



INTERNATIONAL HAZAR  
SCIENTIFIC RESEARCHES  
CONFERENCE - II

---

**ABSTRACT BOOK**

---

EDITORS:

Assoc. Prof. Dr. Irade HALILOVA

Alina AMANZHLOVA

ISBN: 978-605-74616-2-9



## II. INTERNATIONAL HAZAR SCIENTIFIC RESEARCHES CONFERENCE

April 10 - 12, 2021  
Baku, Azerbaijan  
Khazar University



### ABSTRACT BOOK

Edited by

Assoc. Prof. Dr. Irade HALILOVA

Alina AMANZHLOVA

All rights of this book belong to IKSAD GLOBAL.  
Without permission can't be duplicate or copied. Authors of  
chapters are responsible both ethically and juridically.

Issued: 15.04.2021

ISBN: 978-605-74616-2-9

**CONGRESS ID**

**INTERNATIONAL HAZAR SCIENTIFIC RESEARCHES CONFERENCE - II**

**ORGANIZATORS**

**IKSAD and Hazar University**



**DATE-PLACE**

**April 10 - 12, 2021**

**Baku, Azerbaijan, Khazar University**

**EDITORS**

**Assoc. Prof. Dr. Irade HALILOVA**

**Alina AMANZHLOVA**

**EVALUATION PROCESS**

**All applications have undergone a double-blind peer review process**

**TOTAL NUMBER OF PAPERS: 289**

**THE NUMBER OF PAPERS FROM TURKEY: 141**

**OTHER COUNTRIES: 148**

**PARTICIPANT COUNTRIES (32):**

**Turkey, Azerbaijan, Morocco, Pakistan, Nigeria, Algeria, India, Poland, Bangladesh, China, United Kingdom, Australia, Greece, Malaysia, Indonesia, Sweden, Iran, Slovakia, New Zealand, Ethiopia, Ukraine, Mexico, Hungary, United Arab Emirates, South Korea, Iraq, Oman, Colombia, Egypt, Germany, Senegal, Romania**



## **Congress Chairman**

**Prof. Dr. Hamlet ISAHANLI - Chairman of the Board of Trustees of Hazar University**

## **Congress Organizing Committee**

**Prof. Dr. Seyfeddin RZAYEV - Director of AMEA Folklore Institute "Mythology", vice president of the scientific journal "Dede Korkut"**

**Prof. Dr. Ramazan GAFARLI - Director of AMEA Folklore Institute "Dede Korkut" fireplace, President of the scientific journal "Dede Korkut"**

**Prof. Dr. Hacer HÜSEYNOVA - AZERBAIJAN STATE PEDAGOGY UNIVERSITY**

**Prof. Dr. Ali BİLGİLİ - Ankara University**

**Assoc. Dr. İrade HALİLOVA - HAZAR UNIVERSITY VICE RECTOR, Chairman of the Scientific Committee**  
**Assoc. Dr. Ruslan ABDULLAYEV - AZERBAIJAN NATIONAL SCIENCES ACADEMY**

**Assoc. Dr. Gönül SAMEDOVA - AZERBAIJAN STATE PEDAGOGY UNIVERSITY**

**Assoc. Dr. Sehran HAVERİ - Member of the Board of Directors of AMEA**

**Assoc. Dr. Sebine İSAYEVA - AMEA Folklore Institute "Dede Korkut" branch, Expert researcher**

**Assoc. Dr. Sefa KARAYEV - AMEA Folklore Institute**

**Assoc. Dr. Hikmet GULUYEV - AMEA Folklore Institute**

**Dr. Zamik TEHMEZOV - Azerbaijan State Pedagogical University**

**Dr. Lecturer Ishak ERTUĞRUL - Muş Alparslan University**

**Dr. Lecturer Sabahat COŞKUN - Bilecik Şeyh Edebali University**

**Huraman KERİMOVA - AMEA Folklore Institute "Dede Korkut" branch Expert researcher**

**Aysel ŞEYDAYEVA - Azerbaijan State Pedagogical University**

## **SCIENTIFIC AND ADVISORY BOARD**

- Prof. Dr. İsmayıl KAZIMOV - Azerbaijan National Academy of Sciences  
Prof. Dr. Ramazan GAFARLI - Director of AMEA Folklore Institute "Dede Korkut" fireplace,  
President of the scientific journal "Dede Korkut"  
Prof. Dr. Hacer HÜSEYNOVA - Azerbaijan State Pedagogical University  
Prof. Dr. Teyyar CAVADOV - Azerbaijan State Pedagogical University  
Prof. Dr. Seyfeddin RZAYEV - Director of AMEA Folklore Institute "Mythology" network,  
vice president of the scientific journal "Dede Korkut"  
Prof. Dr. Ali BİLGİLİ - Ankara University  
Prof. Dr. Mahmut MASCA - Afyon Kocatepe University  
Prof. Dr. Aliye ÖZENOĞLU - Üsküdar University  
Assoc. Dr. Sebine İSAYEVA - AMEA Folklore Institute "Dede Korkut" branch, Expert  
researcher  
Assoc. Dr. Galib SAYILOV - AMEA Folklore Institute "Ceremonial folklore" branch Expert  
researcher  
Assoc. Dr. Gönül SAMEDOVA - Azerbaijan State Pedagogical University  
Assoc. Dr. Serhan HAVERİ - Member of the Board of Directors of AMEA  
Assoc. Dr. Melahet BABAYEVA - AZERBAIJAN STATE PEDAGOGY UNIVERSITY  
Assoc. Dr. Sefa KARAYEV - AMEA Folklore Institute  
Assoc. Dr. Hikmet GULUYEV - AMEA Folklore Institute  
Assoc. Dr. Basak HANEDAN - Ataturk University  
Assoc. Prof. Dr. Ali Korkut ULUDAĞ - Ataturk University  
Assoc. Prof. Dr. Mehmet Özkan Timurkan - Ataturk University  
Assoc. Prof. Dr. Hakan AYDIN - Ataturk University  
Assoc. Prof. Dr. Hülya BALKAYA - Ataturk University  
Assist. Prof. Dr. Gülşen KIRPIK - Adıyaman University  
Assist. Prof. Dr. Azamat Maksüdünov - Kırgız Türk Manas University, Kırgızistan  
Assist. Prof. Dr. Tuba Özge YAŞAR - Tekirdağ Namık Kemal University  
Assist. Prof. Dr. Hale UYAR HAZAR - Aydın Adnan Menderes University  
Dr. Zamik TEHMEZOV - Azerbaijan State Pedagogical University  
Dr. Lecturer Gülşen KIRPIK - Adıyaman University  
Dr. Gülşen AĞABEY - AZERBAIJAN STATE PEDAGOGY UNIVERSITY  
Dr. Halide MEMMEDOVA - AMEA Folklore Institute "Dede Korkut" branch, Expert  
researcher  
Dr. C.VIJAI - Assistant Professor, Department of Commerce, St.Peter's Institute of Higher  
Education and Research, Avadi, Chennai-600 054 Tamil Nadu, India  
Dr. Aygun MEHERREMOVA. Baku State University  
Dr. Gulshen MEHERREMOVA. Azerbaijan University of Languages

## **GENERAL COORDINATOR**

Elvan CAFEROV - AZERBAIJAN STATE PEDAGOGY UNIVERSITY

# CONTENT

CONGRESS ID	I
SCIENTIFIC COMMITTEE	II
PHOTO GALLERY	III
CONGRESS PROGRAM	IV
CONTENT	V
ABSTRACTS	VI

## ABSTRACTS

TITLE	AUTHOR(S)	PAGE
E-TİCARETTE ELEKTRONİK ÖDEME SİSTEMLERİNİN KULLANIMI: TÜRKİYE ÖRNEĞİ	Mehmet YAZICI	1
IMPROVEMENT OF RECOVERY TIME FOR RESISTIVE SFCL USED IN POWER SYSTEMS	Buğra Yılmaz	2
	Muhsin Tunay Gençoğlu	
MOLECULAR METHODS USED IN THE DETERMINATION OF A1 AND A2 MILK IN THE BETA-CASEIN GENE	Özcan ŞAHİN	4
	Saim BOZTEPE	
CHALLENGES REGARDING THE EXPRESSIONS OF TURKISH CAUSATIVE VOICE VERBS IN TEACHNG RUSSIAN AS A FOREIGN LANGUAGE	Leyla Çiğdem DALKILIÇ	6
VERBS IN THE AZERBAIJANI LANGUAGE	Hajar Huseynova	8
CURRENT STATUS OF ANIMAL PRODUCTION AND AGRICULTURAL SUPPORTS IN TURKEY	Sadi AKYÜZ	10
	İbrahim AYTEKİN	
OCCURRENCE OF <i>Atherina boyeri</i> Risso, 1810 IN KÜÇÜK MENDERES RIVER	Semra BENZER	12
	Prof. Dr. Ali GÜL	
PRESERVING THE PURITY OF OUR LANGUAGE IS ONE OF THE URGENT ISSUES OF LINGUISTICS	Chinara GAHRAMANOVA	13
MEDIAL OVERHANG OF THE TIBIAL COMPONENT DOES NOT SIGNIFICANTLY AFFECT POSTOPERATIVE FUNCTIONAL OUTCOME FOLLOWING TOTAL KNEE ARTHROPLASTYFUNCTIONAL OUTCOME FOLLOWING TOTAL KNEE ARTHROPLASTY	Mehmet Ekinci	16
	Mehmet Ersin	

CHILDREN'S OBRAZ IN ZAUR USTAC'S POEMS ("CHILD OBRAZ IN SETİR" SECTION (IN THE BOOK "GÜLÜZANIN ŞIIRLARI" IN THE FIELD OF RESEARCH)	Ayətəxan Ziyad (İsgəndərov)	17
LANGUAGE SITUATION OF BAKU CITY	Jahid KAZIMOV	20
DERIVATIVES OF XANTHOGENIC ACIDS AS ANTICORROSIVE AND ANTIOXIDANT ADDITIVES	Mustafayev Nazim Pirməmməd oğlu Novotorjina Nelya Nikolayevna Ramazanova Yulduz Böyükağa qızı Musayeva Bella İskəndər qızı Hacıyeva İradə Balay qızı	23
KINETIC CALCULATIONS OF METHYLENE BLUE ADSORPTION ON OLIVE (OLEA EUROPAEA) TREE SAWDUST GROWN IN BORNOVA DISTRICT OF IZMIR PROVINCE	Ali Rıza KUL Sema KAPTANOĞLU Ahmet SELÇUK Hasan ELİK Nuran BAZANCİR Hasan ERGE	26
THERMODYNAMIC AND ISOTHERM CALCULATIONS OF METHYLENE BLUE ADSORPTION STUDIES ON OLIVE (OLEA EUROPAEA) TREE SAWDUST GROWN IN BORNOVA DISTRICT OF IZMIR PROVINCE	Ali Rıza KUL Sema KAPTANOĞLU Ahmet SELÇUK Hasan ELİK Nuran BAZANCİR Hasan ERGE	28
THE EFFECT OF ADDITIVES BASED ON VARIOUS ALKYLPHENOLS ON THE PROPERTIES OF ENGINE OILS	Qədirov Əli Əsrəf oğlu Nağıyeva Elmira Əli qızı Kazımsadə Əli Kazım oğlu Nəsirova Sahilə İkrəm qızı Məmmədyarova Xədicə Nizami qızı	30
BOZQURD IMAGE IN UYGUR OGUZ NAMES	Sadəddinli Nərmin Məmmədrasul qızı	33
THE IMPACT OF THE COVID-19 PANDEMIC ON A DISCIPLINE SOCIETY RESPECTIVE TO CULTURAL FEAR	Emrah ARĞIN İsmail BAYDİLİ	35
REFLECTIONS OF THE CONCEPT OF TIME IN PAINTING	Mustafa DİĞLER Rasim SOYLU	37
SEEKING NATIONAL IDENTITY IN TURKISH ART FROM OTTOMAN TO PRESENT	Rasim SOYLU Mustafa DİĞLER	39
HYPOGAMMAGLOBULINEMIA AND SARS-COV-2: A CASE REPORT	Mehmet Selim ÇÖMEZ	41
A RARE COMPLICATION PNEUMOTORAX: SINGLE CENTER EXPERIENCE IN PATIENTS WITH PACEMAKER APPLIED	Ahmet Acıpayam	43

THEOLOGICAL FUNDAMENTALS OF GUIDANCE AND HERESY IN THE CONTEXT OF HUMAN FREEDOM IN ISLAMIC THEOLOGY	Recep Önal	45
SYNTHESIS AND STUDY OF THIOCYANATE DERIVATIVES CONTAINING DIFFERENT FUNCTIONAL GROUPS AS BIOCIDES TO COOLANT	Musayeva Bella İskender gizi	47
	Farzaliyev Vagif Medcid oglu	
	Ismayilova Gunay Geray gizi	
	Novotorjina Nelya Nikolayevna	
	Akchurina Tanzila Khasanovna	
	Safarova Mehpare Rasul gizi	
FAT AND FATTY ACID COMPOSITION OF THE GRAINS AT DIFFERENT PARTS OF THE PANICLE IN LOCAL OAT GENOTYPES	Özge Doğanay ERBAŞ KÖSE	49
	Zeki MUT	
CLASSIFICATION OF WAVE SEQUENCES FOR COUNTERFLOW COMBUSTION FRONTS IN REACTION-CONVECTION-DIFFUSION MODEL	Fatih ÖZBAĞ	51
PAIN MANAGEMENT IN COVID-19 DIAGNOSED CHILDREN	Sinem Yalnızoğlu Çaka	52
	Özge Karakaya Suzan	
	Nursan Çınar	
MAGNETIC Fe <sub>3</sub> O <sub>4</sub> NANOPARTICLES WITH COUMARIN-PHENYLALANINE: THERMAL, ANTIMICROBIAL AND DIELECTRICAL ANALYSIS	Eray Çalışkan	54
	Fatih Biryan	
	Kenan Koran	
DETERMINATION OF INSIDENTAL RENAL ARTERY STENOSIS WITH MOVING BED CONTRAST ENHANCED MAGNETIC RESONANCE ANGIOGRAPHY USED IN THE DIAGNOSIS OF PERIPHERAL ARTERY DISEASE	Esra Özgül	56
	Nefise Çağla Tarhan	
	Fatih Boyvat	
DETERMINING THE CONTRIBUTION OF CRM TRAININGS ON FLIGHT SAFETY IN TURKEY	Mahmut Melih BAŞDEMİR	58
	Cengiz Mesut BÜKEÇ	
WHY SHOULD FUZZY LOGIC APPLICATIONS BE USED IN SCIENCE EDUCATION?	Münevver SANCA	61
	Hüseyin ARTUN	
THE EFFECTS OF EXERCISE-INDUCED IRISIN MYOKINE ON OBESITY	Aysu ÖNAL	63
	Cengizhan SARI	
DERMATOPHYTOSIS IN DOGS AND TREATMENT CHOICES	Ali Bilgili	65
	Başak Hanedan	
	Muhammed Haydar Uysal	
EFFECT OF THE ADDITION OF SODIUM BUTYRATE ON PERFORMANCE AND EGG QUALITY PARAMETERS IN LAYER QUAILS	Esra Tuğçe ŞENTÜRK	67
	Abbas Fadhl ABDULQADER	
	Alpönder YILDIZ	
	Osman OLGUN	
THE GERMAN ROMANTIC PERIOD UNDERSTANDING BASED ON THE EXAMPLE OF "THE LIFE OF A MISCHIEVOUS"	Coşkun DOĞAN	68



UNDERSTANDING OF GERMAN CLASSICAL LITERATURE AND JOHANN WOLFGANG VON GOETHE	Coşkun DOĞAN	70
INVESTIGATION OF THE EFFECT OF PARTICIPATING IN SPORTS ACTIVITIES ON LIFE SKILLS OF HIGH SCHOOL STUDENTS	Mehmet ALTUN	72
	Mehmet Mustafa YORULMAZLAR	
	Mahmut AÇAK	
THE IMPACT OF THE PROPHETIC SUNNAH ON CHARACTER BUILDING OF AN INDIVIDUAL PERSON	Rehana Kanwal	74
THE EFFECT OF UNIVERSITY STUDENTS' SOCIAL INTELLIGENCE LEVELS ON SELF-SUFFICIENCY PERCEPTIONS: A FIELD RESEARCH IN TURKEY, AZERBAIJAN AND POLAND	İsmail BAKAN	75
	Hamran AMIRLI	
EVALUATION OF PRE-SCHOOL TEACHER CANDIDATES 'OPINIONS ABOUT PHYSICAL EDUCATION AND GAME TEACHING COURSE	Ahmet YIKILMAZ	77
	Fikret ALINCAK	
EFFECTS OF SEPIOLITE USAGE IN DIETS ON SOME EGG TRAITS AND EGG CHOLESTEROL CONTENT IN LAYING HENS	Sakine YALÇIN	79
	Suzan YALÇIN	
SUPPORT OF MN ADDITION TO CRACK PROPAGATION ALONG GRAIN BOUNDARIES IN BI-2212 SUPERCONDUCTING SYSTEM	A.T. Ulgen	80
	T. Turgay	
	Y. Zalaoglu	
	G. Yildirim	
A MECHANICAL MODELLING RESEARCH FOR MN ADDED BULK BI-2212 SUPERCONDUCTING SYSTEM	A.T. Ulgen	81
	T. Turgay	
	Y. Zalaoglu	
	G. Yildirim	
CONSUMER PROFILES BASED ON SUSTAINABLE CONSUMPTION BEHAVIOR	Hilal ÖZTAY	82
RESIDENCE PERMITS OF FOREIGNERS IN LINE WITH INTERNATIONAL PROTECTION LAW WITHIN THE FRAMEWORK OF MIGRATION MANAGEMENT IN TURKEY	Seda TOPGUL	84
THE INEQUALITY VIRUS: CORONAVIRUS AND THE NEW SOCIAL CLASSES IT HAS EMERGED	Seda TOPGUL	85
THE EFFECT OF CUTTING DIRECTIONS ON SCREW TORQUE IN SCOTS PINE WOOD (Pinus sylvestris L.)	Emre BİRİNCİ	86
FEVER MANAGEMENT IN CHILDREN	Gülşah Hür	88
	Nursan Çınar	

DETERMINING THE ACCURACY OF QIBLA DIRECTION OF MOSQUES: A CASE STUDY IN KARAMAN CITY, TURKEY	Fuat BAŞÇİFTÇİ	90
INVESTIGATION OF THE EFFECTS ON MULTI-MACHINE POWER SYSTEMS OF DFIG BASED WIND TURBINES	M. Kenan DÖŞOĞLU	92
	Muhammet DEMİRBAŞ	
INVESTIGATION OF SMALL SIGNAL STABILITY IN POWER SYSTEMS WITH DIFFERENT TG MODELS AND UPFC-POD	Muhammet DEMİRBAŞ	94
	M. Kenan DÖŞOĞLU	
SEMANTIC ANALYZES FROM IMAM BIRGIVİ'S THOUGHT SYSTEM: EXAMPLE OF CONCEPTS OF 'FAITH, BLASPHEMY, BID'AH AND TAKFIR'	Recep Önal	96
THE PLACE OF CORPORATE REPUTATION COMPONENTS IN THE ADVERTISEMENT: THE SAMPLE OF KOÇ HOLDING ADVERTISEMENTS	Merve KARAVAR	98
EFFECT OF SUPPLEMENTATION OF CARDAMOM POWDER TO THE LAYING HEN DIETS ON PERFORMANCE AND EGG QUALITY PARAMETERS	Abbas Fadhıl ABDULQADER	100
	Esra Tuğçe ŞENTÜRK	
	Osman OLGUN	
	Alpönder YILDIZ	
EFFICIENCY IN SOLAR ENERGY SYSTEMS	Ebra Nur ZUREL	101
	Muzaffer ASLAN	
TRANSFORMATION OF BROWNFIELDS: BAKU BLACK CITY OIL INDUSTRIAL ZONE	Leman Allahverdiyeva	103
	Özlem Güzey Kocataş	
MOTOR OIL FOR AUTOTRACTOR DIESELS BASED ON REGENERATION PRODUCTS OF UTILIZED ENGINE OIL	Ramazanova Yulduz Boyukaga gizi	105
	Yusifzadeh Gulshan Galib gizi	
	Shamilzadeh Tamilla Israfil gizi	
	Dadashova Tarana Adil gizi	
	Shukurova Matanat Intigam gizi	
TURKEY'S TRANSBOUNDARY WATER POLICY: THE EXAMPLE OF MERIC-ERGENE RIVER BASIN	Burçin Demirbilek	107
OPTIMIZATION OF THREE-TUNED MASS DAMPER FOR MULTI STORY BUILDIND UNDER EARTHQUAKE EXCITATIONS	Onur ARAZ	109
ECONOMIC LOAD DISPATCH PROBLEM USING A MAYFLY OPTIMIZATION ALGORITHM	Enes KAYMAZ	110
	Uğur GÜVENÇ	
	M. Kenan DÖŞOĞLU	
VOLTAGE STABILITY ANALYSIS WITH DIFFERENT AUTOMATIC VOLTAGE REGULATOR MODELS IN POWER SYSTEMS	Enes KAYMAZ	112
	M. Kenan DÖŞOĞLU	
	Uğur GÜVENÇ	
THE PROBLEM OF SYNONYMY IN ARABIC AND THE PLACE OF SYNONYMY IN LANGUAGE	Saffet Cengiz	114
	Esra Meltem KAYAHAN ULU	116

DIFFUSION-WEIGHTED IMAGING FINDINGS OF BRAIN PARENCHYMA IN PEDIATRIC INTRACRANIAL HYPERTENSION	Hülya İNCE	
	Özlem TERZİ	
TAX CONTROL SYSTEM	Xetai Salmanov	118
SENTIMENT ANALYSIS USING ACTIVE LEARNING BASED TRANSFER LEARNING APPROACH IN TURKISH TEXTS	Seher LORT TOSUN	120
	Oğuz FINDIK	
EARLY MDCT FINDINGS IN COVID-19 DISEASE: CAN VASCULAR ENLARGMENT BE A PATOGNOMONIC FIND?	Melike Ruşen Metin	122
10 YEARS CHANGE IN THE NBA AND IMPORTANT IN-GAME PARAMETERS: OFFENSIVE VARIABLES	Hakan BÜYÜKÇELEBİ	123
	Mahmut AÇAK	
COMPARISON OF GRIP FORCE AND HAND REACTION VALUES IN DIFFERENT GENERATIONS	İsmail CEYLAN	125
	Mehmet TURAN	
	Sofiya OSTROVSKA	
BIS(1,3-DIBROMOISOPROPIOXY) METHANE AS SYNTHON	Farzaliyev Vagif Medjid oglu	127
	Efendiyeva Khuraman Gadir gizi	
	Mustafayev Nazim Pirmammad oglu	
	Safarova Mehpare Rasul gizi	
	Akchurina Tanzila Khasanovna	
THE EFFECT OF MOTIVATIONAL INTERVIEWS ON PERCEPTION OF BIRTH AND SELF-EFFICACY IN NULLIPARS WITH TRAUMATIC BIRTH PERCEPTION	Sümeyye BARUT	129
	Tuba UÇAR	
THE IMPORTANCE OF TOPIRAMATE USA IN MIGRAINE PROPHYLAXIS	Kübra OLAGAN	130
	Ayşe Kübra KARABOĞA ARSLAN	
EVALUATION OF THE OPINIONS OF PHYSICAL EDUCATION TEACHERS ON SUPPORT AND TRAINING COURSES	Ahmet YIKILMAZ	132
	Fikret ALINCAK	
MEDIATING EFFECT OF THE PSYCHOLOGICAL CONTRACT BREACH IN BETWEEN ORGANIZATIONAL CYNICISM AND ORGANIZATIONAL TRUST	Edip ÖRÜCÜ	134
	Caner DOGAN	
HEALTH WORKFORCE RESOURCES IN DEVELOPING COUNTRIES	Şebnem ASLAN	136
	Azza Yhya JADALLAH	
HEALTH EXPENDITURES, HOSPITAL BED CAPACITY AND HEALTHCARE EMPLOYMENT AND MORTALITY FROM COVID-19 IN OECD COUNTRIES	Şebnem ASLAN	138
	Ayşe ÖZDEMİR	
INVESTIGATION OF THE EFFECTS OF SELF-PERCEPTION, LIFE SATISFACTION AND MOTIVATION IN UNIVERSITY STUDENTS	Gökkız KOÇ140	140
	Menşure ALKIŞ KÜÇÜKAYDIN	
HOW DID THE PANDEMIC PROCESS AFFECT THE SITUATION OF HOME ACCIDENTS IN CHILDREN?	Sümeyra Topal	142
	Nursan Çınar	



THE RELATIONSHIP BETWEEN HIGH SCHOOL STUDENTS' PURPOSE OF USING SOCIAL MEDIA AND LEVEL OF LONELINESS	Lütfiye Timur	144
	Melike Soydan	
	Selin Aycan Sezer	
	Menşure Alkış Küçükaydın	
EXCHANGE RATE AND OIL PRICE PASS-THROUGH INTO INFLATION IN ALGERIA	TOUITOU Mohammed	146
WE ARE THE COVID-19'S VICTIMS TOO: A QUALITATIVE STUDY OF THE INFORMAL AND MSME (MICRO, SMALL, AND MEDIUM) ENTREPRENEURS AT THE TIME OF COVID-19 PANDEMIC	Ady Firdaus	147
	Muhammad Said	
AFTER ATESBAZ-I VELI AND ATESBAZ-I VELI, PEOPLE WHO CAME TO THE COOKERY OFFICE	Yıldız ÜNLÜ	148
	Yılmaz ŞEÇİM	
	Hatice Ferhan NİZAMLIOĞLU	
HISTORY OF POLITICAL REPRESENTATION OF WOMEN IN THE TURKISH PARLIAMENT	Derya ÇİNİ ŞİMŞEK	150
GAMMA-RAY TRANSMISSION FACTORS OF RED SOILS IN THE REGION BETWEEN THE OLTU-SENKAYA DISTRICTS	Burcu AKÇA	152
THE INVESTIGATION OF CHARGE CARRIER CONCENTRATION OF SEMICONDUCTORS BY USING TWO-PARAMETER FERMI-DIRAC FUNCTION	Bahtiyar A. Mamedov	154
	Ebru Copuroğlu	
ON THE STUDY OF SEEBECK COEFFICIENT FOR A SINGLE PARABOLIC BAND IN SEMICONDUCTOR BY USING FERMI-DIRAC FUNCTION	Ebru Copuroğlu	155
	Bahtiyar A. Mamedov	
EVALUATION OF PATIENTS WHO RECEIVE HEALTH SERVICE AT HOME AND DIE DUE TO COVID-19	Esra Kurt CANPOLAT	156
	Umut GÜLAÇTI	
COMPARISON OF TURKEY AND AZERBAIJAN OCCUPATIONAL ACCIDENT RATES WITH DESCRIPTIVE STATISTICAL METHOD	Serenay ÇALIŞ	158
	Çağdaş ÇALIŞ	
COMPARISON OF THE ACCOUNTING SYSTEMS OF THE TURKISH REPUBLICS	Aslıhan KESKİN	160
	Zülkif YALÇIN	
ROBUST IDENTIFICATION BASED ON FRACTIONAL-ORDER MODEL FOR A VEHICLE ELECTRO-RHEOLOGICAL (ER) SUSPENSION SYSTEM	Samir Ladaci	162
	Ms. Yamina Ali-Larnene	
MACROPHAGE TARGETING VIA TOPICAL DRUG DELIVERY FOR THE TREATMENT OF CUTANEOUS LEISHMANIASIS	Fakhar-ud-Din	165
	Sibgha Batool	
	Fatima Zahid	
	Gul Majid Khan	
ASSESSMENT OF WATER QUALITY NORTHERN ASSUIT GOVERNORATE, UPPER EGYPT	Ahmed Asmoay	166
	Zameer Gulzar	167

<b>A RESILIENT TINY IOT SENSOR NETWORK BASED BATTERY LIFE SIMULATION FOR REMOTE COMMUNICATION</b>	<b>Fatima Almahri</b>	
<b>ROLE OF QUEUING THEORY MODEL IN EFFECTIVE BUSINESS STRATEGIES PLANNING</b>	<b>Bhavtosh Awasthi</b>	<b>168</b>
<b>222Rn, 226Ra, and 238U IN SOIL SAMPLES COLLECTED FROM KERBALA UNIVERSITY, FREIHA, LRAQ</b>	<b>Abrrar Abbas Ibrahim</b>	<b>169</b>
	<b>Abdalsattar Kareem Hashim</b>	
	<b>Ali Abid Abojasim</b>	
<b>CARE OF BABIES WITH MACROSOMIA AND MACROSOMIA IN INFANTS OF DIABETIC MOTHERS</b>	<b>Seda TECİK</b>	<b>170</b>
	<b>Nursan ÇINAR</b>	
<b>CONTRACT FARMING IN TURKEY</b>	<b>Zuhal Adalı</b>	<b>172</b>
	<b>Şule Turhan</b>	
<b>COMPARISON OF CANCER CASES IN EUROPEAN COUNTRIES AND TURKEY</b>	<b>Şebnem ASLAN</b>	<b>173</b>
	<b>Ferhat BOLUKÇU</b>	
<b>IMMEDIATION OF BAKU BY NURI PASHA, COMMANDER OF THE ISLAMIC ARMY OF THE CAUCASUS</b>	<b>Yunus EKİCİ</b>	<b>175</b>
<b>THE EFFECT OF SEXED OR CONVENTIONAL SEMEN USE ON PREGNANCY RATES IN HIGH MILK YIELD DAIRY COWS</b>	<b>Nail Tekin ÖNDER</b>	<b>177</b>
	<b>Selim ALÇAY</b>	
<b>SIMPLE SENTENCES SET UP WITH GERUNDIAL</b>	<b>Melike Somuncu</b>	<b>179</b>
<b>DEOXY-SUGAR RELEASING PRO- ANGIOGENIC DRESSINGS TO ACCELERATE HEALING IN BURNS INJURIES AND DIABETIC FOOT ULCER WOUNDS</b>	<b>Muhammad Yar</b>	<b>181</b>
	<b>Lubna Shahzadi</b>	
	<b>Azra Mehmood</b>	
	<b>Muhammad Imran Raheem</b>	
	<b>Sabiniano Román</b>	
	<b>Aqif Anwar Chaudhry</b>	
	<b>Ihtesham ur Rehman</b>	
	<b>C.W. Ian Douglas</b>	
	<b>Iain Ralph</b>	
<b>Sheila MacNeil</b>		
<b>COMPARATIVE ANALYSIS OF APRIORI AND FP-GROWTH ALGORITHMS FOR FREQUENT PATTERN MINING USING APACHE SPARK</b>	<b>Shan Ahmed Usmani</b>	<b>182</b>
	<b>Syed Khurram Kamran</b>	
	<b>Muhammad Zeeshan</b>	
	<b>Noman Islam</b>	
	<b>Zamin Ali Khan</b>	
<b>POLISH MODEL OF ELECTRONIZATION OF THE EXAMINATION PROCEDURE IN CIVIL CASES</b>	<b>Kinga Flaga-Gieruszyńska</b>	<b>183</b>
<b>THE ELECTRONIZATION OF ENFORCEMENT PROCEEDINGS IN CIVIL CASES IN POLAND - CURRENT STATE AND PROSPECTS</b>	<b>Joanna Studzińska</b>	<b>184</b>

THE EFFECT OF NANOPARTICLES ON MHD BLOOD FLOW IN STRETCHING ARTERIAL POROUS VESSEL WITH THE INFLUENCE OF THERMAL RADIATION, CHEMICAL REACTION AND HEAT GENERATION / ABSORPTION	Binyam Zigta	185
AN UNAVOIDABLE TANDEM OF INTERESTS: SOVEREIGN AND GLOBAL	Francisco José Leandro	186
ENERGY IN SMART FARMS	Brahim Lejdel	187
GENETIC ALGORITHM TO FIND OPTIMAL PATH ACCORDING TO TIME AND DISTANCE	Brahim Lejdel	189
ARDL BOUNDS TEST OF GREENHOUSE GAS EMISSIONS	Olorunpomi, O.T.	190
	Olorunpomi, C. K.	
	Asongo, S. T	
NON-ZERO CROSS-SECTION CORRELATION OF INDIVIDUAL EFFECTS	Olorunpomi, O.T.	191
Helianthus annuus ASSISTED GREEN SYNTHESIS OF Co <sub>3</sub> O <sub>4</sub> AND Ag-Co <sub>3</sub> O <sub>4</sub> AND EVALUATION OF THEIR CATALYTIC ACTIVITIES TOWARDS PHOTODEGRADATION OF CRYSTAL VIOLET DYE	Ayesha Rafiq	192
	Muhammad Saeed	
Ag@ZnO: GREEN SYNTHESIS AND EVALUATION OF PHOTOCATALYTIC ACTIVITY TOWARDS PHOTODEGRADATION OF RHODAMINE B DYE	Ayesha Rafiq	193
	Muhammad Saeed	
ELECTRODEPOSITION OF CHROMIUM COATINGS FROM ENVIRONMENTALLY SAFE PLATING BATHS BASED ON A DEEP EUTECTIC SOLVENT TO FABRICATE ELECTROCATALYSTS FOR HYDROGEN PRODUCTION	Protsenko V.S.	194
	Bobrova L.S.	
	Dr. Butyrina T.E.	
	Danilov F.I.	
THE EFFECTS OF INTEREST RATE AND INFLATION ON PRIVATE CONSUMPTION EXPENDITURES IN TURKEY	Musa ATGÜR	196
REVIEW OF SOPHIST-PHILOSOPHER DEFINITIONS IN PLATO'S SOPHIST DIALOGUE AND THE RELATIONSHIP OF THE PHILOSOPHER WITH THE TRUTH	Meliha Selin DÜRMÜŞ	198
ELECTROCHEMICAL DEPOSITION OF CDTE THIN FILM FOR CDS/CDTE X-RAY SENSOR	H. SHAMS	200
	H. ABOU GABAL	
	M. SOLIMAN	
	S. EBRAHIM	
DYSTOCIA DUE TO FETAL ASCITES IN IVESI SHEEP	S. AGAMY	201
	Tuğra AKKUŞ	
	F. Zehra ÖZDEN	
	Ömer YAPRAKCI	203
	Maria Javid	
	M. Imran	



NATURAL CONVECTION HEAT TRANSFER OF MAXWELL FLUID IN AN OSCILLATING CYLINDER	Muhammad Imran Chaudhry	
ON FUZZY PARAMETERIZED FUZZY SOFT TOPOLOGICAL SPACES AND IT'S APPLICATION	Adem YOLCU	204
	Taha Yasin ÖZTÜRK	
SUSTAINABLE SOURCE OF LIFE: MICROALGAE	Latife Ceyda İRKİN	205
EXTRACTING SIGNAL CONVERSATION FROM ANDROID SMART PHONES USING ELCOMSOFT FORENSIC TOOL	Afrah Fathima	207
	Zameer Gulzar	
BRUNCH-CUT FOR UNWRAPPING INTERFEROMETRIC PHASE	Mr. Hadj Sahraoui Omar	208
	Mr. Dif Amar	
A SIMULATION MODELLING FRAMEWORK OF MULTI CRANE DUAL CYCLING STRATEGY FOR CONTAINER TERMINALS	M.Sc. Elvan Deniz	209
	Gonca Tunçel	
INVESTIGATION OF URBAN SPATIAL SEGREGATION AND SYRIANS AS OTHER IN URBAN AREA: ISTANBUL CASE	Şafak ÇÖZE	210
	Hülya BERKMEN	
RELATIONSHIP BETWEEN FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH: PANEL CAUSALITY OECD COUNTRY ANALYSIS	Emine Türkan AYVAZ GÜVEN	213
ANALYSIS OF STEER-BY-WIRE VEHICLES VIA T-S FUZZY CONTROL APPROACH	Nabil EL FEZAZI	215
	Youssef EL FEZAZI	
	Nabil EL AKCHIOUI	
	Said IDRISSE	
INTERNAL LENGTH GRADIENT MECHANICS: FROM STRENGTH OF MATERIALS AND ELASTICITY TO PLASTICITY AND FAILURE	VI.G.Dimosthenis	216
	L.A.S.Kouris	
	E.C.Aifantis	
CALCULATING THE DETERMINANT OF VIETA MATRIX	Ufuk Kaya	217
	Fatma Nur Kaya Sağlam	
A STUDY ON A CLASS OF NUMERICAL SEMIGROUPS	Sedat İlhan	219
MODEL OF TELEMEDICINE SERVICES ON THE EXAMPLE OF POLAND	Aleksandra Klich	220
DOJO AND TRADITIONAL MARTIAL ARTS: A SOCIAL COMMUNITY FOR PHYSICAL ACTIVITY AND HEALTH PREVENTION IN LATER AGE	Danilo Contiero	221
THE SHOCK OF COVID-19 ON THE FOOD AND MARINE INDUSTRIES	Theodoros Daglis	222
	Hadjela Salah	223
	Dr. Belhadi Salim	

MACHINING PARAMETERS OPTIMIZATION OF ALLOY STEEL AISI 4140 USING TOPSIS COMBINED WITH AHP	Pr. Ouelaa Nouredine	
	Pr. Yallese Mohamed Athmane	
ON THE EIGENGRAPH FOR $p$ -BIHARMONIC EQUATIONS WITH RELICH POTENTIALS AND WEIGHT	Mohamed LAGHZAL	224
	Abdelouahed EL KHALIL	
	My Driss MORCHID ALAOUI	
	Abdelfattah TOUZANI	
MODELING AND OPTIMIZATION OF SURFACE ROUGHNESS AND CUTTING FORCE WHEN MACHINING INCONEL 718 USING THE RSM AND DF METHODS	Kouahla Ilyas	225
	Yallese Mohamed Athmane	
	Belhadi Salim	
INTRA-GENRE CHANGES OF TONGUE-TWISTERS IN AZERBAIJANI FOLKLORE	Bilal Alarli HUSEYNOV	226
THE INVESTIGATION OF CLASSROOM TEACHERS' VIEWS TOWARDS PRIMARY EDUCATION GOALS OF 2023 EDUCATION VISION	Ferhat Bahçeci	228
	Mustafa Çınar	
	Semih Dikmen	
GROWTH AND CHARACTERISATION OF IN $Zn_{0.97}Co_{0.03}S$ AND $Zn_{0.97}Mn_{0.03}S$ THIN FILMS: STRUCRAL AND OPTICAL CONSTANTS	Abdullah GÖKTAŞ	229
SELF PERFECTION IN PRESCHOOL IMMIGRANT CHILDREN: THE EFFECT OF SOCIAL ADAPTION AND SKILLS EDUCATION	Emine Bozkurt Polat	231
	Saide Özbey	
	Mehlika Köyceğiz Gözeler	
	Sare Türkmen	
SOCIAL VALUES EDUCATION PROGRAM IN PRESCHOOL CHILDREN: THE EFFECT ON SELF-REGULATION, SOCIAL SKILLS AND PROBLEM BEHAVIOR	Emine Bozkurt Polat	233
	Saide Özbey	
THE PELL FIBONACCI- $p$ SEQUENCES MODULO $m$	Yeşim AKÜZÜM	235
	Ömür DEVECİ	
ON THE PELL FIBONACCI- $p$ SEQUENCES	Ömür DEVECİ	236
	Yeşim AKÜZÜM	
THE HADAMARD-TYPE ORDER- $k$ JACOBSTHAL SEQUENCES MODULO $m$	Yeşim AKÜZÜM	237
	Ömür DEVECİ	
ANALYSIS OF NON-TRAUMA RELATED ORTHOPEDICS CONSULTATIONS	Batuhan Gencer	238
EXPRESSION of the ANGIOTENSIN CONVERTING ENZYME 2 (ACE-2) GENE in BLOOD of BREAST CANCER PATIENTS	Ebubekir DİRİCAN	240
SUPPORTING TOOL FOR THE ON-SCENE COMMANDERS IN STRUCTURAL INTERVENTIONS BY THE FIREFIGHTING TEAMS: VALIDATION OF NEED AND PROPOSAL	Pedro Miguel Sousa Barahona	241
	Ana Filomena de Figueiredo Dias	
	Carla Maria Lopes da Silva Afonso dos Santos	

SENSITIVE TO HYDROGEN PEROXIDE FOR BIOSENSOR CONSTRUCTION PLATINUM/ POLYANILINE ELECTRODE PREPARATION	Sinan Mithat MUHAMMET	243
SENSITIVE TO HYDROGEN PEROXIDE FOR BIOSENSOR CONSTRUCTION PLATINUM/ POLYPYRROLE ELECTRODE PREPARATION	Sinan Mithat MUHAMMET	244
NON-ENZYMATIC AND SUPER POROUS HYBRID CUO/PT NPS PLATFORM WITH THE IMPROVED PERFORMANCE FOR THE HYDROGEN PEROXIDE DETECTION	Rakesh Kulkarni	245
	Rutuja Mandavkar	
	Sundar Kunwar	
	Jae-Hun Jeong	
	Jihoon Lee	
EVALUATION OF BODY AWARENESS OF INDIVIDUALS WHO DO REGULAR SPORTS AND THOSE WHO DO NOT DO AND THEIR POSTURE LEVELS	Serkan KIZILCA	247
	Cengiz ARSLAN	
A NUMERICAL STUDY OF RHEOLOGY OF BOUNDARY LAYER AXISYMMTRIC FLOW OF AN OLDROYD-B FLUID IN THE REGION OF STAGNATION POINT OVER A STRETCHING SHEET: FINITE DIFFERENCE ANALYSIS	Bilal Ahmed	249
IN BIG DATA SEMI-STRUCTURED DATA TYPES AND ANALYTICAL STANDARDS OF TRANSFORMING SEMI-STRUCTURED DATA TO STRUCTURED DATA FOR DATA MINING	Ulviyya İbrahimli Mahir	250
ENTREPRENEURSHIP EDUCATION IN MALAYSIAN UNIVERSITIES FROM THE LENS OF NON-BUSINESS ACADEMIC STAFF	Bazilah Raihan Mat Shawal	251
	Kerry Lee	
	Deborah Shepherd	
EPIGALLOCATECHIN-3-GALLATE-LOADED PLGA-PEG NANOPARTICLES AS A PROMISING ANTI-SEIZURE STRATEGY AGAINST EPILEPSY DISORDERS	Amanda Cano	252
SERS ENHANCEMENT OF RHODAMINE 6G BY A MIXTURE APPROACH WITH GRAPHENE QUANTUM DOTS ON HYBRID CORE-SHELL Pd@Ag NPs	Rutuja Mandavkar	253
	Rakesh Kulkarni	
	Shusen Lin	
	Sanchaya Pandit	
	Sundar Kunwar	
MRAC ADAPTIVE CONTROL DESIGN FOR AN f15 AIRCRAFT PITCH ANGULAR MOTION USING dYNAMICS INVERSION AND FRACTIONAL ORDER FILTERING	Jihoon Lee	256
	Samir Ladaci	
ADVANCEMENT OF STATISTICAL COMPUTING IN NORTH CENTRAL NIGERIA: WAY FORWARD	Amani R. Ynineb	259
	Adenomom M. O	
	Tooba jabeen	260



Azadirachta indica ASSISTED GREEN SYNTHESIS OF Ag-NiO AND INVESTIGATION OF ITS CATALYTIC ACTIVITY TOWARDS THE DEGRADATION OF RHODAMINE B DYE IN AQUEOUS MEDIUM	Muhammad Saeed	
	Ayesha Rafiq	
MULTI-OBJECTIVE OPTIMIZATION OF PERFORMANCE PARAMETERS IN MACHINING AISI D3 INTENDED TOOL STEEL FOR COLD WORKING	Safi Khaoula	261
	Yallese Mohamed Athmane	
	Belhadi Salim	
	Mabrouki Tarek	
	Haddad Abdelkrim	
PREDICTIVE DATA MINING FOR HEART DISEASE PREDICTION	Chihaoui Salim	263
	A. Logeswari	
	A. Ameer Suhail	
	K. Ajeeth	
SYNTHESIS, QUANTUM CHEMICAL CALCULATION AND BIOLOGICAL ACTIVITY OF 4-PHENYL-5-(THIOPHEN-2-YL)-4H-1,2,4-TRIAZOLE-3-THIOL	N. Dhinesh	264
	Rebaz Omar	
THE PHYSICAL LIMITS OF COMPUTATION INSPIRE AN OPEN PROBLEM THAT CONCERNS DECIDABLE SETS $X \subseteq \mathbb{N}$ AND CANNOT BE FORMAL-IZED IN ZFC AS IT REFERS TO THE CURRENT KNOWLEDGE ON X	Metin Koparir	265
	Agnieszka Kozdęba	
FOOD CONSERVATION MANAGEMENT SYSTEM	Apoloniusz Tyszka	267
	Afaq Ahmad	
	Firdous Kausar	
DESIGNING OF CRC POLYNOMIALS FOR 5G-NR	Medhat Awadalla	268
	Afaq Ahmad	
	Sayyid Samir Al-Busaidi	
	Medhat Awadalla	
	Sabir Hussain	
ULTRAVIOLET PHOTODETECTOR USING HYBRID PDAG PLASMONIC NANOPARTICLES, GRAPHENE QUANTUM DOTS AND TITANIUM DIOXIDE	Shaik Mazhar Hussain	269
	Shusen Lin	
	Rutuja Mandavkar	
	Rakesh Kulkarni	
	Sanchaya Pandit	
	Sundar Kunwar	
ON THE CONNECTIONS BETWEEN JACOBSTHAL NUMBERS AND PELL $p$ -NUMBERS	Ming-Yu Li	272
	Jihoon Lee	
THE FIBONACCI-PADOVAN $p$ -SEQUENCES MODULO $m$	Özgür ERDAĞ	273
	Ömür DEVECİ	
THE PELL-JACOSTHAL $p$ -SEQUENCES MODULO $m$	Özgür ERDAĞ	274
	Ömür DEVECİ	
GENIUS HOUR IN SCIENCE EDUCATION	Özgür ERDAĞ	275
	Erol TAŞ	

	Hacı Mehmet YEŞİLTAŞ	
THE EFFECT OF WEB AIDED CONCEPT CARTOONS AND CONCEPTUAL CHANGE TEXTS ON THE ACADEMIC SUCCESS AND PERMANENCE OF 6th GRADE STUDENTS	Kübra SİNANOĞLU	277
	Erol TAŞ	
	Erdem KAYA	
	Hacı Mehmet YEŞİLTAŞ	
THE ROLE OF VITAMIN U AGAINST BRAIN DAMAGE INDUCED BY D-GALACTOSAMINE	Dastagul MAHMARZAYEVA	279
	Bertan Boran BAYRAK	
	İsmet Burcu TÜRKYILMAZ	
	Özlem SAÇAN	
	Refiye YANARDAĞ	
THE EFFECT OF STRENGTH TRAINING WITH FUNCTIONAL SPORT EQUIPMENTS ON YOUNG MALE BASKETBALL PLAYERS' PERFORMANCE	Uğur Can GÖÇER	281
	Mürsel BİÇER	
	Burak GÜRER	
SELECTING A CARGO COMPANY WITH SWARA AND GRAY RELATIVE ANALYSIS METHODS	Engin ÇAKIR	283
	Yasemin ŞANAL	
TURNING WASTES TO WEALTH	Nilofar Asim	285
EXERGETIC ANALYSIS OF MICROCHANNEL WITH SINUSOIDAL CORRUGATIONS	Krishan Kumara	286
	Rajan Kumara	
	Rabinder Singh Bharj	
ORTHOGONALITY IN BOOLEAN CUBE	Yavuz CAN	287
PHOTOVOLTAIC ELECTROOXIDATION FOR PHENOL REMOVAL AND SIMULTANEOUS ENERGY HARVESTING VIA HYDROGEN PRODUCTION	Konstantinos Dermentzis	288
TESTING THE ENVIRONMENTAL KUZNETS CURVE HYPOTHESIS IN CENTRAL EUROPEAN COUNTRIES: EMPIRICAL EVIDENCE FROM THE ARDL BOUNDS TEST	BARTOSZ JÓŻWIK	290
REDUCED BEAM SECTIONS WITH AND WITHOUT RIB	Yasin Onuralp Özkılıç	291
HEAVY METAL STATUS IN DRINKING WATER AND FARMLAND SOIL WITHIN NIGERIA POLICE ACADEMY, WUDIL -KANO STATE	Sholadoye.Q.Oyeniya	292
	Lawal Tajudeen Afolayan	
	Zakari Abdullahi	
G-JITTER EFFECT ON CHAOTIC CONVECTIVE FLOW THROUGH AN ANISOTROPIC POROUS MEDIUM	R. Surendar	293
	M. Muthamilselvan	
MICROPOLAR NANOFLUID FLOW OVER A STRETCHING SHEET UNDER THE EFFECTS OF THERMAL RADIATION AND MAGNETIC FIELD	Abid Hussanan	294
STABILITY ANALYSIS OF YIELD OF COMMON WHEAT ( <i>Triticum aestivum</i> L.) GENOTYPES	Cristina Dias	295
	Carla Santos	

ANALYSING THE COVID-19 SITUATION FROM EMPLOYEES' LENS: A CASE OF INDIA'S TOURISM SECTOR	Pinaz Tiwari	296
EVALUATION OF TRADITIONAL TEXTURE IN THE CONTEXT OF URBAN LIFE QUALITY	Fatiha Nur Terlemez	298
	Fadim Yavuz	
A NOTE ON BEST LINEAR UNBIASED ESTIMATORS IN MODELS WITH ORTHOGONAL BLOCK STRUCTURE	Carla Maria Lopes da Silva Afonso dos Santos	300
	Cristina Paula da Silva Dias	
	Célia Maria Pinto Nunes	
	João Tiago Praça Nunes Mexia	
NONLINEAR FRACTIONAL PARTIAL DIFFERENTIAL EQUATION AND IT'S BOUNDEDNESS	Noureddine BOUTERAA	301
THE STATUS OF PUNICA GRANATUM L. CULTIVATION IN BILECIK PROVINCE INHISAR DISTRICT	Nuray KOŞ	302
	Sinem ÖZTÜRK ERDEM	
MULTIPLE SYSTEM INFLAMMATORY SYNDROME AND NURSING MANAGEMENT RELATED TO COVID-19 IN CHILDREN	Ayşe EROĞLU	304
	Nursan ÇINAR	
EMOTIONAL INTELLIGENCE AS A PREDICTOR OF OCCUPATIONAL ABILITY	Saleha Bibi	306
	Amna Khalid	
THE EFFECT OF WEB AIDED CONCEPT CARTOONS AND CONCEPTUAL CHANGE TEXTS ON THE COGNITIVE LOAD OF 6th GRADE STUDENTS	Kübra SİNANOĞLU	307
	Erol TAŞ	
	Erdem KAYA	
	Hacı Mehmet YEŞİLTAŞ	
OIL PRICE, OIL REVENUE, NON-OIL REVENUE AND GOVERNMENT SPENDING IN NIGERIA: A SVAR ANALYSIS OF REVENUE AND EXPENDITURE RELATIONSHIP	D.O. Olayungbo	309
SPATIAL ECONOMETRICS ANALYSIS WITH APPLICATION OF PHILLIP'S CURVE ON NIGERIAN ECONOMY	Okoro-Ugochukwu, N. A.	310
	Adenomom, M. O	
OPTIMIZATION OF CUTTING PARAMETERS IN THE MACHINING PROCESS OF INCONEL 718 USING THE SIGNAL-TO-NOISE RATIO BASED TAGUCHI GREY RELATIONAL ANALYSIS	H. Boumaza	311
	S. Belhadi	
	M.A. Yallese	
	A. Haddad	
TRIVALENT LOGIC IN DECISION-MAKING FUNCTIONS BY NONLINEAR OPTICAL METHODS	M.S. Geselle García-Beltrán	313
	M.S. Eric A. Hurtado-Aviles	
	Carlos Torres-Torres	
GDP OR GNH (GENERAL NATIONAL HAPPINESS)	Andrea Bencsik	314
	Bc. Dominika Diósi	
E-TASK APPLICATION BASED ON PROBLEM BASED LEARNING IN DATA BASED DESIGN COURSES IN COLLEGE EDUCATION	Sri Restu Ningsih	315
	Gwaison, Panan Danladi	316



EXCHANGE RATE AND BALANCE OF PAYMENT IN NIGERIA (1986-2017). AN AUTO REGRESSIVE DISTRIBUTIVE LAG (ARDL) APPROACH	Apeh Ajene Sunday	
THE ROLE OF WEBSITE PERSONALIZATION IN CREATING URGE TO BUY IMPULSIVELY: A CONCEPTUAL FRAMEWORK	Abu Bashar	317
	Shalini Singh	
	Vivek Kumar Pathak	
OPTIMIZATION OF CUTTING PARAMETERS DURING THE MACHINING OF POLYAMIDE (PA66-GF30%) USING THE DESIRABILITY FUNCTION APPROACH (DFA)	Haoues sabrina	318
	Mohamed Athmane Yallese	
	Belhadi salim	
	Alper Uysal	
EFFECT OF DIFFERENT TYPES OF FILLER LOADINGS (GLASS/POLYESTER WASTE, OLIVE NUTS AND SAWDUST) ON THE MECHANICAL PROPERTIES OF UNSATURATED POLYESTER RESIN	Khedoudja LAOUBI	319
	Nabila BELLOUL	
ON DETERMINING THE MORE AFFECTED REGION BY THE CORONAVIRUS DISEASE: EVIDENCE FROM NIGERIA'S PERSPECTIVE	OGUNLEYE, Timothy A	320
	BAMIDELE, Akinfemi P	
A REGRESSION ANALYSIS OF FACTORS AFFECTING GLOBAL CRUDE OIL AND GAS PRICE	Alya Alblooshi	321
	Mohammed Alavi	
	Sharul Sham Dol	
COMMUNICATIVE TEACHING OF ENGLISH IN SECONDARY SPECIAL SCHOOLS	Svetlana Mammadova	322
ARABIC CONSONANTS CLASSIFICATION ACCORDING TO PLACES OF ARTICULATION	Youssef Elfahm	325
	Badia Mounir	
	Ilham Mounir	
	Laila Elmaazouzi	
	Abdelmajid Farchi	
PROTECTIVE EFFECT OF BORON COMPOUNDS AGAINST BRAIN DAMAGE CAUSED BY RADIATION IN THE RATS	Nurhan Erkaya	326
HEAT FLUX OPTIMIZATION IN SOLAR CONCENTRATOR RECEIVER BASED ON GENETIC ALGORITHMS TO IMPROVE THEIR ENERGY EFFICIENCY	Abdelkader Rouibah	328
	Ahmed Hafaifa	
	Djamel Benazzouz	
TOURISTS' PREFERENCES IN TOURISM DESTINATION SELECTION IN MALAYSIA	Marlisa Abdul Rahim	329
	Nurzehan Abu Bakar	
	Nor Maizana Mat Nawi	
	Raja Norliana Raja Omar	
	Nik Alif Amri Nik Hashim	
	Afifah Hanim Md Pazil	
VISUALIZATION OF CARBON DIOXIDE-WATER MOLECULAR SYSTEM	M. Ferdows	330
RABBIT AND RED FOX DYNAMICS WITH ALTERNATIVE PREY: EFFECT OF MANGE	Jyoti Gupta	331
	Joydip Dhar	

	Poonam Sinha	
FINITE DIFFERENCE SOLUTION OF BLASIU S PROBLEM AND HEAT TRANSFER UNDER BIOMAGNETIC FLUID	Sadia Anjum Jumana	332
	M. Ferdows	
MODULATION DOMAIN SPECTRAL SUBTRACTION FOR SPEECH ENHANCEMENT USING COHERENT DEMODULATION TECHNIQUE	Nesrine Abajaddi	333
	Badia Mounir	
	Ilham Mounir	
	Laila Elmaazouzi	
	Abdelmajid Farchi	
EVAPOTRANSPIRATION FACTOR IN 3D MATHEMATICAL MODELING OF GROUNDWATER LEVEL CHANGES	Elena Sierikova	334
	Elena Strelnikova	
ANALYSIS OF THE INFLUENCE OF THE TOURISM SECTOR ON LOCAL REVENUE (PAD) IN NORTH MALUKU PROVINCE 2014-2018	Novi Nur Setianingsih	337
	Avi Budi Setiawan, S. E.	
A QUALITATIVE APPROACH IN HIGHLIGHTING INFRASTRUCTURE BARRIERS AND CHALLENGES TO MALAYSIAN NANOTECHNOLOGY DEVELOPMENT	Faisal Zulhumadi	338
	Wan Nadzri Osman	
THE IMPORTANCE OF ATTITUDE / BEHAVIOR IN THE OBSERVATION OF WORK TEAMS	Francisco Jose Silvestre Nunes Guiomar	340
	Rui Alberto da Silva Martins Isidoro	
	Ana Filomena de Figueiredo Dias	
INVESTIGATING THE EFFECT OF HETEROGENEOUS ERROR-VARIANCE IN ESTIMATING LINEAR DYNAMIC PANEL DATA MODELS	OGUNLEYE, Timothy A.	341
	ADEJUMO, A. Olusola	
SIMULATION OF COMPLEX SOCIAL SYSTEMS. TOOLS, RESULTS and POSSIBILITIES	Makarenko Alexander	342
	Malezhyk Peter	
	Gasnov Aydin	
A CASE STUDY ON MANAGEMENET OF A DIGITAL TRANSFORMATION PROJECT FOR A TRADITIONAL BUSINESS	MSc. Mehrdad Parsaee	343
	MSc. Shila Khademi Sharifabad	
	Shahryar Sorooshian	
IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON PREVENTION OF WORKPLACE HARASSMENTS	MSc. Shila Khademi Sharifabad	344
	MSc. Mehrdad Parsaee	
	Shahryar Sorooshian	
ANTI FOULING TEMPERATURE-RESPONSIVE POLYMER BRUSH COATINGS BASED ON POLY(DI(ETHYLENE GLYCOL)METHYL ETHER METHACRYLATE-CO-ACRYLAMIDE) FOR BIOMEDICAL APPLICATION	Mgr. Yana Shymborska	345

A USER-FRIENDLY EVALUATION TOOL FOR POINT CLOUD CLASSIFICATION AND SEGMENTATION	Muhammed Fatih ERDOĞAN	346
	Burak KALECİ	
THE FEAST OF GENRES: HETEROGLOSSIA IN THE NOVEL 'THE PERFECT TREATMENT TO CURE YOUR LONELINESS'	Zehra ERGEÇ	347
DETERMINATION OF THE ELEMENT CONTENTS OF THE GEOLOGICAL ROCK SAMPLES WITH THE HELP OF CF-LIBS	Gülin GENÇOĞLU KORKMAZ	349
	Yasemin GÜNDOĞDU	
	Hamdi Şükür KILIÇ	
	Hüseyin KURT	
DIAGNOSIS AND TREATMENT OF PRIMARY VENOUS ANEURYSMS	Meral Ekim	351
	Hasan Ekim	
GREEN ARCHITECTURAL BUILDINGS	Aysu SARI ÇETİN	353
THE EVALUATION IN TERMS OF FORAGE QUALITY OF TOXIC SUBSTANCES FOUND IN SOME FORAGE CROPS	Semih AÇIKBAŞ	354
	Mehmet Arif ÖZYAZICI	
POVERTY MANAGEMENT IN LOCAL GOVERNMENTS	Nazire YÜKSEK	356
	Sayra LOTFİ	
A DECISION PROCEDURE TO CONTROL COVID-19 CROSS-INFECTION IN HEALTHCARE FACILITIES	Yasaman Parsia	358
	Shahryar Sorooshian	
STUDYING THE FUTURE URBAN EXPANSION IN THE CITY OF ELMA, USING GEOGRAPHIC INFORMATION SYSTEMS AND REMOTE SENSING TECHNIQUES	Amina Yahia	359
	Nail Kechichel	
	Abdelmalek Hatti	
	Abdelkader Adla	
THE ROLE OF DEMOGRAPHIC FACTORS IN SHAPING PERSONALITY	Mrs. N.J. Abdinova	360
IMPACT OF THE LORENTZ FORCE ON COMBINED BUOYANCY-THERMOCAPILLARY CONVECTION IN A VERTICAL CYLINDRICAL ANNULAR CAVITY OCCUPIED WITH HYBRID NANOFLUID	B. Kanimozhia	362
	M. Muthtamilselvan	
FLOW ANALYSIS OF A SUPERSONIC BELL NOZZLE USING THE CHARACTERISTIC APPROACH	N. Boughazi	363
	A. Haddad	
	M. Laib	
BACTERIAL PLASTICS: PRODUCTION, STRUCTURE, MOLECULAR BASIS AND APPLICATION	Nazia Jamil	364
THERMOELECTRIC GENERATORS, SOLAR CELLS, AND THERMAL COLLECTORS FOR SOLAR COGENERATION: A REVIEW OF RECENT RESEARCH TRENDS	Ali H.A. AL-WAELI	365
	Kamaruzzaman SOPIAN	
	Hussein A. KAZEM	
	Miqdam T. CHAICHAN	

SIMULATING THE FOUR POINT BENDING EXPERIMENT OF THE RC BEAM USING FEM	M. Kountouri	366
	E. A. Vougioukas	
REAL TIME IOT BASED CROP PROTECTION AND SOIL MAINTENANCE	N. Krishnaraj	367
	Padmini J	
	Akalya A P	
	Sneha M	
TURKEY'S EXPORT COMPETITIVENESS IN THE LOW, MEDIUM AND HIGH TECHNOLOGY GOODS: AN ANALYSES FOR THE TERM 2000-2019	Kazım SARIÇOBAN	368
	Elif KAYA	
AN EVALUATION ON THE MANAGERIAL STRUCTURE AND PROJECTS OF ORGANIZATIONS RELATED TO FAMILY AND SOCIAL SERVICES	Özgür YEŞİLYURT	369
	Ömer Faruk ASLAN	
IMAGE CAPTIONING USING CNN ALGORITHM	A.B.Arockia Christopher	371
	DEEPAK. S	
	GURUPRASATH. M	
	MAGUDESWARAN. P	
UNDERSTANDING THE TRIP CHARACTERISTICS OF THE PHYSICALLY CHALLENGED PEOPLE IN A TRADITIONAL NIGERIAN CITY	Nathaniel Oluwaseun OGUNSEYE	372
	Wasiu Ayodeji ALLI-BALOGUN	
	Umar Obafemi SALISU	
	Simeon Oluwagbenga FASINA	
	Surajudeen Oluwaseyi MOMODU	
	Olusholape Jumoke AKIYODE	
	Boluwaji Philip AKINYEMI	
PROJECT BASED LANGUAGE LEARNING: A BOON TO THE ONLINE MODE OF EDUCATION	Akkara Sherine	373
	Supriya Mariam Joseph	
	Stanislaus Ayyadurai	
GRAPH DECOMPOSITION FOR SECURE COMMUNICATION	M. Yamuna	374
	K. Karthika	
POLY (PYRROLE-CO-O-ANISIDINE) SYNTHESIZED ON ZNFE COATED CARBON STEEL SURFACE	Abdurrahman Akdag	375
DETERMINATION OF GERMINATION CHARACTERISTICS OF FENUGREEK (Trigonella foenum-graecum L.) PLANT UNDER SALT STRESS	Gülen ÖZYAZICI	376
	Semih AÇIKBAŞ	
OCCUPATIONAL HEALTH AND SAFETY IN WORKING WITH SCREENED VEHICLES	RÜMEYSA SARIŞEN	378
	FATMA SÜMEYYE SARIŞEN	
	Dr. DİLEK ÖZTAŞ	
	ABDULLAH YILDIZBAŞI	
	ERGÜN ERASLAN	

PHYTOPLANKTON COMPOSITION AND FUNCTIONAL GROUPS IN A SHALLOW PLATEAU LAKE (ÇİĞ LAKE LOCAL WETLAND, NORTHERN TURKEY)	Beyhan TAŞ	381
	Burcu KARAKAYA	
TWO IMPORTANT OPERATIONS IN GENERALIZED UNIFORMITIES	Muwafaq Mahdi Salih	383
ELECTRONIC ELECTORAL SYSTEM USING BLOCKCHAIN TECHNOLOGY	S. Abinaya	384
	S. Nivedha	
	P. Kirubha	
SYNTHESIS OF POLYESTER RESIN FROM PET WASTE AND EXPLOITATION OF DIFFERENT RESOURCES FOR THE ELABORATION OF COMPOSITES	N. Belloul	385
	M. Bendaoud	
	K. Laoubi	
	L. Timhadjelt	
PHARMACOLOGICAL PROPERTIES OF BOMBAX CEIBA YOUNG ROOT AND ITS EFFECT IN STREPTOZOTOCIN INDUCED DIABETIC RATS	Md. Ariful Islam	386
	Md. Motiar Rahman	
	Mohammad Amirul Islam	
EINSTEIN POISSON WARPED PRODUCT SPACE	Pankaj Kumar	387
CONTROL OF THREE-PHASE PERMANENT MAGNET SYNCHRONOUS MACHINE BASED ON INTEGRAL BACKSTEPPING CONTROL TECHNIQUE	KARBOUA DJALOUL	388
	Belgacem Toual	
	Djeddi Ahmed Zohair	
	Abdellah Kouzou	
PARTICIPATORY LEARNING MANAGEMENT IN IMPROVING STUDENT ENTREPRENEURIAL BEHAVIOR OF INDONESIA	Jomed Ceilendra Saskana	389
	Muhammad Said	
ASSESSMENT OF STREET TRADING AND TRAFFIC DELAY SITUATION IN LAGOS STATE, NIGERIA: THE COMPUTER VILLAGE EXPERIENCE	Gbenga Felix ODEYEMI	391
	Wheneyon Peter SURU	
	Oluwaseun Ayodele OLOWOPOROKU	
AGING AND COGNITIVE FUNCTIONING; A MINI REVIEW	Saleha Bibi	392
URBANISATION AND SUSTAINABLE DEVELOPMENT: A CASE STUDY OF TWO URBAN CITY IN SOUTHWESTERN, NIGERIA	Adenike Anike Olayungbo	393
OBTAINING TiO <sub>2</sub> POWDER AS AN INTERMEDIATE PRODUCT DURING ELECTROCHEMICAL DEPOSITION	Necati Basman	394
INTANGIBLE HERITAGE AS A WAY TO STRENGTHEN CULTURAL COOPERATION	Iosefina BLAZSANI-BATTO	395
ANALYZING ELECTRONIC WORD OF MOUTH IN ALGERIAN HOSPITALITY SECTOR: QUALITATIVE APPROACH	GRAA Amel	396
	LACHABI Fatima Zohra	
İSLAM'DA İMAN VE AKAIÐ FARKLILİĞİ VE AKAIÐİN İMANLAŞTIRILMASI TARTIŞMALARI	Abdulhamit SİNANOĞLU	397



FAULT DETECTION AND DIAGNOSIS SYSTEM FOR A THREE-PHASE INVERTER USING ARTIFICIAL NEURAL NETWORK	ABID Mimouna	398
	SAADI LARIBI Souad	
	M'hamed LARBI	
	Belkacem BELABBAS	
	Amine SOBH	
FAULT TOLERANT CONTROL OF THREE PHASE INVERTER IN GRID CONNECTED PHOTOVOLTAIC SYSTEM	MIMOUNI Amina	399
	LARIBI Souad	
	SEBAA Morsli	
	ALLAOUI Tayeb	
OPTIMIZATION OF CUTTING CONDITIONS DURING FINISHING TURNING OF TITANIUM ALLOY Ti-6Al-4V USING GRA METHOD	Younes Belbellaa	400
	Nabil Kribes	
	Mohamed Athmane Yaltese	
THE IMPORTANCE OF CUSTOMER RELATION MANAGEMENT: IMPROVING A FRAMEWORK FOR A COMPANY IN THE SERVICE SECTOR	Ayşenur Erdil	401
A DISRUPTIVE OPEN INNOVATION IDEA REALIZATION SYSTEM FOR BUSINESSES: CEM-COMMUNITY-BASED EXECUTION MODEL	Aysun DEMİRDÖĞEN	402
ARISING FROM TERROR AND ACTIONS OF TERROR DAMAGE ACTIONS AND THE COUNCIL OF STATE APPROACH	Merve Gül GÜN	403
TURKISH ADAPTATION OF THE SCALE OF BREASTFEEDING ATTITUDE AND PARTICIPATION OF FATHERS: VALIDITY AND RELIABILITY STUDY	Hale Uyar	405
	Ebe Sinem Gültekin	
THE DUTY FOR EDUCATORS IN DETERMINING THE FUTURE OF NATIONS IN THE TECHNOLOGY AGE	Gamze SARMAŞIK ABUR	408
OUR VACUUM ASSISTED CLOSURE THERAPY CASE RESULTS	Zafer Cengiz ER	410
	Sameh ALAGHA	
IMPROVING THE NETWORK LIFETIME IN SOLAR ENERGY HARVESTING SYSTEM FOR WIRELESS SENSOR NETWORKS	Saïd El Abdellaoui	411
	Youssef Fakhri	
ZnS and CdS NANOPOWDERS: WET CHEMICAL SYNTHESIS AND CHARACTERIZATION	Suresh Kumar	412
IN VITRO FEEDING AND COLONIZATION OF HYALOMMA EXCAVATUM AND HYALOMMA MARGINATUM TICK SPECIES	Serkan BAKIRCI	413
	Hüseyin Bilgin BİLGİÇ	
	Selin HACILARLIOĞLU	
	Hasan EREN	
	Tülin KARAGENÇ	
ABOUT THE FIRST MEDIEVAL CITIES OF MUGAN PROVINCE AND HAMASHARA	Alasgar Agakhasan oglu Mirzazada	415

DETECTING HIGH LEVELS OF STAGE FRIGHT AT STUDENTS USING COMPUTATIONAL INTELLIGENCE TECHNIQUES	Konstantinos Mastrothanasis	417
	Konstantinos Zervoudakis	
	Maria Kladaki	
BIOMEDICAL IMAGING AND ANALYSIS THROUGH DEEP LEARNING	Siranjeevi Ranjani	418
	Vignesh Prabhu V	
	Navin Karthik M	
A REAL TIME NEURAL NETWORK APPROACH FOR DETECTING DISTRIBUTED DENIAL OF SERVICE ATTACK	Yakub Kayode Saheed	419
	Rilwan Dauda Magaji	
NUMERICAL ANALYSIS OF AN AXIAL FLOW CENTRIFUGAL PUMP AS TURBINE USING CFD TECHNIQUES	Diego Penagos-Vásquez	420
	Jonathan Graciano-Uribe	
SCREENING OF EXOPOLYSACCHARIDES PRODUCING BACTERIAL STRAINS FOR PLANT GROWTH PROMOTING POTENTIAL ISOLATED FROM HOT SPRING	Noor-e-Saba Naz Tahir	422
	Rida Batool	
SINGLE AND DOUBLE OPEN SWITCH FAULT DIAGNOSIS BASED ON ARTIFICIAL NEURAL NETWORK IN THREE PHASE INVERTER OF SOLAR PUMPING SYSTEM	Bengharbi Abdelkader Azzeddine	423
	Laribi Souad	
	Allaoui Tayeb	
CLIMATE CHANGE PERCEPTIONS AND ADAPTATIONS OF PASTORALISTS IN MOROCCO'S ARID RANGELANDS	SNAIBI W.	424
	MEZRHAB A.	
	SY O.	
THE IMPLEMENTATION OF TECHNICAL ANALYSIS TO FORECAST STOCKS PRICE IN EMERGING MARKET	Josep GINTING	426
	Foloren GASELA	
BIOREMEDIATION BY MICROORGANISMS OF TERRITORIES CONTAMINATED WITH VARIOUS POLLUTANTS	K.Kakhramanova	427
	A. Almamedova	
	S.Osmanova	
THE PERCEPTION OF ARCHITECTURAL BARRIERS IN SIEWIERZ MUNICIPIAL OFFICE FROM DISABLE PERSON POINT OF VIEW	Radosław Wolniak	429
FUZZY LOGIC AND CHAOTIC ATTRACTORS IN DECISION-MAKING FUNCTIONS	M.S. Hilario Martines-Arano	430
	M.S. José Alberto Arano-Martínez	
	Carlos Torres-Torres	
OCCUPATIONAL HEALTH AND SAFETY AT HEIGHT WORKS	FATMA SÜMEYYE SARIŞEN	431
	RÜMEYSA SARIŞEN	
	DİLEK ÖZTAŞ	
	ABDULLAH YILDIZBAŞI	
	ERGÜN ERASLAN	
THE IMPACT OF COVID-19 PANDEMIC ON INTERNATIONAL TRADE	Hazar DÖRDÜNCÜ	433

<b>THE PLACE AND IMPORTANCE OF THE BORON MINING IN THE WORLD</b>	<b>Aysu SARI ÇETİN</b>	<b>434</b>
<b>CONTEXTUALISING FLIPPED ONLINE CONTENT WITH LEARNER CENTRIC MOOCS FOR ENGINEERING STUDENTS IN PHYSICS EDUCATION</b>	<b>Neelima Agarwal</b>	<b>435</b>
<b>A THREE POINT INTEGRATION SCHEME FOR SINGULAR PERTURBATION PROBLEMS</b>	<b>Mohammad Javed Alam</b>	<b>436</b>
	<b>Hari Shankar Prasad</b>	
	<b>Rakesh Ranjan</b>	

**EVAPOTRANSPIRATION FACTOR IN 3D MATHEMATICAL MODELING OF  
GROUNDWATER LEVEL CHANGES****Elena Sierikova, PhD**

National University of Civil Defence of Ukraine, Kharkiv, Ukraine

ORCID: 0000-0003-0354-9720

**Elena Strelnikova, Doctor of Technical Sciences**A.M. Podgorny Institute for Mechanical Engineering Problems NAS of Ukraine, Kharkiv,  
Ukraine

ORCID: 0000-0003-0707-7214

**ABSTRACT**

For the cities sustainable development, the construction protection against dangerous groundwater level (GWL) rising and flooding, it is necessary to correctly assess the existing hydrogeological conditions and to predict them with the proper accuracy [1]. It is important to note the area of flooding within the territory of Ukraine amounted about 9 million hectares. This list starts with the big cities of Ukraine [1].

For the first time, the boundary conditions of the groundwater level changing mathematical model in 2D and 3D formulation have been developed. Mathematical model takes into account artificial coverings on the soil surface and groundwater discharge processes due to evapotranspiration to improve predictions and management of groundwater level on the built-up areas [2-4].

The value of GWL changing at constant evapotranspiration has been obtained in 2D and 3D formulations, which has been visualized by calculations for limited areas of the Kharkiv territory in Fig.2, which shows the function  $h_1(x,y)$ . In this case it was supposed that value of GWL changing were calculated at  $y=3$  and different values of  $z$ .

By number 1 the values obtained with usage of 2D model are denoted, numbers 2, 3, 4 correspond to values  $z = (l+a)\frac{\pi}{4}$ ,  $z = (l+a)\frac{\pi}{6}$  and  $z=0$ .

From these results one can concluded that values of GWL changing obtained at 3D simulation are less than ones obtained as the result of calculations carried out according to the two-dimensional theory. Therefore, data of 2D simulation can be used as an upper bound for GWL changing estimation. GWL changing at other values of  $y$  have demonstrated the similar behavior. These data are shown at Fig. 1. GWL changing at  $y= -2$  and different values of  $z$  have presented at Fig. 2.



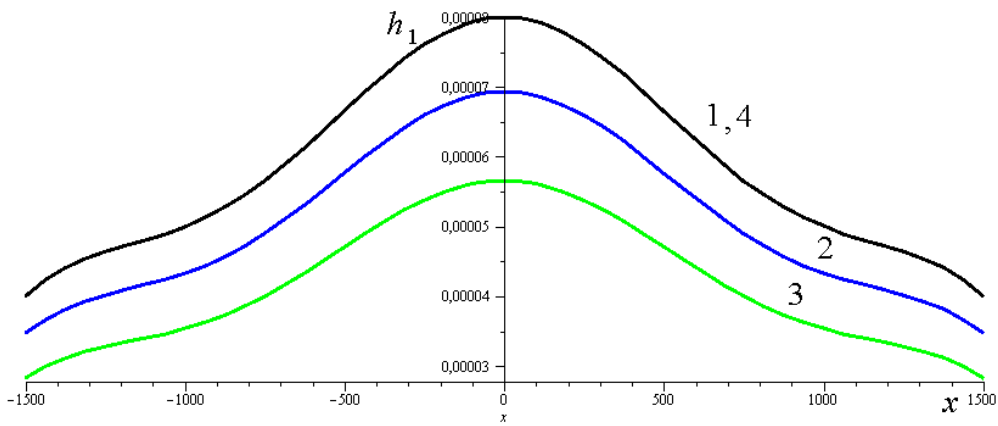


Fig. 1. GWL changing at other values of  $y$ .

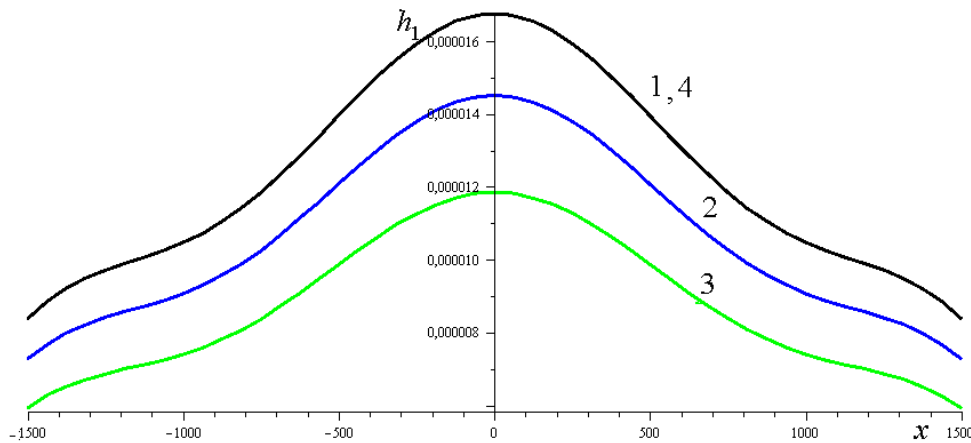


Fig. 2. GWL changing at  $y = -2$  and different values of  $z$ .

The values of GWL changing during variable evapotranspiration have been also obtained, which have shown in Fig. 3. Here numbers 1, 2, 3 correspond to values  $z = (l + a) \frac{\pi}{2}$ ,

$z = (l + a) \frac{\pi}{4}$ ,  $z = (l + a) \frac{\pi}{6}$ . By number 4 the results of 2D simulations are marked.

As before, these results have demonstrated that values of GWL changing obtained at 3D simulation are less than ones obtained as the result of calculations carried out according to the two-dimensional theory. Therefore, data of 2D simulation can also be used as an upper bound for GWL changing estimation. In figure 4a the data are obtained at  $x = (l + a) \frac{\pi}{2}$  and different

value of  $z$ , while in figure 4b the data are shown that were obtained at  $x = (l + a) \frac{\pi}{4}$ .





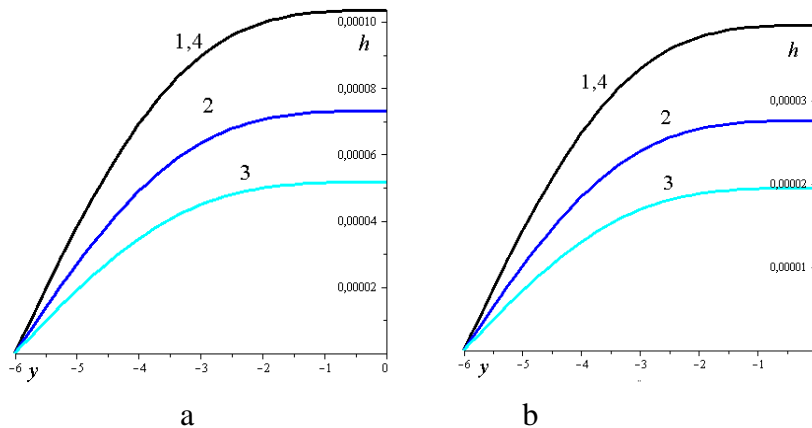


Fig. 3 – GWL changing with variable evapotranspiration

Three-dimensional modeling of groundwater level changing in contrast to two-dimensional allows to take into account the dependence of evapotranspiration on the presence of artificial coverings on the soil surface, which are located unevenly and have different filtration coefficients, which causes corresponding groundwater level changes of urban areas.

## REFERENCES

1. Sierikova E., Strelnikova E., Pisia L., Pozdnyakova E., (2020). Flood risk management of Urban Territories. *Ecology, Environment and Conservation* 26 (3). P. 1068-1077.
2. Serikova E.N.; Yakovlev V.V., (2011). Additional infiltration to underground waters of big cities territory (on example Kharkiv region). In: Babaev V.N. (Ed.): *Proc.: Municipal Economy of Cities №97, Kharkiv, KNAME: 344-348.*
3. Serikova E.; Strelnikova E.; Yakovlev V. 2015. Mathematical Model of Dangerous Changing the Groundwater Level in Ukrainian Industrial Cities. *Journal of Environment Protection and Sustainable Development*. Vol. 1, № 2: 86–90.
4. Sierikova E.N., Strelnikova E.A. Mathematical Modeling of Groundwater Level Changing with Considering Evapotranspiration Factor. *International Journal of Modern Studies in Mechanical Engineering (IJMSME)*. Volume 6, Issue 1, ARC Publications, LLC, USA. 2020. P. 19–25. DOI: <http://dx.doi.org/10.20431/2454-9711.061003>

