



“VASILE ALECSANDRI” UNIVERSITY OF BACAU, ROMANIA
FACULTY OF ENGINEERING
“GHEORGHE ASACHI” UNIVERSITY OF IAȘI, ROMANIA
POLITEHNICA UNIVERSITY OF BUCHAREȘT, ROMANIA
ROMANIAN ACADEMY OF AGRICULTURAL AND FORESTRY SCIENCES
“GHEORGHE IONESCU – ȘIȘEȘTI”
POLITECNICO UNIVERSITY OF TORINO, ITALY
“ANGEL KANCHEV” UNIVERSITY OF RUSE, BULGARIA
WARSAW UNIVERSITY OF TECHNOLOGY, POLAND
UNIVERSITY OF CADIZ, SPAIN
ROMANIAN ASSOCIATION OF MANAGERS AND ECONOMIC ENGINEERS
THE ROMANIAN ENVIRONMENT ASSOCIATION – 1998 (ARM)



The 18th International Conference of Constructive Design and Technological Optimization in Machine Building Field

OPROTEH 2023

PROGRAM

BACAU
MAY 11-13, 2023



The 18th International Conference of Constructive Design and Technological Optimization in Machine Building Field



SCIENTIFIC COMMITTEE

A. Astolfi - University Politecnico di Torino, Italy	L. I. Rosca - "Lucian Blaga" University of Sibiu, Romania
A. Fînaru - "Vasile Alecsandri" University of Bacau, Romania	L. Marsavina - "Politehnica" University of Timisoara, Romania
A. Sava - École Nationale d'Ingénieurs de Metz, France	M. Agop - "Gheorghe Asachi" Technical University of Iasi, Romania
C. Fetecău - "Dunarea de Jos" University of Galati, Romania	M. C. Nicolescu - Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu Sisesti", Romania
C. Nitu - "Politehnica" University of Bucharest, Romania	M. Frățilă - "Lucian Blaga" University of Sibiu, Romania
C. Schnakovszky - "Vasile Alecsandri" University of Bacau, Romania	M. Gavrilesu - "Gheorghe Asachi" Technical University of Iasi, Romania
C. Teodosiu - "Gheorghe Asachi" Technical University of Iasi, Romania	M. Gilli - University Politecnico di Torino, Italy
C. Vial - Université Clermont Auvergne, France	M. Izvercianu - "Politehnica" University of Timisoara, Romania
D. Cașcaval - "Gheorghe Asachi" Technical University of Iasi, Romania	M. Radovanovic - University of Nis, Serbia
D. I. Nistor - "Vasile Alecsandri" University of Bacau, Romania	M. Romanca - "Transilvania" University of Brașov, Romania
D. Nedelcu - "Gheorghe Asachi" Technical University of Iasi, Romania	M. Torchiano - University Politecnico di Torino, Italy
D. M. Constantinescu - "Politehnica" University of Bucharest, Romania	N. Mihailov - University of Rousse, Bulgaria
E. L. Nițu - University of Pitesti, Romania	N. Ungureanu - "North University" of Baia Mare, Romania
G. Nicoletto - Università degli Studi di Parma, Italy	P. Chevrier - Ecole Nationale d'Ingénieurs de Metz, France
G. Paraschiv - "Politehnica" University of Bucharest, Romania	P. Dasič - High Technological Technical School Krusevac, Serbia
Gh. Nagit - "Gheorghe Asachi" Technical University of Iasi, Romania	R. Iatan - "Politehnica" University of Bucharest, Romania
G. Culea - "Vasile Alecsandri" University of Bacau, Romania	R. Sethi - University Politecnico di Torino, Italy
G. Drăghici - "Politehnica" University of Timisoara, Romania	S. Ekinovic - University of Zenica, Bosnia and Herzegovina
G. Muscă - "Gheorghe Asachi" Technical University of Iasi, Romania	S. Fiore - University Politecnico di Torino, Italy
G. Pluvinage - Ecole Nationale d'Ingénieurs de Metz, France	S. G. Racz - "Lucian Blaga" University of Sibiu, Romania
G. Przydatek - State University of Applied Sciences, Nowy Sącz, Poland	S. Radkowski - Warsaw University of Technology, Poland
Gh. N. Radu - "Transilvania" University of Brașov, Romania	T. Rusu - Technical University of Cluj-Napoca, Romania
Gh. Voicu - "Politehnica" University of Bucharest, Romania	V. Doicin - "Politehnica" University of Bucharest, Romania
H. I. Beloev - University of Rousse, Bulgaria	V. Gîngu - Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu Sisesti", Romania
I. Băisan - "Gheorghe Asachi" Technical University of Iasi, Romania	V. K. Krapivin - IRERAS, Russian Academy of Science, Russia
I. Sarbu - Economical Studies Academy of Moldova, Moldova	V. Miguel Eguia - Universidad Castilla - La Mancha, Spain
I. C. Rosca - "Transilvania" University of Brașov, Romania	V. Marascu-Klein - "Transilvania" University of Brașov, Romania
I. Pirna - Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu Sisesti", Romania	V. Nedeff - "Vasile Alecsandri" University of Bacau, Romania
J. A. Lopez Ramirez, University of Cadiz, Spain	V. Năstăsescu - Academy of Technical Sciences of Romania
J. L. Cueto Ancela, University of Cadiz, Spain	V. Păunoiu - "Dunarea de Jos" University of Galati, Romania
J. M. L. de Luzuriaga Fernández - University of Zaragoza, Spain	V. Pencheva - University of Rousse, Bulgaria
J. Stephant - ENSIL Université de Limoges, France	V. Tabară - Academy of Agricultural and Forestry Sciences "Gheorghe Ionescu Sisesti", Romania
K. H. Adjallah - École Nationale d'Ingénieurs de Metz, France	V. V. Jinescu - "Politehnica" University of Bucharest, Romania
L. Bibire - "Vasile Alecsandri" University of Bacau, Romania	V. Zichil - "Vasile Alecsandri" University of Bacau, Romania



ORGANIZING COMMITTEE

CONFERENCE CHAIRPERSON

Assoc.Prof.Ph.D. Mirela PANAINTE-LEHADUS

TECHNICAL PROGRAMME COMMITTEE

Prof.Ph.D. Valentin NEDEFF
Prof.Ph.D. Valentin ZICHIL
Prof.Ph.D. Denisa NISTOR
Prof.Ph.D. George CULEA
Assoc.Prof.Ph.D. Mirela PANAINTE - LEHADUS
Assoc.Prof.Ph.D. Bogdan CHIRITA
Assoc.Prof.Ph.D. Narcis BARSAN
Assoc.Prof.Ph.D. Alisa Vasilica ARUS
Lect.Ph.D. Eugen HERGHELEGIU

Prof.Ph.D. Carol SCHNAKOVSKY
Prof.Ph.D. Adriana FINARU
Prof.Ph.D. Luminita BIBIRE
Assoc.Prof.Ph.D. Roxana GRIGORE
Assoc.Prof.Ph.D. Catalin DROB
Assoc.Prof.Ph.D. Emilian MOSNEGUTU
Lect.Ph.D. Andrei SIMION
Lect.Ph.D. Catalin TAMPU





CONFERENCE PROGRAM

THURSDAY, MAY 11, 2023		
17 ⁰⁰ -19 ⁰⁰	Welcome & Registration	Building D Central hall, first floor
19 ⁰⁰ -20 ³⁰	Dinner	"Vasile Alecsandri" University of Bacau Restaurant
FRIDAY, MAY 12, 2023		
08 ⁰⁰ -10 ⁰⁰	Welcome & Registration	Building D Central hall, first floor
10 ⁰⁰ -10 ³⁰	Conferences official opening Welcome messages of the organizing committee	"Vasile Alecsandri" University of Bacau AULA
10 ³⁰ -12 ⁰⁰	Plenary lectures Goals and expectation for University and Industry	"Vasile Alecsandri" University of Bacau AULA
12 ⁰⁰ -12 ³⁰	Coffee break	Central hall, first floor
12 ³⁰ -13 ³⁰	Plenary lectures Goals and expectation for University and Industry	"Vasile Alecsandri" University of Bacau AULA
13 ³⁰ -15 ⁰⁰	Lunch	"Vasile Alecsandri" University of Bacau Restaurant
15 ⁰⁰ -18 ⁰⁰	Section lectures and Poster sessions	Buildings B/D and Central hall
16 ⁰⁰ -18 ⁰⁰	Workshop, Romanian Environmental Association – 25 of activity	Building D Hall DP12
16 ⁰⁰ -18 ⁰⁰	Workshop, Sustainability and energy efficiency	Building D Hall DP17
16 ⁰⁰ -18 ⁰⁰	Workshop, K Factory - Best Practices to a Smart Factory	Building B Hall BI29
20 ⁰⁰	Gala Diner	URBO Restaurant
SATURDAY, MAY 13, 2023		
09 ⁰⁰ – 11 ⁰⁰	Section lectures and Poster sessions	Buildings D Central hall
11 ⁰⁰ – 11 ³⁰	Coffee break	Buildings B/D and Central hall
11 ³⁰ – 12 ⁰⁰	Final discussion and future perspective	Buildings B/D
11 ³⁰ – 13 ⁰⁰	Faculty research laboratories visit	Buildings B/D
14 ⁰⁰	Departure of participants	





Welcome to the 18th International Conference of Constructive Design and Technological Optimization in Machine Building Field

*“VASILE ALECSANDRI” UNIVERSITY OF BACĂU
FACULTY OF ENGINEERING*

PLENARY LECTURES

GOALS AND EXPECTATION FOR UNIVERSITY AND INDUSTRY

FRIDAY 12 MAY 2023 10³⁰ – 13⁰⁰

**CHAIRPERSONS: PROF. VALENTIN NEDEFF
PROF. CAROL SCHNAKOVSKY
ASSOC.PROF.PH. D. MIRELA PANAINTE-LEHADUS**

- 1. QUALITY MANAGEMENT OF WINES AND REDOXX PROCESS**
RODICA STURZA - TECHNICAL UNIVERSITY OF MOLDOVA
- 2. FROM REAL-TIME EMULATION OF WIND AND TIDAL TURBINES TO SIMULATION OF DISTRIBUTED GENERATORS INTEGRATED INTO THE POWER GRID - WORK REPORT AND PROJECTS**
CRISTIAN NICHITA - UNIVERSITY OF LE HAVRE NORMANDIE, FRANCE
- 3. WATER - RESOURCE AND ENVIRONMENTAL FACTOR - OBJECTIVE OF SUSTAINABLE DEVELOPMENT**
VLADIMIR ROJANSCHI - ROMANIAN ENVIRONMENTAL ASSOCIATION; ADVISORY COUNCIL FOR SUSTAINABLE DEVELOPMENT, ROMANIA
- 4. A RESEARCH ON THE INVESTIGATION OF THE ENVIRONMENTAL EFFECTS OF SILVER OXIDE (Ag₂O) NANOPARTICLE ADDITIVES IN DIESEL ENGINE**
CIHAN BAYINDIRLI - NIGDE OMER HALISDEMIR UNIVERSTY, NIGDE VOCATIONAL SCHOOL OF TECHNICAL SCIENCES, TURKIYE
- 5. SUSTAINABLE ISSUES IN 3D PRINTING OF FILAMENT MATERIAL EXTRUSION**
JOHN KECHAGIAS - UNIVERSITY OF THESSALY, GREECE
- 6. INDUSTRY 4.0 AND INNOVATION**
GÜLSEN AKMAN - KOCAELI UNIVERSITY, TURKIYE
- 7. AEROSTAR S.A. BACAU - 70 YEARS OF PERFORMANCE THROUGH PROFESSIONALISM**
ALEXANDRU FILIP
- 8. VIRTUAL ENGINEERS - ARTIFICIAL INTELLIGENCE APPLIED IN MANUFACTURING**
CATALIN PIU, VLAD CAZAN



Welcome to the 18th International Conference of Constructive Design and Technological Optimization in Machine Building Field

OPROTEH 2023



SECTIONS CONFERENCES

- A. Optimization of Manufacturing Processes and Systems & Computer Aided Design and Manufacturing
- B. Optimization of Technologies and Equipment from Process Industries
- C. Optimization in Environmental Engineering and Environmental Protection
- D. Mechatronics & Robotics
- E. Economic Engineering
- F. Chemical & Food Engineering
- G. Industrial Power Engineering & Computer Science

In the case of all Conference Sections, the POSTERS can be visited in the period 12-13 MAY on the Central Hall (Building D).



A. OPTIMIZATION OF MANUFACTURING PROCESSES AND SYSTEMS & COMPUTER AIDED DESIGN AND MANUFACTURING

BUILDING B HALL BI29

FRIDAY, MAY 12, 2023 15⁰⁰ – 18⁰⁰

SATURDAY, MAY 13, 2023 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. DUMITRU NEDELICU
PROF.PH.D. VIOREL PAUNOIU
ASSOC.PROF.PH.D CONSTANTIN CARASU**

A.1. MULTI-OBJECTIVE OPTIMIZATION OF INJECTION MOLDING PROCESS USING RESPONSE SURFACE METHODOLOGY

IONEL CRINEL RAVEICA

A.2. PREDICTION AND OPTIMIZATION OF THE MICROHARDNESS IN THE MILLING PROCESS

MOHAMMED TOUFIK AMIRA, ABDERRAHIM BELLOUFI, MOURAD ABDELKRIM, ELHOCINE CHIBA

A.3. CONTINUOUS FIBRE REINFORCEMENT OF THE HIGH-PRESSURE DUCT OF THE BARREL BASED ON THE UKM-2000 RIFLE

MACIEJ PANEK, MIROSŁAW BOCIAN, JAN STOPPEL

A.4. EXPERIMENTAL STUDY OF THE EFFECT OF THE FIXING DISTANCE OF ALUMINUM PLATES IN ARC WELDING ON THE MECHANICAL PROPERTIES OF THE WELD BEAD

MOURAD MEZOU DJ, AMOR BOUREBBOU, MOURAD BENDIFALLAH, ABDERRAHIM BELLOUFI, IMANE REZGUI, KAMEL FEDAOUI

A.5. PROBLEM OF MECHANICAL CLEANING OF ELEVATIONS OF HIGH BUILDINGS

MARIUSZ KOSOBUDZKI, DAMIAN STEFANOW, WITOLD ŻOŁNA

A.6. A REVIEW OF THE MODELS PROPOSED FOR CUTTING FORCE PREDICTION IN CASE OF MILLING PARTS WITH LOW RIGIDITY

PETRICĂ RADU, CAROL SCHNAKOVSKY

A.7. PREDICTION OF THE TRIBOLOGICAL BEHAVIOR OF EPOXY COMPOSITES REINFORCED WITH NATURAL FIBERS USING A SYSTEM OF FUZZY INFERENCES

IMANE REZGUI, ABDERRAHIM BELLOUFI, MOURAD ABDELKRIM, MOURAD MEZOU DJ

A.8. DEVELOPMENT OF A FUZZY LOGIC MODEL TO PREDICT THE TRIBOLOGICAL BEHAVIOR OF AL/SIC/GR HYBRID COMPOSITES

IMANE REZGUI, ABDERRAHIM BELLOUFI, MOURAD ABDELKRIM, MOURAD MEZOU DJ

A.9. A REVIEW OF THE RECENT RESEARCH ACTIVITIES IN THE FIELD OF ELECTRICAL DISCHARGE MACHINING

OANA GHIORGHE, CAROL SCHNAKOVSKY

A.10. SURFACE ROUGHNESS MONITORING FOR EARLY DETECTION OF INTERNAL CRACKS IN OUARGLA TRAMWAY RAILS IN ALGERIA

MOURAD ABDELKRIM, ELHOCINE CHIBA, ABDERRAHIM BELLOUFI, IMANE REZGUI

A.11. FLUID FLOW ANALYSIS OF THE COOLING SYSTEMS WITH VARIOUS NOZZLE GEOMETRIES USED FOR CUTTING PROCESSES

IONEL OLARU

A.12. DESCRIPTIVE STUDY OF EVALUATION, MODELING AND OPTIMIZATION METHODS IN OCCUPATIONAL ERGONOMICS APPLICABLE IN INDUSTRIAL PROCESS OF WELDING WORKERS

DIANA ONOFREI, CATALINA MIHAELA CULEA, EUGEN HERGHELEGIU, CAROL SCHNAKOVSKY



A.13. THE INFLUENCE OF THE PROCESSING ENVIRONMENT ON THE SURFACE QUALITY CHARACTERISTICS ON NON-FERROUS MATERIALS

BOGDAN NITA, NICOLAE CATALIN TAMPU, EUGEN HERGHELEGIU, RALUCA IOANA TAMPU, BOGDAN ALEXANDRU CHIRITA, CAROL SCHNAKOVSZKY

A.14. INFLUENCE OF CUTTING PARAMETERS ON SURFACE QUALITY IN MILLING OF Ti-6Al-4V TITANIUM ALLOY

NICOLAE CATALIN TAMPU, CATALINA BURLACU, CAROL SCHNAKOVSZKY, BOGDAN ALEXANDRU CHIRITA, PETRICA RADU, EUGEN HERGHELEGIU, CRINA RADU, BOGDAN NITA, RALUCA IOANA TAMPU

A.15. THE EFFECT OF MACHINING PARAMETERS ON THE SURFACE QUALITY AT POLYAMIDE

IANCU COSMIN, CAROL SCHNAKOVSZKY, EUGEN HERGHELEGIU, BOGDAN ALEXANDRU CHIRITA, NICOLAE CATALIN TAMPU

A.16. REUSE OF COOKING OILS FROM THE FOOD INDUSTRY AS DIELECTRICS IN ELECTRICAL DISCHARGE MACHINING. A CASE STUDY

CRINA RADU, CAROL SCHNAKOVSZKY, BOGDAN ALEXANDRU CHIRITA, NICOLAE CATALIN TAMPU, RADU PETRICA, OANA GHIORGHE

A.17. STUDY ON THE INFLUENCE OF THE FOCUSING TUBE ON THE QUALITY OF ABRASIVE WATERJET MACHINED SURFACES

EUGEN HERGHELEGIU CRINA RADU, CAROL SCHNAKOVSZKY, BOGDAN ALEXANDRU CHIRITA, NICOLAE CATALIN TAMPU, RADU PETRICA, BOGDAN NITA

A.18. USING THE AIDA METHOD IN THE DESIGN OF NEW ELEMENTS FOR THE ASSEMBLY OF PHOTOVOLTAIC PANELS

VLAD-ANDREI CIUBOTARIU, COSMIN-CONSTANTIN GRIGORAŞ, VALENTIN ZICHIL, BOGDAN-ALEXANDRU CHIRITA

A.19. TEXTURED SURFACES OF ARBOBLEND V2 NATURE

SIMONA-NICOLETA MAZURCHEVICI, OKTAWIAN BIALAS, TEODOR DANIEL MINDRU, MARCIN ADAMIAK, DUMITRU NEDELCU

A.20. EVALUATION FOR ENVIRONMENTAL HEALTH WITHIN PORTAL FRAMES AND PROJECT MANAGEMENT OF MANUFACTURES AT SUSTAINABLE COMMUNITY HEALTH TOURISM DESIGN FACILITIES

TILEMACHOS KOLIOPOULOS, DIMITRIS PAPAKONSTANTINOY, SLAVOLJUB HILCENKO, GALINA PETROVA MRATSKOVA, CRINA RADU

A.21. EVALUATION OF MANAGERIAL CHALLENGES FOR INDUSTRY 4.0 APPLICATION IN LIGHTING INDUSTRY

GÜLŞEN AKMAN, SERRA UTKU, ALİ İHSAN BOYACI

A.22. NEW ACHIEVEMENTS IN THE FIELD OF SHEET HYDROFORMING

VIOREL PAUNOIU, NICUSOR BAROIU, VIRGIL TEODOR, RAZVAN CRACIUN

A.23. EFFICIENCY STUDY IN A TIRE COMPANY

MEHLİKA KOCABAŞ AKAY, YİĞİT İSENCİK, GÜLŞEN AKMAN

A.24. RHEOLOGICAL-NUMERICAL MODEL OF DENTAL MATERIALS IN TERMS OF TRIBOLOGICAL WEAR

ADAM NOWICKI, KAROLINA OSYPKO, DARIUSZ PYKA, ADAM KURZAWA, KRZYSZTOF JAMROZIAK

A.25. ASPECTS REGARDING THE STUDY OF HYDRAULIC AND MECHANICAL PARAMETERS OF A "SPIDER CRANE" SYSTEM

NICUSOR BAROIU, VIOREL PAUNOIU, VIRGIL GABRIEL TEODOR, GEORGIANA-ALEXANDRA MOROSANU, RAZVAN SEBASTIAN CRACIUN



A.26. EXPERIMENTAL INFLUENCE OF CORROSIVE AGENTS ON THE MECHANICAL CHARACTERISTICS OF STEELS

Olga POPA, Andrei-Vlad CIUBOTARIU, Cosmin-Constantin GRIGORAȘ, Ana-Maria ROȘU, Valentin ZICHIL



B. OPTIMIZATION OF TECHNOLOGIES AND EQUIPMENT FROM PROCESS INDUSTRIES

BUILDING D HALL DP12

FRIDAY, MAY 12, 2023 15⁰⁰ – 18⁰⁰

SATURDAY, MAY 13, 2023 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: ASSOC.PROF.PH.D GELU IANOS
ASSOC.PROF.PH.D MEHMET CELIK
ASSOC.PROF.PH.D EMILIAN MOSNEGUTU**

B.1. DETERMINING A RELATIONSHIP BETWEEN THE ENGINE SPEED AND THE ELECTRICITY CONSUMPTION OF IN ORDER TO IMPROVE OPERATING COSTS IN THE CASE OF A HAY BALE SHREDDER

ANDREI-ALIN VOINESCU, ALEXANDRA SUTA, EVELYNE POP, SIMINA MARIS

B.2. MODELLING AND OPTIMIZATION OF FOLIC ACID SEPARATION USING IONIC LIQUIDS

ELENA NICULINA DRAGOI, ALEXANDRA CRISTINA BLAGA, LENUTA KLOETZER, ALEXANDRA TUCALIUC, DIANA GEORGIANA GAL

B.3. DETERMINING THE MOVEMENT OF AN AMPLIFICATION MECHANISM

EMILIAN MOSNEGUTU, MIRELA PANAINTE-LEHADUS, DANA-ALEXANDRA CHITIMUS, CLAUDIA TOMOZEI, OANA IRIMIA, MARCIN JASIŃSKI, ALEXANDRU DONICI, EUSTINAGIANINA DAMASCHIN

B.4. THE BEHAVIOR OF BULKY RECYCLABLE CARDBOARD WASTE DURING COMPACTION/BALING USING HORIZONTAL PRESSES WITH THE CONTINUOUS FLOW

GHEORGHE VOICU, PAULA TUDOR, BIANCA-STEFANIA ZABAVA, MIRCEA-BUCUR LAZEA, GABRIEL-ALEXANDRU CONSTANTIN

B.5. RESEARCH ON THE INVESTIGATION OF THE ENVIRONMENTAL EFFECTS OF SILVER OXIDE (Ag₂O) NANOPARTICLE ADDITIVES IN DIESEL ENGINE

CIHAN BAYINDIRLI, MEHMET CELIK

B.6. BEHAVIOR MODEL OF WEAKLY COHESIVE SOILS IN THE STATIC COMPACTION PROCESS

CARMEN DEBELEAC, ANDREI BURAGA

B.7. SUSTAINABLE ISSUES IN 3D PRINTING OF FILAMENT MATERIAL EXTRUSION

JOHN KECHAGIAS

B.8. EXPERIMENTAL AND NUMERICAL ANALYSIS OF THE SYSTEM OF AN ADDITIONAL CAR BODY SHIELD LOADED WITH A BALLISTIC IMPACT

MACIEJ MAMYS, DARIUSZ PYKA, MIROŚLAW BOCIAN, KRZYSZTOF JAMROZIAK

B.9. APPLICATION OF ADVANCED ENGINEERING METHODS FOR IMPROVING THE QUALITY OF TECHNOLOGICAL PROCESSES OF VULCANIZING AUTO TIRES

ION DURBACĂ, NICOLETA SPOREA, ANCA DUMITRESCU, GHEORGHÎTA TOMESCU

B.10. RESEARCH ON MECHANIZED GRAPE HARVESTING WITH HORIZONTAL VINE SHAKING EQUIPMENT

IOAN BĂISAN, VALENTINA CEZARA ZĂPODEANU, ANA GEORGIANA LUPU

B.11. ENERGY EFFICIENCY ANALYSIS AND OPTIMISATION FOR A PUBLIC BUILDING – INSTITUTIONAL, EDUCATIONAL

IULIAN NICOLĂESCU, ION CEBANU, ALEXANDRU RADU, CRISTINA BELECCIU, ARISTOTEL POPESCU

B.12. END-OF-LIFE MANAGEMENT OF PHOTOVOLTAIC MODULES – A REVIEW



CRISTINA BELECCIU, ANA-GEORGIANA LUPU, ALEXANDRU RADU, ARISTOTEL POPESCU

B.13. DIMENSIONING AND TESTING TALL TOWERS USING CALCCOL SOFTWARE

LUMINIȚA BIBIRE, CONSTANTIN CIUCHE, PAULA GRETA VRÎNCEANU

B.14. MAINTENANCE MANAGEMENT FOR A BOTTLING LINE

LUMINIȚA BIBIRE, DANA ALEXANDRA CHIȚIMUȘ, PAULA GRETA VRÎNCEANU

B.15. PHYSICAL-MECHANICAL CHARACTERISTICS OF STEERING WHEEL COVER LEATHERS

ANDREI DUMITRU, BOGDAN RUSU, MADALINA IGNAT, ROXANA CONSTANTINESCU, CIPRIAN CHELARU

B.16. TRANSMISSION BELTS PERFORMANCE IN NORMAL AND HEAVY-DUTY CONDITIONS

BOGDAN RUSU, ANDREI DUMITRU, MADALINA IGNAT, ROXANA CONSTANTINESCU, CIPRIAN CHELARU

B.17. BIODEGRADABLE POLYMER COMPOSITE BASED ON POLYVINYL CHLORIDE AND WOOD WASTE. REALIZATION AND CHARACTERIZATION

VLAD BĂRBULESCU, ALEXANDRESCU LAURENȚIA, MIHAELA NITUICĂ, MIHAI GEORGESCU, MARIA SONMEZ, DANIELA-MARIA STELESCU, DANA GURĂU

B.18. EVALUATION OF THE ACTION OF THE ROLLER ON WEAKLY COHESIVE SOILS IN THE STATIC COMPACTION PROCESS

ANDREI BURAGA

B.19. INVESTIGATION OF THE EFFECTS OF THE ADDITION OF TITANIUM DIOXIDE (TiO₂) NANOPARTICLE FUEL ADDITIVE IN COTTON BIODIESEL ON ENGINE PERFORMANCE

MEHMET CELIK, CIHAN BAYINDIRLI

B.20. AHP-BASED METHODOLOGY FOR CHOOSING INDIVIDUAL PROTECTIVE EQUIPMENT

GABRIELA TOMA, STEFAN LUCIAN TOMA

B.21. STUDY THE PHYSICAL CHARACTERISTICS OF RED RADISHES THROUGH THE PENETRATION METHOD

MARIANA LUPU, VALENTIN NEDEFF, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU



C. OPTIMIZATION IN ENVIRONMENTAL ENGINEERING AND ENVIRONMENTAL PROTECTION

BUILDING D HALL DP12

FRIDAY, MAY 12, 2023 15⁰⁰ – 18⁰⁰

SATURDAY, MAY 13, 2023 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. ION DURBACA
PROF.PH.D. JOHN KECHAGIAS
ASSOC.PROF.PH.D. MIRELA PANAINTE-LEHADUS**

C.1. ENVIRONMENTAL AND ENERGY EFFICIENCY OF A SELECTED MUNICIPAL WASTEWATER TREATMENT PLANT

GRZEGORZ PRZYDATEK, EMILIAN MOSNEGUTU

C.2 WIND AND TEMPERATURE PATTERNS WITHIN URBAN RELIEF

SIMONA CONDURACHE-BOTA, ANCA NARCISA MILOSOVICI

C.3. EVALUATION OF NOISE LEVEL IN AN WORKING ENVIRONMENT

CLAUDIA TOMOZEI, MIRELA PANAINTE-LEHADUS, OANA IRIMIA, FLORIN MARIAN NEDEFF, EMILIAN MOȘNEGUTU, NARCIS BARSAN, DANA CHITIMUS, ANDREEA-IULIANA MAREȘ, GRZEGORZ PRZYDATEK

C.4 STUDIES ON THE BIOACCUMULATION OF MERCURY IN THE PLANT SPECIES OF TYPA LATIFOLIA

ALEXANDRA-DANA CHITIMUS, VALENTIN NEDEFF, EMILIAN MOSNEGUTU, NARCIS BARSAN, CRISTIAN RADU

C.5. THE USE OF CoFe_2O_4 @HaP SORBENT FOR THE DEGRADATION OF CONGO RED DYE FROM AN AQUEOUS SOLUTION

RALUCA-ȘTEFANIA DĂNILĂ, MARIA IGNAT, AUREL PUI

C.6. IMPLEMENTATION OF THE CIRCULAR ECONOMY CONCEPT IN THE FRAMEWORK OF A RETAIL COMPANY WITH CONSTRUCTION MATERIALS

OANA IRIMIA, CLAUDIA TOMOZEI, LUCIAN MIHET-POPA, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU, OANA OJOG

C.7. DETERMINATION OF THE TOTAL SUSPENDED SOLIDS CONTENT AND THE AMOUNT OF WASTE RETAINED BY THE SCREENING INSTALLATIONS

BIANCA-ȘTEFANIA ZĂBAVĂ, GHEORGHE VOICU, MĂDĂLINA-ELENA ȘTEFAN, SORIN CĂNĂNĂU

C.8. ECO-LABELLING IN THE CONTEXT OF THE CIRCULAR ECONOMY

MIRELA PANAINTE-LEHADUS, EMILIAN-FLORIN MOSNEGUTU, CLAUDIA TOMOZEI, OANA IRIMIA, FLORIN-MARIAN NEDEFF

C.9. HABITAT PRESSURE AND PLANNING OF GREEN SPACES IN THE CITY OF KINSHASA, DRCONGO

HOLENU MANGENDA HOLY, KANDALA MUAMBA DAN

C.10. WATER - RESOURCE AND ENVIRONMENTAL FACTOR - OBJECTIVE OF SUSTAINABLE DEVELOPMENT

VLADIMIR ROJANSCHI

C.11. RESEARCH ON THE RECOVERY OF SOME AGRICULTURAL WASTE FOR MANUFACTURING OF COMPOSITE MATERIALS WITH CLAY MATRICES

ELENA SURDU, CLAUDIA-DANA FARÇAȘ-FLAMAROPOL, PETRU CÂRDEI, ION DURBACĂ, NICOLETA SPOREA



C.12. CERAMIC COMPOSITE FILTERS – IMPORTANT ADVANCED SYSTEMS FOR DRINKING WATER PURIFICATION

RAMONA MARE, ION DURBACĂ, NICOLETA SPOREA, DANA-CLAUDIA FARCAȘ-FLAMAROPOL, ȘTEFAN CASTRAVETE

C.13. BIOGAS - ANAEROBIC FERMENTATION OR COMPOSTING?

DAN POMANA

C.14. SEM ANALYSIS OF POLYPROPYLENE FILTER CARTRIDGES USED IN DRINKING WATER PURIFICATION SYSTEMS

ANDREI ZAHARIA, VALENTIN NEDEFF, EMILIAN MOȘNEGUȚU, NARCIS BARSAN, MIRELA PANAINTE-LEHADUS

C.15. LONG RANGE TRANSPORT ANALYSIS BASED ON EASTERN ATMOSPHERIC CIRCULATION AND ITS IMPACT TO THE DUST EVENT OVER MOLDAVIA, ROMANIA IN AUGUST 2022

DIANA-CORINA BOSTAN, INGRID-MIHAELA MICLĂUȘ, COSMINA APETROAIE, MIRELA VOICULESCU, MARIUS-MIHAI CAZACU, ADRIAN TIMOȚTE

C.16. ECOLOGICAL STIMULATION OF THE GERMINATION OF SOME AGRICULTURAL CROPS WITH THE HELP OF CARBON CLUSTERS AT LOWER PRESSURE THAN THE ATMOSPHERIC ONE

ALISA MOSNEAGA, PETRU LOZOVANU, VALENTIN NEDEFF

C.17. MICROSTRUCTURAL AND FT-IR ANALYSIS OF SOME RAW BIOMASS USED AS SOLID BIOFUELS

GELU IANUS, BOGDAN ISTRATE, CORNELIU MUNTEANU, TEODOR MALUTAN, FLORIN CIOLACU, MARIAN GRIGORE

C.18. PRACTICAL APPROACH IN THE TREATMENT OF MUNICIPAL SLUDGE BY USING ORGANIC POLYMERS

NARCIS BARSAN, MARIANA TURCU, VALENTIN NEDEFF, GRZEGORZ PRZYDATEK, DANA CHITIMUS, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU, CLAUDIA TOMOZEI, ECATERINA-ANDREEA TAMPU

C.19. STUDIES ON THE POSSIBLE USE OF AERIAL DRONES IN AGRICULTURE

IOSIF IOJĂ, VALENTIN NEDEFF, FLORIN MARIAN-NEDEFF, MARICEL AGOP

C.20. ASPECTS REGARDING THE YEAST GROWTH ISOLATED FROM FERMENTED PROBIOTIC PRODUCT AND FROM GRAPE POMACE

DUMITRA RADUCANU, NICOLETA BADALUTA, ANA MARIA GEORGESCU

C.21. MBR PILOT PLANT APPLICATION IN THE TREATMENT OF WASTEWATER FROM MEAT PRODUCTION

NICOLETA FRUNZĂ, NARCIS BARSAN, CIPRIAN NANU, FLORIN CIUTACU, OANA IRIMIA, ANDREI ZAHARIA

C.22. ANALYSIS OF THE HOUSEHOLD WASTE MANAGEMENT SYSTEM AND THE HEALTH AND ENVIRONMENTAL IMPACT IN THE MUNICIPALITY OF KASA VUBU, CITY OF KINSHASA IN THE DEMOCRATIC REPUBLIC OF CONGO

HOLENU MANGENDA HOLY, VUNI SIMBU ALEXIS, NGOMA NSUNGU DERVIE, MASAMUNA PARFAIT, MOLA JEAN PAUL, MUYULU ROSY, EBUBU ADOGO JEFFERSON, NDOY PUKUTA REAGAN

C.23. CO-COMPOSTING OF SEWAGE SLUDGE WITH BIOPESTICIDE MICRO-ORGANISMS TO ENRICH THE BIODIVERSITY OF ACID SOILS IN CAMEROON

JEAN JULES NANA NDANGANG, ALAIN-MARTIAL SONTSA-DONHOUNG, BRICE CHARLES NDZENE, ALEX STEEVES LINOU NGONGANG, ANNE AYO, EMMANUEL YOUMBI



D. MECHATRONICS & ROBOTICS

BUILDING D HALL D131

FRIDAY, MAY 12, 2023 15⁰⁰ – 18⁰⁰

SATURDAY, MAY 13, 2023 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. VALENTIN ZICHIL
LECTURER PH.D. GABRIEL PETRU PUIU
LECTURER PH.D. CATALIN TAMPU**

D.1. PREDICTION OF RESIDUAL STRESS DISTRIBUTION AFTER TURNING OF MAGNESIUM ALLOY

CĂTĂLIN TÂMPU, RALUCA TÂMPU, VALENTIN ZICHIL, VLAD CIUBOTARIU, COSMIN GRIGORAȘ, BOGDAN CHIRIȚĂ, BOGDAN NIȚĂ, CAROL SCHNAKOVSKY

D.2. INTEGRATING NEURAL NETWORKS INTO SHEET METAL FORMING: A REVIEW OF RECENT ADVANCES AND APPLICATIONS

COSMIN-CONSTANTIN GRIGORAȘ, VALENTIN ZICHIL, ȘTEFAN COȘA

D.3. MACHINE LEARNING, MECHATRONICS, AND STRETCH FORMING: A HISTORY OF INNOVATION IN MANUFACTURING ENGINEERING

COSMIN-CONSTANTIN GRIGORAȘ, VALENTIN ZICHIL, ȘTEFAN COȘA

D.4. IOT AND SUSTAINABLE AGRICULTURE

LILIANA TOPLICEANU, PETRU GABRIEL PUIU

D.5. SYSTEM SCADA FOR WATER TREATMENT

LILIANA TOPLICEANU, PETRU GABRIEL PUIU

D.6. THE BIPOLAR STEPPER MOTOR CONTROL SYSTEM USING THE ARDUINO MEGA 2560 DEVELOPMENT BOARD

PETRU LIVINȚI

D.7. HUMS CONCEPT FOR SUSPENSION SYSTEM OF HIGH MOBILITY WHEELED VEHICLE

MARIUSZ KOSOBUDZKI

D.8. INTEGRATED CONCEPT OF ANALYSIS - OPTIMIZATION - SIMULATION OF THE BEHAVIOR OF MECHANICAL SYSTEMS

ADRIAN GHENADI, IONEL OLARU

D.9. STUDY ON PROBLEMS RELATED TO OPTIMAL OPERATION OF TOOL MAGAZINE OF NUMERICALLY CONTROLLED MACHINE TOOLS AND THE ANALYSIS OF THEIR DYNAMIC BEHAVIOR

ADRIAN GHENADI, IONEL OLARU



E. ECONOMIC ENGINEERING

BUILDING D HALL D131

FRIDAY, MAY 12, 2023 15⁰⁰ – 18⁰⁰

SATURDAY, MAY 13, 2023 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. VALENTIN ZICHIL
ASSOC.PROF.PH.D. CATALIN DROB
LECTURER PH.D. COSMIN GRIGORAS**

E.1. MARKETING RESEARCH REGARDING CONSUMER SATISFACTION FOR THE ELECTRICITY SUPPLY SERVICES OFFERED BY SUPPLIERS IN ROMANIA

FLORIN LUNGU, FLORIANA DESMEREAN, SIMION DAN

E.2. THE IMPACT OF AGILE SYSTEMS ON THE ROLE OF THE PROJECT MANAGER IN AN IT COMPANY

FLORIN LUNGU, LAVINIA MATIES

E.3. FDI AND ECONOMIC GROWTH IN ROMANIA

CATALIN DROB, VALENTIN ZICHIL, COSMIN GRIGORAS, IOANA PLESCAU

E.4. FACE-TO-FACE VERSUS ONLINE OR HYBRID: HOW STUDENTS PERCEIVE THE EDUCATIONAL FRAMEWORK

IOANA PLESCAU, CATALIN DROB

E.5. GENERAL AND SPECIFIC ASPECTS OF CIRCULAR ECONOMY IMPLEMENTATION

LILIANA TOPLICEANU, CATALIN DROB, PETRU PUIU GABRIEL

E.6. THE IMPACT OF COVID PANDEMIC ON SMEs: EVIDENCE FROM CENTRAL AND EASTERN EUROPE

IOANA PLESCAU, CATALIN DROB, VALENTIN ZICHIL

E.7. EVOLUTION OF RENEWABLE ENERGY GENERATION IN EU27. A DECOMPOSITION ANALYSIS

IOANA MADALINA DRIHA, FURIO CASSETTA, SERGIO NARDINI, VICENZO BIANCO

E.8. DIGITIZATION OF INDUSTRIAL PRODUCTION CHAINS

FLORENTINA ADELINA SPATARIU (ASARBOAEI)

E.9. DEVELOPMENT OF A HAND ORTHOSIS FOR THE CORRECTION OF THE FINGERS POSTURE OF PEOPLE WITH RHEUMATOID ARTHRITIS USING 3D PRINTING TECHNOLOGY

FLORENTINA ADELINA SPATARIU (ASARBOAEI)

E.10. VISUAL ANALYSIS OF MACROECONOMICS INDICATORS FOR ESTABLISHING HIERARCHIES OF INFLUENCE AND PREVISION POSSIBILITIES

MARGARETA ILIE, CONSTANTIN ILIE

E.11. ESTABLISHING AN ARCHITECTURE FOR AN ARTIFICIAL NEURAL NETWORK FOR MODELING MACROECONOMICS INDICATORS

CONSTANTIN ILIE, MARGARETA ILIE

E.12. NEURAL NETWORKS - A DIRECTION OF INTELLECTUAL CAPITAL ANALYZED IN INDUSTRIAL ORGANIZATIONS

SILVIA CURTEANU, ANDREEA FERARU PREPELITA

E.13. ECONOMIC CONSIDERATIONS IN OPTIMIZING THE RESPONSE IN THE EVENT OF A CAR ACCIDENT

DORIN ROȘU



F. CHEMICAL & FOOD ENGINEERING

BUILDING D HALL DP18

FRIDAY, MAY 12, 2023 15⁰⁰ – 18⁰⁰

SATURDAY, MAY 13, 2023 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. ALIONA GHENDOV-MOSANU
PROF.PH.D. ILEANA DENISA NISTOR
PROF.PH.D. ADRIANA DABIJA**

F.1. IONIC LIQUID MEDIATED PETRACTION FOR VITAMIN C

ALEXANDRA CRISTINA BLAGA, LENUȚA KLOETZER, ALEXANDRA TUCALIUC, DAN CASCAVAL, ANCA IRINA GALACTION

F.2. THE ORIGIN AND TREND OF ORANGE WINES

ALIONA SCLIFOS

F.3. OXIDATION AND MARKERS OF WINE OXIDATION

RODICA STURZA, IURIE SCUTARU

F.4. CHICKPEA AND LENTIL AQUAFABA - A FOAMING AGENT FOR THE MANUFACTURE OF FASTING CONFECTIONERY PRODUCTS

MIHAIL MAZUR, VIORICA BULGARU, ALIONA GHENDOV-MOSANU, RODICA STURZA

F.5. STUDIES ON THE HERBICIDAL EFFECT OF A BIPYRIDINIUM DERIVATIVE AND THE EVALUATION OF ITS IMPACT ON SOME AQUATIC ORGANISMS

BIANCA FURDUI, ANDREEA-VERONICA BOTEZATU, LORENA DEDIU, RODICA-MIHAELA DINICA

F.6. LOCAL YEASTS ISOLATED FROM CIMIȘLIA WINE CENTER AS A WINEMAKING PERSPECTIVE OF THE REPUBLIC OF MOLDOVA

ECATERINA COVACI

F.7. IMPACT OF CHEMICALLY MODIFIED STARCH ON BIOCHEMICAL PARAMETERS OF IN VITRO AND SPONTANEOUS FLORA OF BASIL SP

ANA-MARIA ROȘU, DANIELA NICUȚĂ, ELENA ROXANA VOICU, ILEANA-DENISA NISTOR

F.8. VALORIZATION THE RESIDUAL BIOMASS OF SACCHAROMYCES PASTORIANUS IN DYNAMIC BIOSORPTION PROCESSES

ALEXANDRA MARIA TANASĂ, DANIELA ȘUTEU, ALEXANDRA CRISTINA BLAGA, LACRAMIOARA RUSU

F.9. RETENTION EFFICIENCY OF DYES FROM THE FOOD INDUSTRY ON ORGANO-INORGANIC MATRICES

ANA-MARIA GEORGESCU, ANA-MARIA ROȘU, GABRIELA MUNTIANU, DOREL URECHE, ILEANA-DENISA NISTOR

F.10. BREWING WITH SORGHUM AND SORGHUM MALT

MARIUS EDUARD CIOCAN, ANCUȚA CHETRARIU, ROZÁLIA VERONIKA SALAMON, ADRIANA DABIJA

F.11. STUDY ON USING SPENT GRAIN TO PRODUCE FLOUR PRODUCTS

ANCUȚA CHETRARIU, ADRIANA DABIJA

F.12. FRUITS ROLLS ENRICHED WITH GRAPE POMACE POWDER - SENSORY EVALUATION AND CONSUMER ACCEPTABILITY

IRINA-CLAUDIA ALEXA, LUMINIȚA GROSU, OANA-IRINA PATRICIU, ADRIANA-LUMINIȚA FÎNARU



F.13. EXTRACTS OF BLACKCURRANT BERRIES POMACE - IN VIVO INVESTIGATION

DANIELA NICUȚĂ, LUMINIȚA GROSU, IRINA-CLAUDIA ALEXA, ADRIANA-LUMINIȚA FÎNARU

F.14. BIOCOMPOSITE MATERIAL BASED ON YEAST RESIDUAL BIOMASS AND NATURAL POLYMER AS ALTERNATIVE FOR SUSTAINABLE REMOVAL OF RIFAMPICIN FROM AQUEOUS MEDIA

LĂCRĂMIOARA RUSU, ELENA-MIRELA SUCEVEANU, DANIELA ȘUTEU, CHRISTOPHE VIAL

F.15. SAMBUCUS NIGRA L.: CHARACTERIZATION OF ELDERBERRY EXTRACTS OBTAINED BY VARIOUS METHODS

ANCA SANDU BĂLAN (TĂBĂCARIU), OANA-IRINA PATRICIU, IOANA-ADRIANA ȘTEFĂNESCU, IRINA-LOREDANA IFRIM, ADRIANA-LUMINIȚA FÎNARU

F.16. UREASE ACTIVITY IN GINGER (ZINGIBER OFFICINALE)

IOANA-ADRIANA ȘTEFĂNESCU, IRINA-LOREDANA IFRIM, ELENA-MIRELA SUCEVEANU

F.17. INVESTIGATION INTO 3-FORMYL-RIFAMYCIN BIOSORPTION USING BIOCOMPOSITE MATERIAL BASED ON MICROBIAL BIOMASS AND NATURAL POLYMER

ELENA-MIRELA SUCEVEANU, LĂCRĂMIOARA RUSU, OVIDIU TIȚA, LIDIA FAVIER

F.18. OXIDATIVE STABILITY OF DRY WHITE WINES DEPENDING ON TECHNOLOGICAL FACTORS: SULFUR DIOXIDE, IRON AND COPPER IONS

ECATERINA COVACI

F.19. STUDIES ON THE USE OF CLAY-BASED MATERIALS IN THE RETENTION PROCESSES OF SOME AROMATIC POLLUTANTS, POSSIBLY USED IN THE MILITARY INDUSTRY

RALUCA-FLORENȚA DIACONESCU, ANDREEA HORTOLOMEU, RĂZVAN CONSTANTIN ANASIE, GABRIELA MUNTIANU, ANA-MARIA GEORGESCU, ILEANA-DENISA NISTOR

F.20. THE IMPORTANCE OF BROILERS NUTRITION

ANDREEA SECARĂ (MUSCĂ), VASILICA-ALISA ARUȘ, NICOLETA PLATON, ANA-MARIA ROȘU, GABRIELA MUNTIANU, ANA-MARIA GEORGESCU, ANDREI-IONUȚ SIMION, CAMELIA URECHE, DENISA-ILEANA NISTOR

F.21. STUDY ON THE QUALITY OF CHICKEN MEAT FOR HUMAN CONSUMPTION

ANDREI BERENDEA, MONICA ALINA MAREȘ, GABRIELA MUNTIANU, ANA-MARIA GEORGESCU, ANA-MARIA ROȘU, ANDREI-IONUȚ SIMION, DENISA-ILEANA NISTOR

F.22. CLASSIFICATION OF EXTRA VIRGIN OLIVE OILS USING CHEMOMETRY ANALYSIS APPLIED TO SPECTROMETRIC DATA

ANDREI DANIEL GEMAN, ANDREEA LOREDANA COMĂNESCU, CONSTANTIN APETREI

F.23. CHEMOMETRIC ANALYSIS OF FTIR SPECTROSCOPIC DATA USED FOR THE DETECTION OF OLIVE OILS ADULTERATION WITH VEGETABLE OILS

ANDREEA LOREDANA COMĂNESCU, ANDREI DANIEL GEMAN, CONSTANTIN APETREI

F.24. DETECTION OF OLIVE OILS ADULTERATION WITH ELECTROCHEMICAL SENSORS AND BIOSENSORS BASED ON NANOMATERIALS AND ENZYMES

IRINA MIRELA APETREI, ALEXANDRA VIRGINIA BOUNEGRU, IRINA GEORGIANA MUNTEANU, CONSTANTIN APETREI

F.25. MICROWAVE ASSISTED OF PEPPERMINT ETHANOLIC EXTRACT

ALIN CRISTIAN TEUSDEA, LIVIA BANDICI, VASILE-DARIE ȘOPRONI, FRANCISC-IOAN HATHAZI, MIRCEA-NICOLAE ARION, CARMEN OTILIA MOLNAR, SIMONA IOANA VICAS

F.26. FOOD WASTE AMONG ROMANIAN CONSUMERS

NICOLETA VARTOLOMEI, SIMINA TANASA, LUCRETIA DUMITRESCU, VASILICA-ALISA ARUȘ



F.27. CHROMATIC AND IMAGISTIC ANALYSIS OF BREAD WITH ADDITION OF BUCKWHEAT FLOUR

VASILICA-ALISA ARUȘ, ALIN CRISTIAN TEUȘDEA, ANA-MARIA GEORGESCU, ANA-MARIA ROȘU, NICOLETA PLATON, ILEANA-DENISA NISTOR

F.28. PREPARATION OF AN ADSORBENT MATERIAL FROM CHERRY STONES POWDER AND ITS APPLICATION IN RETAINING AZO DYES FROM AQUEOUS SOLUTIONS

CRISTINA-GABRIELA GRIGORAȘ, ANDREI-IONUȚ SIMION, LIDIA FAVIER

F.29. FATTY ACID METHYL ESTER (FAME) PROFILES OF FISH RESIDUAL MATERIALS USED AS HORTICULTURAL AMENDMENTS

VIOLETA ALEXANDRA ION, OANA CRISTINA PARVULESCU, OANA CRINA BUJOR, AILIN MOLOȘAG, LILIANA BĂDULESCU

F.30. VALORISATION OF CHOKEBERRY POMACE BY-PRODUCT AS A FUNCTIONAL INGREDIENT IN MUFFINS FORMULATION

NICOLETA PLATON, VASILICA-ALISA ARUȘ, ANA-MARIA GEORGESCU, ILEANA-DENISA NISTOR

F.31. THE USE OF NANOMATERIALS IN ROSEHIP OIL TREATMENT

CAMELIA GABOR, NICOLETA VARTOLOMEI, VASILICA-ALISA ARUȘ

F.32. EFFECT OF ROSE HIP ON GINGERBREAD QUALITY AND STABILITY

ALIONA GHENDOV-MOSANU, RODICA STURZA

F. 33. AN INVESTIGATION INTO SYNTHESIS OF MIXED OXIDES AND THEIR USE ON WATER DECONTAMINATION

AMALIA MARIA SESCU, LIDIA FAVIER, DOINA LUTIC, MARIA HARJA, LĂCRĂMIOARA RUSU, ANDREI-IONUȚ SIMION, CRISTINA-GABRIELA GRIGORAȘ

F. 34. AMMONIA ADSORPTION ON PILLARED CLAY IN MAGNETIC FIELD. MATHEMATICAL MODELLING AND OPTIMIZATION BY RESPONSE SURFACE METHODOLOGY

GABRIELA MUNTIANU, ANDREI-IONUȚ SIMION, CRISTINA-GABRIELA GRIGORAȘ, DENISA-ILEANA NISTOR

F.35. APPLICATION OF ULTRASOUND TREATMENT TO IMPROVE SENSORY CHARACTERISTICS IN RED WINES

IRINA-LOREDANA IFRIM, IOANA-ADRIANA ȘTEFĂNESCU, ELENA-MIRELA SUCEVEANU



G. INDUSTRIAL POWER ENGINEERING & COMPUTER SCIENCE

BUILDING D HALL DP17

FRIDAY, MAY 12, 2023 15⁰⁰ – 18⁰⁰

SATURDAY, MAY 13, 2023 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. CRISTIAN NICHITA
PROF.PH.D. ROBERT ISTOK
PROF.PH.D. GEORGE CULEA**

G.1. STUDY OF SECURITY BREACHES DUE TO ON GPU EXECUTION

EUSEBIU PRUTEANU, ANA MARIA AILINCĂ

G.2. PERFORMANCE COMPUTING BASED ON NATURE-INSPIRED MODELS

SILVIA MUNTEANU, VICTOR ABABII, VIORICA SUDACEVSCHI, OLESEA BOROZAN, VICTOR LAȘCO

G.3. ON THE STRUCTURAL AND OPTICAL CHARACTERISTICS OF POLYCRYSTALLINE ZNO THIN FILMS

DRAGOS-IOAN RUSU

G.4. OPTIMIZING THE OPERATING REGIME OF THE TRANSFORMERS IN A ELECTRICAL DISTRIBUTION SUBSTATION

ANETA HAZI, GHEORGHE HAZI

G.5. OPTIMIZATION OF ELECTRICAL SUBSTATION DIAGRAMS ON RELIABILITY CRITERIA

GHEORGHE HAZI, ANETA HAZI

G.6. RECOGNIZE STATIC GESTURES USING HIDDEN MARKOV MODEL

ANDREI ENACHI, CORNEL TURCU, IOAN VIOREL BANU

G.7. THE CURRENT STATE OF RESEARCH ON COMPLEX TEXT AND DOCUMENT ANALYSIS ALGORITHMS

ANDREI-GABRIEL UNGUREANU, ȘTEFAN GHEORGHE PENTIUC

G.8. THE CURRENT STATE OF RESEARCH ON RECOGNITION AND EVALUATION OF HUMAN ACTIVITY BY PROCESSING VIDEO STREAMS

BOGDAN-CONSTANTIN SGHERA, ȘTEFAN GHEORGHE PENTIUC

G.9. VIRTUAL AND AUGMENTED REALITY GUIDE FOR MUSEUMS

GEORGE CULEA

G.10. COMPARATIVE ANALYSIS OF PREDICTIVE MAINTENANCE SYSTEMS FROM SPECIALTY LITERATURE

DRAGOS-ALEXANDRU ANDRIOAIA, VASILE GHEORGHITA GAITAN

G.11. PREDICTIVE MAINTENANCE SYSTEM FOR A PARK OF ELECTRIC SCOOTER

DRAGOȘ ALEXANDRU ANDRIOAIA

G.12. STUDY ON PARTIAL SHADING IRRADIANCE CONDITIONS OF PHOTOVOLTAIC ARRAYS

IOAN VIOREL BANU, FADILA BARKAT, JOSEP M. GUERRERO, GEORGE CULEA, PETRU LIVINTI, DRAGOS ANDRIOAIA, SORIN VERNICA, ANDREI ENACHI

G.13. ANALYZING INTELLIGENT PATTERN RECOGNITION SYSTEMS TO SPECIFY THE TIME OF OCCURRENCE AND TYPE OF FAULT IN GAS-INSULATED CIRCUIT BREAKERS

SORIN EUGEN POPA

G.14. COMPARATIVE STUDY OF A BUCK DC-DC CONVERTER CONTROLLED WITH THE PI OR FUZZY LOGIC REGULATORS

PETRU LIVINTI, IOAN VIOREL BANU



G.15. THE DETERMINISTIC NOISE OF THE ELECTROMYOGRAPHIC SIGNAL PREPROCESSING FOR THE CREATION OF OPTIMIZED MODELS IN THE REHABILITATION AND REEDUCATION OF WRIST/HAND ACTIVITY

CĂTĂLINA MIHAELA CULEA

G.16. COMPARATIVE STUDY BETWEEN LOW-COST PLC AND A RASPBERRY PI 4 WITH OPENPLC

GEORGE CULEA, IOAN CARCEI

G.17. FROM REAL-TIME EMULATION OF WIND AND TIDAL TURBINES TO SIMULATION OF DISTRIBUTED GENERATORS INTEGRATED INTO THE POWER GRID - WORK REPORT AND PROJECTS

CRISTIAN NICHITA, EZZEDINE TOUTI

G.18. AN ICT SOLUTION FOR THE REAL-TIME ENVIRONMENTAL MONITORING AND INSTANT ALERT

VEACESLAV SPRINCEAN, ALEXEI LEU, ROMAN BUIMESTRU, MARIANNA SAVVA, VASIL ANDRUH, MIHAIL CARAMAN, MARIAN JALENCU, FLORENTIN PALADI

G.19. MAINTENANCE MANAGEMENT SYSTEM FOR HIDROPOWER GENERATORS

PETRU GABRIEL PUIU, ROBERT ISTOK, EUSEBIU PRUTEANU

G.20. PHOTOVOLTAIC OFF-GRID POWER SUPPLY SYSTEM OF A DIDACTIC LABORATORY

SORIN-GABRIEL VERNICA, ROXANA-MARGARETA GRIGORE, LAURENȚIU MĂGUREANU

G.21. CONSIDERATIONS ON THE USE OF PVT PANELS FOR ELECTRICITY AND HEAT PRODUCTION IN HOUSEHOLD CONSUMERS

ROXANA MARGARETA GRIGORE, CORNELIA CAPĂT

G.22. ENERGY PRODUCTION USING PVT PANELS

ROXANA MARGARETA GRIGORE, SORIN GABRIEL VERNICA, IOAN VIOREL BANU, SORIN POPA

G.23. IEEE 802.15.4 RADIO SCHEDULER FOR ZIGBEE AND THREAD MULTIPROTOCOL DEVICES

CORNEL POPESCU

G.24. STUDY ON WHEEL WEAR ON DIESEL-ELECTRIC LOCOMOTIVES USED ON THE RAILWAY NETWORK IN ROMANIA

DANIEL APOSTOL

G.25. STRUCTURAL ANALYSIS BASED ON JATCO JR710E SEVEN-SPEED AUTOMATIC TRANSMISSIONS SYSTEMS

COSMIN TOMOZEI

G.26. MANUFACTURING AND TESTING OF HIGH VOLTAGE FILTER CAPACITORS

RÓBERT ISTÓK, TIBOR GÁL, PÉTER JÁNOS JASZTRAB, PETRU GABRIEL PUIU

G.27. INNOVATION THROUGH DIGITAL TRANSFORMATION. PRESENTATION OF THE DIGITAL HUB INNOVATION ZONE

CRISTINA BAGHIU

