations of these materials.

**Keywords:** Density Functional Theory; Halide perovskites; Structural parameters; Elastic moduli; Electronic properties



## ANALYSIS OF WATER SCARCITY EFFECTS ON REAL ESTATE VALUATION

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### ABSTRACT

Real estate valuation is an issue of particular concern. It depends on many factors such as economic social and physical factors. Water plays a key role in the development. Sustainable development needs to manage and preserve water resources to meet the population needs with the required quantity and the quality. However, the water quantity is decreasing due to climate change effects and population growth. The water scarcity causes big loses in the economy because it is the cornerstone of any production chain. Moreover, the water scarcity affects negatively the economy by diminishing the investment opportunities but also by decreasing, the real estate value considered as pillar of development programs. Studies examining the impacts of water scarcity on real estate values are few. This paper seeks to fill that void by examining the effects of water scarcity on property values: ground water and surface water.

Therefore, the water is an important factor, which affects the real estate value. In property appraisal, the water can be considered as a price-setting factor in market price of real estate. Then, it is so difficult for real estate appraiser to determine why property price differ and how much this difference can be attributed to particular distinguishing features such as water scarcity.

To discuss this issue, the analytical method is used. Many appraisers' reports, research's findings and courts decisions related to real estate value influenced by water scarcity are analysed, discussed and compared to many studies findings.

**Keywords:** Appraiser, water scarcity, environment, property value, real estate appraisal.



## EFFECT OF COMBINATIONS OF POULTRY MANURE AND CHEMICAL FERTILIZERS ON MULBERRY LEAF AND SILKWORM COCOON PRODUCTIVITY IN INDIA

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### ABSTRACT

Sericulture is an important agro-based industry in India that produces all four types of commercially exploited silk, viz Mulberry, Eri, Tasar & Muga. As mulberry leaf production alone covers more than 60% of the total production cost, mulberry leaf production plays a crucial role in the sustainability of Sericulture in a region. G4 is a variety that has been developed by Central Sericulture Research & Training Institute, Mysore with high productivity. Since the high leaf yield production potential mulberry varieties requires high input to produce quality leaf in higher quantities, large quantities of organic and chemical fertilizers have been recommended for their cultivation. For G4 mulberry variety the current recommended fertilizer dose is NPK of 350:140:140. However continuous application of high dosage of chemical fertilizers affects not only the soil structure but also the micro flora and fauna of the soil. In order to minimize the negative impact of chemical fertilizers efforts have been made to replace chemical fertilizers partly or completely with organic fertilizers such as FYM, Cow dung, Poultry manure and other farm residuals. In this study the effect of application of different compositions of chemical, organic and poultry manures were evaluated.

The poultry manure with different treatment compositions ranging from T1 to T11 by taking T0 as absolute control. The results indicate that organic fertilizers, including poultry manure, can lead to increased plant growth and positively impact silkworm growth. The results obtained from ANOVA suggest that the use of organic fertilizers or poultry manure i.e., T1, T7 and T11, has a higher significance when compared with control T0 and other treatments.

**Keywords:** Mulberry, Silkworm, NPK, Poultry Manure, Organic Fertilizer



## IN SILICO DISCOVERY OF NOVEL ANTI-CANCER AGENTS

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### ABSTRACT

The discovery of new drugs through computer simulations is a promising approach that can reduce the cost and time required for drug development. In this study, we have proposed and validated a bioinformatics-guided method for identifying potential anti-breast cancer drugs. To assess the effectiveness of quinoline derivatives as antitumor agents and their potential for developing new breast cancer treatments, we conducted a comprehensive analysis using three-dimensional quantitative structure-activity relationships (3D-QSAR) and molecular docking with the aromatase enzyme (PDB: 3S7S). By employing Comparative Molecular Similarity Indices Analysis (CoMSIA), we established a reliable 3D-QSAR model that yielded statistically significant results for  $Q^2$ ,  $R^2$  and  $R^2_{pred}$ , indicating high predictability. To confirm the model's predictive capabilities, we performed external validation using a test set. The findings demonstrated that the electrostatic, hydrophobic, hydrogen bond donor, and acceptor fields had a significant impact on anti-breast cancer activity. Using these results, we designed several potent aromatase inhibitors and utilized the best model to predict their inhibitory effects. Additionally, we evaluated the effectiveness of these novel drug candidates using ADMET properties.

**Keywords:** In silico; Cancer; Quinoline; CoMSIA; Molecular docking; ADMET.



## CHEMICAL COMPOSITION, ANTIOXIDANT AND ANTIBACTERIAL ACTIVITIES OF MOROCCAN PROPOLIS

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### ABSTRACT

In order to evaluate the local products and contribute to their valorization, this work was devoted to the study of the biological properties in particular the determination of the bioactive molecules like polyphenols and flavonoids as well as the screening of the antibacterial and antioxidant activities of the local propolis of three regions of Morocco. The contents in polyphenol, flavonoids were assessed using Folin-Ciocalteu and Aluminium Trichloride colorimetric methods. The antimicrobial activity was determined by disc diffusion and broth microdilution methods against four bacterial strains including *Escherichia coli*, *Pseudomonas* sp, *Staphylococcus aureus*, and *Enterococcus faecalis*. The antioxidant activity was assessed by DPPH radical scavenging activity assay. The results showed that the total phenolic content ranged from  $100,3 \pm 0,57$  to  $12,26$  gallic acid equivalent GAE/mg of extract, and the flavonoids content ranged from  $3,466 \pm 1,71$  to  $73,466 \pm 3,58$   $\mu\text{g}$  catechin equivalent CE/g of extract. The samples from Sidi Bennour region showed the strongest radical scavenging activity toward DPPH with IC<sub>50</sub> values of  $4,2 \pm 1,58$   $\mu\text{g}/\text{ml}$ . The screening of the antibacterial activity showed that all tested bacteria were sensitive to propolis ethanolic extract with inhibitory zones varied from  $10 \pm 0,089$  mm to  $22 \pm 0,5$  mm. and MCI ranged from 1,25 to 40 mg /ml. Additionally a strong correlation was observed between the total phenolic, flavonoids and antioxidant activity. It can be concluded that the chemical composition, antioxidant and antimicrobial activities of various propolis depend on their geographical and botanical origin.

**Keywords:** Propolis, Phenolic content, Antioxidant activity, Antibacterial activity, Morocco



**KOYUNLARDA REKTAL YOLLA ULTRASONOGRAFİK MUAYENE İÇİN TASARLANAN  
VE 3D YAZICI İLE ÜRETİLEN REKTAL PROB APARATI**  
**RECTAL PROBE APPARATUS DESIGNED FOR RECTAL ULTRASONOGRAPHIC  
EXAMINATION IN SHEEP AND PRODUCED BY 3D PRINTER**

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**ÖZET**

Koyunlarda üreme alanında ultrasonografik muayene genel olarak uterus ve ovaryumların muayenesini içermektedir. Ultrasonografik muayene ile ovaryumların muayenesinde, ovaryum üzerindeki yapıların doğru ve net bir şekilde tespit edilmesi; suni tohumlama, embriyoların elde edilmesi ve embriyo transferi gibi işlemlerin başarılarını doğrudan etkileyebilmektedir. Ancak, koyunlar için üretilen spesifik ultrason problemlerinin sınırlı olması, genelde sığırlarda kullanılan rektal lineer problemlerin koyunlar için uygun bir aparatının kolay bulunmayışı ovaryum muayene başarısını sınırlamaktadır.

Bu çalışmada, koyunlarda rektal muayene için saha şartlarına uygun bir ultrason probunun bulunmasındaki zorluklar nedeniyle, sığır rektal probunun koyunlarda da kullanılabilir hale getirilmesi amaçlanmıştır. Bu hedef doğrultusunda, 3D tasarım programı SolidWorks kullanılarak bir aparat tasarlandı ve %100 doluluk oranında Polilaktik Asit (PLA) malzemeden 3D yazıcı ile üretildi. Aparat, probu üstten ve yandan tırnaklarla kavrayacak şekilde tasarlanmıştır. Toplam uzunluk 335 mm, probun oturacağı kısım 115 mm ve kablunun geçeceği oluk 162 mm'dir. Kullanım kolaylığı sağlamak için aparatın uç kısmına, kablo dışarı çıkacak şekilde oluklu bir dirsek eklenmiştir. Yeterli mukavemet sağlamak amacıyla aparatın belirli bölümlerinde destekler oluşturulmuştur. Rektal geçiş sırasında herhangi bir hasarı önlemek için, aparatın sert köşeleri yuvarlatılmış ve probun uç kısmına aşağı yönlü bir eğim verilmiştir.

Bu çalışma, hayvancılık ve veterinerlik alanında mevcut sorunlara çözüm getirme potansiyeli olan 3D baskı teknolojisinin etkin kullanımını vurgulamaktadır. Ayrıca, bu teknolojinin gelecekteki uygulamalar için teşvik edilmesi amaçlanmıştır. Sonuç olarak, tasarlanan aparat, MyLab DeltaVet, ESAOTE, doppler ultrasonu (Esaote Biomedica®, Genova, İtalya) ile koyunlarda rektal muayene için güvenilir ve kullanışlı bir çözüm sunmuştur.

**Anahtar kelimeler:** Koyun, Ultrasonografi, Prob Aparatı, 3D Yazıcı

**ABSTRACT**

Ultrasonographic examination in the breeding area of sheep generally includes examination of the uterus and ovaries. Accurate and clear detection of structures on the ovary in the examination of the ovaries by ultrasonographic examination can directly affect the success of processes such as artificial insemination, obtaining embryos, and embryo transfer. However, the limited number of specific ultrasound probes





produced for sheep, and the lack of a suitable device for rectal linear probes, which are generally used in cattle, limit the success of ovarian examination.

This study aimed to adapt the bovine rectal probe for use in sheep due to difficulties in finding an ultrasound probe suitable for rectal examination in sheep under field conditions. To meet this goal, an adapter was designed using the 3D design program SolidWorks and produced from polylactic acid (PLA) with a 100% fill rate using a 3D printer. The adapter was designed to grip the probe from above and from the side with claws. The total length is 335 mm, the part where the probe will sit is 115 mm, and the groove through which the cable will pass is 162 mm. To facilitate usage, a grooved elbow was added to the end of the adapter, allowing the cable to exit. To ensure sufficient strength, supports were added to certain parts of the adapter. To prevent any damage during rectal passage, the sharp corners of the adapter have been rounded, and a downward slope has been given to the end of the probe.

This study emphasizes the effective use of 3D printing technology, which has the potential to provide solutions to existing problems in the fields of livestock and veterinary medicine. Moreover, it aims to encourage the use of this technology in future applications. In conclusion, the designed adapter provides a reliable and practical solution for rectal examination in sheep using the MyLab DeltaVet, ESAOTE, doppler ultrasound (Esaote Biomedica®, Genova, İtalya).

**Keywords:** Sheep, Ultrasonography, Probe Apparatus, 3D Printer



## INSIDIOUS ACTIVITY OF ARMENIANS LIVING IN DAGESTAN

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### ABSTRACT

According to the results of the census conducted in the Russian Federation, about 6.5 thousand Armenians were registered in Dagestan In 2005. But in 2015, this figure was below 5 thousand. However, Armenian sources do not confirm this number and state that more than 12 thousand Armenians live in Dagestan. Even the Armenian government officially sent a note of protest to the government of the Russian Federation regarding the reduction of the number of Armenians in Dagestan and expressed their displeasure. Apparently, it is not given correct information about the exact number of Armenians in Dagestan. Approximately 25-30 Armenian families leave Dagestan every year. The vast majority of these families move either to Turkey once, and a certain part to other cities of Russia. Compared to other cities of Russia, Armenians settled in Dagestan mainly go to the capital city of Moscow. This is not without reason. Because compared to other cities of Russia, There is their community in Moscow. One important point is that there are more wealthy, well-known Armenians in the capital of Russia, who closely support many Armenians and at the same time provide unemployed Armenians with new jobs. Compared to Russia, the number of immigrants from Dagestan to Turkey is higher. There are a number of objective and subjective reasons for this. First, as mentioned above, considering that the main source of income for Armenians in Dagestan is trade, it is considered convenient and appropriate for Armenians to find a place of income in Turkey. Armenians themselves admit that compared to Russia, they feel more comfortable and free in Turkey. Secondly, the tourism sector has a very important place in the economy of the brotherly country. Bodrum, Antalya, Izmir and Trabzon cities have a big share in this business. Currently, the majority of people working in the tourism sector in many cities of Turkey are local Armenians. For this reason, most of the Armenians who leave Dagestan go to these cities. (As support of Armenians in Turkey). They prefer to work in hotel guidance, restaurant jobs and housekeeping professions, which mainly operate in these regions of Turkey. In general, we still remember well from the Soviet era that the Armenian nation is a nation that can cope with such areas. According to the obtained information, in some regions of Turkey, especially in the Black Sea regions, there are private hotels owned by Armenian businessmen (permanently registered in Turkey), and a certain part of the employees in those hotels are Armenians who left Dagestan. For your information, Armenians who left Dagestan once and went to Turkey can even get Turkish citizenship in different ways after a certain period of time. Based on this factor, Armenian girls get married to Turks (for information, Armenian women occupy one of the first three places in the world in terms of marrying non-nationals) or by taking care of elderly, lonely Turks at home and gaining their trust through inheritance. Many Armenians changed their surnames after marrying Turks. (They switched to Turkish surnames). Research shows that about 500 Armenian families have migrated from Dagestan-Turkey recently.



## ECHINACEA PURPUREA AND ONOPORDUM ACANTHIUM EXERT ANXIOLYTIC EFFECT IN EXPERIMENTAL MODEL OF ACUTE STRESS

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### ABSTRACT

**Background:** *Echinacea purpurea* (EP) and *Onopordum acanthium* (OA) are promising medicinal plants rich in polyphenols, flavonoids and other biologically active compounds. Our earlier studies with High Performance Liquid Chromatography (HPLC) analysis showed that EP alcoholic extract contains chicoric, caftaric and caffeic acids and OA alcoholic extract is rich in chlorogenic, caffeic acid, arctigenin and apigenin.

**Objective:** to investigate antianxiety effect of EP, OA and their co-administration in rats subjected to acute cold stress.

**Material and method:** male Wistar rats were divided into 6 groups (n=8): control; stressed control, EP, OA, combined extract 1 (EP:OA in ratio 1:1) and combined extract 2 (EP and OA in ratio 3:1). All extracts were given by oral lavage (500 mg/kg bw) for 2 weeks. Elevated plus-maze was performed on day 15. Animals were subjected to low temperatures (4°C) for one hour prior to testing. Number of entries in open and enclosed arms, time spent in each of them and the ratio open arm /total entries were assessed.



**Results:** the time spent in open arms, the total number of entries in them and the ratio were significantly decreased in stressed control when compared to unstressed animals ( $p < 0.05$ ). In rats treated with OA and combined extract 2 the time spent in the open arms was statistically significantly increased whereas that spent in the enclosed arms was decreased when compared with stressed control ( $p < 0.001$ ). The number of entries in open arms was significantly increased in OA and combined extract 1 in comparison with stressed control ( $p < 0.05$ ). When the ratio was used significance was registered for all treated groups.

**Conclusion:** OA and OA-based combinations produce more pronounced anti-anxiety effect than EP. This is probably due to chlorogenic acid found in the extract. The latter has proven anxiolytic effect.

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**Keywords:** acute stress, anxiolytic effect, rats, polyphenols, flavonoids



## INVASION-MEDIATED EVOLUTIONARY CHANGES IN SOIL FUNGAL COMMUNITIES: A REVIEW

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### ABSTRACT

Soil fungi constitute a diverse and vital group of organisms that play key roles in terrestrial ecosystem functioning, such as nutrient cycling, plant growth promotion, and biotic interactions. However, these communities are also exposed to invasion by exotic species of plants, animals, and fungi, which can alter their structure and function in various ways. This paper provides a comprehensive review of the current state of knowledge and knowledge gaps on the effects of invasive species on soil fungal communities and their evolutionary responses. It covers the mechanisms and consequences of invasion-induced changes in soil fungal diversity, composition, function, and interactions at different spatial and temporal scales. It also examines the potential feedbacks between soil fungal evolution and ecosystem processes, as well as the challenges and opportunities for studying and managing soil fungal invasions. It argues that soil fungal invasions are widespread and significant drivers of ecological and evolutionary change in soil ecosystems, and that more integrative and experimental approaches are needed to better understand and predict their effects.

**Keywords:** soil fungi, invasion biology, community ecology, evolutionary ecology, ecosystem function



## WAVELET-BASED DENOISING OF HIGHLY DISTORTED AUDIO SIGNALS: A HARD THRESHOLDING APPROACH

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### ABSTRACT

By eliminating undesired background noise, speech denoising, commonly referred to as noise reduction, is a potent method used to improve the quality and understandability of audio recordings. It is essential to many applications, from voice assistants and communications systems to audio transcription and forensic investigation. The value of voice denoising resides in its capacity to enhance listening quality, boost communication, and raise speech recognition accuracy. The use of speech denoising in telecommunications systems is one of its main uses. Background noise in phone calls or video conferences, such as wind, traffic, or people talking, can drastically lower the quality of the speech signal.

Ambient noise sources are frequent in real-world settings and can obstruct voice recognition technology. Denoising algorithms can reduce background noise, enhancing the voice assistant's comprehension and responsiveness to human input. One of these techniques –for denoising- is the wavelet method, a widely used signal processing approach with numerous uses, including signal filtering, compression, and many more. The initial step in applying the wavelet method is reading the noisy audio signal (noisy speech). This is followed by the specification of the wavelet characteristics, such as the wavelet family (typically the Daubechies family), the decomposition level, and the threshold rule (soft or hard). The decomposition function (wdenomp) applies a global threshold to the wavelet coefficients to finish the denoising process. Based on the anticipated noise level, we calculate the denoising threshold value.

In summary, speech denoising has many uses and is very useful in a variety of industries. It improves communication, increases the precision of voice recognition, makes accurate transcriptions easier, and supports forensic audio analysis by eliminating undesirable background noise from audio recordings. Speech denoising techniques are anticipated to become even more advanced as technology develops, allowing for additional advancements in audio quality and user experience.

**Keywords:** Noisy speech , Wavelet, hard-threshold, de-noising.



## UNSTEADY FLOWS OF A BINGHAM PLASTIC MEDIUM IN MICROCHANNEL WITH SYMMETRIC MEMBRANE CONTRACTION

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### ABSTRACT

Bingham plastic fluid flow driven by membrane pumping mechanism is presented mathematically. The motivation behind this mathematical analysis is to examine the rheological effects on flow analysis, wall shear, pressure distribution, pumping characteristics, stream line patterns and discuss the importance for the physiological transport phenomena. Considering creeping flow nature of physiological transport, lubrication approach is utilized. Analytical approaches are adopted to derive the closed form solutions and graphical results are simulated using in-house code in Matlab. In the membrane pumping, the compression and expansion phases are used for the micropump actuator simulation in which the axisymmetric membrane as a motion of actuation is embedded in the middle. The analytical results indicate that the flow characteristics and pumping characteristics are significantly affected by the plasticity of the fluids as well as membrane shape parameter. Such types of results are highly recommended for the designing of the micro-valveless pumping actuator to control the microscale transport phenomena of physiological systems.

**Keywords:** Viscoplastic fluids; membrane pumping mechanism; microscale transport phenomena; transient flow analysis; wall shear; streamlines patterns.



## MICROWAVE-ASSISTED PYROLYSIS OF PLASTICS WASTE WITH MAGNETIC-BASED CATALYSTS FOR HYDROGEN AND HIGH-VALUE CARBONS

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### ABSTRACT

This research deals with microwave-assisted catalytic pyrolysis (MAP) for plastics waste that uses magnetic-based catalysts to convert high-density polyethylene (HDPE) into H<sub>2</sub> gas and carbon nanotubes (CNTs). The conversion of different types of waste plastic into valuable H<sub>2</sub> has attracted significant attention. Catalytic Pyrolysis is a thermochemical process in which feedstocks are heated in an inert atmosphere to obtain a gas yield, liquid yield, and solid residue. Due to its volumetric and selective heating nature, which enables rapid heating in a cold environment, microwave heating has been considered an appropriate technology for providing the energy required for biomass pyrolysis. In this paper, the NiZnFe<sub>2</sub>O<sub>4</sub>, NiMgFe<sub>2</sub>O<sub>4</sub>, and ZnMgFe<sub>2</sub>O<sub>4</sub> catalysts were utilized for the straightforward degradation of plastic waste into hydrogen gas and carbon yield. In this procedure, the catalyst was used to enhance the value of the H<sub>2</sub> and decrease the amount of heat energy needed. Composites of magnetic ferrites worked as both catalysts and heat susceptors for the microwave process. The results indicated that the type of catalyst and the operational parameters significantly affected the synthesis of carbon nanotubes and hydrogen. The properties of these synthesized catalysts were comprehensively characterized. The one-step pyrolysis approach takes 2-8 minutes to convert pulverized plastic waste into gas and solid yield. The solid pyrolysis products were characterized using TGA, SEM, and FTIR techniques. FTIR was used to analyze the liquid product produced during pyrolysis. The evolved gases were analyzed using a gas analyzer. NiZnFe<sub>2</sub>O<sub>4</sub> catalyst resulted in highly structured carbon residue with fewer impurities than other catalysts. Using magnetic catalysts, almost 90% of the hydrogen can be extracted from plastic during the first 2 minutes of pyrolysis at optimum temperature. The NiMgFe<sub>2</sub>O<sub>4</sub> catalyst produced 87% hydrogen gas.

**Keywords:** Catalytic microwave pyrolysis; plastic waste; Hydrogen gas; Carbon nanotubes





## IOT BASED SMART LOCK DOOR SYSTEM USING RASPBERRY PI

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### ABSTRACT

**Methods:** This system is used for monitoring whether unknown person is entering into the house. System was established with communication and electronic devices through face detection with the help of Raspberry Pi platform. The face of authorized(known) persons is then stored in data. It checks whether the person is authorized or not. If the person is authorized then the door opens automatically and if not, the authorized person receives a message that someone is trying to intrude.

**Results:** We successfully made a People who tried it found it easy to use and were happy with it. If the authorized person wants to open the door for the unauthorized person it can be done and if authorized person doesn't want to open the door, then the unknown person receives a voice message from the authorized person. This automated door lock system can be widely used in homes.

**Conclusions:** People found it easy to use and liked it It provides a simple and versatile experience for users. This automated door lock system can be widely deployed in homes.



## SYNERGISTIC EFFECT OF CNTs AND NiZnFe<sub>2</sub>O<sub>4</sub> FOR PHOTOCATALYTIC H<sub>2</sub> EVOLUTION ACTIVITY

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### ABSTRACT

The world faces challenges of environmental pollution and energy shortage due to the enormous wastage of organic pollutants by industries and the rapid growth of the human population. Photocatalysis has been reported as an efficient technology to mitigate these two emerging issues. This study investigated heterojunction photocatalysts based on Ni<sub>x</sub>Zn<sub>1-x</sub>Fe<sub>2</sub>O<sub>4</sub>/CNTs<sub>x</sub> for enhanced H<sub>2</sub> production from water splitting. The synthesized Ni<sub>x</sub>Zn<sub>1-x</sub>Fe<sub>2</sub>O<sub>4</sub>/CNTs<sub>x</sub> composite was characterized using several methods, including SEM, EDX, FTIR, XRD, and UV-Vis-DRS to examine their magnetic electrical, opto-physical, and photocatalytic active. The highest hydrogen evolution rate using N<sub>0.4</sub>Z<sub>0.6</sub>FC<sub>0.3</sub> is 4550 μmolh<sup>-1</sup>g<sup>-1</sup>, 5 and 2.3 times greater than that of NZF and Ni<sub>0.1</sub>Zn<sub>0.9</sub>FC<sub>0.3</sub> catalysts. On the H<sub>2</sub> evolution, the effects of process variables such as irradiation period, catalyst dose, and sacrificial reagents are investigated. The N<sub>0.4</sub>Z<sub>0.6</sub>FC<sub>0.3</sub> H<sub>2</sub> production rate for successive cycles showed strong stability and reusability. The research also deduces the photocatalytic mechanism of water splitting using the Ni<sub>x</sub>Zn<sub>1-x</sub>Fe<sub>2</sub>O<sub>4</sub>/CNTs<sub>x</sub> photocatalyst.

**Keywords:** Carbon nanotubes, Hydrogen evolution, water splitting, Nickel zinc ferrite



## MAGNETO-DIELECTRIC INVESTIGATION OF NON-THERMAL TREATED TERNARY FERRITES FOR HIGH-FREQUENCY AND ENERGY STORAGE APPLICATIONS

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### ABSTRACT

The use of ferrites in energy storage devices and high-frequency applications has been extensively investigated over the last few decades. Applying non-thermal microwave plasma exposure under low-pressure conditions to the NiCuZnFe<sub>2</sub>O<sub>4</sub> series can enhance their magnetization and dielectric properties. This research provided non-thermal microwave plasma exposure to NiCuZnFe<sub>2</sub>O<sub>4</sub> synthesized by sol-gel auto-combustion method. Based on the X-ray diffraction investigation, the cubic spinel structure of the synthesized was confirmed, exhibiting an average crystallite size of 47.7 nm. Plasma treatment has also been observed to result in a slight increase in the porosity of samples. FTIR spectra also confirmed the formation of spinel ferrites by exhibiting strong bands in the range 450-700 cm<sup>-1</sup>. SEM micrographs demonstrated agglomerated particles for pristine and plasma-treated ferrites caused by magnetic interactions. Moreover, a decline in particle size was also witnessed due to plasma treatment. From VSM investigations, it is conspicuous that plasma exposure significantly enhanced saturation magnetization and remnant magnetization. The saturation magnetization exhibited by plasma-treated ferrites is roughly 65% higher than pristine ferrite samples. A prominent alteration in dielectric characteristics of ferrites is also observed with better response to electromagnetic waves. All experimental findings suggested that plasma exposure can enhance the dielectric and magnetic features of ferrites; consequently, they can be potential candidates for high-frequency and energy storage applications.

**Keywords:** Ferrites, Non-thermal plasma, magnetization, energy storage, high frequency



## ROLE OF PSYCHROMETRIC CHART IN DESIGNING OF AIR CONDITIONING SYSTEMS

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### ABSTRACT

A Psychrometric chart is used to design winter and summer air conditioning by analyzing different air conditioning processes of humidification, dehumidification, heating and cooling processes. It helps in calculating and analyzing the work and energy transfer during various air conditioning process. The moisture holding capacity of the air depends on the dry bulb temperature and relative humidity. Warm air can hold more moisture than cold air and humidification with steam or water spray will increase the humidity ratio and relative humidity. It helps us to study the dependence of dry bulb temperature, wet bulb temperature, dew point temperature, relative humidity and humidity ratio on the comfort air conditioning.

**Keywords:** Psychrometric chart, Air conditioning, Comfort, Humidity, Temperature



## PREVENTIVE MAINTENANCE REGIME OPTIMIZATION BASED ON THE MODELING OF A COMPLEX ELECTRICAL SYSTEM CONSIDERING THE RELIABILITY

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### ABSTRACT

The static synchronous compensator is increasingly being used in electrical networks due to its economical benefits. The purpose of this study is to offer a strategy for compensating reactive energy by optimizing a complex electrical system maintenance routine based on reliability. The complexity of electrical system architecture is only one aspect of its complexity; the electrical network and interactions with reactive energy compensators (STATCOM) are also critical. Bayesian networks are used to solve this complexity constraint and evaluate the time-variant dependability of an electrical system. The probabilistic technique includes a global cost that accounts for additional charges associated with system operational uncertainty in order to maximize the electrical system's preventative control interval. The discovered results can be used to improve the performance of the electrical system availability.

**Keywords:** Reliability, Maintenance, Electrical system, Optimization, BNs.



## THE INFLUENCE OF ENTREPRENEURSHIP AND CREATIVITY IN EDUCATION

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### ABSTRACT

It is believed that entrepreneurship and creativity are two essential elements in education that can significantly impact the personal and professional growth of students. Thus, these two terms are really important. This study has been carried out in a private university and it is aimed to examine whether the students are aware of these terms or not. To meet the aim of this research, a method of qualitative research was carried out. The study group was comprised of 25 foreign language department university students. The result of the research indicated that entrepreneurship helps students to develop an entrepreneurial mindset, which involves developing the skills and mindset necessary to start, manage, and grow a successful business. By learning the principles of entrepreneurship, students can learn to think critically, solve problems, and make decisions that can be used in a variety of contexts, and therefore creativity helps students learn to use their imagination and innovate. which are essential for success in today's rapidly changing world. On the other hand, by promoting creativity, students can learn to think creatively and produce original answers to challenging issues. Additionally, it has been discovered that students can become aware of innovation and creativity by encouraging an entrepreneurial and creative spirit in both classrooms and outside the classroom.

**Keywords:** Creativity, Entrepreneur, Entrepreneurship, Education, Innovation



## DEVELOPMENT OF AN APPLICATION WITH HYPERPARAMETER FLEXIBILITY FOR PREDICTIVE MODELING

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### ABSTRACT

In recent years, predictive modeling has become an essential tool in fields as diverse as finance, healthcare and marketing. The accuracy and performance of these models largely depend on the selection and optimization of hyperparameters. This study aims to develop an interface with hyperparameter flexibility to improve the user experience and increase the effectiveness of predictive modeling. The proposed application allows the user to seamlessly load datasets, select relevant features and target variables, partition data for training and testing and optimize the parameters of the methods. The methods included in the application are Long-Short Term Memory, Gated Recurrent Unit (GRU), Recurrent Neural Network (RNN), Auto-Regressive Integrated Moving Average (ARIMA), Light Gradient Boosting Machine (LightGBM) and Support Vector Machine (SVM). The application enables the generation of predictive models based on the selected target variable. It also facilitates the comparison of the predicted values with the actual values, calculation of error metrics and visualization of the fit of the predicted values along with the actual values. Overall, with the flexibility of hyperparameters, the proposed interface fulfills the need for a comprehensive and efficient platform for developing and evaluating predictive models. It streamlines the process, improves the user experience, and enables users to tap into the full potential of predictive modeling in their field.

**Keywords:** Predictive Models, Hyperparameter Flexibility, Machine Learning.



## PHYLOGENETIC ANALYSIS OF CHICKEN INFECTIOUS ANAEMIA VIRUS ISOLATES FROM COMMERCIAL AND BACKYARD CHICKENS IN LIBYA

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### ABSTRACT

The genus *Gyrovirus* of the family *Circoviridae* is home to the chicken infectious anaemia virus (CIAV). This naked virus's 2.3 kb negative polarity circular single-stranded DNA genome has icosahedral symmetry and three partially overlapping genes called VP1, VP2, and VP3. Chicken infectious anemia, an immunological condition that affects poultry, is brought on by CIAV. CIAV is a complex clinical diagnosis since it frequently manifests in its lesser forms and goes undiagnosed. Serological assays can be used as a standard diagnostic tool to isolate and identify the virus. This study's objective was to analyze the gene CIAV in DNA taken from samples of broiler breeders' thymus, liver tissues, and eggshell membranes, as well as from free-range chickens housed in various breeding facilities in Libya. Using the technique, the viral genome was found in all sixteen field samples from birds with presumed immunosuppressive symptoms. Phylogenetic analysis of the CIAV-positive sample should also be done. The findings indicated that CIAV was present in all of the examined birds. Five amplicons these sub-genomic DNA products were discarded as too short for further analysis. Eleven amplicons from the CIAV positive material were chosen for sequencing and phylogenetic analysis, where it was discovered that there were no changes between the samples. The acquired sequences were compared to samples from different phylogenetic-examined isolates from diverse regions worldwide. The sequencing of the amplicon allowed it to be determined that the Libyan field strains of CIAV are members of the same nucleotide-level clade (Cluster III). The results of this investigation proved that CIAV continues to exist in commercial and backyard chicken flocks across the country. VP1 nucleotide sequence-focused phylogenetic analysis revealed that all Libyan isolates formed a cluster and shared high similarity (97%) with genotype B reference strains.

The findings demonstrate that field strains of the virus circulate in broilers, broiler breeders, and free-range flocks, perhaps damaging their immune systems. This study is the first to focus on the genetic characterization of field strains of CIAV in Libya.





## CHALLENGES OF RAISING CARP FISH IN LABORATORY ENVIRONMENT

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### ABSTRACT

**Objectives:** Our aim was to raise for a long period of time common carps (*Cyprinus carpio* Linnaeus, 1758) for experimental purposes in specially designed recirculating aquaculture system adapted for limited space as laboratory is.

**Methods:** For the purposes of our project, we stocked common carps (*C. carpio*) of various sizes (3-5 g to 30-35 g). Fish arrived relatively healthy but over the time of raising began to show various symptoms of various diseases, e. g. parasitosis and bacterial infections. Diseases symptoms necessitated the usage of various medications for treatment.

**Results:** The poor health status and suffering of our experimental animals required medical treatments which forced time changes for planned experiments. Also, diseases made carp raising more expensive and complicated to carry out the experiments at all.

**Conclusions:** The raising of common carps in laboratory recirculating aquaculture system don't guarantee the lack of diseases. The origin of diseases could be different: by the delivered fish, by the



water, by the staff members, by the equipment, etc. For successful raising and better health status of carps in laboratory environment maybe could help probiotic feed additives.

**Acknowledgements:** This work was supported by the Bulgarian National Science Fund under Grant № KII-06-H 36/4.

**Keywords:** carps, aquaculture, diseases



## COVID-19 IN MASS MEDIA: UNDERSTANDING THE PERCEPTION OF VIRUS' ICON IMAGE AMONG OLDER ADULTS IN FRANCE

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### ABSTRACT

The COVID-19 pandemic has caused an important uproar across the world that elicited various spillover effects and cascading impacts in various domains. The main cause behind the global pandemic is the invisible nature of the SARS-CoV-2 virus having a major impact on people's emotions, cognition, and health-related behavior. In times of major crises, mass media remains the most important vector of information, beliefs, visual symbols, and codes of conduct to the population. The SARS-CoV-2 virus, about 120 nm in diameter, which is invisible to the naked eye is represented in mass media and popular science broadcasts as an image of a "ball with spikes". This visual image that has become one of the most popular symbols of the global pandemic is underpinned by complex social construction processes. The current research aims to investigate the impact of the COVID-19 "ball with spikes" mass media image on older adults, the most susceptible, not only to the virus but also to pandemic-related fake news. This research adopts an innovative mixed-methods design consisting of questionnaires (N=144), semi-structured research interviews, and pictographic measures (N= 26). The main results show that participants perceived the SARS-CoV-2 virus as the "ball with spikes" image, as represented by the



mass media, which became an icon of a dangerous, mysterious, and sometimes even aesthetic entity for participants. Hence, the present research demonstrates that mass media has a significant role in shaping individuals' perceptions and emotions of the news SARS-CoV-2 virus that may contribute to improving crisis management strategies in case of future pandemic outbreaks.

**Keywords-** COVID-19, SARS-CoV-2 virus, mass media, images, perceptions.



## THE IMPACT OF VARIOUS DISTANCE FORMULAE IN THE FRAMEWORK OF ANT COLONY OPTIMIZATION IN CONTINUOUS DOMAIN

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### ABSTRACT

Ant colony optimization (ACO) is an SI-based meta-heuristic optimization algorithm inspired by the foraging mechanism of ants. ACO is a prominent unconstrained optimization algorithm with combinatorial and continuous versions. Mathematical formulations of continuous canonical ACO is closely connected with the Manhattan distance formula. Variation in the formula changes the amount of exploration and exploitation that can be used for their balancing to avoid the premature convergence that will result in to innovate the ACO which is the main motive of the current research. In the research work, contrary to Manhattan distance formula used in the canonical version of ACO, we apply three different distance formulae namely Euclidian, Chebychev and Minkowsky in the frame work of ACO to check their impact on the algorithm in order to give clear road map to the community about the suitable selection of distance formulae according to the nature of the problems. This lead us to three different version of canonical ACO, denoted by ACO1 (Euclidian), ACO2 (Chebychev) and ACO3 (Minkowsky). In order to demonstrate the performance of these variants, CEC2019 unconstrained real-parameters test functions suite is used. The simulation results shows that ACO1 surpasses ACO2, ACO3 and also the canonical version ACO.

**Keywords:** Ant colony optimization, meta-heuristic, unconstrained optimization algorithm, combinatorial, exploration and exploitation



## INVESTIGATION OF MINOCYCLINE EFFECT ON EXPRESSION CHANGES OF *MMP-2* AND *MMP-9* GENES ON MCF7 BREAST CANCER CELLS

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### ABSTRACT

**Introduction:** Breast cancer (BC) is the most frequent malignancy in women and the leading cause of cancer-related deaths among women worldwide. Furthermore, distant metastases and invasion are the primary causes of patient BC deaths. Matrix metalloproteinases (MMPs) which degrade extracellular matrices, are considered to be associated with tumor invasion and metastasis. Therefore, MMPs, including *MMP-2* and *MMP-9* targeting, may be a promising therapeutic strategy for BC treatment. Minocycline has emerged as one of the most thoroughly researched tetracycline antibiotics with antitumor action. This study aimed to evaluate the minocycline effect on expression changes of *MMP-2* and *MMP-9* genes on MCF7 breast cancer cells.

**Material and method:** Human MCF7 cells were cultured in DMEM-F12 in T25 flasks. Twenty-four hours after seeding, the treatment with minocycline was started. Cells were detached with trypsin/EDTA 24 h after treatment. RNA was extracted from cells, and cDNA was synthesized. Ultimately, the expression of *MMP-2* and *MMP-9* genes was evaluated using real-time polymerase chain reaction.

**Result:** The expression of *MMP-2* and *MMP-9* genes was reduced in the minocycline-treated group compared to the control group.

**Conclusion:** *MMP-2* and *MMP-9* could be therapeutic targets for treating metastatic bone disease. Our research shows that minocycline can prevent the metastasis of BC in MCF7 breast cancer cells by downregulating *MMP-2* and *MMP-9* genes.

**Keywords:** Breast cancer, Metastasis, *MMP-2*, *MMP-9*, Minocycline



## EXPANDING OPTIONS FOR SNACKS AT SCHOOL WITH PASTRIES AND CAKES

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### ABSTRACT

The goal of this project is to study school students' interest in cakes and pastries as an additional option for snacks and meals that they can purchase from schools. It was discovered that due to several factors, there is only a limited variety of foods sold in the school canteens or cafes. This causes students to resort to consuming foods with less nutrients but higher in calories like chips and chocolate bars that can harm their health. Thus, this project seeks to resolve this issue by offering a range of healthy cakes and pastries for students to choose either as their snacks or main meals. Thus, a number of respondents will be randomly selected to identify their preferences and these data will be used to determine the types of cakes and pastries that will be available for purchase at the chosen school. Another instrument will be distributed to find out how well they respond to the food products.

**Keywords:** cakes, pastries, variety, nutrients