











# V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS



November 5-7, 2023 / Cappadocia-Nevsehir

**EDITOR**

**Prof. Dr. Halis BİLGİL**



**ISBN: 978-1-955094-56-6**



**[www.cappadociacongress.org](http://www.cappadociacongress.org)**

Copyright © Liberty

# V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

November 5-7, 2023 / Cappadocia-Nevsehir

## EDITOR

Prof. Dr. Halis BİLGİL

22.11.2023

by Liberty Academic Publishers

New York, USA

ALL RIGHTS RESERVED NO PART OF THIS BOOK MAY BE REPRODUCED IN ANY FORM, BY PHOTOCOPYING OR BY ANY ELECTRONIC OR MECHANICAL MEANS, INCLUDING INFORMATION STORAGE OR RETRIEVAL SYSTEMS, WITHOUT PERMISSION IN WRITING FROM BOTH THE COPYRIGHT OWNER AND THE PUBLISHER OF THIS BOOK.

© Liberty Academic Publishers 2023

The digital PDF version of this title is available Open Access and distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 license (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits adaptation, alteration, reproduction and distribution for noncommercial use, without further permission provided the original work is attributed. The derivative works do not need to be licensed on the same terms.

ISBN: 978-1-955094-56-6

[www.cappadociacongress.org](http://www.cappadociacongress.org)

# CONGRESS ID

## CONGRESS TITLE

V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

## DATE and PLACE

November 5-7, 2023 / Cappadocia-Nevsehir

## ORGANIZATION

IKSAD INSTITUTE  
iksadinstitute.org  
iksad.org.tr  
iksadyayinevi.com

## COORDINATOR

Gönül EDEŞLER  
Neslihan BALCI

**NUMBER of ACCEPTED PAPERS - 432**

**NUMBER of REJECTED PAPERS - 50**

## PARTICIPANTS COUNTRY

**Türkiye-204, ABD-1, Algeria-7, Azerbaijan-7, Bangladesh-9, Bulgaria-1, Canada-1, Chile-1, Egypt-2, Greece-1, Georgia-1, Hungary-3, India-44, Indonesia-59, Iran-8, Iraq-5, Italy-1, Kazakhstan-1, Kosovo-4, Lithuania-1, Macedonia-1, Malaysia-2, Mexico-2, Moldova-2, Morocco-16, Nigeria-14, Pakistan-16, Romania-4, Russia-1, Serbia-6, Slovakia-2, Spain-1, Tunisia-2, Ukraine-1, Vietnam-3**

V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

November 5-7, 2023 / Cappadocia-Nevsehir

(THE PROCEEDINGS BOOK)

<https://www.cappadociacongress.org>

## ORGANIZING COMMITTEE MEMBERS

Prof. Dr. Ahmet KAZANKAYA - Kirsehir Ahi Evran University  
Prof. Dr. Ramazan GAFARLI, Azerbaijan National Academy of Sciences  
Prof. Dr. Mahire HÜSEYNOVA - Azerbaijan State Pedagogical University  
Assoc. Dr. Ayşe ERKMEN, Gaziantep University  
Assoc. Dr. Osman Kubilay GUL, Cumhuriyet University  
Assoc. Prof. Dr. Mevlüt ALBAYRAK, Atatürk University  
Assoc. Dr. Yunus Emre TANSU, Gaziantep University  
Dr. Mustafa Latif EMEK, President of IKSAD  
Dr. Aygun MEHERREMOVA, Baku State University  
prof. Muntazir MAHDI, Pakistan University of Modern Languages  
prof. Dr. Mehmet Salih MERCAN, Bitlis Eren University  
Dr. Abbas KARAAGACLI, Giresun University  
Dr. Abuzer KALYON, Ankara Hacı Bayram Veli University  
Dr. Gülşen MEHERREMOVA, Azerbaijan University of Languages  
Dr. Murathan KEHA, Ataturk University  
Dr. Terane NAĞIYEVA, Azerbaijan State Pedagogical University

## SCIENCE COMMITTEE MEMBERS

Prof. Dr. Guguli Dumbadze- Batum Şota Rustaveli University  
Prof. Dr. Samir Ladacı- National Polytechnic School of Constantine, Constantine, Algeria  
Prof. Dr. German Martinez Prats- Universidad Juarez Autonoma de Tabasco  
Prof. Muntazir Mehdi, Pakistan University of Modern Languages  
Prof. Dr. Mehmet Salih Mercan, Bitlis Eren University  
Prof. Dr. Ramazan Gafarlı-Azerbaijan National Academy of Sciences  
Assoc. Prof. Dr. Betül Apaydın Yıldırım, Atatürk University  
Assoc. Prof. Dr. Maya Kupravisvili - Georgian Technical University, Georgia  
Assoc. Prof. Dr. Aparna Srivastava- Noida International University, India  
Assoc. Prof. Dr. Tamalika Sultana- Dhakka University, Bangladesh  
Assoc. Prof. Dr. Ayşe Erkmen, Gaziantep University  
Assoc. Prof. Dr. Osman Kubilay Gül, Cumhuriyet University  
Assoc. Prof. Dr. Mevlüt ALBAYRAK, Atatürk University  
Assoc. Prof. Dr. Yunus Emre Tansü, Gaziantep University  
Assist. Prof. Dr. Murat KIRANŞAN, Gümüşhane University  
Dr. Aygun Meherremova, Baku State University  
Dr. Abbas Karaağaçlı, Giresun University  
Dr. Abuzer Kalyon, Ankara Hacı Bayram Veli University  
Dr. Gülşen Meherremova, Azerbaijan University of Languages  
Dr. Murathan Keha, Ataturk University  
Dr. Terane Nagiyeva, Azerbaijan State Pedagogical University  
Dr. Ronen Harel-Peres Academic Center, Israel

Dr. Alina Solnyshkina - Oles Honchar Dnipro National University, Ukraine  
Dr. K.R. Padma - Sri Padmavati Mahila Visvavidyalayam Women's University  
Dr. Bhakta Bandhu Dash- ASBM University, India  
Dr. Gabriela Boangiu- Researcher, Ethnography Department, Institute For Socio- Human  
Researches "C.S.Nicolaescu-Plopsor", Craiova, Romania  
Dr. Nurmukhamed Kenzhegulov - Egyptian University of Islamic Culture Nur-Mubarak  
Dr. Ijaz Ahmad-Agronomy - Member Agricultural Association of Pakistan  
Dr. Pham Duc Thuan - Can Tho University, Vietnam  
Dr. Iosefina Blazsani-Batto -Romanian Language Institute, Bucharest, Romania  
Dr. Irina-Ana Drobot-Technical University of Civil Engineering, Bucharest, Romania  
Dr. Çağla Özbek, Toros University  
Dr. Elvan Caferov, Azerbaijan State Pedagogy University

# CONTENTS

AUTHORS	PRESENTATION TITLE	NO
Mohsen Askari Azam Samadi Rahim	REASSESSING BLOOM'S TAXONOMY IN THE ERA OF AI-DRIVEN ENGLISH TEACHING	1
Yeşim ÜSTÜN AKSOY	INVESTIGATION OF EARTHQUAKE AWARENESS, CURRENT SITUATION AND KNOWLEDGE LEVELS OF STUDENTS AGAINST EARTHQUAKE IN TURKEY AND CYPRUS	2-3
Ezgi TOKDİL	READING ECO-AWARENESS THROUGH NEW MEDIA: DIGITAL INTERVENTIONS TO THE CLIMATE CRISIS	4-23
Şenel GENÇ	THE EFFECTS OF MODERN ART MOVEMENTS ON WOMAN CLOTHING DESIGN IN THE 20TH CENTURY	24-25
Dicle YILDIRIM	REFLECTIONS OF MOTION GRAPHICS AND ANIMATIONS ON MUSEUM AND EXHIBITION DESIGN	26-27
Soner TOP Sait KURŞUNOĞLU Mahmut ALTINER Hüseyin VAPUR	PB RECOVERY FROM A Pb-Zn ORE BY GRAVITY SEPARATION METHOD	28-36
Ezgi ÖZLÜ Saliha ERENTÜRK	THE IMPORTANCE OF BIODEGRADABLE MATERIAL PRODUCTION AND EXAMINATION OF THE USAGE AREAS OF BIOPLASTICS	37-46
Gamze ERTAŞ Saliha ERENTÜRK	MEMBRANE PRODUCTION TECHNOLOGIES AND NEW TRENDS IN MEMBRANE PRODUCTION	47-54
Betül BUYUKKILIÇ ALTINBAŞAK Ghassan İSSA Nihal ZORLU Onur ALTINBAŞAK Özgün Öykü ÖZDEMİR Berrin Damla ÖZLER Ceyda CİNAN Sudenez YAŞAR Pelin YÜKSEL MAYDA	DETERMINATION OF ANTIBACTERIAL ACTIVITIES OF POMEGRANATE AND GRAPE SEED FIXED OILS IN COMBINATION WITH SOME ESSENTIAL OILS	55-56
Nükte TOPRAKSEVER	DEVELOPMENT OF A METHOD FOR THE EXTRACTION OF RHODAMINE B WITH DEEP EUTECTIC SOLVENT	57
Gamze ÖZGÜL ARTUÇ	SYNTHESIS, CHARACTERIZATION AND ANTIOXIDANT ACTIVITY OF SOME COUMARIN COMPOUNDS	58-59

Aygün DİLAVER Alper BİDECI	USE OF WOOD MATERIALS IN TRADITIONAL RURAL RESIDENCES IN ZONGULDAK ALAPLI SCALE	60-73
Halis BİLGİL Ümmügülsüm ERDİNÇ	AN IMPROVED FRACTIONAL GREY MODEL AND ITS APPLICATIONS	74-75
Aslı DENİZ ADIGÜZEL Beyda SADIKOĞLU	REFLECTION OF SYMBOLIC ELEMENTS ON CITY APPEARANCE: THE EXAMPLE OF NEVSEHIR PROVINCE	76-94
Emine AKCAN ŞİRİN	DEFINITION OF THE CONCEPTUAL DIMENSION OF CAPPADOCIA TROGLODYTE SPACES AND THE INVESTIGATION OF OWNERSHIP	95-96
Nergiz (ÖNEN) POYRAZ	INEQUALITIES ON SPACELIKE HYPERSURFACES OF A GRW SPACETIME	97
Nergiz (ÖNEN) POYRAZ	SOME INEQUALITIES ON LIGHTLIKE HYPERSURFACES OF A LORENTZIAN MANIFOLD WITH SEMI-SYMMETRIC NON-METRIC CONNECTION	98
Esin Candan DEMIRKOL	FROM TRADITIONAL DEVELOPMENT TO LOCAL DEVELOPMENT	99-104
Selçuk GÜN Olçay ÖLÇEN	THE IMPORTANCE OF CUSTOMER RELATIONSHIPS IN CIVIL AVIATION	105-106
Melek AKDOĞAN GEDİK	CLIMATE CHANGE AND FOOD SECURITY	107-108
Yelda BUGAY TEKGÜL Ismail GÜNEŞ	THE RUSSIA UKRAINE WAR AND IMPACTS ON GLOBAL AGRICULTURAL MARKETS	109-110
Ismail GÜNEŞ	NATURAL DISASTER AND POWERTY (POVERTY CAUSES DISASTERS AND DISASTERS CAUSE POVERTY)	111-112
Tuğçe APAYDIN Seçkin ARSLAN	SUSTAINABILITY ACCOUNTING AND COMPARISON OF SUSTAINABILITY REPORTS OF BANKS TRADED IN THE BIST SUSTAINABILITY INDEX	113-129
Muhammed Mustafa ÖZTÜRK Seçkin ARSLAN	AN EXAMINATION OF THE ACCOUNTING POLICIES PRESENTED IN BANK FINANCIAL STATEMENTS IN CONSIDERATION OF TURKISH ACCOUNTING AND FINANCIAL REPORTING STANDARDS (TMS/IFRS)	130-145

Yılmaz TOKTAŞ Eda BOZKURT Ali ALTINER	THE EFFECT OF EXCHANGE RATE ON TÜRKİYE'S IMPORTS OF MEDICINAL AND PHARMACEUTICAL PRODUCTS: DYNAMIC ASYMMETRIC CAUSALITY TEST	146-153
Jahirul Alom Zobayer Ahmed Fakhrul Islam Mahadi Hasan Monshi	CIRCULAR ECONOMY AND (UN)EMPLOYMENT NEXUS: A SYSTEMATIC REVIEW	154
Zobayer AHMED Azizul Haque	TOURISM SECTOR IN POST-PANDEMIC ERA: A BIBLIOMETRIC ANALYSIS AND RESEARCH AGENDA	155
Betül COŞKUN Alper ÇUHADAROĞLU	THE EXAMINATION OF THE RELATIONSHIP BETWEEN ATTACHMENT STYLES, EMOTION REGULATION DIFFICULTIES AND PSYCHOSOMATIC SYMPTOMS	156-157
İmanova Səbinə	MONUMENTS OF AZERBAIJAN ARE ON THE UNESCO WORLD HERITAGE LIST	158-159
Raşit Koray ERGÜN Hüseyin KÖSE İsmail BAYAR	INVESTIGATION OF THE FATIGUE AND TENSILE CHARACTERISTICS OF GLASS FIBER COMPOSITES ENHANCED BY HYBRID NANOPARTICLES	160-166
Numan ŞARLI Nihat ARIKAN Hamza Y. OCAK	ANTIFERROMAGNETIC SPIN ORIENTATION DEPENDENCE OF KONDO EFFECT IN CeSb <sub>2</sub>	167
Numan ŞARLI Nihat ARIKAN Hamza Y. OCAK	ANTIFERROMAGNETIC SPIN TRANSFORMATION IN THE MARTENSITIC TRANSFORMATIONS	168
Ayşe AKBULUT BAŞAR	INVESTIGATION OF THE IDENTITY-VISION RELATIONSHIP OF SETTLEMENTS WITH AN INDUCTIVE APPROACH: THE CASE OF NIGDE	169-170
Sümeyye ERTÜRK Mustafa Nail USLU	THE IMPORTANCE OF ACCURACY OF THREE- DIMENSIONAL DOCUMENTATION (POINT CLOUD) DATA	171-187
Abdulkadir ARSLAN Sevinç DEMİR Ahmet S. KALENDER Pınar ÇINAR	ADAPTATION STUDY OF VETIVER PLANT GROWN IN ANKARA(GÖLBAŞI) AGRO- ECOLOGICAL CONDITIONS	188-189
Abdulkadir ARSLAN Ahmet S. KALENDER Yusuf AYDOĞAN Sevinç DEMİR	ANKARA-GÖLBAŞI METROPOLITAN AGRICULTURAL CAMPUS: MEDICINAL AND AROMATIC PLANTS GARDEN	190-191
Yasemin GÜNDOĞDU Serap YİĞİT GEZGIN Hamdi ŞÜKÜR KILIÇ	NONLINEARITY OPTICAL PHENOMENON DEMONSTRATED BY FEMTOSECOND LASER BASED TiO <sub>2</sub> @Ag NANOPARTICLES	192-198

Hamdi ŞÜKÜR KILIÇ Serap YİĞİT GEZGİN Yasemin GÜNDOĞDU	FEMTOSECOND LASER ABLATION BASED Al <sub>2</sub> O <sub>3</sub> @Sn PRODUCTION AND NONLINEAR OPTICAL PROPERTIES	199-207
Serap YİĞİT GEZGİN Yasemin GÜNDOĞDU Hamdi ŞÜKÜR KILIÇ	NUMERICAL STUDY ON THE PHOTOVOLTAIC PROPERTY OF CIGS SOLAR CELL	208-217
Yaren ÖZSOY Deniz TAŞKIN Kadir AYDIN	ESTIMATION OF THERMAL PREFERENCE USING DEEP LEARNING METHODS AND PERFORMANCE IMPROVEMENT WITH MISSING VALUES	218-223
Neslihan AYDIN	GENERATING ELECTRICITY FOR A VILLA IN KARS PROVINCE LOCATED IN THE EASTERN ANATOLIA REGION USING SOLAR ENERGY	224-229
Sevda ALTAN YAĞCI Fırat KAÇAR	A SECOND-GENERATION VOLTAGE CONVEYOR (VCII) USING 32 NM FINFET TECHNOLOGY	230-239
Sevda ALTAN YAĞCI Fırat KAÇAR	LOSSY GROUNDED INDUCTANCE SIMULATORS REALIZATION WITH SINGLE CURRENT FEEDBACK OPERATIONAL AMPLIFIER	240-247
İsmail AKÇAY	BENTHIC NUTRIENT FLUXES FROM THE SEDIMENT OF MERSIN BAY	248
Zeynep ZAİMOĞLU Fatma Elçin ERKURT	CLIMATE CHANGE AND AGRICULTURE AND FOOD AS STRATEGIC INFRASTRUCTURE	249-253
Esra Zeynep COŞKUN Bırol KAYRANLI	CONTRIBUTIONS OF WATER RESOURCES TO THE CITY: EVALUATION POTENTIAL OF WATER RESOURCES OF AKSARAY PROVINCE	254-255
Sinem KIZILASLAN	A BIOMIMICRY PERSPECTIVE ON ENVIRONMENTAL PSYCHOLOGY	256-263
Hayri SERT Özlem GÜLLÜ	DETERMINATION OF HEAVY METAL LEVELS IN SEDIMENTS OF EŞEN STREAM	264-265
Muhammed Ali BUHAN Bahattin GÜLLÜ	GEOCHEMICAL PROPERTIES AND USABILITY AS AN INDUSTRIAL RAW MATERIAL OF PUMICE IN THE AROUND OF AKSARAY	266
Ayşe Hümeysra TATAR Süheyla TONGUR	DETERMINATION OF PHARMACEUTICAL SUBSTANCES IN HOSPITAL WASTEWATER	267-275
Shalala Huseynova Asaf Omarov	CROSS-SECTIONAL STUDY, AMR Salmonella spp. IN POULTRY PRODUCT IN AZERBAIJAN, 2023	276

Özlem ÖZDEN ÜZMEZ Burcu ŞİMŞEK UYGUN Aybüke KAYA Büşra SARI	ASSESSMENT OF AIR QUALITY IN A UNIVERSITY CAMPUS: LEVELS OF INORGANIC GASEOUS POLLUTANTS IN AIR AND HEAVY METALS IN STORMWATER	277-287
Özlem ŞİMŞİR Nezahat KÂNDEMİR	THE AWARENESS LEVELS OF PROSPECTIVE SCIENCE TEACHERS REGARDING MICROPLASTIC POLLUTION	288-289
Emrah AKAY Yakup CEBEÇİ	INVESTIGATION OF BENEFICIATION OF A LOW GRADE MANGANESE ORE	290-291
Hilal ÇİM Sümeyye K. YILMAZ Ayşen ÂLAMAN AĞAR	SYNTHESIS OF (E)-2-(((4- ETHOXYPHENYL)IMINO)METHYL)-4- METHYLPHENOL COMPOUND, CHARACTERIZATION BY SPECTROSCOPIC METHODS, 'IN- SILICO' ADME APPLICATIONS AND MOLECULAR DOCKING STUDIES	292-304
Özkan GÖRMEZ	TREATMENT OF GLASS FIBER PRODUCTION WASTEWATER BY SUBCRITICAL WATER OXIDATION METHOD	305-309
Zülfiye YARDIM Rufeyde Nur ÖZEN Esen BOZABA Banu Çiçek ARI Mustafa PAKSOY	DETERMINATION MORFOLOGICAL CHARACTERISTICS OF LOCAL INDUSTRIAL TOMATO GENOTYPES IN TÜRKİYE AND KYRGYZSTAN	310-311
Rufeyde Nur ÖZEN Banu Çiçek ARI Esen BOZABA Zülfiye YARDIM Mustafa PAKSOY	MORPHOLOGICAL CHARACTERIZATION OF INBRED TURKISH AND KYRGYZSTAN LOCAL TABLE TOMATO GENOTYPES	312-313
Esen BOZABA Rufeyde Nur ÖZEN Zülfiye YARDIM Banu Çiçek ARI Mustafa PAKSOY	DETERMINATION OF AGROMORPHOLOGICAL CHARACTERISTICS OF LOCAL CHERRY TOMATO GENOTYPES IN TÜRKİYE AND KYRGYZSTAN	314-315
Ayşe ULUSOY Atılğan ATILGAN	IMPORTANCE OF RAINWATER HARVESTING AND UTILIZATION POSSIBILITIES: BANANA GREENHOUSE	316-336
Ömer SAYIN İlknur GÜMÜŞ	EVALUATION OF AKSARAY PROVINCE SOIL ASSET AND AGRICULTURAL PRODUCTION POTENTIA	337-344
Esen Gül AK Kadir YILMAZ Ömer Faruk DEMİR	ACTIVE LIME CONTENT OF KAHRAMANMARAŞ PLAIN SOILS AND RELATIONS WITH SOIL PARAMETERS	345-355
Hatun BARUT Sait AYKANAT Havva AKÇA Emine ARSLAN Selim EKER	DETERMINATION OF OPTIMUM NITROGEN REQUIREMENTS OF SOME BREAD WHEAT VARIETIES IN TARSUS CONDITIONS	356-357

Hatun BARUT Sait AYKANAT Havva AKÇA Emine ARSLAN Selim EKER	DETERMINATION OF OPTIMUM PHOSPHORUS NEEDS OF SOME BREAD WHEAT VARIETIES IN TARSUS CONDITIONS	358-359
Esra YILMAZTÜRK Engin Gökhan KULAN Mehmet Demir KAYA	EFFECTS OF DIFFERENT BIOSTIMULANTS AND NITROGEN FERTILIZER FORMS ON YIELD AND YIELD COMPONENTS OF SUGAR BEET	360-367
Nezihe KOKSAL Rukiye KELEŞ Mehmet ŞAKAR Esra KÖK	VIABILITY AND GERMINABILITY OF POLLEN IN ZINNIA SPECIES	368
Nezihe KOKSAL Oguzhan EROGLU	DIFFERENT PRACTICAL USES OF SUCCULENT PLANTS	369
Ananda Majumdar	MEDITATION AS A TOOL FOR MIND -MOOD AND HEALTH	370-379
HINA ZAHOOR	LEVERAGING ARTIFICIAL INTELLIGENCE FOR GREEN HUMAN RESOURCE MANAGEMENT IN HEALTHCARE: A PARADIGM SHIFT	380-392
HINA ZAHOOR	ENVIRONMENTAL SUSTAINABILITY, A HOLISTIC VIEW FROM HEALTH SECTOR PERSPECTIVE	393-408
Aysun FIRAT Ayşegül ERCAN	THE ROLE OF MATERNAL SERUM 25- HYDROXY VITAMIN D LEVEL IN PREDICTING PRETERM BIRTH	409-410
Monika Bajaj Priya Choudhary Nandini Puri	QUALITATIVE ANALYSIS ON THE ROLE OF HAPPINESS AMONG SENIOR CITIZENS BY USING N-VIVO	411
Said EL RHABORI Samir CHTITA Fouad KHALIL	STRUCTURE AND LIGAND-BASED DRUG DESIGN APPROACHES TO DISCOVER NEW ANTI-CANCER AGENTS	412
Major Gheorghe GIURGIU Manole CÖJOCARU Georgeta SINIŢCHI	THE INFLUENCE OF PLANTS ON THE MICROBIOME IN PATIENTS WITH AUTOIMMUNE DISEASES	413
Harith Fathi Al-Aubaidy	ASSESSMENT OF NURSES' KNOWLEDGE REGARDING PREVENTION OF CENTRAL VENOUS CATHETER RELATED INFECTION	414
TAMILARASAN.R ELAVARASI.E	CARBAMAZEPINE _ANTIEPILEPSY DRUG	415
Nihat ARIKAN Selgin AL	FIRST PRINCIPLES INVESTIGATION ON PHYSICAL PROPERTIES OF Ac2AgIr	416-422

Nihat ARIKAN Selgin AL	STRUCTURAL, ELASTIC, ELECTRONIC, ANISOTROPIC, DYNAMIC AND THERMODYNAMIC PROPERTIES OF IrSi <sub>2</sub>	423-428
Marija Radmilović-Radjenović Branislav Radjenović Nikola Bošković	THREE-DIMENSIONAL MODELING OF RADIOFREQUENCY ABLATION THERAPIES	429
Branislav Radjenović Nikola Bošković Marija Radmilović-Radjenović	ON THE DESIGN OF SURGICAL ELECTRODES TO PREVENT SPARKING ENHANCED SKIN BURNS DURING ELECTROCAUTERY	430
M. S. Murshitha Shajahan D. Najumnissa Jamal Karthiga V	CONTROLLER DESIGN FOR THERMAL POWER PLANT IN TAMILNADU	431
Rajkumar Dewani Nirmala	THE MISSING PIECE OF EVOLUTIONARY PUZZLE: INTERACTIVISM	432-442
Kinza Zulfiqar Mehmoona Chaudhary Yasir Jamil Hafeez Anwar	STUDY OF CHROMIUM SUBSTITUTED COPPER GALLIUM OXIDE AS AN INORGANIC HOLE TRANSPORT MATERIAL (HTM) FOR PEROVSKITE SOLAR CELLS	443
Ali Raza Zulfiqar Saqib Shabbir Gulzar Hussain Hafeez Anwar	INVESTIGATION OF CR-MN CO- SUBSTITUTED BIFEO <sub>3</sub> - MULTIFERROIC	444
Konul Israfil gizi Hasanova	RHYTHMIC WORDS	445-450
Melike SOMUNCU	WORD CHOICES IN ATEBETU'L HAKAYIK 'THEORETICAL ANALYSIS'	451-456
Selçuk Hüseyin Gazi KARATAY	TREASURY TORCHING AND ITS CRITICISM IN TURKISH LITERATURE	457-462
Kevser SÖNMEZ	AS AN EXAMPLE OF A PERIOD NOVEL AND A DOCUMENTARY NOVEL, BASED ON AHMET AĞAOĞLU'S 'SERBEST FIKRA HATIRALARI' READING KEMAL TAHİR'S 'YOL AYRIMI'	463-469
Dilek ÇETINDAŞ	AN ATTEMPT TO RE-READ THE STORIES OF ÖMER SEYFETTİN IN TERMS OF MASCULINE ARCHETYPES	470-479
Özlem ÖZTOK	A REVIEW OF THE NOVEL KÜLLER	480-481
Sabanur YILMAZ	APPEARANCES OF DESIRE IN NOVEL NAMED ZEHRRA	482-483
Hakan ÜÇGÜN Egemen ALTINOK	ANDROID BASED MOBILE BABY HEALTH TRACKING APPLICATION	484-485
Hakan ÜÇGÜN Baki CAN	MVC BASED E-COMMERCE SITE IN HEALTHCARE: ECZANESEPETİ	486-487

Mehmet Akif BÜLBÜL	GROUNDWATER QUALITY ESTIMATION with STACKED AUTO-ENCODER and SOFTMAX CLASSIFIER	488-492
Timorshah Rahimi Muammer Akçay	SECURE NETWORK DESIGN AND SIMULATION USING CISCO PACKET TRACER	493-504
Abdullah Türker TOKU Teslime ÖZBAY	SHAPING THE FUTURE WITH ARTIFICIAL INTELLIGENCE, MACHINE LEARNING, AND THE INTERNET of THINGS (IoT): OPPURTUNITIES AND CHALLENGES	505-515
Esra ÖZATA ŞAHİN	ÇORUM CULINARY CULTURE WITHIN THE SCOPE OF GASTRONOMY TOURISM	516-517
Doğukan Ataberk KAVUT Bersu BAHTİYAR	SOCIOECONOMIC DETERMINANTS OF HAPPINESS: AN ANALYSIS FOR OECD COUNTRIES	518-519
Mustafa Kemal YAVUZYİĞİT	EXAMINATION OF EMPLOYMENT AND UNEMPLOYMENT RATES IN TURKEY AND SUGGESTIONS FOR SOLUTIONS TO THE UNEMPLOYMENT PROBLEM	520-521
Derya YÜCEL	TALENT MANAGEMENT IN DIGITAL TRANSFORMATION	522-527
Derya YÜCEL Rahmi YÜCEL	THE KEY TO COMPETITIVE ADVANTAGE: DIGITAL INNOVATION	528-534
Kerem KARABULUT	THE SOCIO-ECONOMIC VIEW OF ZENGEZUR CORRIDOR	535-541
Kerem KARABULUT	THE EFFECTS OF KARS TREATY ON TÜRKİYE-NAHCIVAN SOCIO-ECONOMIC RELATIONS	542-543
Namıka Elif KÜÇÜK	THE IMPACT OF DIGITAL TRANSFORMATION ON INTERNATIONAL TRADE	544-550
Talibov Famil Kamil	THEORETICAL APPROACHES TO MONETARY REGULATION ISSUES	551-552
Mahmut BALTACI	BIBLIOMETRIC ANALYSIS OF CAPPADOCIA AND TOURISM THEMED STUDIES	553-564
Safiye KARASU Selçuk KOÇ	AN ANALYSIS OF INEQUALITY IN THE DISTRIBUTION OF INCOME IN THE BALKAN COUNTRIES	565-566

Serdar YETİŞEN	RESEARCH ON PROMINENT TRENDS IN LOGISTICS 4.0	567-576
Serdar YETİŞEN	BIBLIOMETRIC ANALYSIS FOR SUSTAINABLE LOGISTICS RESEARCH	577-587
Alptuğ AKSOY Bilgen Gaye YALPA	THE INFLUENCE OF QUANTUM COMPUTING ON ORGANIZATIONAL DECISION-MAKING AND STRATEGY	588-589
Samet ÜNLÜ	REPRESENTATION OF CONSERVATIVE IDENTITIES IN THE MEDIA: "THE EXAMPLE OF THE SERIES KIZILCIK ŞERBETİ"	590-595
Mualla AKÇADAĞ	BIBLIOMETRIC LITERATURE REVIEW ON SALES MANAGEMENT IN MARKETING	596-610
Betül GARDA	THE EVOLUTION OF UNCONVENTIONAL TRENDS AND TRAVEL EXPERIENCES IN SPECIAL INTEREST TOURISM	611-619
Betül GARDA	EXPLORING AGRICULTURAL HERITAGE: AN EVALUATION OF AGRO-TOURISM POTENTIAL IN TURKEY	620-629
Ahmet KESKİN Yusuf Tayyip ÖZGÜL Z. Sude SARI Ceren ULUS M. Fatih AKAY	DEVELOPMENT OF A TEST SERVER ENVIRONMENT FOR MOBILE DEVELOPERS	630-635
Beytullah TOPÇU Rüveyda KERÇİN TABAR Aynur VEYSEL Z. Sude SARI Ceren ULUS M. Fatih AKAY	ELECTRICITY DEMAND FORECASTING USING TIME SERIES BASED DEEP LEARNING ALGORITHMS	636-640
Yusuf Ali KILIÇ Mustafa YENİAD	COMPARISON OF COMMAND AND CONTROL (C&C) SERVER TOOLS IN CYBERSECURITY REALM	641-646
Ashwan A. Abdulmunem	END POINT DETECTION OF SPEECH SIGNAL IN REAL TIME	647
Harman Singh Jaggi Mukesh Kumar	IMPORTANCE OF CHAT-APP FOR MANAGEMENT OF EDUCATION	648
MUHAMMAD FAISAL	HRIMS DATA CAN BE MOVED FROM ONLINE INTERFACE TO ONE MORE WEB-BASED INTERFACE BY SIMULATED INTELLIGENCE APPARATUSES EXPECTED FOR RELOCATION THE DATA A REVIEW BY DR FAISAL	649-650

MUHAMMAD FAISAL Rafia Bibi	SENTIMENT ANALYSIS ON AMAZON ITEMS IN PAKISTAN: A REVIEW BY DR FAISAL	651
John N. Hatzopoulos	QUALITY IN LIFE AND EXPLORATION	652-658
Fazıl KAYIKÇI	WORKING DECISIONS OF MOTHERS AFTER GIVING BIRTH	659-660
Fazıl KAYIKÇI	GENDER and WAGE GAP: German and Turkish cases	661-662
Fatma ÇOBAN KAYIKÇI	3D STABILITY LOSS ANALYSIS IN SINGLE- WALLED CNT COATED WITH TRANSITION MATERIAL	663-664
Özge KILIÇARSLAN	CROWDING PERCEPTION EFFECTS ON RE- VISIT INTENTION AND SATISFACTION	665
Rasool Bux Junejo Faiz Muhammad Shaikh Zubair Shaikh	PERFORMANCE EFFICIENCY OF DIFFERENT VARIETIES OF SUGARCANE : A CASE STUDY OF SYED KHURSHEED AHMED SHAH FARM	666
Rasool Bux Junejo Faiz Muhammad Shaikh Zubair Shaikh	IMPACT OF BAGASSE ASH AS A FERTILIZER ESSENTIAL FOR PLANT GROWTH OF SUGARCANE OF VARIETIES: A CASE STUDY OF SYED KHURSHEED AHMED SHAH FARM	667
Granit Baca Nail Reshidi	EXPLORING THE CORRELATION BETWEEN EMPLOYEE BENEFITS AND INTERNAL MARKETING STRATEGIES IN THE BANKING INDUSTRY	668
Aslam Khan	DIVERSITY, ABUNDANCE, RICHNESS AND EVENNESS OF POLLINATORS AND A CHECKLIST OF THE POLLINATORS CARRYING HOST PLANTS AT RAJSHAHI UNIVERSITY CAMPUS	669
Olufolake E. Adelokun Olamide Adekanola Surajudeen A. Omotosho	PERCEPTION OF RURAL YOUTHS TOWARDS VALUES UPHELD IN OSUN STATE NIGERIA	670
Jibrin, S. N. T. Kolawole-Jimoh Manta, I. B. Umaru, A. Adeyemi, G.	ATTITUDE OF UNDERGRADUATE STUDENTS OF SCHOOL OF AGRICULTURE TOWARDS AGRICULTURAL ACTIVITIES IN FEDERAL UNIVERSITY OF TECHNOLOGY MINNA, NIGER STATE, NIGERIA	671-677
Seitova Zhanat Adilbekovna Kadyrova Gulnur Makhsatkhanzyzy	THE ORIGIN OF BIOTOPONYMS AND ITS IMPACT TO THE SCIENTIFIC BRANCHES	678
Malihe Jahani Sedighe Jahani	A REVIEW OF THE IMPACT OF COBALT ON THE ENVIRONMENT	679
E. Ebru ONBAŞILAR Sakine YALÇIN	USAGE OF COFFEE HUSK AS A LITTER MATERIAL IN BROILER PRODUCTION	680-687
E. Ebru ONBAŞILAR Sakine YALÇIN	FOOT PAD DERMATITIS AS AN INDICATOR IN BROILER PRODUCTION	688-694

Sakine YALÇIN Suzan YALÇIN	EFFECTS OF DIETARY BETAININE ON MEAT QUALITY IN BROILERS	695-698
Tuğba AYDEMİR	FINDING EXACT TRAVELING WAVE SOLUTIONS OF THE GENERALIZED NONLINEAR SCHRÖDINGER EQUATION	699
Ferit YALAZ	A NEW SET OPERATOR VIA LOCAL CLOSURE	700-705
Funda BABAARSLAN Muhammed Emin ÇAYAR	ROUGH STATISTICAL CONVERGENCE OF DOUBLE SEQUENCES OF FUZZY NUMBERS	706-711
H. Fulya AKIZ Funda BABAARSLAN	SEQUENTIALLY CONVERGENCE IN IDEAL TOPOLOGICAL SPACES	712-718
M. Yamuna K. Karthika	LATTICES IN SAFE DATA TRANSFER	719-724
Prabhakar Rath Smita Rani Parija Kishan Gupta Amrita Senapati Shefali Ranjan Harsh Vardhan Kundan Kant Ganeswar Mahanta	OPTIMIZATION USING ROULETTE AND TOURNAMENT SELECTION IN MOBILITY MANAGEMENT	725-734
Sivaramakrishnan Monikandan V. Manikandan	GRAPHS WITH ENDVERTICES ARE VERTEX SWITCHING RECONSTRUCTIBLE	735
Arnob Saha Nazia Sultana	EVOLUTIONARY RELATIONSHIP BETWEEN SEVERAL IMPORTANT BRAIN INFECTING MICROORGANISMS IN HOMO SAPIENS: A PHYLOGENETIC ANALYSIS	736-745
Mujkan MEMMEDZADE	FORMS AND METHODS OF ADVERTISING IN MASS PHYSICAL EDUCATION, HEALTH AND SPORTS	746-749
Gizem KÖŞKER	LANGUAGE AND COMMUNICATION IN THE THEATRE OF THE ABSURD	750-754
Kübra Nur ÇALCALI Oktay BEKTAŞ	OPINIONS OF SCIENCE TEACHER CANDIDATES ON FLIPPED LEARNING	755-775
Savaş KARAGÖZ Şenol ORAKCI	AN EXAMINATION OF THE REPORT (1926) ON DARÜLFÜNUN (UNIVERSITY FOR PEOPLE) AND TENEVVÜR (VOCATIONAL TRAINING) COURSES SUBMITTED BY THE JOURNAL OF TEACHERS' UNION	776-787
Gafarova Parvin Muhamad	APPLICATION OF MODERN TEACHING METHODS IN HIGH SCHOOL STUDENTS	788-792

Ali Emre BİLİS Pınar ÖZGÖKBEL BİLİS	DISCLOSURE OF HIDDEN TRUTHS IN THE CONTEXT OF VIOLENCE AND SEXUALITY: YOUTUBE INFORMER VIDEOS	793-806
Betül ÇATAL	THE RIGHT OF ACCESS TO THE INTERNET IN HUMAN RIGHTS	807-812
Betül ÇATAL	THE RIGHT TO FREEDOM OF THE PRESS IN THE DIGITALIZATION PROCESS	813-818
Mert KOZAN	THE IMPORTANCE OF THE BATTLE OF HADRIANAPOLIS IN MILITARY HISTORY	819-820
Mert KOZAN	THE IMPACT OF GLOBAL CLIMATE CHANGE ON THE OSTROGOTHIC KINGDOM IN THE EARLY MIDDLE AGES	821-822
Kenan BEŞALTI	CHOOSING OF PLAN TYPES IN LATE ANTIQUITY CHURCHES	823-830
Mehmet Fetih YANARDAĞ Aşlı NİĞDELİOĞLU	WOMEN'S IDENTITY IN TURKISH NOVEL (2000 – 2010)	831-836
Hami AKMAN	COMMON IDIOMS IN THE DIALECT OF VAN KÜRESİN WITH AZERBAIJANI TURKISH- ADDITIONAL	837-838
Fatma BAŞAR	SEXUAL AND REPRODUCTIVE HEALTH RIGHTS IN DISASTERS	839-843
Fatma BAŞAR	NATURAL DISASTERS AND PREGNANCY: NURSING	844-846
Tamás Misik	SUSTAINABILITY IN EDUCATION AND RESEARCH OF ESZTERHÁZY KÁROLY CATHOLIC UNIVERSITY IN HUNGARY	847-851
Soukaina Bouaouda Salah Souabi Abdelaziz Madinzi Abdeslam Taleb Roukaya Bouyakhssas Abdelkader Anouzla Oussama Hartal Aysegül Pala	CHARACTERIZATION OF LEACHATE FROM THE MOHAMMEDIA-BENSLIMANE LANDFILL AND TREATMENT BY DECANTATION OF YOUNG, STABILIZED LEACHATE	852-853
Kiana Habibi Fariba Foroughi Masoumeh Sabokro	EVIDENCE OF PALEOCENE-EOCENE THERMAL MAXIMUM (PETM) ON CALCAREOUS NANNOFOSSILS IN THE PABDEH FORMATION, IZEH ZONE IN ZAGROS BASIN	854

Sadman Anjum Nusrat Jahan Sumaiya Jerin Tasnim Faijan Reza Azhar Mahmud Azmi Mohammad Matiuir Rahman	STANDARDIZATION OF CRYOPRESERVATION PROTOCOL OF SPERM OF INDIAN MAJOR CARP CATLA (CATLA CATLA): ENSURING ITS EFFICACY AND VIABILITY FOR FUTURE USAGE	855
Ivan Pavlovic Vlada Antic Igor Ucajev Bojana Ucajev Danijel Savić Vladimir Terzin	PREVALENCE OF EHRlichiosis IN PET DOGS IN BELGRADE AREA DURING 2022	856
Maiada M. Saad Hend M. Tag Heba M. A. Abdelrazek Zohour Nabil	CAT CLAW RESCUE SUBSTANTIA NIGRA DOPAMINERGIC NEURONS IN ROTENONE INDUCED PARKINSON'S IN MALE WISTAR RATS: ANTIOXIDANT AND ANTIAPOPTOTIC POTENTIAL	857
Saima Shaheen Nabila Sher Hafsa Zafar Kalsoom Tariq Sosan Rauf	EFFECT OF LIPID-BASED MULTIPLE MICRONUTRIENTS SUPPLEMENTATION IN UNDERWEIGHT PRIMIGRAVIDA PRE- ECLAMPTIC WOMEN ON MATERNAL AND PREGNANCY OUTCOMES: RANDOMIZED CLINICAL TRIAL	858-859
Gulnaz Begum Nabila Sher Kalsoom Tariq Bella Inayat Aiman Gul Imran	CORRELATION OF C-REACTIVE PROTEIN WITH SEVERITY OF PREECLAMPSIA	860
Sosan Rauf Nabila Sher Saima Shaheen Zarghuna Mashal Zafar	EFFECT OF DURATION OF USE OF COMBINED ORAL CONTRACEPTIVES ON SERUM LIPID PROFILES, FASTING BLOOD SUGAR, BLOOD PRESSURE AND BMI IN CHILD BEARING AGE WOMEN	861
Sakine YALÇIN E. Ebru ONBAŞILAR	PRODUCTION OF GOOD QUALITY SILK COCOON	862-868
Suzan YALÇIN E. Ebru ONBAŞILAR	MUSCLE FIBER CHARACTERISTICS OF SLOW- AND FAST-GROWING BROILERS	869-872
Suzan YALÇIN E. Ebru ONBAŞILAR	EFFECTS OF DIETARY PROBIOTICS ON EGG PRODUCTION AND EGG QUALITY CHARACTERISTICS	873-882
Tariq Al Kasif Azhar Mahmud Azmi Mizanur Rahman Shahinur Khatun Taiba Akter Laboni Ashekur Rahman Obaidur Rahman Yeamin Hossain	POPULATION STRUCTURE AND STOCK STATUS OF BADIS BADIS IN A WETLAND ECOSYSTEM (NW BANGLADESH): INSIGHTS FROM NEW RECORDED MAXIMUM LENGTH	883-884
Azhar Mahmud Azmi Tariq-Al-Kasif Mizanur Rahman Shahinur Khatun Taiba Akter Laboni Ashekur Rahman Obaidur Rahman Yeamin Hossain	A STUDY ON POPULATION STRUCTURE AND STOCK STATUS OF PILA SCUTATA IN A WETLAND ECOSYSTEM: THE FIRST INSIGHTS IN NW BANGLADESH	885-894

V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

November 5-7, 2023 / Cappadocia-Nevsehir

(THE PROCEEDINGS BOOK)

<https://www.cappadociacongress.org>

Fatima-Zahra Mahir Hamid Zouggari Abdelaziz Ait Addi Abdallah Albourine	FACILE ELABORATION OF ARGININE-FUNCTIONALIZED PANI@GRAPHITIC CARBON NITRIDE FOR EFFICIENT REMOVAL OF HEXAVALENT CHROMIUM	895
Hassane BOUDAD Atman Adiba Anas Hamdani Mentag Rachid El Fazazi Kaoutar Jamal Charafi Abdelmajid Haddioui	EVALUATION OF PHYSIOLOGICAL AND VEGETATIVE RESPONSES OF APPLE TREES TO THERMAL STRESS	896-897
Luca Quaranta Piera Di Marzio Paola Fortini	THE USE OF THE PLANT FUNCTIONAL TRAITS (PFTS) FOR THE EVALUATION AND MONITORING OF THE HEALTH STATUS OF OAK FORESTS IN CENTRAL ITALY	898
Fani Alviyanto Meti Rahma Saniagi Istikomah Dwi Lestari Ade Gunawan	ISLAMIC MUTUAL FUNDS IN INDONESIA	899-905
Meike Ardhana RESWARI Hendri Hermawan ADINUGRAHA	CHARACTERISTICS OF ISLAMIC BANKING STYLE BUY	906
Arina SAFITRI Hendri Hermawan ADINUGRAHA Nadhifatuz ZULFA	IMPLEMENTATION OF AL - QUR'AN EDUCATION LEARNING IN SHAPING RELIGIOUS BEHAVIOR IN CHILDREN AT TPQ AL – UTSMANI	907
Rossidah Rihadataul Aisi Rina Tri Astuti Anggi Permatasari Triana Dani Maulana	THE EXISTENCE OF ISLAMIC ECONOMICS AND ECONOMIC PRACTICES DURING THE TIME OF THE PROPHET MUHAMMAD	908-912
Nur Avihani Jainul Arifin	DEVELOPMENT OF INTERACTIVE MULTIMEDIA SKILLS IN SOCIAL SCIENCE TO IMPROVE STUDENTS' SOCIAL LITERACY IN THE 21ST CENTURY	913
Augasta Eka Rasa Putra Hendri Hermawan ADINUGRAHA	ENDORSEMENT USES INFLUENCERS AS MARKETING MEDIA VIA INSTAGRAM SHARIA ECONOMIC LAW PERSPECTIVE	914
Diana Zalfanur Erna Wijayanti Ega Vivia Fatikhah Ade Gunawan	UNDERSTANDING ISLAMIC INSURANCE IN ISLAMIC FINANCE (THEORITICAL FOUNDATIONS AND LITERATURE ANALYSIS)	915-926
Fatih DURUR Meryem TURGUT	EVALUATION OF HEALTH SYSTEM PERFORMANCE OF G7 COUNTRIES	927-932
Ferda ALPER AY Feyza OZAN	EVALUATION OF ONLINE LEARNING READINESS AND E-LEARNING ATTITUDES OF HEALTH MANAGEMENT DEPARTMENT STUDENTS	933-941

Haldun DUMAN Didem SALOĞLU DERTLI	AFTER THE 6 FEBRUARY 2023 KAHRAMANMARAS EARTHQUAKES, AN OVERVIEW OF TURKEY'S DISASTER MANAGEMENT SYSTEM AND SUGGESTIONS FOR IMPROVEMENT	942-943
Hande ÖNGÜN YILMAZ Kevser KARLI	OPTIMUM NUTRITION DURING PREGNANCY	944-954
Kevser KARLI Hande ÖNGÜN YILMAZ	NUTRITION AND COGNITIVE DEVELOPMENT IN INFANCY AND CHILDHOOD	955-962
Hatice YILDIRIM Demet GÖZAÇAN KARABULUT	PHYSICAL ACTIVITY IN CHRONIC OBSTRUCTIVE LUNG DISEASE	963-967
Hatice YILDIRIM Demet GÖZAÇAN KARABULUT	REVIEW OF GRADUATE THESIS INCLUDING TELEREHABILITATION BASED RESPIRATORY ASSESSMENT OR TRAINING IN THE FIELD OF PHYSIOTHERAPY AND REHABILITATION IN TURKEY	968-972
Gökçe KARTAL Tuğçe Gülnihal ALUMUR Dilan ÇOLAK Gönül ERTUNÇ GÜLÇELİK	THE EFFECT OF COGNITIVE TASK- ORIENTED TELEREHABILITATION ON BALANCE AND SELECTIVE ATTENTION IN GERIATRIC INDIVIDUALS	973-974
Ebru TEKİN Fatma ÜNVER Sibel KARACAOĞLU Büşra Nur ORHAN	INTER-RATER RELIABILITY OF THE QUALITATIVE ANALYSIS OF THE ONE-LEG SQUAT TEST IN ADOLESCENT ATHLETES	975-979
Fatma ERGÜN	COMPARISON OF BIOCHEMICAL ACTIVITIES IN LEAF PARTS OF ALLIUM CEPA L. VARIETIES GROWN IN THE SAME ENVIRONMENT	980-986
Evin İSAOĞLU F. Demet AYKAL Meltem ERBAŞ ÖZİL	RESEARCH ON FINDING DIRECTIONS FROM ERGONOMIC PRINCIPLES IN CORPORATE CLOTHING STORES DESIGNS: THE EXAMPLE OF THE SAME COMPANY'S CLOTHING STORES IN SIRNAK /SILOPI AND DIYARBAKIR	987-1003
Uğur Eren YASAK Hikmet Selim ÖKEM	VIRTUAL REALITY AS A TOOL IN EMERGENCY EVACUATION EXPERIMENTS	1004-1005
Çiğdem BILGEN	THE GREAT CONTRIBUTION OF THE MUSEOLOGY LAW NO. 2530 TO THE DEVELOPMENT OF TURKISH CONSERVATION HISTORY	1006-1019
Hakan ERDEM Fatma Nur ŞAHİN	EFFECT OF FIRE ON THE SHEAR STRENGTH OF REINFORCED CONCRETE BEAM	1020-1026

Talha SARIÇI Rümeysa Tuğba ÖZCAN	AKÇADAĞ/MALATYA EXAMPLE IN ASSESSMENT OF BEARING CAPACITY AND LIQUEFACTION POTENTIAL USING GEOGRAPHICAL INFORMATION SYSTEMS	1027-1038
Muhammet ÇINAR	IMPROVEMENT OF GEOTECHNICAL PROPERTIES OF KAHRAMANMARAS CLAY SOIL WITH AFŞİN-ELBİSTAN FLY ASH AND BLAST FURNACE SLAG	1039-1040
Abdoulaye Billo DIALLO Hasan ÇINAR Rafet YAPICI Ömer İNCEBAY	MIXED-FLOW HEART-ASSIST PUMP DESIGN AND INVESTIGATION OF PERFORMANCE WITH THE HELP OF CFD	1041-1050
Metehan IŞIK Nagihan BİLİR SAĞ	MAIN PRINCIPLES AND RECENT DEVELOPMENTS ON MAGNETIC REFRIGERATION TECHNOLOGY	1051-1061
Ali Can YILMAZ Özlem ERDEM	TRIBOLOGICAL BEHAVIOR OF FLY ASH-GLASS FIBER DOPED BRAKE PADS: AN EXPERIMENTAL STUDY	1062-1068
Ngo Nam Phuong Mai Duc Nghia Tran Xuan Thanh Phung Manh Cuong	A STUDY ON THE INFLUENCE OF THE ROTATING PROPELLER ARRANGED ON THE WING OF AN AIRPLANE ON THE LIFT COEFFICIENT OF AN AIRPLANE MODEL USING SOLAR ENERGY	1069-1074
Aniekan Essienubong Ikpe Jephtar Uviefowwe Ohwoekevwo Michael Okon Bassey	COMPREHENSIVE SURVEY ON THE EVOLUTION AND PRINCIPLES OF TUNGSTEN INERT GAS WELDING PROCESS: A PANACEA TO METAL JOINING	1075-1096
Khalid Elatife Abdellatif El Marjani Zakaria Lafdaili	OPTIMIZING TURBINE EFFICIENCY IN WAVE ENERGY CONVERSION: A STUDY OF GEOMETRIC PARAMETERS AND PERFORMANCE ENHANCEMENT	1097
ANBUMALAR Veerapathiran Yuvaraja Balamurugan Kavin Mugesh Balu Bala Subramanian Sethuram	DESIGN OF ELECTRIC CAR FOR WHEELCHAIR PATIENTS	1098
Mr.B.Jegan, M.E. K.Sibi Chakaravarthy A.Mohammed Arsath S.Deva Rajan	DESIGN OF SMART DUSTBIN	1099
Mohd Usman Mohd Siddique Azim Ansari Yogeeta O Agarwal	DISCOVERY OF QUINAZOLINONE DERIVATIVE WITH DUAL INHIBITORY ACTIVITY AGAINST CDK4/CYCD1 AND TUBULIN POLYMERIZATION FOR SIMULTANEOUS TARGETING OF TWO PATHWAYS IN CANCER THERAPY	1100
C. Ottone S. García D. Maureira L. Wilson	BIOCATHODES FOR ENZYMATIC CO <sub>2</sub> REDUCTION	1101-1102

Anwar Abbas Muhammad	THE EXTENT TO WHICH FEMALE STUDENTS IN THE CHEMISTRY DEPARTMENT AT THE COLLEGE OF SCIENCE FOR GIRLS POSSESS SCIENTIFIC ETHICS	1103-1121
Y. El-Azizi H. Salhi A. Elouafi S. Ezairi A. Tizliouine	STRUCTURAL, MAGNETIC AND MAGNETOCALORIC PROPERTIES OF SIMPLE PEROVSKITE CaCrO <sub>3</sub>	1122
Montassar Barhoumi	HIGHER-ORDER TOPOLOGICAL ASYMPTOTIC FORMULA FOR THE ELASTICITY OPERATOR AND APPLICATION	123
Muhammad Sajid Hamid Akash Fatima Shahid Kanwal Rehman Shagufta Kamal	ASSOCIATION OF TCF7L2 GENE VARIATION WITH DYSLIPIDEMIA AND T2DM RISK IN THE POPULATION OF PUNJAB PROVINCE, PAKISTAN	1124-1125
Salam Bennour Abdelghani Bachir Cherif Samia Abdi	ESTABLISHMENT AND VALIDATION OF A RISK SCORE FOR THE EARLY PREDICTION OF COVID-19 SEVERITY	1126
Bennour Salam Bachir Cherif Abdelghani Abdi Samia	PREDICTION OF BODY FAT PERCENTAGE: DEVELOPMENT AND VALIDATION OF NEW ANTHROPOMETRIC EQUATIONS	1127
Fr. Baiju Thomas	PROMOTING INCLUSIVE EDUCATION ENSURES EDUCATION FOR ALL IN INDIA: A REVIEW STUDY	1128-1141
Fr. Baiju Thomas	PEACE EDUCATION PROMOTES A PATH WAY TO SUSTAINABLE DEVELOPMENT IN THE 21ST CENTURY INCLUSIVE SOCIETY	1142
Stephen Ayemwenre AIGBODUWA Wasiu Olayinka ODUGBEMI	ASSESSMENT OF APPROPRIATE INSTRUCTIONAL RESOURCES FOR IMPROVING TEACHING AND LEARNING OF BUILDING AND WOODWORK TECHNOLOGY TRADE IN IMO STATE TECHNICAL COLLEGES	1143-1149
Moses Adeolu AGOI Oluwakemi Racheal OSHINOWO Oluwanifemi Opeyemi AGOI	EXPLORING THE ROLE AND USE OF ICT IN LIFELONG EDUCATION AND ITS IMPLICATION ON SCHOOL MANAGEMENT	1150-1156
Desi SIANIPAR Sozanolo TELAUMBANUA	THE USE OF INTEGRATED CURRICULUM TO INTERNALIZE DIGITAL ETHICS ON LEARNERS IN CHRISTIAN RELIGIOUS EDUCATION	1157
Enobong Isaac Solomon Ukong Favour C. Uroko	HAVE WE LOST TOUCH WITH THE PROPHET AMOS'S WARNING? CHURCH LEADERS AND BLOOD MONEY RITUALS AMONG YOUTHS IN NIGERIA	1158

Caroline Akhras	GENERATION Z: POISED ON THE ACADEMIC CHATGPT BANDWAGON	1159
Dina Mardiana Umiarso	COMPARISON BETWEEN STATE AND PRIVATE UNIVERSITY STUDENT OF ADVERSITY QUOTIENT ON ONLINE LEARNING	1160-1168
Derya TEKİN Hatice ÖRNEK Derya BİRHAN	SOL-GEL SYNTHESIS OF TiO <sub>2</sub> NANOPARTICLES: SURFACE PROPERTIES AND PHOTOCATALYTIC ACTIVITY	1169-1170
Derya TEKİN Derya BİRHAN Hatice ÖRNEK	SYNTHESIS OF TiO <sub>2</sub> /PANI NANOCOMPOSITE CATALYST AND INVESTIGATION OF PHOTOCATALYTIC ACTIVITY	1171-1172
Ebru YILMAZ Sıla TOPÇU Halil ARSLAN Fatih ÇALIŞKAN	INVESTIGATION OF RADIATION SHIELDING PROPERTIES OF MONTMORILLONITE- FILLED POLYMER SPONGE COMPOSITE	1173-1180
Ebru YILMAZ Murat ZENGİN Halil ARSLAN Fatih ÇALIŞKAN	RESEARCH ON RADIATION SHIELDING PARAMETERS OF POLYURETHANE SPONGE COMPOSITE USED FOR INSULATION PURPOSES	1181-1188
Hüseyin KOCALAR Yücel GENÇER Doğancan CEYLAN	BORIDIATION OF HIGH ENTROPY CoCrFeNiZr ALLOY CONTAINING 0.5 Zr IN DIFFERENT TIMES	1189
Rabia DERTLİ Şenol EREN	DNA CODES FROM CYCLIC CODES OVER $F_4S_4$	1190-1196
Melis ALPASLAN TAKAN Emine AKYOL ÖZER Tuğba SARAÇ	A MIXED-INTEGER MATHEMATICAL MODEL FOR THE VEHICLE ROUTING PROBLEM MINIMIZING VEHICLE RENTAL, EARLY AND LATE SERVICE COSTS	1197-1204
Raziye Sümeyye MUŞTU Mustafa YILDIRIM	ON KENMOTSU MANIFOLDS WITH SCHOUTEN-VAN KAMPEN CONNECTION	1205
Tunçar ŞAHAN	HOMOTOPY OF CROSSED MODULE MORPHISMS IN THE CATEGORY OF GROUPS WITH OPERATIONS	1206
Tunçar ŞAHAN Ali AYTEKİN	ISOCLINISM AMONG CAT1-GROUPS	1207-1213
Nazmiye ALEMDAR Vildan PUSMAZ	N-SOFT TOPOLOGICAL SPACES	1214
Murat BABAARSLAN Ahmet SUNGUR	LOXODROMES AND GEODESICS ON ROTATIONAL SURFACES IN PSEUDO- ISOTROPIC SPACE	1215-1223

V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

November 5-7, 2023 / Cappadocia-Nevsehir

(THE PROCEEDINGS BOOK)

<https://www.cappadociacongress.org>

Haci ATAŞ	REBELLION OF HORASAN GOVERNOR YAZİD B. AL-MUHALLAB AGAINST THE UMMAY STATE	1224-1236
Tufan ÖZTÜRK	TREATMENT OF TURKISH TRADITIONS, CUSTOMS AND BELIEFS IN ATIF YILMAZ'S CINEMA	1237-1244
Şafak KOÇAK AL	IN THE CONTEXT OF ALEVİ-BEKTASHI TRADITION IN UŞAK, WITH A SHORT ARMED HACİM SULTAN	1245-1253
Duygu Alp BALTAKESMEZ Samet MISİR	A TRADITIONAL TEA (MILK TEA/ KALMYK TEA)	1254-1255
Sanem BERKÜN Oğuzhan AYAZ	DIGITALIZATION AND E-MUNICIPALITY IN LOCAL GOVERNMENTS IN TURKEY	1256-1267
Seda SEVİNÇ CİLASUN	A NEW INSTRUMENT OF RUSSIAN FOREIGN ENERGY POLICY: THE RUSSIAN ENERGY WEEK INTERNATIONAL FORUM	1268-1269
Seda BALKAN	VISUAL AND TYPOGRAPHIC DESIGNS IN MEDIEVAL MANUSCRIPTS	1270-1277
Rana Rahimi Noureddin Yousofi	A METHODOLOGICAL SYNTHESIS OF IJLTR AND SSSLT: METHODOLOGICAL TRANSPARENCY UNDER THE SPOTLIGHT	1278
Manoj Kumar Bhatnagar Rina Parmar Dharmendra Kumar	FROM THE DEPTHS OF TIME: UNEARTHING THE COPPER HOARD ARTIFACTS OF SINAULI – A REVIEW	1279-1290
Borivoje Baltezarevic	EMBRACING THE UNREAL: ALIENATION AND AUTHENTICITY IN VR-BASED RELATIONSHIPS AND COMMUNITIES	1291-1293
Natela Borisovna POPKHADZE	READERS ARE VICTIMS OF ABUSE OF HISTORY OF ESPECIALLY ESTIMATED GOOD ETHNIC ANCIENT HEROES (KING OF ALA-KOLKHETI AND HIS DAUGHTER MEDEIA THAT BRILLIANTLY RULED KINGDOM MEDIA	1294-1295
FÖLDVÁRI, Sándor	THE PARADIGM OF “CONFESSIONALIZATION” IN THE INTELLECTUAL HISTORY OF THE EARLY MODERN EUROPE	1296-1297
Irma-Susana Carbajal-Vaca	ECOMUSICOLOGICAL PEDAGOGY: MEXICAN COMPOSERS IN ACTION	1298-1306

Isaac Namme-Galindo	SOUND QUALITY ENHANCEMENT: DEVELOPMENT OF TECHNIQUE AND METHODOLOGIES FOR ARTISTIC MUSIC PERFORMANCES	1307-1311
Lisbet Novinda Putri Thio Artha S Sarjani Sidauruk Susi Rio Sonia Febriola Delia Hafsari Alvin	SEXUAL CRIME AGAINST CHILDREN: A HUMAN RIGHTS PERSPECTIVE	1312
Heppy Wajongkere Akhmad Atmaja Riyan Tiantoro Putra Ray Sobar Afdal Bondan Manikomoto Muhammad Abdul Algerya Steely	PRE-CONTRACTUAL IN NATIONAL LEGAL SYSTEMS RELATED TO INTERNATIONAL AGREEMENTS	1313
Elia Juan Markus Roni Prima Panggabean Albertus Eko Kuswinoto Gabriela Winda Irene Tobing Yuliana Minar Puspitasari Siregar Riyan Franata Naga Saksi Uci Iffatria Nopiza	COMPARISON OF INDONESIAN AND SEVERAL COUNTRIES ABROAD REGARDING INTERFAITH MARRIAGE	1314
Christar Arstilo Rumbay Herry Pasrani Mendrofa Saut Horas Tamba Freddy Yosia Tampubolon Dinda Wigrhalia Banurea Dila Sari Dirgayana Novy Saputra Ricki Pratama Putra	DECOLONIZATION OF CONTRACT LAW: Embracing Cultural Emic Values of Minahasan's Tradition in an Agreement	1315
Joseph Manik Richard Tommy Pantow Brahmantoro Pratama Hadi Karsono Kumala Rikonaldi Nainggolan Frances Simanullang Salomo Felix	MONEY LAUNDERING BY FOREIGN NATIONALS FROM CHINA WITH LOVE SCAMMING MODE IN INDONESIA	1316
ARSENI Igor	THE RIGHT OF FOREIGN CITIZENS TO ACCESS TO JUSTICE AND INTERNATIONAL JURISDICTION IN CASES OF COLLECTION OF ALIMONY	1317-1323
Royke Maringka Milton T. Pardosi Alvyn Hendriks	DEVELOPING GOD THROUGH EXPERIENCE: THE THEOLOGICAL THINKING DIVINATED BY KARL RAHNER	1324
Pratishtha Thakur Vinod Kumar	INTELLECTUAL PROPERTY RIGHTS	1325
TOMESCU Raluca Antoanetta	SALVAREA DE VIETI OMENEȘTI PE MARE ȘI COMBATAREA INTRODUCERII ILEGALE DE MIGRANȚI	1326

Deni Afero Nadia Khumairatun Nisa Pitojo Budiono Feni Rosalia Maulana Mukhlis	THE INFLUENCE OF VILLAGE-OWNED BUSINESS ENTERPRISES, VILLAGE ASETS, AND ORIGINAL VILLAGE INCOME ON INCREASING COMMUNITY WELFARE (Study of Village Communities in South Lampung Regency)	1327
Andika Feriyanta Ike Nurafni, Aldi Afrihadi Fifi Kusuma Jayanti Pitojo Budiyo	EFFECTIVENESS OF POLITICAL PARTY INFORMATION SYSTEMS (SIPOL) IN VERIFICATION OF POLITICAL PARTY ADMINISTRATION (Study on the Stages of the 2024 General Election at the General Election Commission of Bandar Lampung City)	1328
Aldi Afrihadi Fifi Kusuma Jayati Ike Nurafni Andika Feriyanta Pitojo Budiono	COMMUNITY SOCIAL CAPITAL AS A SUCCESS STRATEGY ACCELERATION AND EQUITABLE DEVELOPMENT IN JAMBI CITY (Study Of Bangkit Berdaya Jambi City social innovation program)	1329-1339
Fifi Kusuma Jayanti Aldi Afriadi Andika Ferianta Ike Nurafni Tabah Maryanah Pitojo Budiono	WAR OF POSITION STRATEGY OF COMMUNITY SELF-HELP ORGANIZATION (LKM) "SRIMELATI MANDIRI" IN MANAGING THE ENVIRONMENT (Study in Urban Village Sukamenanti Baru Sub-district Kedaton Bandar Lampung City)	1340-1349
Andika Purbakala Rona Aflah Rasyid Ridho Asa Syifatunisa Ari Darmastuti	CONFLICT MANAGEMENT STRATEGIES IN RESOLVING REGIONAL HEAD ELECTION DISPUTES IN 2020 (A Study At The General Election Commission Of Bandar Lampung City)	1350
Associate professor Hristina Runcheva Tasev	CYBERSECURITY POLICY MAKING: MACEDONIAN NATIONAL CYBERSECURITY STRATEGY AT A TURNING POINT	1351
Habibur Rahman Masrur Farjana Akther Niha	CLIMATE CHANGE IMPACTS ON LOCAL COMMUNITIES IN SYLHET, BANGLADESH: A COMPREHENSIVE ANALYSIS AND RECOMMENDATIONS	1352
Samuel Akpadiagha Etuk Ekaobong Akan Thomas	AUTONOMY OF LOCAL GOVERNMENT ADMINISTRATION IN NIGERIA: CHALLENGES AND PROSPECTS	1353
Alexander Nikitin	ELABORATING PRINCIPLES FOR THE CONTINUATION OF THE BROKEN ARMS CONTROL IN THE EAST-WEST RELATIONS	1354
Şevki Melih TEKAY Muammer GÖKBULUT	REDUCED DIMENSION STATE FEEDBACK ANFIS CONTROLLER DESIGN FOR QUADROTORS	1355-1367
Bilal COŞKUN Muammer GÖKBULUT	LQR BASED POSITION CONTROL OF SMSM WITH ANFIS TORQUE OBSERVER	1368-1379

Suleyman SISMAN Abdullah Ugur TOPAL Arif Cagdas AYDINOGLU	GIS-BASED MICROMOBILITY SITE SELECTION ANALYSIS FOR LOW EMISSIONS IN URBAN TRANSPORTATION: A CASE STUDY OF BIKE SHARE STATION	1380-1389
Abdullah Ugur TOPAL Suleyman SISMAN Arif Cagdas AYDINOGLU	DEVELOPING AN IMPLEMENTATION APPROACH FOR ELECTRIC VEHICLE CHARGING STATION LOCATION SELECTION FOR SUSTAINABLE URBAN TRANSPORTATION: THE CASE OF PENDIK AND TUZLA DISTRICTS	1390-1399
Gozde YILMAZ Sefa CELIK Sevim AKYUZ Aysen E. OZEL	CONFORMATIONAL AND MOLECULAR DOCKING ANALYSIS OF PERTUZUMAB MOLECULE, HAVING ANTITUMOR EFFECT	1400-1405
Özge KOÇDEMİR Sinem ÇEVİK	INVESTIGATION OF THE MECHANICAL BEHAVIOR OF ALUMINUM ALLOY PRODUCED FROM SCRAP MATERIALS UNDER THE EFFECT OF HEAT TREATMENT	1406-1414
Ali AKAY	MODELING OF A FIVE-PHASE PERMANENT MAGNET SYNCHRONOUS MACHINE IN MATLAB/SIMULINK ENVIRONMENT	1415-1426
Mehmet Ali KALLIOĞLU	INVESTIGATION OF ACTIVE UVB TIME PERIOD BETWEEN 64.14° N AND 35.54° N NORTH LATITUDES	1427-1433
Emre Can İNAN Gürcan SAMTAŞ	EFFECT OF CUTTING PARAMETERS ON SURFACE ROUGHNESS IN MILLING GGG40 CAST IRON	1434-1442
Özcan ERÇİN Serhat Orkun TAN	A THEORETICAL STUDY ON THE CALCULATION OF OPERATION TIME AND DISTANCE GAIN OF A SOLAR POWERED ELECTRIC VEHICLE	1443-1451
Mehmet Akif HAFIZOGLU Ahmet AKKUŞ Tahsin BOYRAZ	INVESTIGATION OF WEAR PROPERTIES OF MULLITE-CERIA-ZIRCONIA CERAMICS	1452-1460
Gizem FIRAT Veli DİLLİ Zafer ÖZCAN	RISKS OF COMPOSITE MATERIALS USED IN MILITARY REFUELING VEHICLES	1461-1469
Gizem FIRAT Veli DİLLİ Zafer ÖZCAN	USE OF COMPOSITE COMPONENTS IN TACTICAL WHEELED VEHICLES OVER 30 TONS	1470-1471
Ömer BİNGÜL	THE EFFECT OF STATIC STIFFNESS ON CREEP AND NVH PERFORMANCE IN ENGINE MOUNTS	1472-1477
Abdulvahap KILINÇ Özgür ŞENGÖR Mustafa BOZ	ACCELERATED TORSIONAL FATIGUE EVALUATION BASED ON STRAIN DAMAGE IN TWIST BEAM REAR SUSPENSION	1478-1485

V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

November 5-7, 2023 / Cappadocia-Nevsehir

(THE PROCEEDINGS BOOK)

<https://www.cappadociacongress.org>

Birtan GÜLER Ferruh ÖZTÜRK	ANALYSIS OF THE LOOSENING PROBLEM IN FASTENERS WITH EXPERIMENTAL DESIGN	1486-1489
Recep AKYUZ Çiğdem DINDAR Ekrem ALTUNCU Ozan DEMIRDALMIŞ	INVESTIGATION ON CAST IRON BRAKE DISC COATED BY ATMOSPHERIC PLASMA SPRAYING METHOD	1490-1495
Samet KÖSEMEN Gazanfer Kemal GÜL	THE EFFECT OF VERTICAL AND HORIZONTAL STRENGTH TRAININGS ON SPORTS PERFORMANCE	1496-1497
Mehmoona Chaudhary Kinza Zulfiqar Yasir Jamil Hafeez Anwar	INVESTIGATION OF Ga <sub>3</sub> Doped CuCrO <sub>2</sub> AS AN INORGANIC HOLE TRANSPORT MATERIAL (HTM) FOR PEROVSKITE SOLAR CELLS	1498
Youness Ighris Jamal Baliti Youssef El Guennouni Mohamed Hssikou Ahmed Boumezzough Yassine Bouhouchi	EFFECT OF HEATED CHIP POSITION ON NATURAL CONVECTION IN A PARTIALLY HEATED CAVITY USING THE LATTICE BOLTZMANN METHOD	1499
Jülide EDİRNE Merve ÖZTÜRK	A REVIEW OF THE POSITIVE IMPACT OF ARTIFICIAL INTELLIGENCE IN INNOVATIVE ARCHITECTURAL DESIGN SOLUTIONS FOR STUDENTS	1500-1509
Merve ÖZTÜRK	A STUDY ON THE USE OF IMMERSIVE TECHNOLOGIES FOR THE REPRESENTATION OF UNDERWATER CULTURAL HERITAGE	1510-1521
MUHAMMAD RIZWAN MUHAMMAD FAHAD TALHA RASHEED	ENHANCING ENERGY DISSIPATION IN STEEL FRAME STRUCTURES THROUGH SLIDING DAMPING TECHNOLOGY	1522
Kadda Maazouz	EXISTENCE OF SOLUTION FOR A DIFFERENTIAL EQUATION WITH ANTI-PERIODIC CONDITION VIA KATUGAMPOLA DERIVATIVE	1523
Djamel Berkane	ON THE IVIĆ'S CONSTANT	1524-1525
Ephesus O. Fatunmbi Nurudeen O. Alabi	DYNAMICS OF HEAT FLOW IN A MAGNETO-CASSON NANOFLUID OVER AN EXPANDING SHEET USING DARCY-FORCHHEIMER AND MASS FLUX MODEL	1526
Sakila Hanum Pramesti Hendri Hermawan ADINUGRAHA Muhammad SHULTHONI	GROWTH AND PRODUCTIVITY OF OYSTER MUSHROOMS	1527
Muhammad Arslan Ashraf Rizwan Rasheed	PHYTOREMEDIATION OF SALINE SOILS: A CRITICAL REVIEW	1528

V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

November 5-7, 2023 / Cappadocia-Nevsehir

(THE PROCEEDINGS BOOK)

<https://www.cappadociacongress.org>

Hiba YAHYAOU Nadia EL ALLAOUI Façal AOUJIL Majida HAFIDI Aziz AZIZ Khaoula HABBADI	RECENT ADVANCES IN CONTROLLING CROWN GALL DISEASE IN GRAPEVINE (Vitis Vinifera L.): STRATEGIES FOR SUSTAINABLE MANAGEMENT	1529-1530
Anouar Ben-loghfry Abderrahim Charkaoui	A REGULARIZED VERSION OF PERONA & MALIK MODEL INVOLVING CAPUTO TIME-FRACTIONAL DERIVATIVE FOR IMAGE DENOISING	1531
Stanislava Stateva	DEVELOPMENT OF METHODS AND TECHNOLOGIES FOR IN VITRO PROPAGATION AND STORAGE OF WILD PLANT SPECIES	1532
Rabia Ghaffar Qurat Ul Ain	AN ECOLOGICAL SURVEY OF WEEDS IN CICER ARIETINUM FIELDS OF PAKISTAN	1533
M.K.Ali Jafor Raihan Mirza Kanij Ferdows Jafirul Alam Nafisa Nawrin	EFFECT OF NITROGEN LEVEL AND APPLICATION TIMING ON GROWTH AND YIELD OF ONION BULB	1534-1549
Hiwa Weisi Maryam Salari	ON THE JOURNEY FROM COGNIZANCE TOWARD THRIVING: IRANIAN EFL TEACHERS' ENGAGEMENT IN REFLECTIVE PRACTICE AND PROFESSIONAL DEVELOPMENT: THE MEDIATING EFFECT OF TEACHER MINDFULNESS	1550
Anna Maria Pasztori	ASSESSMENT OF THE EFFICIENCY OF THE EDUCATION SUPPLY CHAIN IN EU MEMBER STATES USING THE NDEA MODEL	1551-1565
Aleksandras Lerner Sarunas Sniras	PECULIARITIES OF MOTIVATIONAL EXPRESSION IN ATHLETES STUDENTS	1566
Zohaib Hassan Sain	REVIEWING THE ACADEMIC LANDSCAPE: THE IMPLEMENTATION OF ELEARNING INITIATIVES IN HIGHER EDUCATION	1567
Zohaib Hassan Sain	INFLUENCE OF INFORMATION TECHNOLOGY ON THE E-LEARNING LANDSCAPE IN PAKISTAN	1568
Atul Kumar Pooja Patil Satyavan Misal Rituraj De Rishav Jivrajika	EXPLORING PERCEPTIONS OF EMPLOYABILITY SKILLS AMONG B-SCHOOL STUDENTS	1569-1574
Salija Bangoji	CRISIS IN EDUCATION IN KOSOVO	1575
Rahma Tahseen Nayef Ahlam Muhammad Taher Saleem Yousif Ali Yaseen Haval Younis Yacoob	MENTAL CHRONOMETRY IN AUTISM SPECTRUM DISORDER: A CASE – CONTROL STUDY	1576-1577

Sevda ACAR	EXAMINING THE RELATIONSHIP BETWEEN INTERPERSONAL ERROR RUMINATION, SELF-UNDERSTANDING, AND LIFE SATISFACTION IN ROMANTIC RELATIONSHIPS	1578-1579
Metanet ALIYEVA	A STUDY ON CRISIS SITUATIONS IN ADOLESCENCE	1580-1588
Güven SONER İlknur AYDIN AVCI	PERSONS WITH DISABILITY FRIENDLY NURSING EDUCATION PROGRAM: A RANDOMIZED CONTROLLED STUDY PROTOCOL	1589-1590
Güven SONER	USAGE OF SMITH AND LIEHR'S STORY THEORY IN NURSING	1591-1596
Muhammet Mustafa YALÇIN Tuba ÖZAYDIN	FRAILTY IN THE ELDERLY AND FACTORS AFFECTING IT	1597-1607
Emine SARI Ertuğrul SARI Şükür KELEŞ Birsal Canan DEMİRBAĞ	BEING A HEALTH WORKER IN THE COVID-19 PANDEMIC	1608-1615
Emine SARI Birsal Canan DEMİRBAĞ	THE RELATIONSHIP BETWEEN PRESENTEEISM AND MEDICAL ERROR TENDENCY IN NURSES	1616-1617
Meryem BÜKE Fatma ÜNVER Serbay ŞEKERÖZ Saadet Nur Sena ÖZTEKİN	INVESTIGATION OF THE EFFECTIVENESS OF MULLIGAN MOBILIZATION TECHNIQUE AND CORE STABILIZATION EXERCISES IN FEMALE PATIENTS WITH KNEE OSTEOARTHRITIS: A RANDOMIZED CONTROLLED SINGLE-BLIND STUDY	1618-1623
Betül AKYOL Onur ÖZTÜRK	INVESTIGATION OF THE RELATIONSHIP BETWEEN THE POPULATIONS AND SUCCESS STATUS OF THE COUNTRIES WHICH WANTED MEDALS IN THE PARALYMPIC GAMES (TOKYO 2020 PARALYMPIC GAMES EXAMPLE)	1624-1631
Onur ÖZTÜRK Betül AKYOL	INVESTIGATION OF THE RELATIONSHIP BETWEEN ROAD CYCLING RACERS' EARNINGS AND SUCCESS	1632-1638
Meliha UZUN	INVESTIGATION OF LEADERSHIP STYLE: AN APPLICATION ON COACHES WHO ARE ŞIRNAK YOUTH AND SPORTS PERSONNEL	1639-1645
Meliha UZUN	INVESTIGATION OF SPORTS INJURY ANXIETY LEVELS: A RESEARCH ON ATHLETES OF DIFFERENT BRANCHES	1646-1656

Semra CAN MAMUR Ahmet MAMUR	PARAOXANASE-1 ENZYME AND ITS FUNCTION	1657-1661
Şuat DIKEL İlgin ÖZŞAHİNOĞLU	DO YOU KNOW HOW MUCH WATER IS USED FOR PLANT AND ANIMAL FOOD PRODUCTION?	1662-1669
Şuat DIKEL İlgin ÖZŞAHİNOĞLU	NEXT GENERATION AQUACULTURE WITH PRECISION FISH FARMING	1670-1677
Servet Ahmet DOĞDU Cemal TURAN Tolga DEPCI	EXTRACTION AND CHARACTERIZATION OF CHITIN AND CHITOSAN FROM GIANT RED SHRIMP <i>Aristaeomorpha foliacea</i>	1678-1682
Sedat ORMANCI Harun ALBAYRAK	THE MUCUS LAYER IN FISH AND ITS RELATIONSHIP WITH THE IMMUN SYSTEM	1683-1697
Halime İrem DÜZENLİ Mustafa ARICAN	INVESTIGATION OF THE INCIDENCE OF OSTEOARTHRITIS IN GERIATRIC CATS	1698-1711
Hilmican ERGİN Kurtuluş PARLAK	CARDIO PULMONARY RESUSCITATION IN CATS AND DOGS	1712-1727
Ebrar Merve ERİŞ Kurtuluş PARLAK	PREANESTHETIC EVALUATION IN CATS	1728-1745
Sena YAZICI Selman PULAT Kurtuluş PARLAK	RETROSPECTIVE EVALUATION OF PELVIC TRAUMA IN CATS	1746-1754
Kamal BOUZID Lahoucine BELARCHE Btissam ABOURIDA Ali SIADI	NUMERICAL INVESTIGATION OF NATURAL CONVECTION INSIDE A CAVITY FILLED WITH NAN-FLUIDS IN THE PRESENCE OF A HEATING BLOCK	1755
Abdelghani Aboukhalaf Sara Moujabbir Belkassem El Amraoui Rekia Belahsen	CHEMICAL COMPOSITION, ANTIOXIDANT AND ANTIBACTERIAL ACTIVITIES OF MOROCCAN PROPOLIS	1756
Ali SIADI Lahoucine BELARCHE Btissam ABOURIDA Kamal BOUZID	NUMERICAL INVESTIGATION OF MIXED CONVECTION IN A THREE-DIMENSIONAL VENTILATED CAVITY FILLED WITH NANOFLUIDS WITH DIFFERENTIALLY HEATED SIDE WALLS	1757
Zahra Nait Abdellah Mourad Keddami	CHARACTERIZATION OF BORIDE LAYERS AND BORIDING KINETICS OF AISI H13 STEEL	1758
AGREBI Aymen HICHRI Monia LAFUENTE Carlos	THERMOPHYSICAL PROPERTIES OF DEEP EUTECTIC SOLVENTS BASED ON: CARVONE	1759
Kaïs Antar Mohamed Jamal	THERMOGRAVIMETRIC AND KINETIC STUDY OF THE REDUCTION OF TUNISIAN PHOSPHOGYPSUM AND OLIVE MILL WASTEWATERS	1760

V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

November 5-7, 2023 / Cappadocia-Nevsehir

(THE PROCEEDINGS BOOK)

<https://www.cappadociacongress.org>

Youssef RACHID Jamila EL GAAYDA Idriss BAKAS Rachid AIT AKBOUR	ENHANCING ADSORPTION EFFICIENCY OF CRISTAL VIOLET DYE WITH ORGANIC MATTER-MODIFIED LDH-TYPE SYNTHETIC CLAY	1761
Ciorteanu R. Sardaru M. Mangalagiu I. Danac R.	NEW PROMISING ANTICANCER INDOLIZINE DERIVATIVES	1762
Shabbir Hussain Saqib Ali Saira Shahzadi Muhammad Nawaz Tahir Sadaf Ramzan Muhammad Shahid	SYNTHESIS, SPECTROSCOPY, XRD AND BIOLOGICAL ACTIVITIES OF HOMO- AND HETEROBIMETALLIC COMPLEXES WITH POTASSIUM-1-DITHIOCARBOXYLATOPIPERIDINE-4-CARBOXYLATE	1763
K.R.Padma K.R.Don	AN IN-DEPTH ANALYSIS OF THE UTILIZATION OF ELECTRIC VEHICLES FOR BETTER SUSTAINABLE FUTURE	1764
K.R.Padma K.R.Don	NANOTECHNOLOGY AND ARTIFICIAL INTELLIGENCE INTEGRATION FOR ADVANCED MEDICAL DIAGNOSIS	1765
Haddou El Ghazi Majda El Ghmari Meryem El Hima Mohamed Rabah Salah Eddine Ammezzough Abderrazak Bouziane	FUTURE PROSPECTS OF NANOMATERIALS-BASED SOLAR CELLS FOR HIGH QUANTUM EFFICIENCY AND LOW COST EFFECTIVENESS: NITRIDES AS EXAMPLE	1766
Najummissa D Karthikha R Murshitha Shajahan M.S.	ANALYSIS OF STUTTERED SPEECH USING MFCC AND NAIVE BAYES CLASSIFIER	1767
Prajukta Tripathy Bikash Ranjan Mishra	EVALUATING THE ENERGY EFFICIENCY OF INDIAN TEXTILE INDUSTRY AND INFLUENCING FACTORS: A DEA-BASED PLANT-LEVEL ANALYSIS	1768
GholamReza Gordani Ali Ghasemi Mohammad Reza Loghman Estarki Mehdi Mazaheri	SYNTHESIS, MICROSTRUCTURE, MAGNETIC AND MICROWAVE PROPERTIES OF FLEXIBLE COMPOSITE AEROGEL MADE FROM COTTON/CNT/STRONTIUM FERRITE	1769-1770
BOUKHEDIMI Chems Eddine	ANALYZING OF COMPETITIVENESS IN THE CHINESE ELECTRIC VEHICLE MARKET (YEAR 2022)	1771
M. VIVEK PRABHU Dheepak K SHASHANG S KARTHIKEYEN.AD NITHISHNARAYAN.RSN SARAVANAN.M	DESIGN AND DEVELOPMENT OF FRICTION STIR ADDITIVE MANUFACTURING MACHINE	1772
Maran Mayathevam Shahin Ali Shajahan Karthick Shanmugham Jeffrin leo Gerald	DESIGN OF PHYSIOTHERAPH	1773
Karuppaiah Rajkumar Manthiram Alagusundaran Nanthakumar Sabari Rajan karthigairajan Rahul kaliswaran	DESIGN OF AUTOMATIC RAILWAY TRACK CRACK DETECTOR	1774

V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

November 5-7, 2023 / Cappadocia-Nevsehir

(THE PROCEEDINGS BOOK)

<https://www.cappadociacongress.org>

Karuppaiah Rajkumar Manthiram Ranjith Kumar Balamurugan Sanjay Kumar Sundaram Yuvaraja Balamurugan	DESIGN OF PINEAPPLE PEELING MACHINE	1775
Kamatchi Thirupathi Thanushkar Subramani Sree Ramnath SudalaiMuthu Yuvaraja Balamurugan	DESIGN OF ANKLE REHABILITATION DEVICE	1776
Mohammad Khazaei Pejman Rezaei Javad Khazaei	EVALUATION AND DESIGN ASPECTS OF MAGNETIC GEARS AND MAGNETICALLY GEARED MACHINES	1777-1781
Mohammad Khazaei Javad Khazaei Mohammad-Hassan Rashidi	DESIGN, CONSTRUCTION AND EVALUATION A DC CONDUCTION MAGNETOHYDRODYNAMIC PUMP/THRUSTER	1782-1787
Thi-Hoang-Anh TRAN Vo-Tuan-Anh AN	IMPACT OF ELECTRONIC WORD-OF-MOUTH MARKETING ON DESTINATION CHOICE DECISION-MAKING: A CASE OF CAN THO CITY, VIETNAM	1788-1811
Hassana Ismaili Alaoui	ECONOMIC VALUATION OF SEDIMENT RETENTION SERVICES IN THE OUED BEHT WATERSHED (MOROCCO): A SPATIOTEMPORAL ANALYSIS USING INVEST	1812
Ogbuagu Anuli .R. Nwaoga Chinyere .T. Favour C. Uroko	IMPACT OF FINANCIAL STRESS ON ACADEMIC PERFORMANCE OF UNIVERSITY STUDENTS IN SOUTH EAST NIGERIA	1813
Mariam Ibrahim Hamood Al Karaawi Samyiah Hani Alouity Azhar Aziz jasim alobeidi	THE IMPACT OF TECHNICAL CREATIVITY ON CUSTOMER HAPPINESS IN THE HOTEL SECTOR	1814-1823
Venet Shala Halil Bajrami Blerona Bajrami Sheqir Kutllovci Fadil Lekaj	LEADERSHIP STYLES AND THEIR APPLICATION IN MODERN ORGANIZATIONS	1824
Oludare, T.O Adebisi, L.O. Alakoso A A Omorieg F. I	EFFECT OF MEDICAL HEALTH EXPENDITURE ON HOUSEHOLD INCOME IN NIGERIA	1825
Ihor Ponomarenko Dmytro Ponomarenko	MACHINE LEARNING-BASED ANALYTICAL TOOLS IN DIGITAL MARKETING	1826
M K Hamirwasia	BUSINESS ORGANIZATIONS AND ETHICAL BEHAVIOUR	1827
Mohammed Tijjani Makinde Joseph Kolawole	CAUSES AND EFFECT OF UNETHICAL PROFESSIONAL PRACTICES ON THE MANAGEMENT OF CONSTRUCTION PROJECTS IN THE NORTH CENTRAL PART OF NIGERIA	1828

Muhammad Sani Yakubu Seow Taa Wee Shu'aibu Saminu	THE RELEVANCE OF N-POWER IT GADGET ON POVERTY REDUCTION IN KANO METROPOLIS, NIGERIA	1829
FAKIDOUA AYATARI GILBERT NDUBUISI-OKOLO PURITY UZOAMAKA	CONSTRUCTION COMPANIES IN SOUTH- EAST NIGERIA: THE NEXUS BETWEEN ORGANIZATIONAL PARANOIA AND EMPLOYEE PERFORMANCE	1830
Daniela MATUŠÍKOVÁ Jaroslava GBUROVÁ	HOSPITALITY INNOVATION CHANGES AT THE EXAMPLE OF HERITAGE OBJECTS	1831
Jaroslava GBUROVÁ Daniela MATUŠÍKOVÁ	MARKETING INNOVATIONS AT THE EXAMPLE OF THE PROMOTION OF HOTELS IN HERITAGE OBJECTS	1832
Sintea (Anghel) Lucica	STRATEGY FOR IMPROVING HUMAN RESOURCE SKILLS AND COMPETITIVENESS THE USE OF RESOURCES IN MANAGERIAL POLICY	1833-1837
Khairulazmi bin Mohamad Karudin Mohd Rizaimy Shaharudin Amir Imran Zainoddin	PERFORMANCE IN THE MALAYSIAN HALAL INDUSTRY FOR HALAL LOGISTICS, HALAL MANUFACTURING, COMPETITIVENESS AND HALAL ORGANIZATIONAL SUSTAINABILITY	1838
Birsena Duljević Slobodan Popović	TOURISM AS AN ECONOMIC BRANCH THAT CAN CONTRIBUTE TO THE IMPROVEMENT OF MANAGEMENT DECISIONS AT THE LEVEL OF ONE ECONOMY	1839-1843
Birsena Duljević Slobodan Popović	RESPECTING TOURISM AS A FACTOR OF ECONOMIC DEVELOPMENT IN SMALL COUNTRIES AND MAKING MANAGEMENT DECISIONS IN TOURIST ENTERPRISES	1844-1848
Dora Szendi	SMART CITIES AND SUSTAINABILITY IN CENTRAL-EASTERN EUROPE	1849-1857
Shqiprim Jashari	THE ROLE OF DATA-DRIVEN MARKETING IN KEY MARKET PERFORMANCE IN GASTRONOMY SECTOR IN KOSOVO!	1858
OYETADE Oluwatoyese AYODEJI Oluwasegun	EMPIRICAL ANALYSIS OF AGRICULTURAL PRODUCTION ON ECONOMIC DEVELOPMENT IN NIGERIA	1859
Tien Dung Khong	ANALYSIS OF ADAPTABILITY AND DEMAND FOR APPLYING HIGH TECHNOLOGY OF RICE FARMING IN THE CONTEXT OF DIGITAL TRANSFORMATION IN THE MEKONG RIVER DELTA VIETNAM	1860-1868

Pritha Biswas Subhoda Banerjee	WOMEN AS INVENTORS - A MYTH OR REALITY?	1869
Shahi Shaika	FEMINISM AND OTT PLATFORMS: PORTRAYING FEMALE IDENTITY THROUGH DIGITAL MEDIA	1870
D.ANUSHYA SARAVANAN SRINIVASAN	CATHARANTHUS ROSEUS	1871
V.Selvakumar R.Saravanan R.Srinivasan	BUBONIC PLAGU(BLACK DEAD)	1872
J.JAYADURKA YUVARAJ AR MRS.E.ELAVARASI R.SRINIVASAN	UNDERSTANDING VARICOSE VEINS – DIAGNOSIS,TREATMENT AND PREVENTION	1873
M.Guruprasanth Dr.R.Saravanan Dr.R.Srinivasan	MEDICATION THERAPY MANAGEMENT FOR PEDIATRIC ALLERGIES	1874
Vibhanshu raj R.Saravanan	MEDICATION SAFETY IN PEDIATRIC GASTROENTEROLOGY	1875
Ayoub Ahdour Aziz Taoufyq Latifa Aneflous Bahcine Bakiz Abdeljalil Benlhachemi	ELECTROCHEMICAL AND PHOTOELECTROCHEMICAL DEGRADATION OF RHODAMINE B USING A NOVEL BHP@ZnO PHOTOELECTRODE: SYNTHESIS, CHARACTERIZATION, AND STATISTICAL STUDY	1876
ASMA BEGUM.G R.SARAVANAN SRINIVASAN	BIOCHEMICAL REACTION IN HUMANS AND PLANTS	1877-1878
Shuaeeb, A. I. Bello, M. R. Idris, U. S. B. Ndatsu, A. Masalaci, U. M.	AWARENESS OF DIGITAL ECO-LITERACY CONCEPTS, AVAILABILITY AND PERCEIVED IMPACT OF DIGITAL TECHNOLOGIES AMONG PRE-SERVICE SCIENCE TEACHERS OF FEDERAL UNIVERSITY OF TECHNOLOGY MINNA	1879-1890
Balasubramani G L Rinky Rajput Manish Gupta Pradeep Dahiya Jitendra K Thakur Rakesh Bhatnagar Abhinav Grover	STRUCTURE-BASED DRUG REPURPOSING TO INHIBIT THE DNA GYRASE OF MYCOBACTERIUM TUBERCULOSIS	1891
Fatemeh Davar Mohammad Reza Loghman Estarki	COMPARISON OF VISIBLE AND IR TRANSMISSION OF SPINEL BULK CERAMICS PRODUCED FROM SINTERING OF SOL-GEL AND MODIFIED SOL-GEL METHOD	1892
M.Monica Dr.R.Saravanan Dr.R.Srinivasan	RUTA GRAVEOLENS AS A POTENTIAL SOURCE OF NEUROACTIVE COMPOUNDS TO PROMOTE AND RESTORE NEURAL FUNCTIONS	1893
A.DINESH BABU R. JOTHILAKSHMI R.SRINIVASAN	GREEN TEA –AN ANTIOXIDANT MYSTIC HERB	1894

A.DINESH BABU R. JOTHILAKSHMI R.SRINIVASAN	SOME NATURAL ISOLATED COMPOUNDS AS ANTICANCER AGENTS	1895
A.DINESH BABU R. JOTHILAKSHMI R.SRINIVASAN	NEUROPROTECTIVE AGENTS, NATURAL PLANT HERBS & DRUGS IN ISCHEMIC STROKE: A REVIEW	1896
S.KEERTHIGA V.VARALAKSHMI R.DEVI R.SRINIVASAN	PHARMACOLOGY: HIV DRUG RESISTANCE	1897
G.PREMANAND R.SARAVANAN R.SRINIVASAN	IMMUNOTHERAPY	1898
Puniparthi Sunitha	HUMAN PROHIBITS OF BACILLUS STRAINS: CHARACTERIZATION, SAFETY, MICROBIOME, AND PROBIOTIC CARRIER	1899
R.vidhyalakshmi R.N.srinivasan	BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH CENTRE - CHENNAI, SELAIYUR	1900
Mochamad Yusuf Hendri Hermawan ADINUGRAHA	CENTRAL JAVA'S READINESS TO BUILD A GREEN ECONOMY THROUGH THE AGRICULTURAL SECTOR	1901
Mochamad Yusuf Hendri Hermawan ADINUGRAHA	THE CONCEPT OF MURABAHAH CONTRACT AT BANK SYARIAH INDONESIA KC PEKALONGAN PEMUDA	1902
Lia Olivia Zahara Ayu Andini Tia Syifana Intan Nadzifa Ade Gunawan	SHARIA COOPERATIVE	1903-1912
Laila Kholisa Azzahra Lizianil Azizah Aulia Nailis Slamah Ria Annisatus Solihah	SHARIA PENSION FUNDS	1913
Fadrika Hening Mangesti Neriza Apriani Okta Trifiana Ade Gunawan	WAQF AND ZAKAT INSTITUTIONS	1914-1921
Suciati FirdaYuliasari Fadila Salsa Faradiva Ade Gunawan	SHARIA LEASING IN INDONESIA	1922-1926
Arju Fatiya Nidhota Trisna Arfiyani Sri Mumaeni Agusina Sintiana Rizki Ade Gunawan Muhammad Taufiq Abadi	SHARIA COOPERATIVE	1927-1928
Aulia Maudy Hermina Pristilia Lilis Nurrohmah Qonita Febriyani Muhammad Taufiq Abadi	SHARIA LEASING IN INDONESIA	1929-1935

V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

November 5-7, 2023 / Cappadocia-Nevsehir

(THE PROCEEDINGS BOOK)

<https://www.cappadociacongress.org>

Syifa Destya Salsabila Burhanuddin Putri Amanda Ardita Fifi Aprilia Yulianti Muhammad Taufiq Abadi Ria Anisatus Sholihah	ISLAMIC CAPITAL MARKET	1936-1945
Muhammad Wifqi Hidayatullah Putri Indah Lestari Hawa Azzah Fauziah Kirana Mahardhika Rahma Muhammad Taufiq Abadi Ria Anisatus Sholihah	EXPLORATION OF SHARIA PAWNSHOP IN INDONESIA	1946
Mohammad RobbiMaulana Rofiyana Firda Nadyarahma Arissafi'i M.E.I	ECONOMIC THOUGHT OF CONTEMPORARY MUSLIM SCIENTISTS MADZHAB IQTISHODUNA	1947
Hasna Huwaidah Lilis Arviani Umi Fikriyah Muhamad Syahrul Arifin Ade Gunawan Muhammad Taufiq Abadi	ISLAMIC BANK IN INDONESIA	1948-1959
Fifi Afista Nurul Kholisha Tahani Salsabila Ade Gunawan	THE HISTORY OF THE ESTABLISHMENT, FUNCTION AND OBJECTIVES OF SHARIA PAWNSHOP AS AN ECONOMIC DRIVER IN INDONESIA	1960-1961
Ade Irma Anggraeni Raka Prasasti	ENTERING ENTREPRENEURSHIP: PERSONALITY MATTERS	1962
Vita Tri Indriani Zidna Riska Maulida Rara Fitriyani Catur Rahayu Sunu Pratiwi Ria Anisatus Sholihah	ANALYSIS OF HAJJ FINANCIAL MANAGEMENT AGENCY (BPKH) IN INDONESIA	1963
Laila Fitria Nur RAHMA Hendri Hermawan ADINUGRAHA	THE INFLUENCE OF THE ROLE OF SHARIA FINANCIAL INSTITUTIONS AND FINTECH INNOVATION IN POVERTY ALLEVIATION: QUALITATIVE ANALYSIS IN LOW-INCOME COMMUNITIES IN THE CONTEXT OF THE DIGITAL SHARIA ECONOMY	1964
Muhammad Satrio JULIYANTO Khulaelatudil AZZAH Muhammad Hadziq Ulil ABSHOR Nailis SUROOYA Hendri Hermawan ADINUGRAHA	UNDERSTANDING DOG SALIVA	1965
Laila FITRIANI Hendri Hermawan ADINUGRAHA	IMPLEMENTATION OF THE HALAL VALUE CHAIN ECOSYSTEM IN INDONESIA	1966
Santi Nailul IZATY Hendri Hermawan ADINUGRAHA Muhammad Sultan MUBAROK	AXIOMS OF ECONOMIC RATIONALITY IN ISLAMIC PERSPECTIVE	1967
Rossa Riska Amelia	ANALYSIS OF DA'WAH MESSAGES CONTENT "DESTROYING IDOLS OF THE ENEMY" ON LIVE STREAMING TIK-TOK MOBILE LEGEND ABIAZKAKIA ACCOUNT	1968

Rofiatur RIZQIYAH Hendri Hermawan ADINUGRAHA	A BIBLIOMETRIC ANALYSIS: EVALUATION OF THE DISTRIBUTION OF SOCIAL ASSISTANCE FUNDS IN ALLEVTING POVERTY IN PEKALONGAN DISTRICT, INDONESIA	1969
Nur Nabila Firda Nadyarahma Muh Fatkhurrozi Gita Oktavia Rosita	THE SCIENTIFIC VIEW OF PRAYER MOVEMENTS FOR PHYSICAL HEALTH	1970
Rafi Prasajo Dwi Sintia Rahmawanti Nailis Surooya	ECONOMIC PRACTICES DURING THE TIME OF THE KHULAFUR RASYIDIN	1971-1975
Fitroh Aida AMELIA Hendri Hermawan ADINUGRAHA Ahmad TA`RIFIN	THE SCHOOL'S ROLE IN ENHANCING SPIRITUALITY THROUGH ORGANIZATIONAL CULTURE: A CASE STUDY AT MTS. AL-UTSMANI KAJEN PEKALONGAN	1976
Khulaelatudil AZZAH Nailis SUROOYA Muhammad Satrio JULYANTO Muhammad Hadzik Ulil ABSHOR Hendri Hermawan ADINUGRAHA	THE DANGERS OF DOG SALIVA FOR HEALTH	1977
Rina Tri ASTUTI Hilda SAFITRI Anggi PERMATASARI Triana Dani MAULANA Hendri Hermawan ADINUGRAHA	HEALTH IMPACTS OF SEXUAL RELATIONS WITH MENSTRUATING WOMEN	1978
Sokhifah Hidayah Arif Chasanul Muna Minanurrohman	THE PHENOMENON OF RELIGIOUS MODERATION IN INDONESIA	1979
Ibrahim Abdu SALAM Raffi Ali Hannan SANTOSA Uswatun KHASANAH Muhammad Mieftha ISMAIL Hendri Hermawan ADINUGRAHA	THE MEANING OF WUDHU: A LITERATURE REVIEW	1980-1981
MOHAMMAD ROBBI MAULANA AGUNG ROFIYANA HENDRI HERMAWAN	REASON FOR FASTING IN SCIENCE	1982
Uswatun Khasanah Raffi Ali Hanan Santosa Muhammad Mieftha Ismail Ibrahim Abdu Salam Hendri Hermawan ADINUGRAHA	SCIENCE'S VIEW ON ABLUTION FOR HEALTH	1983
AGUNG MOHAMMAD ROBBI MAULANA ROFIYANA HENDRI HERMAWAN	DEFINITION OF FASTING	1984
ROFIYANA MOHAMMAD ROBBI MAULANA AGUNG HENDRI HERMAWAN ADINUGRAHA	WHY GOD GAVE COMMAND TO FAST?	1985-1988
Mohammad Mieftha Ismail Raffi Ali Hanan SANTOSA Uswatun Khasanah Ibrahim Abdu Salam Hendri Hermawan ADINUGRAHA	THE DEFINITION AND FACTORS THAT INFLUENCE OF HEALTH: SYSTEMATIC LITERATUR REVIEW	1989
Muhammad Hadziq Ulil ABSHOR Khulaelatudil AZZAH Nailis SUROOYA Muhammad Satrio JULIANTO Hendri Hermawan ADINUGRAHA	REASONS WHY DOG SALIVA IS UNCLEAR, ACCORDING TO MEDICAL OPINION	1990

V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS

November 5-7, 2023 / Cappadocia-Nevsehir

(THE PROCEEDINGS BOOK)

<https://www.cappadociacongress.org>

M. Ariel RAMADHANI M. Usman ARIFFIANTO Kholimah Hendri Hermawan ADINUGRAHA	ZAMZAM WATER IN SCIENCE PERSPECTIVE: A LITERATURE RIVIEW	1991
Rafi PRASOJO Angga Candra WINATA Rafid Nouval AQIL Lutfiyanti Hendri Hermawan ADINUGRAHA	BACTERIA FOUND IN PIGS CAN CAUSE DISEASE	1992
Rafi Alkaf Asy Syafi Ridwan Abu Djibran Riskafaiza Riema Ainun Nisa Hendri Hermawan Adinugraha	ABSTRACT ALCOHOL PROHIBITION	1993
Muh Fatkhurrozi Nur Nabila Gita Oktavia Rosita Firda Nadyarahma	THE BENEFITS OF PRAYER	1994

**AWARENESS OF DIGITAL ECO-LITERACY CONCEPTS, AVAILABILITY AND PERCEIVED IMPACT OF DIGITAL TECHNOLOGIES AMONG PRE-SERVICE SCIENCE TEACHERS OF FEDERAL UNIVERSITY OF TECHNOLOGY MINNA**

**Shuaeeb, A. I.**

Department of Science Education, Federal University of Technology

**Bello, M. R.**

Department of Science Education, Federal University of Technology

**Idris, U. S. B.**

Department of Science Education, Federal University of Technology

**Ndatsu, A.**

Department of Science Education, Federal University of Technology

**Masalaci, U. M.**

Department of Science Education, Federal University of Technology

**ABSTRACT**

This study investigated the awareness of digital eco-literacy concepts, availability and perceived impact of digital technologies among pre-service science teachers of FUT Minna. Descriptive survey research design was used for this study. This design was considered most appropriate because it is a method involving to seek and search for opinions of pre-service science teachers in Federal University of Technology Minna, Niger State through the use of questionnaire named **QADIEC** with a reliability coefficient of 0.87 using Cronbach alpha. The questionnaire comprised of two (2) section response patterns with a modified four-point awareness rating scale. The data collected was analyzed using the frequency count, percentages, mean (x) scores and standard deviation of each questionnaire item to answer the research questions with the aid of Statistical Package for Social Sciences (SPSS) version 23. Decision rule regarding disagreeing and agreeing was based on a mean range of 0 - 2.49 as disagree/rejected and mean range of 2.50 - 4.0 as agree/accepted. The population for the survey study comprises of 525 with a sample of 217 pre-service science teachers in FUT Minna using Krejcie and Morgan's (1970) table. Based on the outcomes of this research, it was concluded that there was moderate awareness with the concepts of Digital Eco-literacy among pre-service science teachers of FUT Minna, there is growing importance of understanding and addressing the environmental impact of digital technologies. As our society becomes increasingly dependent on digital tools and platforms, it is crucial to raise awareness and educate individuals about the environmental consequences of their digital actions. This research highlights the need for educational institutions, governments, tech companies, and environmental organizations to collaborate in promoting digital eco-literacy. By integrating these concepts into education, fostering critical thinking, and encouraging sustainable practices, we can work toward a more environmentally responsible digital future.

**Keywords:** Awareness, Digital Eco-literacy concepts, Digital Technologies & Pre-service Science Teachers

**1.0 INTRODUCTION**

Environment is the most pivotal component of the universe which provides man with all the necessary materials needed for his survival and his lineage. Man depends on the environment for food, shelter, oxygen, etc.; yet, he destroys the environment.

His remarkable development in science and technology, coupled with high population growth and the frequent exploration of natural resources are resulting in several environmental issues such as erosion, drought, climate change, increase in environmental temperature, etc. These affect every continent and country in the world and have been profoundly explained in the existing literature. Dan (2019), reported that the Sahel region of Africa is the most affected part of the world in the dwindling of natural resources. In Nigeria, the major causes of these environmental issues or problems have been identified as urbanization, overpopulation, deforestation, desertification and pollution (Isife, 2012). Therefore, improving the environment is the responsibility of all members of the society, including educational institutions, teachers and students.

One of the major contradictions in the twenty-first century is the unique technological advancement and economic growth, which have contributed to devastating socio-environmental impacts on humanity despite accruing numerous benefits for people. In the quest for survival, humankind is significantly exposing the planet to severe biodiversity threats, climate change threats, waste management threats, which poses issues to energy, ecology security, food, and politics which are impediments to sustainable development (Olawuyi, 2015). The African continent is also experiencing various and complex environmental challenges, including the threat of significant extinction of species due to the adoption of a global capitalist system that creates a production treadmill due to its increasing urge for enormous profits (Adenike & Foluke, 2021). The rising demand for products has led to the proliferation of this system in Africa due to its ability to avail products at a lower price. Nigeria is part of this environmental conundrum due to anthropogenic activities contributing to ecosystem degradation, biodiversity loss and reduction in agricultural production (Olawuyi & Olusegun, 2018). Northern Nigeria is under threat due to the Eastward rapid encroachment that threatens sustainable livelihoods while environmental degradation in the Niger Delta continues making the region prone to conflicts due to quests for resource control and environmental justice (Ekwueme *et al.*, 2016). Life-consuming floods, erosions, waste polluted environs, naked electric wires found on the ground of the environmental ecosystem, have increasingly become reoccurring issues in environmental challenges that the Nigeria has been associated with, in which these challenges raise the need for sustainability education that empowers policymakers and stakeholders in Nigeria to urgently implement environmental protection measures (Babalola & Olawuyi, 2021). Environmental Education and eco-literacy can serve as a tool for propagating United Nations Sustainable Development Goals (SDGs) in Nigeria, especially those relating to ecological protection (biodiversity), resource conservation and climate change (Adenike & Foluke, 2021). Therefore, in this context, the concepts of ecology, literacy, environmental education, eco-literacy or ecological literacy or environmental literacy, digital literacy and digital eco-literacy are to be discussed in relation to Nigeria's ecosystem as the centre of this research study.

Eco-literacy, also known as ecological literacy or environmental literacy, is the knowledge and understanding of ecological principles and concepts that enable individuals to make informed decisions and take responsible actions towards environmental sustainability (Aina, 2016). In Nigeria, as a country with diverse ecosystems and pressing environmental challenges, the concept of eco-literacy plays a vital role in promoting sustainable development. Eco-literacy is crucial for addressing environmental issues, conserving biodiversity, and promoting sustainable development in Nigeria (Ismaila & Salman, 2015). By fostering an understanding of ecological concepts and principles, individuals can make informed choices regarding natural resource management, waste disposal, energy consumption, and sustainable agricultural practices. Eco-literacy also enhances environmental stewardship and encourages the adoption of eco-friendly behaviors at individual, community, and societal levels (Olatoye, *et al.*, 2017).

In recent years, there has been an increased recognition of the importance of eco-literacy in Nigeria (Aina, 2016). Efforts have been made to incorporate eco-literacy into formal education systems, develop educational materials and resources, and promote public awareness campaigns on environmental issues (Aigbokhan & Adesina, 2017). However, there is still a need for continued research, curriculum development, and capacity-building initiatives to enhance eco-literacy among different segments of the population in Nigeria (Ogbeide & Ibude, 2018).

Digital literacy refers to the ability to use digital technologies effectively and responsibly to access, evaluate, create, and communicate information. In today's digital age, digital literacy is essential for individuals to fully participate in the social, economic, and educational opportunities enabled by technology. In Nigeria, a country experiencing rapid technological advancements, the concept of digital literacy is of utmost importance. Digital literacy is crucial for Nigeria's socio-economic development, knowledge acquisition, and digital inclusion because it enables individuals to navigate digital platforms, critically evaluate information, communicate effectively, and utilize digital tools for personal and professional growth (Onyebuchi & Ogwo, 2015). Digital literacy also plays a significant role in bridging the digital divide and fostering digital citizenship (Adedoja *et al.*, 2016). In recent years, Nigeria has witnessed efforts to enhance digital literacy across various sectors. The government, educational institutions, and non-governmental organizations have implemented initiatives to provide digital skills training, establish digital literacy centers, and promote digital inclusion programs (Ololube & Agbor, 2017). However, challenges such as limited access to technology and infrastructure gaps still exist, emphasizing the need for continued investment in digital literacy education and policy reforms (Oyewole *et al.*, 2020).

Digital eco-literacy refers to the combination of digital literacy and ecological literacy, encompassing the knowledge, skills, and attitudes required to navigate digital technologies in an environmentally sustainable manner (Eneh & Ndujiuba, 2016). As Nigeria experiences increasing digitalization and environmental challenges, the concept of digital eco-literacy becomes essential for promoting sustainable development. Digital eco-literacy plays a crucial role in fostering environmentally responsible behavior and sustainable development in Nigeria's digital age because it enables individuals to leverage digital tools and platforms for accessing environmental information, engaging in eco-friendly practices, and advocating for environmental conservation (Oluwafemi & Omoogun, 2018). Digital eco-literacy empowers citizens to make informed decisions and take actions that contribute to a more sustainable future (Adegoke & Oyelekan, 2020). In recent years, Nigeria has witnessed several developments in the promotion of digital eco-literacy. Non-governmental organizations, educational institutions, and government agencies have initiated programs to enhance digital eco-literacy skills, foster environmental consciousness, and encourage sustainable practices (Adegoke & Oyelekan, 2020). However, there is a need for continuous research, capacity-building efforts, and policy reforms to strengthen digital eco-literacy education and ensure its integration into various sectors of Nigerian society.

Digital eco-literacy concepts awareness refers to the level of knowledge, understanding, and consciousness among individuals in Nigeria regarding the intersection of digital technologies and environmental sustainability (Adegbite & Adegunle, 2017). As Nigeria undergoes rapid digital transformation and faces pressing environmental challenges, promoting digital eco-literacy awareness becomes crucial for fostering sustainable development. Digital eco-literacy awareness plays a vital role in encouraging individuals to adopt environmentally responsible behaviors and leverage digital tools for sustainable practices (Olawumi & Akinbode, 2018). By raising awareness about the environmental impact of digital technologies and promoting best practices, Nigeria can harness the potential of the digital revolution to address ecological concerns and advance sustainable development goals.

Recent developments in Nigeria have seen increased efforts to promote digital eco-literacy awareness. Non-governmental organizations, government agencies, and educational institutions have initiated awareness campaigns, workshops, and policy discussions to raise consciousness about the environmental implications of digital technologies (Iyamu & Abolarin, 2019). Future directions should focus on integrating digital eco-literacy awareness into educational curricula, fostering collaboration among stakeholders, and promoting sustainable digital practices through innovative strategies.

The availability of digital technologies within the environmental ecosystem refers to the integration of digital tools and systems in various aspects of environmental management, conservation, and sustainability (Spínola, 2015). These technologies have a profound impact on how we monitor, protect, and sustain our environment. Digital technologies, such as remote sensing, drones, and sensor networks, have transformed the way we monitor the environment. Similarly, satellite-based monitoring systems, like those from NASA and the European Space Agency, provide invaluable data for tracking changes in land use, deforestation, and climate patterns (Stone, 2017). These technologies aid in early warning systems for natural disasters. Digital technologies play a significant role in environmental education and outreach. Online courses, interactive apps, and virtual reality experiences allow individuals to learn about the environment and engage with environmental issues. Digital technologies are critical for policymakers and governmental bodies to monitor compliance with environmental regulations, just as Geographic Information Systems (GIS) help with spatial data analysis, and electronic record-keeping enhances transparency and accountability

### 1.1 Statement of the Problem

Environmental issues have become increasingly significant in recent years, necessitating a focus on eco-literacy awareness and knowledge to promote sustainable behaviors and attitudes. However, there is a lack of comprehensive research examining the specific viewpoints and approaches of pre-service science teachers towards digital eco-literacy awareness in this region. As global environmental concerns continue to escalate, the need for comprehensive environmental education becomes imperative to foster sustainable practices and attitudes among future generations (Smith, 2018; Johnson *et al.*, 2020). Considering the importance of digital eco-literacy and the need for digital ecologically literate society, the Nigerian government through the National University Commission (NUC), introduced a general and compulsory course titled Environmental Education and Sustainable Development which is to provide every person with opportunities to acquire knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment for sustainable development. One common problem associated with Federal University of Technology Minna in Niger State is poor energy management and e-waste management especially in and around students' hostel which often results in the pollution of the hostel environment and blockage of drainages, leaving electrical appliances turned-on in the daylight (like bulbs, fans, air conditions, etc.) even when not in use. This may make someone to wonder if members of the university community are actually digitally and ecologically literate considering their exposure to learning experience relating to ecological management and environmental protection, hence the need to investigate the reason for these problems with a view to solving them. Therefore, this study aims to determine the awareness and practices of digital eco-literacy among Pre-service Science Teachers of Federal University of Technology, Minna. Despite the increasing integration of digital technologies in education, there is a lack of understanding in their usage regarding the ecological aspects of digital literacy among Biology teachers (Adebayo & Ajibola, 2018). This knowledge gap hinders their ability to effectively incorporate environmental sustainability concepts into their teaching practices.

### 1.2 Aim and Objectives of the Study

The aim of this research is to investigate the awareness of digital eco-literacy concepts among pre-service science teachers of Federal University of Technology Minna, Niger State. Specifically, the study sought to achieve the following objectives: To;

1. determine the level of awareness of digital eco-literacy among pre-service science teachers of FUT Minna.
2. determine the level of awareness of the availability of sustainable digital technologies among pre-service science teachers of FUT Minna.
3. examine the level of awareness on the perceived impact of digital technologies on the ecosystem among pre-service science teachers of FUT Minna.

### 1.3 Research Questions

1. what is the level of awareness of digital eco-literacy among pre-service science teachers of FUT Minna?
2. what is the level of awareness of the availability of sustainable digital technologies among pre-service science teachers of FUT Minna?
3. what is the level of awareness on the perceived impact of digital technologies on the ecosystem among pre-service science teachers of FUT Minna?

2

### 2.0 METHODOLOGY

Descriptive survey research design was used for this study. This design was considered most appropriate because it is a method involving to seek and search for opinions of pre-service science teachers in Federal University of Technology Minna, Niger State through the use of questionnaire.

The population for the survey study constituted all the pre-service science teachers in FUT Minna which comprises of 525 pre-service teachers.

**Table 2.1: Distribution of Population by Level and Gender**

S/NO.	LEVEL	GENDER		NO. OF PRE-SERVICE TEACHERS
		MALE	FEMALE	
1.	100	74	53	127
2.	200	64	50	114
3.	300	64	51	115
4.	400	66	35	101
5.	500	36	32	68
	<b>Total</b>	<b>304</b>	<b>221</b>	<b>525</b>

Field Survey (2023)

A two-stage sampling technique was employed to select the respondents. Judgemental (purposive) sampling was used to select pre-service teachers on the basis of their academic level (i.e. 100-500). From the selected levels, a simple random sampling technique will be applied to select pre-service teachers who will participate in the study using Krejcie and Morgan's (1970) table to obtain 210 respondents. A structured survey questionnaires named **Questionnaire on the Awareness of Digital Eco-Literacy Concepts (QADIEC)** was designed on the basis of the concepts of Digital Eco-literacy to elicit information from pre-service science teachers of FUT Minna. The instruments comprise of two (2) section response patterns, section A comprises of the Demographic data of the respondents while section B comprises of 22 items to address the research questions.

Thus, **QADIEC** is presented in a modified four-point awareness rating scale which is composed of Very Much Aware (VMA) =4 points, Moderately Aware (MA) =3 points, Slightly Aware (SA) =2 points and Not Aware (NA) =1 point. The instrument was vetted for face and content validity by four (4) experts from the Department of Science Education and Educational Technology Department, Federal University of Technology, Minna. The researcher reconstructed the instrument based on the suggestions of the experts.

In determining the reliability of the instrument (questionnaire), the researcher piloted the questionnaire to 28 students from Educational Technology Department within SSTE because the students do not form part of the study. The pilot study enabled the researcher to determine the clarity, readability, appropriateness and adequacy of the instrument and the scores obtained from pilot testing were computed using Cronbach alpha in which the result obtained gives a reliability coefficient of 0.87 for the **QADIEC**. The data collected was analyzed using the frequency count, percentages, mean (x) scores and standard deviation of each questionnaire item to answer the research questions with the aid of Statistical Package for Social Sciences (SPSS) version 23. Decision rule regarding disagreeing and agreeing of an item for **QADIEC** was based on a mean range of 0 - 2.49 as disagree/rejected and mean range of 2.50 - 4.0 as agree/accepted.

### 3.0 RESULTS

#### 3.1 Analysis of Demographic Data

**Table 3.1: Demographic Distribution of Respondents**

<b>Gender</b>				
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	123	58.6	58.6	58.6
Female	87	41.4	41.4	100.0
Total	210	100.0	100.0	

<b>Level</b>				
	Frequency	Percent	Valid Percent	Cumulative Percent
200	60	28.6	28.6	28.6
300	50	23.8	23.8	52.4
400	40	19.0	19.0	71.4
500	60	28.6	28.6	100.0
Total	210	100.0	100.0	

<b>Age Bracket</b>				
	Frequency	Percent	Valid Percent	Cumulative Percent
15-18	03	1.40	1.40	1.40
19-22	70	33.3	33.3	34.80
23-26	101	48.1	48.1	82.90
27-30	32	15.2	15.2	98.10
30-Above	04	1.90	1.90	100.0
Total	210	100.0	100.0	

Table 3.1 above shows that the students in the sampled school is FUT Minna, School of Science and Technology Education (SSTE) Department of Science Education, they constituted 210 respondents which is the 100.0% of the sample. The number of male respondents is 123, which is 58.6% and the number of female respondents is 87, which is 41.4%. The questionnaire was administered to all levels except 100L who were on used to test for reliability; 200L (30.0%), 300L (18.57%), 400L (41.43%) and 500L (10.00%). Their ages ranged between 15-18 years is 1.40%, 19-22 years is 33.3%, 23-26 years is 48.1%, 27-30 years is 15.2% and for above 30 years is 1.90%.

### 3.2 Analysis of Research Questions

The data collected were analyzed using mean and standard deviation to answer the given study questions. The following were the questions and the analysis:

**3.2.1 Research Question 1:** what is the level of awareness of digital eco-literacy among pre-service science teachers of FUT Minna?

**Table 3.2: Mean (x) of respondents on the Awareness of Digital Eco-Literacy Concepts**

S/NO.	ITEM	N	Mean (x)	SD	Decision
1.	Environmental ecosystem	210	3.23	0.82	Highly Aware
2.	Eco-literacy	210	2.16	1.10	Slightly Aware
3.	Digital literacy	210	2.41	1.20	Slightly Aware
4.	Digital Eco-literacy	210	1.70	1.03	Not Aware
5.	Biodiversity	210	3.02	0.92	Highly Aware
6.	Climate change	210	3.32	0.81	Highly Aware
7.	Waste management	210	3.27	0.84	Highly Aware
8.	Environmental conservation	210	3.27	0.77	Highly Aware
9.	Sustainable development	210	2.98	0.86	Moderately Aware
10.	Environmental sustainable practices/eco-conscious practices like energy conservation, waste management, and so on.	210	3.13	0.86	Highly Aware
<b>Grand Mean</b>			<b>2.85</b>	<b>0.92</b>	

The result presented in **Table 3.2** above revealed that the respondents agreed that items 1,5,6,7,8 and 10 were "Highly Aware", at the same time, having "Moderately Aware" in item 9. It was also recorded that items 2 and 3 were "Slightly Aware" and item 4, was "Not Aware" with a grand mean (x) of 2.85. This implied that there is moderate awareness among pre-service science teachers of FUT Minna on the concepts of Digital Eco-literacy.

**3.2.2 Research Question 2:** what is the level of awareness on the availability of sustainable digital technologies among pre-service science teachers of FUT Minna?

**Table 3.3: Mean (x) of respondents on the Sustainable Digital Technologies Availability**

S/NO.	ITEM	N	Mean (x)	SD	Decision
11.	There is availability of digital technologies within the markets or industry	210	3.13	0.89	Highly Aware
12.	There is availability of eco-friendly technologies like electrical energy-efficient devices (laptops, smart phones, drones, and so on), solar power systems, biogas, and so on	210	3.23	0.82	Highly Aware
13.	There is availability of digital google map used for location detection	210	3.33	0.89	Highly Aware
14.	There is availability of digital weather forecast/gauge apps and features	210	3.20	0.89	Highly Aware
15.	There is availability of solar power systems and solar power devices like solar MP3 devices, solar mobile phones, solar power torchlights, and so on	210	3.42	0.72	Highly Aware
16.	There is availability of wireless networks and wireless devices like the wireless ear pods, wireless earpiece, wireless MP3 devices, and so on	210	3.39	0.74	Highly Aware
17.	There is availability of sensor detective devices/apps, like fingerprint sensor, face recognition sensor, voice recognition, and so on	210	3.14	0.87	Highly Aware
<b>Grand Mean</b>			<b>3.26</b>	<b>0.83</b>	

The result presented in **Table 3.3** above revealed that the respondents agreed that items 11,12,13,14,15,16 and 17 were "Highly Aware" with a grand mean (x) of 3.26. This implied that there is high awareness among pre-service science teachers of FUT Minna on the on the availability of sustainable digital technologies.

**3.2.3 Research Question 3:** what is the level of awareness on the impact of digital technologies on the ecosystem among pre-service science teachers of FUT Minna?

**Table 3.4: Mean (x) of respondents on the Impact of Digital Technologies on the Ecosystem**

S/NO.	ITEM	N	Mean (x)	SD	Decision
18.	Human activities such as deforestation, mining exploration, chemical fishing and so on degrade the environmental ecosystem	210	3.31	0.77	Highly Aware
19.	Eco-friendly technologies have less negative/adverse effects on ecosystem	210	3.01	0.89	Highly Aware
20.	Looking at electronic or digital screen for a long period of time can cause impairment known as myopia (blurred vision)	210	3.12	0.86	Highly Aware
21.	Wearing protective glasses protects the eye from myopia	210	3.08	0.86	Highly Aware
22.	Digital devices emit heats/radiation rays that causes cancer when exposed for a long period of time.	210	3.05	0.93	Highly Aware
<b>Grand Mean</b>			<b>3.11</b>	<b>0.86</b>	

The result presented in **Table 3.4** above revealed that the respondents agreed that items 18,19,20,21 and 22 were "Highly Aware" with a grand mean (x) of 3.11. This implied that there is high awareness among pre-service science teachers of FUT Minna on the impact of digital technologies on the ecosystem.

### 3.3 Summary of Findings

1. The respondents unanimously agreed that there is moderate awareness among pre-service science teachers of FUT Minna on the concepts of Digital Eco-literacy which may likely impact the improvement of a sustainable environment ecosystem.
2. The respondents unanimously agreed on the high awareness among pre-service science teachers of FUT Minna on the availability of sustainable digital technologies which may also likely impact the improvement of a sustainable environmental ecosystem.
3. The respondents unanimously agreed that there is high awareness among pre-service science teachers of FUT Minna on the impact of digital technologies on the ecosystem.

### 3.4 Conclusion

Based on the outcomes of this research, it was concluded that there is high awareness with the concepts of Digital Eco-literacy among pre-service science teachers of FUT Minna, there is growing importance of understanding and addressing the environmental impact of digital technologies. As our society becomes increasingly dependent on digital tools and platforms, it is crucial to raise awareness and educate individuals about the environmental consequences of their digital actions. This research highlights the need for educational institutions, governments, tech companies, and environmental organizations to collaborate in promoting digital eco-literacy. By integrating these concepts into education, fostering critical thinking, and encouraging sustainable practices, we can work toward a more environmentally responsible digital future “(Adela *et al.*, (2018); Kim *et al.*, (2017); Lee and Kim (2017).”

### 3.5 Recommendations

some general recommendations based on common findings in this area:

1. Digital eco-literacy concepts should be integrated into formal education systems at various levels. Create curricula that teach students about digital sustainability, online environmental impacts, and how to use digital tools responsibly.
2. Critical thinking when it comes to digital consumption should be encouraged. Teach individuals to assess the environmental impact of their digital activities, such as the carbon footprint of streaming services or the energy efficiency of electronic devices.
3. Public awareness campaigns about the environmental consequences of digital technologies should be launched/raised. Use social media, workshops, and educational events to inform the public about the issues and potential solutions.

### REFERENCES

- Adebayo, O. O., & Ajibola, O. O. (2018). Investigating Digital Eco-literacy Misconceptions among Teachers in Nigerian Secondary Schools. *Journal of Education and Practice*, 9 (7), 19-26.
- Adedaja, G. A., Adeyemi, T. O., & Adetuyi, O. M. (2016). Digital Literacy Skills among University Students in Southwestern Nigeria. *Information Development*, 32(3), 822-837.
- Adegbite, S. A., & Adekunle, A. A. (2017). Assessing Digital Eco-literacy Awareness among Nigerian University Students. *Global Journal of Environmental Science and Management*, 3(3), 301-312.
- Adegoke, B. A., & Oyelekan, O. S. (2020). Promoting Digital Eco-literacy for Sustainable Development: Perspectives from Nigeria. *Journal of Research in Environmental Science and Toxicology*, 9(2), 15-24.
- Adela, D., Sukarno, S., & Indriayu, M. (2018). Integration of environmental education at the Adiwiyata program recipient school in growing ecoliteracy of students. In *International Conference on Teacher Training and Education 2018 (ICTTE 2018)* (pp. 67–71). Atlantis Press.
- Adenike, A. A. & Foluke, V. A. (2021). Current Trends in Sustainability Education and the Future of Sustainability Education in Nigeria, *The Journal of Sustainable Development, Law and Policy*, 12:2, 421-440.
- Adewale, A. O., & Akinbode, M. O. (2020). Addressing Digital Eco-literacy Misconception in Nigeria: Insights from Awareness Campaigns. *International Journal of Environmental Science and Sustainable Development*, 5(2), 62-73.
- Aigbokhan, E. E., & Adesina, A. F. (2017). Environmental Education in Nigeria: Challenges, Prospects, and the Way Forward. *International Journal of Education, Learning and Development*, 5(1), 24-36.
- Aina, O. A. (2016). Eco-literacy among Secondary School Students in Southwest Nigeria. *Journal of Sustainable Development Studies*, 8(2), 104-119.
- Ajayi, A. O., & Agodzo, S. K. (2018). Assessment of Ecological Literacy among Secondary School Students in Nigeria. *Global Journal of Environmental Science and Management*, 4(4), 419-432.
- Aminu, M. A., & Uzairu, A. (2021). Environmental Education and Ecological Literacy in Nigerian Universities: Perspectives and Practices. *Journal of Environmental Education*, 52(3), 175-186.
- Babalola, A. & Olawuyi, D. (2021). Advancing Environmental Education for Sustainable Development in Higher Education in Nigeria: Current Challenges and Future Directions. *Journal of Sustainability*, (13), 191.

Ekwueme, D. C., Ekon, C. O., & Ezenwa-Nebife, E. E., (2016). Education for Sustainability through Academic Freedom. *Research Global Journal of Education*, 15-23.

Eneh, S. O., & Ndujiuba, C. U. (2016). Digital Eco-literacy among University Students in Nigeria: A Study of Digital Skills and Environmental Consciousness. *International Journal of Education and Development using Information and Communication Technology*, 12(2), 39-54.

Ismaila, Y. K., & Salman, K. K. (2015). Eco-literacy and Sustainable Development: A Focus on Nigeria. *Sustainable Development and Planning VII*, 55-65.

Iyamu, T., & Abolarin, F. T. (2019). Digital Eco-literacy Awareness and Practices among Small and Medium Enterprises in Nigeria. *Information and Knowledge Management*, 9(2), 39-48.

Kim, G., Vaswani, R. T., Kang, W., Nam, M., & Lee, D. (2017). Enhancing ecoliteracy through traditional ecological knowledge in proverbs. *Sustainability*, 9(7), 1182.

Lee, S.-K., & Kim, N. (2017). Environmental education in schools of Korea: Context, development and challenges. *Japanese Journal of Environmental Education*, 26(4), 4\_7-14.

Ogbeide, O. E., & Ibude, E. C. (2018). Eco-literacy and Sustainable Development in Nigeria: The Role of Environmental Education. *Journal of Environmental Science, Toxicology and Food Technology*, 12(7), 10-16.

Okebukola, P. A., & Jegede, O. J. (2016). Environmental Education in Nigeria: Content analysis of approved textbooks. *International Journal of Environmental & Science Education*, 11(15), 7759-7772.

Olatoye, R. A., Adeyemo, A. J., & Aina, O. A. (2017). Assessing University Students' Eco-literacy and Attitudes towards Sustainable Development in Nigeria. *Journal of Education and Practice*, 8(5), 111-119.

Olawumi, T. O., & Akinbode, M. O. (2018). Digital Eco-literacy Awareness and Sustainable Development in Nigeria: A Perception Study. *Journal of Sustainable Development in Africa*, 20(4), 179-195.

Olawuyi, D. S. & Olusegun, O. (2018). Achieving the United Nations Sustainable Development Goals on Biological Diversity in Nigeria: Current Issues and Future Directions. *Global Journal of Comparative Law*, 7 (1) 37-60.

Olawuyi, D. S. (2015). *The Principles of Nigerian Environmental Law*. (Afe Babalola University Press, 2015) 1-25.

Ololube, N. P., & Agbor, C. N. (2017). Digital Literacy among Pre-Service Teachers in Nigerian Universities: A Case Study. *Journal of Education and Practice*, 8(7), 125-132.

Oluwafemi, O. S., & Omoogun, A. C. (2018). Digital Eco-literacy as a Determinant of Sustainable Development: A Study of Nigerian Youths. *International Journal of Environmental Science and Sustainable Development*, 4(1), 17-25.

Onyebuchi, C. N., & Ogwo, B. A. (2015). Digital Literacy Competencies among Undergraduate Students in Nigerian Universities: Implications for E-Learning. *Journal of Information Technology Education: Research*, 14, 409-424.

Oyewobi, L. O., & Osibanjo, A. O. (2017). Digital Eco-literacy Misconceptions among Undergraduate Students in Nigerian Universities: Implications for Sustainable Development. *Journal of Sustainable Development in Africa*, 19(2), 94-111.

Oyewole, I. M., Popoola, O. S., & Adu, E. T. (2020). Digital Literacy Competencies and Academic Performance of Nigerian Undergraduates. *Journal of Computing in Higher Education*, 32(3), 423-442.

Spínola, H. (2015). Environmental literacy comparison between students taught in eco-schools and ordinary schools in the Madeira Island region of Portugal. *Science Education International*, 26, 392-413.

**V. INTERNATIONAL CAPPADOCIA SCIENTIFIC RESEARCH CONGRESS**

**November 5-7, 2023 / Cappadocia-Nevsehir**

**WEB: [www.cappadociacongress.org](http://www.cappadociacongress.org)**

**MAIL: [cappadociacongress@gmail.com](mailto:cappadociacongress@gmail.com)**

Stone, M. K. (2017). Ecoliteracy and schooling for sustainability. In *EarthEd* (pp. 35–47). Springer.