



“VASILE ALECSANDRI” UNIVERSITY OF BACAU, ROMANIA
FACULTY OF ENGINEERING
“GHEORGHE ASACHI” UNIVERSITY OF IAȘI, ROMANIA
POLITEHNICA UNIVERSITY OF BUCHAREST, 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 16th International Conference of Constructive Design and Technological Optimization in Machine Building Field

OPROTEH 2021

PROGRAM

BACAU
MAY 25-27, 2021



SCIENTIFIC COMMITTEE

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	V. Zichil - "Vasile Alecsandri" University of Bacau, Romania



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Lect.Ph.D. Eugen HERGHELEGIU





CONFERENCES PROGRAM

TUESDAY 25 MAY 2021		
11 ⁰⁰ – 11 ³⁰	Conferences official opening Welcome messages of the organizing committee - Prof.Ph.D. Valentin NEDEFF, University Senate President - Prof.Ph.D. Carol SCHNAKOVSKY, University Rector - Assoc.Prof.Ph.D. Mirela PANAINTE-LEHADUS, Faculty of Engineering Dean	<i>Online Teams Platform Meeting</i>
11 ³⁰ - 13 ⁰⁰	Plenary lectures	<i>Online Teams Platform Meeting</i>
13 ⁰⁰ – 16 ⁰⁰	Sections Conferences lectures 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	<i>Online Teams Platform Meeting</i>

WEDNESDAY 26 MAY 2021		
11 ⁰⁰ – 14 ⁰⁰	Sections Conferences lectures 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	<i>Online Teams Platform Meeting</i>



THURSDAY 27 MAY 2021

11 ⁰⁰ – 13 ⁰⁰	<p>Sections Conferences lectures</p> <p>A. Optimization of Manufacturing Processes and Systems & Computer Aided Design and Manufacturing</p> <p>B. Optimization of Technologies and Equipment from Process Industries</p> <p>C. Optimization in Environmental Engineering and Environmental Protection</p> <p>D. Mechatronics & Robotics</p> <p>E. Economic Engineering</p> <p>F. Chemical & Food Engineering</p> <p>G. Industrial Power Engineering & Computer Science</p>	<p><i>Online Teams Platform Meeting</i></p>
13 ⁰⁰ – 13 ³⁰	<p>Conferences final discussions</p>	<p><i>Online Teams Platform Meeting</i></p>





Welcome to the 16th International Conference of Constructive Design and Technological Optimization in Machine Building Field

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

PLENARY LECTURES

TUESDAY 25 MAY 2021 11⁰⁰ – 13⁰⁰

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

1. GUIDELINES FOR THE STUDY OF PHOTOPROCESSES: TOWARDS THEIR UNDERSTANDING AND OPTIMIZATION, FABRICE GROS, CAROLINE SUPPLIS, JÉRÉMI DAUCHET, THOMAS VOURC'H, JEAN-FRANÇOIS CORNET

2. THE OPPORTUNITY OF USING CLOUD-BASED COMPUTING IN NUMERICAL SIMULATIONS ON STRUCTURAL ANALYSIS - CASE STUDY, VLAD-ANDREI CIUBOTARIU, COSMIN-CONSTANTIN GRIGORAS, CRINA MARIA RADU, CATALIN NICOLAE TAMPU, VALENTIN ZICHIL

3. SOLAR PANEL CARPORT WITH SECOND LIFE ELECTRIC VEHICLE BATTERIES, ISTÓK RÓBERT

4. INFLUENCE OF PROCESS PARAMETERS ON THE ABRASION RESISTANCE OF HARD ALLOY DEPOSITS OBTAINED BY ARC SPRAYING PROCESS, STEFAN TOMA, RADU ARMAND HARAGA, DANIELA LUCIA CHICET, CRISTIANA CHIRIAC MORUZZI, COSTICA BEJINARIU

5. TRENDS OF THE NEW GENERATIONS OF EQUIPMENT AND CONTROL TECHNIQUES, FOR MACHINE TOOLS WITH NUMERICAL CONTROL, BOGDAN MIRON

6. APPLICATIONS OF THE GIS AND REMOTE SENSING METHODS IN THE LAND USE AND COVER MAPS. CASE STUDY: ROMAN CITY AND THE SURROUNDINGS OF THE NORTH SIDE AREA, PETRUT LIVIU BOGDAN, VALENTIN NEDEFF, NARCIS BARSAN, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU, DANA CHITIMUS



Welcome to the 16th International Conference of Constructive Design and Technological Optimization in Machine Building Field

OPROTEH 2021



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

All conferences lectures will be organized *Online on Teams Platform Meeting*.

Considering that all speech sessions are online *the meeting schedule on speech sessions can be changed*. All speech persons from the plenary and sections lectures are invited to connect on the Teams Platform Meeting at least 15 minutes before speech session.

In the case of all Conference Sections, the Poster Sessions can be accessed from each conference section *Online on Teams Platform Meeting*. These will be available on the *entire days of conference*.



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

Online Teams Platform Meeting

TUESDAY 25 MAY 2021 13⁰⁰ – 16⁰⁰

WEDNESDAY 26 MAY 2021 11⁰⁰ – 14⁰⁰

THURSDAY 27 MAY 2021 11⁰⁰ – 13⁰⁰

**CHAIRPERSONS: PROF.PH.D. CAROL SCHNAKOVSKY
ASSOC.PROF.PH.D. BOGDAN ALEXANDRU CHIRIȚĂ
ASSOC.PROF.PH.D. CRINA MARIA RADU
LECT.PH.D. EUGEN HERGHELEGIU**

Speech session

- 1. MODELLING AND MULTI-OBJECTIVE OPTIMIZATION OF SURFACE ROUGHNESS AND TAPER ANGLE IN ABRASIVE WATER JET MACHINING OF ALUMINUM ALLOY**
IONEL CRINEL RAVEICA, EUGEN HERGHELEGIU
- 2. SOFTWARE INTEGRATION TYPE CAD-CAM-CAE IN PRODUCT LIFECYCLE MANAGEMENT**
IONEL OLARU
- 3. METHODS OF OPTIMISATION IN MACHINING OF LIGHT METAL ALLOYS**
BOGDAN ALEXANDRU CHIRITA, CATALIN NICOLAE TAMPU, EUGEN HERGHELEGIU, COSMIN CONSTANTIN GRIGORAS
- 4. INFLUENCE OF THE WORKING PARAMETERS ON THE QUALITY OF CUT PERFORMED BY ABRASIVE WATER JET CUTTING OF S235 STEEL PLATES**
EUGEN HERGHELEGIU, CAROL SCHNAKOVSKY, CRINA MARIA RADU, BOGDAN ALEXANDRU CHIRITA, CATALIN NICOLAE TAMPU, VLAD ANDREI CIUBOTARIU, COSMIN CONSTANTIN GRIGORAS
- 5. INVESTIGATION OF THE QUALITY OF SURFACES OBTAINED BY DIE-SINKING ELECTRICAL DISCHARGE MACHINING USING THE RAPESEED OIL AS DIELECTRIC FLUID**
CRINA MARIA RADU, CAROL SCHNAKOVSKY, BOGDAN ALEXANDRU CHIRITA, CATALIN NICOLAE TAMPU, VLAD ANDREI CIUBOTARIU, EUGEN HERGHELEGIU
- 6. A METHOD OF CORRECT EVALUATION OF LIFE CYCLE COST IN DEVELOPMENT OF CAR MARKET**
ADRIAN STELIAN GHENADI, CRINA MARIA RADU
- 7. THE OPPORTUNITY OF USING CLOUD-BASED COMPUTING IN NUMERICAL SIMULATIONS ON STRUCTURAL ANALYSIS - CASE STUDY**
VLAD-ANDREI CIUBOTARIU, COSMIN-CONSTANTIN GRIGORAS, CRINA MARIA RADU, CATALIN NICOLAE TAMPU, VALENTIN ZICHIL
- 8. STUDY ON THE ELECTROEROSION PROCESSING WITH FILIFORM ELECTRODE OF METALLIC MATERIALS**
OANA GEORGETA GHIORGHE, CAROL SCHNAKOVSKY



9. **MANAGING SUPPLY CHAIN RISKS: A FUZZY-FAILURE MODE AND EVALUATION APPROACH FOR RANKING THREATS**
BABATUNDE OMONIYI ODEDAIRO, VICTOR OLUWASINA OLADOKUN, AYODELE OLUWASEGUN OLUWOLE
10. **ANALYSIS FOR INVOLUTE SPUR GEARS, THE BENDINGS AND PITTINGS STRESS ON GEARS**
ADESOLA OLADEJ¹, TAOFIK ORIOLOWO
11. **DESIGN FOR THE RECOVERY / REUSE OF COMPONENTS IN THE AUTOMOTIVE INDUSTRY**
ADRIAN STELIAN GHENADI, IONEL OLARU
12. **STRETCH FORMING USING HEATED DIE**
COSMIN CONSTANTIN GRIGORAS, VALENTIN ZICHIL, EUGEN HERGHELEGIU, CATALIN TAMPU, VLAD CIUBOTARIU
13. **MAGNESIUM ALLOY AZ31B FORMING LIMIT CURVE USING THE NAKAZIMA TEST**
AUGUSTIN JITARU, COSMIN CONSTANTIN GRIGORAS, GHEORGHE BRABIE, ANA-MARIA ROSU, LUCIAN-MARIUS ROSU
14. **ASPECTS REGARDING THE CUTTING CAPACITY OF DIAMOND DISCS USED IN THE FLAT GRINDING OF HARD GRANITE AND BASALT MINERAL MATERIALS**
VALEA PETRE

Poster session

1. **STUDY ON ENVIRONMENTAL ASSESSMENT OF RECYCLING IN ROMANIA ACCORDING WITH LIFE CYCLE ANALYSIS**
IONEL CRINEL RAVEICA
2. **INFLUENCE OF CARBON AMOUNT ON RESIDUAL STRESS DISTRIBUTION IN SURFACE LAYER**
CATALIN NICOLAE TAMPU, RALUCA IOANA TAMPU, BOGDAN ALEXANDRU CHIRITA, EUGEN HERGHELEGIU
3. **A SIMULATION WITH SOLIDWORKS OF A JET EJECTOR FLOW PARAMETERS**
IONEL OLARU



B. OPTIMIZATION OF TECHNOLOGIES AND EQUIPMENT FROM PROCESS INDUSTRIES

Online Teams Platform Meeting

TUESDAY 25 MAY 2021 13⁰⁰ – 16⁰⁰

WEDNESDAY 26 MAY 2021 11⁰⁰ – 14⁰⁰

THURSDAY 27 MAY 2021 11⁰⁰ – 13⁰⁰

**CHAIRPERSONS: PROF.PH.D. LUMINIȚA BIBIRE
PROF.PH.D. NICOLETA SPOREA
ASSOC.PROF.PH.D MOSNEGUTU EMILIAN**

Speech session

1. **PROCESS OPTIMISATION AND SOME MICRONUTRIENT RETENTION IN THE PRODUCTION OF OVEN-DRIED MICRONUTRIENT-RICH ORANGE-FLESHED POTATO FLOUR: A TIME STUDY AND VALUE STREAM MAPPING APPROACH**
BABATUNDE OMONIYI, GIBSON LUCKY, ABDUL-RAZZAK
2. **HEART-HEALTH STATUS USING MACHINE LEARNING**
EBENEZER OYEBODE,

Poster session

1. **INFLUENCE POSITION THE ROD-CRANK MECHANISM ON THE MOVEMENT OF AN OSCILLATING SIEVE**
EMILIAN MOSNEGUTU, NARCIS BARSAN, MIRELA PANAINTE-LEHADUS, DANA CHITIMUS, CLAUDIA TOMOZEI
2. **VISCOSITY OF AQUEOUS POTASSIUM CARBONATE SOLUTIONS PROMOTED BY AMINO ACID: MEASURING AND CORRELATION**
RAMONA ELENA TATARU-FARMUS, GABRIELA APOSTOLESCU, CORINA CERNATESCU, CLAUDIA COBZARU, MIHAELA VIZITIU, NICOLAE APOSTOLESCU
3. **THE IMPACT OF THE DRY AGED BEEF PROCESS PARAMETERS ON END PRODUCT QUALITY**
BULGARU VIORICA
4. **PRACTICAL APPLICATION OF IDENTIFICATION AND ASSESSMENT OF RISKS AND DESIGNING OF A RISK MANAGEMENT SYSTEM, AT A COMPANY FOR AGRICULTURE MACHINE BUILDING**
LUMINITA BIBIRE, ALEXANDRA-DANA CHITIMUS
5. **THE ACTION OF CORROSIVE AGENTS ON THE QUALITY OF METALLIC MATERIALS FROM MACHINE BUILDING INDUSTRY**
MARIUS LUCIAN ROSU, AUGUSTIN JITARU, COSMIN GRIGORAS, GHEORGHE BRABIE
6. **APPLICATION CONTRIBUTIONS TO THE ANALYSIS OF STRESS STATUS AND DEFORMATION GENERATED IN A SANDWICH TYPE COMPOSITE STRUCTURE - CASE STUDY**



ELENA SURDU, DANA-CLAUDIA FARCAȘ-FLAMAROPOL, ION DURBACĂ, ANDREEA NIȚU, RAMONA MARE,

7. **ANALYTICAL-EXPERIMENTAL METHODS FOR EVALUATION OF LIFE PERIOD OF PRESSURE EQUIPMENT**
GHEORGHE-COSMIN CIOCOIU, NICOLETA SPOREA, ION DURBACĂ
8. **DETERMINATION OF THE PHONO-ABSORBING BEHAVIOR OF STRATIFIED COMPOSITE STRUCTURES**
NICOLETA SPOREA, ION DURBACĂ
9. **USE OF THE SIX SIGMA METHODOLOGY TO IMPROVE THE QUALITY OF THE MANUFACTURING PROCESSES OF SOME INDUSTRIAL PRODUCTS**
ION DURBACĂ, NICOLETA SPOREA
10. **STUDY ON THE TECHNICAL EXPERTISE OF GAS-LIQUID FUEL BOILER ROMSTAL THERMOSTAL ENERSAVE ENP 700 - 700 KW, IN ORDER TO EVALUATE THE REMAINING SERVICE LIFE**
IONEL PAȘALĂU, ADRIAN SORIN UMBRĂRESCU, CIUCHE CONSTANTIN
11. **STUDY ON THE REDUCTION OF ENERGY CONSUMPTION FOR A SYSTEM WITH THREE DEPIRATION ROLLS, BY OPTIMIZING THE MAIN GEOMETRIC AND DYNAMIC ELEMENTS N**
CAROL CSATLOS
12. **STUDY REGARDING THE PLACEMENT OF MEASURING AND CONTROL DEVICES AND OF SAFETY DEVICES ON PRESSURE VESSELS**
LUMINITA BIBIRE, CONSTANTIN CIUCHE, PAULA GRETA VRINCEANU
13. **RESEARCH ON MECHANICAL CHARACTERISTICS OF VENISON MEAT**
IOANA SONIA COMĂNESCU
14. **USING ARTIFICIAL COLD FOR DRYING SUGAR**
ALEXE NICOLAE ORMENIȘAN
15. **INFLUENCE OF PROCESS PARAMETERS ON THE ABRASION RESISTANCE OF HARD ALLOY DEPOSITS OBTAINED BY ARC SPRAYING PROCESS**
STEFAN TOMA, RADU ARMAND HARAGA, DANIELA LUCIA CHICET, CRISTIANA CHIRIAC MORUZZI, COSTICA BEJINARIU
16. **SIMULATED BEHAVIOR OF THERMAL COATED LAYERS AT POINT CONTACT STRESS**
STEFAN TOMA, DANIELA CHICET, ANA TUFESCU, GABRIELA TOMA
17. **STUDY REGARDING THE ATTITUDE TOWARDS RISK, OF MANAGERS FROM ROMANIA, IN CONTEXT OF THE INTEGRATED APPROACH FOR RISK MANAGEMENT**
LUMINITA BIBIRE, ALEXANDRA-DANA CHITIMUS
18. **ASPECTS REGARDING MULTICAVITY INJECTION FORMS WITH INTERCHANGEABLE CASSETTE FOR INJECTION OF POLYMER MATERIALS**
ANA-MARIA CIOBANU, ELENA-RALUCA COMĂNESCU, ELENA CATALINA CATANA, ION DURBACĂ
19. **COMPARATIVE ANALYTICAL DETERMINATION OF THERMAL PROTECTION BEHAVIOR FOR EXPERIMENTAL MODELS MADE OF STRATIFIED BIOCOMPOSITE BOARDS OF LIGNO-CELLULOSE NATURE**
SILVIA-ANDREEA NIȚU, RADU IATAN, ION DURBACĂ, GABRIEL PETROȘEL, ELENA SURDU, DANA CLAUDIA FARCAȘ-FLAMAROPOL



C. OPTIMIZATION IN ENVIRONMENTAL ENGINEERING AND ENVIRONMENTAL PROTECTION

Online Teams Platform Meeting

TUESDAY 25 MAY 2021 13⁰⁰ – 16⁰⁰

WEDNESDAY 26 MAY 2021 11⁰⁰ – 14⁰⁰

THURSDAY 27 MAY 2021 11⁰⁰ – 13⁰⁰

**CHAIRPERSONS: PROF.PH.D. VALENTIN NEDEFF
ASSOC.PROF.PH.D. MIRELA PANAINTE-LEHĂDUȘ
ASSOC.PROF.PH.D. NARCIS BARSAN**

Speech session

- 1. ADVANCEMENT IN MODELING AND MATHEMATICAL OPTIMIZATION OF AN ADSORPTION-BASED TREATMENT PROCESS**
ALIONA GHENDOV-MOSANU
- 2. OVERVIEW OF RESEARCH ON THE CONTINUOUS REMOVAL OF HEAVY METALS FROM WASTEWATERS USING MICROORGANISMS**
CĂTĂLINA FILOTE, MIHAELA ROȘCA, ISABELA MARIA SIMION, RALUCA MARIA HLIHOR
- 3. MEDICAGO SATIVA DEVELOPMENT AND STRESS IN ZINC CONTAMINATED ENVIRONMENT**
DANA MIHAELA ASIMINICESEI, IONELA VASILACHI, MARIANA MINUȚ, PETRONELA COZMA, RALUCA MARIA HLIHOR, MARIA GAVRILESCU
- 4. CONSIDERATIONS ON SOME PROPERTIES OF LINIC AND EKCRANIC TECHNOSOLS FROM URBAN AREAS**
FEODOR FILIPOV, ESMERALDA CHIORESCU
- 5. APPLICATION OF THE CIRCULAR ECONOMY CONCEPT IN THE FOOD INDUSTRY WASTEWATER REUSE POSSIBILITIES**
NICOLETA DANIELA FRUNZA, OANA IRIMIA, NARCIS BARSAN, CIPRIAN NANU
- 6. MICROBIOLOGICAL QUALITY EVALUATION OF MINERAL WATERS. CASESTUDY: SLANIC MOLDOVA WATER STORED IN REUSABLE BOTTLES**
LAVINIA MISAILA, DUMITRA RADUCANU, NARCIS BARSAN, LUMINITA GROSU, OANA-IRINA PATRICIU, LUCIAN GAVRILA, ADRIANA-LUMINITA FINARU

Poster session

- 1. TECHNOLOGICAL CHALLENGES FOR SHORT ROTATION FORSTRY IN THE HILLY REGION OF NE ROMANIA**
IULIAN-CONSTANTIN DĂNILĂ, MIHAI-LEONARD DUDUMAN, GIANINA LAURA BOURIAUD
- 2. STUDY REGARDING THE HOUSEHOLD WASTE COLLECTION**
MIHAI VULPE, VALENTIN NEDEFF, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU, CLAUDIA TOMOZEI
- 3. PHYTOTOXIC EFFECTS OF A COMMON LAUNDRY DETERGENT ON GERMINATION AND GROWTH OF LETTUCE (LACTUCA SATIVA L.)**
DUMITRA RADUCANU, ANA-MARIA GEORGESCU



4. **SCREENING OF BRASSICA NAPUS L. RESISTANCE AT DIFFERENT CADMIUM AND LEAD LEVELS IN SOIL**
MIHAELA ROȘCA, PETRONELA COZMA, MARIANA MINUȚ, RALUCA-MARIA HLIHOR, CAMELIA BEȚIANU, MARIANA DIACONU, MARIA GAVRILESCU
5. **USING RESPONSE SURFACE METHODOLOGY AS A TOOL FOR EVALUATING AND OPTIMIZING THE HEAVY METALS REMOVAL BY BIOREMEDIATION PROCESSES**
MIHAELA ROȘCA, RALUCA-MARIA HLIHOR, PETRONELA COZMA, CĂTĂLINA FILOTE, ISABELA MARIA SIMION, MARIA APOSTOL, MARIA GAVRILESCU
6. **GERMINATION AND GROWTH OF LUCERNE (MEDICAGO SATIVA L.) PLANT UNDER THE INFLUENCE OF CU(II) IONS**
IONELA CĂTĂLINA VASILACHI, DANA-MIHAELA ASIMINICESEI, MARIANA MINUȚ, PETRONELA COZMA, RALUCA-MARIA HLIHOR, MARIA APOSTOL, MARIA GAVRILESCU
7. **PHYTOMINING OF HEAVY METALS FROM CONTAMINATED SOILS: A GREEN TECHNOLOGY**
MARIANA MINUȚ, PETRONELA COZMA, MIHAELA ROȘCA, IONELA CĂTĂLINA VASILACHI, DANA MIHAELA ASIMINICESEI, RALUCA MARIA HLIHOR, MARIA APOSTOL, MARIANA DIACONU, MARIA GAVRILESCU
8. **INVESTIGATION REGARDING THE INFLUENCE OF DIFFERENT PARAMETERS ON EGGSHELLS ADSORPTION EFFICIENCY**
ELENA-PETRONELA BRAN, IRINA-CLAUDIA ALEXA, ELENA-MIRELA SUCEVEANU, CRISTIAN RADU, ADRIANA-LUMINITA FINARU
9. **STUDY ON URBAN MOBILITY IN BACĂU MUNICIPALITY**
PANAINTE-LEHADUS MIRELA, NEDEFF FLORIN-MARIAN, TOMOZEI CLAUDIA, BARSAN NARCIS, IRIMIA OANA
10. **COMPARATIVE ANALYSIS OF THE EFFICIENCY OF THE WASTE MANAGEMENT SYSTEM IN SELECTED COUNTIES IN ROMANIA AND IN POLAND**
OANA TIRTOACA, GRZEGORZ PRZYDATEK
11. **GROUNDWATER AND SURFACE WATER POLLUTION. A REVIEW RELATED TO THE METALS RESULTING FROM MINING ACTIVITIES**
ALINA COCHIORCA, VALENTIN NEDEFF, NARCIS BARSAN, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU, DANA CHITIMUS
12. **FLOOD VULNERABILITY REDUCION. CASE STUDY: TAZLĂU RIVER BASIN, DOWNSTREAM OF ITS CONFLUENCE WITH TAZLĂU SĂRAT**
TIRNOVAN ALINA, COVACI OVIDIU, GAZDA MARIUS, BARSAN NARCIS
13. **CONTRIBUTIONS REGARDING THE ENERGITICAL VALORIFICATION OF URBAN SLUDGE TREATMENT**
DANA-CLAUDIA FARCAȘ-FLAMAROPOL, ELENA SURDU, ION DURBACĂ, ANDREEA NIȚU, EUGEN DUȚU
14. **A CASE STUDY ON THE EFFICIENCY OF A WASTEWATER TREATMENT PLANT IN A SMALL RURAL COMMUNITY**
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15. **MUNICIPAL SLUDGE TREATMENT BY USING ORGANIC FLOCCULANTS. LABORATORY APPLICATIONS**
NARCIS BARSAN, MARIANA TURCU, VALENTIN NEDEFF, DANA CHITIMUS, DAN IANCULESCU, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU
16. **APPLICATIONS OF THE GIS AND REMOTE SENSING METHODS IN THE LAND USE AND COVER MAPS. CASE STUDY: ROMAN CITY AND THE SURROUNDINGS OF THE NORTH SIDE AREA**
PETRUT LIVIU BOGDAN, VALENTIN NEDEFF, NARCIS BARSAN, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU, DANA CHITIMUS



17. **MEMBRANE FILTRATION TECHNIQUES. A SHORT REVIEW RELATED TO THE MOST USED MEMBRANES IN WASTEWATER TREATMENT**
ANDREI ZAHARIA, VALENTIN NEDEFF, NARCIS BARSAN, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU, CAROLINA UNTILA
18. **EMERGENCY MANAGEMENT AT THE LEVEL OF THE BACAU FIRE BRIGADE**
BOGDAN MINEL, CLAUDIA TOMOZEI, MIRELA PANAINTE-LEHADUS, VALENTIN NEDEFF, OANA IRIMIA
19. **STUDIES ON THE PHYTOTOXICITY EFFECT GENERATED BY THE VARIATION OF THE VANADIUM AND BERYLLIUM CONTENT OF THE SOIL FOR A MAIZE MONOCULTURE**
ALEXANDRA-DANA CHITIMUS, VALENTIN NEDEFF, EMILIAN MOSNEGUTU, NARCIS BARSAN, CLAUDIA TOMOZEI, OANA MUSCALU (PLESCAN)
20. **EVALUATION OF THE NOISE LEVEL IN THE BACAU BUS STATION AREA**
CLAUDIA TOMOZEI, OANA IRIMIA, MIRELA PANAINTE LEHADUS, FLORIN NEDEFF, EMILIAN MOSNEGUTU



D. MECHATRONICS & ROBOTICS

Online Teams Platform Meeting

TUESDAY 25 MAY 2021 13⁰⁰ – 16⁰⁰

WEDNESDAY 26 MAY 2021 11⁰⁰ – 14⁰⁰

THURSDAY 27 MAY 2021 11⁰⁰ – 13⁰⁰

**CHAIRPERSONS: PROF.PH.D. ADRIAN GHENADI
PROF.PH.D. LIANA TOPLICEANU
LECT.PH.D. RADU CALIMAN**

Speech session

1. **TREATMENT TECHNOLOGIES TO OBTAIN METALLIC AND NONMETALLIC CARBON FIBER COMPOSITE MATERIALS**
RADU CALIMAN
2. **ANALYSIS OF THE CHEMICAL DEPOSITION PROCESS IN VAPOR STATE FOR COATING CARBON FIBERS IN THE STRUCTURE OF METAL AND NON-METAL MATERIAL COMPOSITES**
RADU CALIMAN
3. **THE FUNCTIONALITY OF CARTRIDGE VALVES**
TOPLICEANU LILIANA, CALIMAN RADU, GRIGORAS COSMIN
4. **STABILITY CONTROL MODELLING UNDER DYNAMIC MOTION SCENARIO OF A DIFFERENTIAL DRIVE ROBOT**
ADEDOTUN OWOJORI, KAYODE AKINGBADE, WALIU APENA, ERASTUS OGUNTI
5. **COMPARATIVE STUDY BETWEEN FINITE ELEMENT METHOD AND PHOTOELASTICIMETRY, REGARDING STRESSES AND ISOSTATIC CURVES**
COSMIN GRIGORAS, VALENTIN ZICHIL, VLAD CIUBOTARIU, CATALIN DROB
6. **AUTOMATIC HIDRAULIC CAR STARING SYSTEM**
VIOREL IVAN
7. **THE INFLUENCE OF FAST ADVANCE SPEED ON POSITIONING ACCURACY ON CNC MACHINE TOOLS**
ADRIAN STOICA, VIOREL IVAN
8. **OPTIMIZING THE RESPONSE TIME TO ROTARY TABLES FROM CNC MACHINE TOOLS**
IONUT TANASE
9. **DEAD RACE REDUCTION MECHANISM FOR CINEMATIC ADVANCE CHAINS FROM CNC MACHINE**
MARIA BOGHIAN, ADRIAN STOICA
10. **OPTIMIZATION OF THE GUIDANCE SYSTEM FOR A CNC MILLING MACHINE**
ADRIAN STOICA, MARIA BOGHIAN
11. **CASE STUDY ON MECHATRONIC DESIGN FOR THE AUTOMATION OF AN IRRIGATION SYSTEM**
BUCUR DANIEL
12. **CROSSING BALANCE SYSTEM FOR CNC PORTAL MILLING MACHINES**
LUCIAN PETREA



13. *TRENDS OF THE NEW GENERATIONS OF EQUIPMENT AND CONTROL TECHNIQUES, FOR MACHINE TOOLS WITH NUMERICAL CONTROL*
BOGDAN MIRON
14. **SOME MECHANICAL PROPERTIES OF ARBOBLEND V2**
DORIN VĂIDEANU, TUDOR CRISTIAN PETRESCU
15. **A COMPARATIVE STUDY OF THE PROPERTIES OF DIFFERENT “LICHID WOOD” PRESENTATION FORMS**
DORIN VĂIDEANU, TUDOR CRISTIAN PETRESCU



E. ECONOMIC ENGINEERING

Online Teams Platform Meeting

TUESDAY 25 MAY 2021 13⁰⁰ – 16⁰⁰

WEDNESDAY 26 MAY 2021 11⁰⁰ – 14⁰⁰

THURSDAY 27 MAY 2021 11⁰⁰ – 13⁰⁰

**CHAIRPERSONS: PROF.PH.D. VALENTIN ZICHIL
ASSOC.PROF.PH.D. CATALIN DROB
ASSISTANT PROF. PH.D. COSMIN GRIGORAŞ**

Speech session

- 1. THE EVOLUTION OF THE CAPITAL MARKET IN ROMANIA IN THE CONTEXT OF THE COVID-19 PANDEMIC**
DROB CATALIN, ZICHIL VALENTIN, GRIGORAS COSMIN, CIUBOTARIU VLAD
- 2. IMPLEMENTATION OF THE CIRCULAR ECONOMY IN ROMANIA**
LILIANA TOPLICEANU, CATALIN DROB, PETRU GABRIEL PUIU
- 3. RECENT EVOLUTION AND PERSPECTIVES OF THE FOREIGN DIRECT INVESTMENT IN ROMANIA**
CATALIN DROB
- 4. RECENT EVOLUTION OF FOREIGN DIRECT INVESTMENT IN THE DEVELOPED COUNTRIES**
CATALIN DROB, VALENTIN ZICHIL
- 5. RESEARCH ON BUSINESS OPPORTUNITIES OF SMEs IN NORH-EAST ROMANIA**
NICOLETA CIUCESCU, OVIDIU-LEONARD TURCU, COSTEL CEOCEA, ANDREEA FERARU
- 6. THE IMPACT PRODUCED BY THE SARS COV-2 VIRUS ON TOURISM IN BACAU**
ANDREEA FERARU, COSTEL CEOCEA, OVIDIU-LEONARD TURCU, NICOLETA CIUCESCU
- 7. EVALUATION OF ENTREPRENEURIAL VIEWS ON CONTEXTUAL ELEMENTS WHICH HAVE BEEN NEGATIVELY AFFECTED THE ACTIVITY OF SMES IN NORTH- EAST ROMANIA**
NICOLETA CIUCESCU, COSTEL CEOCEA, OVIDIU-LEONARD TURCU, ANDREEA FERARU
- 8. STUDY ON THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND LEADERSHIP STYLE**
ANDREEA FERARU, OVIDIU-LEONARD TURCU, COSTEL CEOCEA, NICOLETA CIUCESCU



F. CHEMICAL & FOOD ENGINEERING

Online Teams Platform Meeting

TUESDAY 25 MAY 2021 13⁰⁰ – 16⁰⁰

WEDNESDAY 26 MAY 2021 11⁰⁰ – 14⁰⁰

THURSDAY 27 MAY 2021 11⁰⁰ – 13⁰⁰

CHAIRPERSONS: PROF.PH.D. ILEANA DENISA NISTOR
PROF.PH.D. ADRIANA FINARU
ASSOC.PROF.PH.D. ALISA ARUS
LECT.PH.D. ANDREI SIMION
LECT.PH.D. ANA MARIA ROSU

Speech session

- 1. IMPEDANCE SPECTROSCOPY TO INVESTIGATE THE DIELECTRIC AND ELECTRICAL BEHAVIOR OF SEAWEED POLYSACCHARIDES IN AQUEOUS SOLUTIONS**
ZAIM SOUMIA, EL MOZNINE REDDAD, NMILA RACHID, RCHID HALIMA, SABIR IBTISSAM, URSU ALINA-VIOLETA, VIAL CHRISTOPHE, MICHAUD PHILIPPE
- 2. PRODUCTION OF A FUNCTIONAL FOOD DRINK BASED ON THE BIOLOGICALLY ACTIVE POTENTIAL OF THE ANTHOCYANIN EXTRACT FROM GRAPE POMACE**
COVACI ECATERINA, STURZA RODICA, VIZIREANU CAMELIA
- 3. WATER, AN ESSENTIAL COMPONENT OF THE FOOD INDUSTRY**
STOIAN CRISTINA
- 4. DETERMINATION OF PRIMERS EFFICIENCY IN THE DETECTION OF *PEDIOCOCCUS* IN WINES**
BUGA ALEXANDRA, MITINA IRINA, MITIN VALENTIN, ZGARDAN DAN, RUBTOV SILVIA
- 5. ORGANIC WASTE BIOREFINERY: THE KEY ROLE OF ANAEROBIC BUILDING BLOCKS**
VIAL CHRISTOPHE, FONTANILLE PIERRE, ELLOUZE MARWA, TRAD ZAINEB, URSU ALINA-VIOLETA, CHRISTOPHE GWENDOLINE, DUBESSAY PASCAL, GUEZ JEAN-SÉBASTIEN
- 6. DENITRIFICATION OF TUNISIAN NATURAL WATERS BY BATCH ELECTROCOAGULATION PROCESS**
BEN ARFA MAHA, URSU ALINA-VIOLETA ATTOUR ANAIS, ELFIL HAMZA, VIAL CHRISTOPHE
- 7. INHIBITORY EFFECT OF SOME PLANT EXTRACTS AGAINST BACTERIAL STRAINS CAUSING FOOD POISONING DISEASES**
COJOCARI DANIELA
- 8. OBTAINING AND STABILIZING DYES, ANTIOXIDANTS AND PRESERVATIVES OF PLANT ORIGIN FOR FUNCTIONAL FOODS**
GHENDOV-MOSANU ALIONA
- 9. EVALUATION OF THE POTENTIAL FOR USE IN AGRICULTURE OF SEDIMENTS FROM BISTRITA RIVER BY PHYSICAL-CHEMICAL ANALYSIS**
ANDREI SIMONA, RAȚI IOAN-VIOREL, RĂDUCANU DUMITRA, URECHE DOREL, NISTOR DENISA ILEANA



10. **EVALUATION OF THE ANTIMICROBIAL ACTIVITY OF THE WINE AND OTHER OENOLOGICAL EXTRACTS.**
BEHTA EMILIA
11. **INVESTIGATION OF OBTAINING VINEGAR USING CONCENTRATED JUICE**
BOIȘTEAN ALINA
12. **QUALITY CONTROL OF RAW MATERIALS FOR POULTRY FEED**
MUSCĂ ANDREEA, ROȘU ANA-MARIA, PLATON NICOLETA, ARUȘ ALISA-VASILICA, NISTOR DENISA-ILEANA
13. **OPTIMIZATION OF OPERATIONAL PARAMETERS OF AN IMPROVED MAIZE SHELLER USING RESPONSE SURFACE METHODOLOGY**
SEDARA ADEWALE, ODEDIRAN EMMANUEL
14. **SCREENING OF MICROALGAE FOR EXOPOLYSACCHARIDE PRODUCTION WITH INDUSTRIAL APPLICATION**
MICHAUD PHILIPPE
15. **MEMBRANE FILTRATION AS A CRITICAL STEP IN WASTE MEAT BIOREFINERY: EXAMPLE OF LIQUID EFFLUENTS FROM BOVINE MEAT COOKING PROCESSES**
URSU ALINA-VIOLETA, GHASSEMI SAMIRA, VIAL CHRISTOPHE, DJELVEH GHOLAMREZA
16. **THE USE OF ASCORBIC ACID IN BREADMAKING**
VARTOLOMEI NICOLETA, TURTOI MARIA
17. **PREPARATION AND CHARACTERIZATION OF ACTIVATED CARBON FROM *PANDANUS CANDELABRUM* STEM USING H_3PO_4**
DIM PAUL EGWUONWU, TERMTANUN MUTSEE
18. **CHARACTERIZATION OF SANDSTONE PORE NETWORK USING MERCURY POROSIMETRY, HELIUM POROSIMETRY AND SCANNING ELECTRON MICROSCOPY**
DIM PAUL EGWUONWU, RIGBY SEAN P.
19. **SYNTHESIS OF SILVER NANOPARTICLE EMBEDDED CATIONIC CLAY AS AN EFFICIENT CATALYST OF DYES AND ITS ANTIBACTERIAL ACTIVITY**
MIRILĂ DIANA-CARMEN, RĂDUCANU DUMITRA, DIDI MOHAMED AMINE, NISTOR DENISA-ILEANA, AZZOUZ ABDELKRIM

Poster session

1. **THE ABILITY OF SEA BUCKTHORN TO FIGHT AGAINST *L. MONOCYTOGENES***
COJOCARI DANIELA
2. **HONEY – A POTENTIAL SOURCE OF FUNCTIONAL FOODS**
ALEXA IRINA-CLAUDIA, SUCEVEANU ELENA-MIRELA, GROSU LUMINIȚA, PATRICIU OANA-IRINA, IFRIM IRINA-LOREDANA, FÎNARU ADRIANA-LUMINIȚA
1. **SOLID PHASE EXTRACTION METHOD FOR THE EXTRACTION OF NEUROTRANSMITTERS FROM SHEEP BRAIN**
TÂMPU RALUCA, TÂMPU CĂTĂLIN, ELFAKIR CLAIRE
3. **PREPARATION OF WHITE BREAD WITH HEN EGG SHELL POWDER**
PLATON NICOLETA, ARUȘ VASILICA-ALISA, GEORGESCU ANA-MARIA, NISTOR ILEANA DENISA
4. **PRELIMINARY CHARACTERIZATION OF OIL/WATER EMULSIONS FOR ADDED-VALUE TO TEXTILE FABRICS**
GHENDOV-MOSANU ALIONA
5. **IDENTIFICATION OF THE POLYPHENOLIC LEVEL OF YOUNG WHITE WINES BY TREATMENT WITH VARIOUS INORGANIC AND ORGANIC MATERIALS**



HORTOLOMEU ANDREEA, MIRILA DIANA-CARMEN, PETUHOV OLEG, DIDI MOHAMED AMINE, COVACI ECATERINA, STURZA RODICA, SCUTARU IURIE, NISTOR ILEANA DENISA

6. **THE IMPACT OF THE TOXIC METALS ACCUMULATION ON THE CHAMOMILE MEDICINAL PLANT IN A LABORATORY STUDY**
ȘERBAN ECATERINA ANCA, VASILE GABRIELA GEANINA, STOICA CĂTĂLINA, GHEORGHE ȘEFANIA, DINU CRISTINA
7. **GERMINATION AND BIOACCUMULATION OF LEAD IN CULTURE MUSTARD IN A LABORATORY STUDY**
TENEA ANDA-GABRIELA, VASILE GABRIELA-GEANINA, MUREȘEANU MIHAELA, DINU CRISTINA, STOICA CĂTĂLINA
8. **CHEMICAL MODIFICATIONS OF CORN STARCH FOR NEW NANOMATERIALS USED IN AGRO-ALIMENTARY WASTES VALORIZATION**
ROȘU ANA MARIA, ANASIE RAZVAN CONSTANTIN, NISTOR ILEANA DENISA, RAFIN CATHERINE, VEIGNIE ETIENNE
9. **LACTIC ACID FERMENTATION IN THE PRESENCE OF LAYERED DOUBLE HYDROXIDES AND ULTRASOUND FIELD: STATISTICAL MODELLING AND OPTIMIZATION**
ARUȘ VASILICA ALISA, NISTOR ILEANA DENISA, PLATON NICOLETA, GEORGESCU ANA MARIA, MUNTIANU GABRIELA, JINESCU GHEORGHIȚA
20. **CONFECTIONERY MASSES WITH EXTRACTS AND POWDERS OF CHOKEBERRY AND SEA BUCKTHORN FRUITS**
GHENDOV-MOȘANU ALIONA, STURZA RODICA
21. **OPTIMIZATION OF ALIGOTE DRY WHITE WINE PRODUCTION UNDER TUM MICRO-WINEMAKING CONDITIONS**
COVACI ECATERINA, STURZA RODICA, DRUȚA RAISA, SUBOTIN IURIE
10. **EFFECT OF CALCIUM GLUÇONATE ON ACRYLAMIDE LEVEL AND BREAD QUALITY**
SARION CRISTINA, CODINĂ GEORGIANA GABRIELA
11. **COMPARATIVE EVALUATION OF THE PHYSICO-CHEMICAL CHARACTERISTICS OF SPENT GRAIN FROM BREWING AND MALT WHISKY**
CHETRARIU ANCUȚA, DABIJA ADRIANA
12. **BUCKWHEAT MALT AS RAW MATERIAL FOR BREWING**
CIOCAN MARIUS EDUARD, CHETRARIU ANCUȚA, MÎRZAN DARIUS, DABIJA ADRIANA
13. **THE EFFECT OF GERMINATED BEANS ON WHEAT DOUGH RHEOLOGY**
ATUDOREI DENISA, ATUDOREI OLIVIA, CODINĂ GEORGIANA GABRIELA
14. **ULTRASOUND-ASSISTED EXTRACTION OF BIOACTIVE COMPOUNDS FROM IVY LEAVES**
NEGREA CRISTINA LUCIANA, POPA IOANA, CĂLINESCU IOAN, MAHOLEA LAURA, GAVRILĂ ADINA IONUȚA
15. **COMPARATIVE ANALYSIS OF VEGETABLE ACTIVATED CARBONS WITH COMMERCIAL ONES OF GRANUCOL SERIES**
PETUHOV OLEG, TIMBALIUC NINA, GINSARI IRINA, CIBOTARU SILVIA, GONTA ALEXANDRU, CIOBANU MIHAIL, LUPASCU TUDOR, NASTAS RAISA
16. **POSSIBILITIES OF USING CLAY-BASED MATERIALS IN THE SERVICE OF PUBLIC HEALTH AND INDUSTRY, ESPECIALLY IN THE FOOD INDUSTRY**
DOROFTEI RALUCA, GEORGESCU ANA-MARIA, MUNTIANU GABRIELA, ARUȘ ALISA-VASILICA, SIMION ANDREI-IONUȚ, LEHR BLAZIU CAROL, NISTOR DENISA-ILEANA
17. **EVALUATION OF SENSORIAL AND ANTIOXIDANT EFFECTS OF BASIL (OCIMUM BASILICUM L.) EXTRACT ON COTTAGE CHEESE**
POPESCU LILIANA, STURZA RODICA, PINTEA ADELA



18. **MATERIALS WITH ADDED VALUE BY VALORIZATION OF INDUSTRIAL BY-PRODUCTS: BIOSORBENTS BASED ON RESIDUAL INDUSTRIAL BIOMASS IMOBILIZED**
ȘUTEU DANIELA, ZAHARIA CARMEN, BLAGA ALEXANDRA CRISTINA, HORCIU LUIZA IOANA, RUSU LĂCRĂMIOARA
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CONSTANTIN ANASIE RAZVAN, ROȘU ANA-MARIA, NISTOR ILEANA DENISA
20. **DIMETHYL N-CYANODITHIOIMINOCARBONATE AND TRIPHENYLPHOSPHINE OXIDE METAL HALIDE COMPLEXES: MOLECULAR CRYSTAL ELUCIDATION**
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21. **DEVELOPMENT OF NEW BIOSORBENTS BASED ON MICROBIAL BIOMASS IMMOBILIZED ON NATURAL POLYMERS**
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23. **VALORISATION OF VINE BRANCHES BY SLOW PYROLYSIS**
CALCAN SUZANA IOANA, PÂRVULESCU OANA CRISTINA, ION VIOLETA ALEXANDRA, RĂDUCANU CRISTIAN EUGEN, EGRI DIANA, TĂNASE DOBRE
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MĂRGEAN ALINA, LUPU MIRABELA IOANA, PĂDUREANU CRISTINA, PĂDUREANU VASILE
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BENNACER SONIA, URSU ALINA-VIOLETA, ELIAS ABDELHAMID, FONTANILLE PIERRE, BRUN FRÉDÉRIC, VIAL CHRISTOPHE
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BALANUȚA ANATOL, COVACI ECATERINA, SCLIFOS ALIONA, BODRUG ANASTASIA
29. **ANALYSIS OF MICRONUTRIENT CONTENT IN THE DAILY FOOD RATION OF PRESCHOOLERS OF REPUBLIC OF MOLDOVA**
SUHODOL NATALIA, DESEATNICOVA OLGA, CHIRSANOVA AURICA, REȘITCA VLADISLAV, CAPCANARI TATIANA, COVALIOV EUGENIA, BOIȘTEAN ALINA
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BANTEA-ZAGAREAMU VALENTINA
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SUBOTIN IURIE, DRUȚĂ RAISA, COVACI ECATERINA, STURZA RODICA
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- DONISE ANDREEA, MIRICA OANA, CRĂCIUN MIHAELA EMANUELA, PÂRVULESCU OANA*
33. **EQUILIBRIUM AND KINETICS STUDIES OF ACID BLUE 193 REMOVAL ONTO AMBERLITE XAD7HP RESIN**
MARIN NICOLETA MIRELA
34. **BENEFITS, PHYSICAL-CHEMICAL AND FUNCTIONAL PROPERTIES OF CHIA SEEDS - SALVIA HISPANICA L. (LAMIACEAE)**
GROSU CAROLINA, SIMINIUC RODICA, COVALIOV EUGENIA, GUTIU OLGA
35. **THE INFLUENCE OF THE FUNGUS *BOTRYTIS CINEREA* ON THE PRODUCTION OF SWEET WINES**
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36. **THE IMPACT OF HAWTHORN (CRATAEGUS) LIPOPHILIC EXTRACT ON THE OXIDATIVE STABILITY OF VEGETABLE OILS**
POPOVICI VIOLINA, STURZA RODICA, GHENDOV-MOSANU ALIONA
37. **OPTIMIZATION OF SOME PHYSICAL AND FUNCTIONAL PROPERTIES OF EXTRUDED SOYBEAN CRUD RESIDUE-BASE FLOATING FISH FEED**
ABIOL SAHEED OLAOYE
38. **STUDY ON THE CURRENT STATE OF PREPARATION METHODS FOR HYDROTALCITE (ANIONIC CLAYS)**
PALEU DIANA, SIMION ANDREI-IONUȚ, GRIGORAȘ CRISTINA-GABRIELA, ROȘU ANA-MARIA, NISTOR DENISA-ILEANA
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BAERLE ALEXEI, SAVCENCO ALEXANDRA, POPESCU LILIANA, TATAROV PAVEL
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43. **INFLUENCE OF TEMPERATURE ON THE EXTRACTION OF FAT-SOLUBLE COMPLEX FROM SEA BUCKTHORN AND ROSEHIP FRUITS**
GHENDOV-MOȘANU ALIONA, STURZA RODICA
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45. **INFLUENCE OF EXTRACTION CONDITIONS ON BIOLOGICALLY ACTIVE COMPOUNDS AND ANTIOXIDANT ACTIVITY IN GRAPE MARC EXTRACTS**
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46. **ANALYSIS OF THE FORCED OXIDABILITY OF GRAPE SEED, WALNUT AND CORN OILS**
SUBOTIN IURIE, DRUȚĂ RAISA, COVACI ECATERINA, STURZA RODICA
47. **METHYL ORANGE DRIVEN NiFe_2O_4 NANOPARTICLES SELF-ASSEMBLY AS SPONGE-LIKE FORM AND THE REVERSIBILITY OF THE PROCESS UNDER THERMAL TREATMENT**
GHERCA DANIEL, PALAMARU MIRCEA NICOLAE, IORDAN ALEXANDRA RALUCA, BORHAN ADRIAN IULIAN



48. **SrTiO₃/NiFe₂O₄ TYPE VISIBLE-LIGHT DRIVEN POROUS-FOAM NANOCOMPOSITE BY JOINT SOLID STATE AND SOL-GEL AUTO-COMBUSTION TECHNIQUES**
GHERCA DANIEL, PALAMARU MIRCEA NICOLAE, IORDAN ALEXANDRA RALUCA, BORHAN ADRIAN IULIAN
49. **FROM ZERO-DIMENSIONAL TO QUASI ONE-DIMENSIONAL NiFe₂O₄ PHOTOCATALYST: TOWARDS DEVELOPMENT OF NANOFIBERS-TEXTURED MATERIALS**
GHERCA DANIEL, BORHAN ADRIAN IULIAN, PALAMARU MIRCEA NICOLAE, IORDAN ALEXANDRA RALUCA
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51. **OBTAINING AND STABILIZING DYES, ANTIOXIDANTS AND PRESERVATIVES OF PLANT ORIGIN FOR FUNCTIONAL FOODS**
GHENDOV-MOSANU ALIONA
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GALERU RĂDUCU, PRUTEANU LAURA-MIHAELA, RADU ANGELA
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TARAȘ CRISTINA
54. **TRACEABILITY OF ORGANIC BREAD WITH ADDED RYE FLOUR**
POPA MARIANA, STAN IOAN, DAMIAN MIHAELA, ACUCULIȚEI ANCUȚA DENISA, DĂNILA ANDREEA, POPA MARIANA
55. **COMMON CHEMICALS USED IN ORGANIC FARMING**
MARIN IRINA
56. **MEDICINAL WINES**
STAN MARIA
57. **CHEMICAL METHODS OF IDENTIFICATION OF THE CHARACTERISTIC INDICATORS OF THE SHAMPOO**
DANIELA BILBOR
58. **NEW SUBSTITUTED PYRAZOLES DERIVATIVES WITH ANTIBACTERIAL ACTIVITY**
CHRISTINA ZALARU, FLOREA DUMITRASCU, CONSTANTIN DRAGHICI, DIANA PRICOPE, FLORIANA BECTAS, ADRIAN ARNAUTU
59. **BIODEGRADABLE AND EDIBLE MEMBRANES A VIABLE ALTERNATIVE FOR THE TRADITIONAL NON-BIODEGRADABLE PLASTIC PACKAGING**
SONIA AMARIEI, IONUȚ AVRĂMIA, FLORIN URSACHI, ANCUȚA CHETRARIU



G. INDUSTRIAL POWER ENGINEERING & COMPUTER SCIENCE

Online Teams Platform Meeting

TUESDAY 25 MAY 2021 13⁰⁰ – 16⁰⁰

WEDNESDAY 26 MAY 2021 11⁰⁰ – 14⁰⁰

THURSDAY 27 MAY 2021 11⁰⁰ – 13⁰⁰

**CHAIRPERSONS: PROF.PH.D. GEORGE CULEA
PROF.PH.D. PETRU LIVINȚI
PROF.PH.D. HAZI GHEORGHE
ASSOC.PROF.PH.D. ROXANA GRIGORE**

Speech session

- 1. OPTIMIZATION METHODS APPLIED TO GAS TURBINE PLANTS**
SORIN VERNICA, ANETA HAZI, GHEORGHE HAZI, ROXANA-MARGARETA GRIGORE
- 2. A METHOD FOR CALCULATING THE CONTINUITY INDICATORS OF A POWER SYSTEM**
GHEORGHE HAZI, ANETA HAZI, ROXANA GRIGORE, SORIN VERNICA
- 3. ON THE SELECTIVITY OF PROTECTIONS AGAINST EARTHING IN MV POWER SYSTEMS**
GHEORGHE HAZI, ANETA HAZI, SORIN VERNICA
- 4. INCREASING THE TECHNICAL-ECONOMIC EFFICIENCY OF A COMBINED GAS-STEAM CYCLE**
ANETA HAZI, GHEORGHE HAZI, GRIGORE ROXANA, VERNICA SORIN GABRIEL
- 5. IMPROVING THE ENERGY EFFICIENCY OF THE ELECTRICAL DIAGRAM OF A POWER PLANT**
HAZI ANETA, HAZI GHEORGHE, VERNICA SORIN GABRIEL, GRIGORE ROXANA
- 6. REMOTE CONTROL SYSTEM OF THE SPEED OF THE DC MOTOR WITH TWO ARDUINO UNO DEVELOPMENT BOARDS**
PETRU LIVINTI
- 7. APPLICATION OF SIEMENS PLC IN TWO-AXIS TRACKING SOLAR PV**
GEORGE CULEA, DAN ROTAR, DRAGOȘ ALEXANDRU ANDRIOAIA
- 8. SOME ASPECTS ABOUT THE USING OF RENEWABLE SOURCES OF ENERGY FOR NZEB SINGLE FAMILY HOUSES**
ROXANA-MARGARETA GRIGORE, CORNELIA CAPĂȚ
- 9. MONITORING THE TEMPERATURE AND HUMIDITY OF AN ENCLOSURE USING RASPBERRY PI AND THINGSPEAK**
DRAGOȘ ALEXANDRU ANDRIOAIA, GEORGE CULEA, PETRU-GABRIEL PUIU
- 10. THEORETICAL STUDY ABOUT THE USING OF HYBRID PV/T PANELS FOR A RESIDENTIAL HOUSE**
ROXANA-MARGARETA GRIGORE, ANETA HAZI, GHEORGHE HAZI, SORIN VERNICA
- 11. STUDY CONCERNING THE CONSTRUCTION OF A MEDIUM FREQUENCY INDUCTION HEATING OVEN WITH PWM FREQUENCY ADJUSTMENT**
PETRU-GABRIEL PUIU, DRAGOȘ ALEXANDRU ANDRIOAIA, LILIANA TOPLICEANU
- 12. CYBERNETIC SECURITY OF IOT DEVICES WHICH TRANSMIT DATA IN THE CLOUD OF THE THINGSPEAK PLATFORM**
DRAGOȘ ALEXANDRU ANDRIOAIA, DAN ROTAR



13. **OPTIMIZING THE ACTIVITY OF ATI STAFF BASED ON AN ERGONOMIC MODEL**
CATALINA CULEA
14. **TOWARDS REDUCING ENERGY USAGE IN DATACENTER**
EBENEZER OYEBODE, OLUSEGUN OJESANMI
15. **ASSESSMENT OF CODE BASED COMPLEXITY METRIC ON XML SCHEMA LANGUAGES**
KEHINDE SOTONWA
16. **MODELING AND SIMULATION WITH GRAFCET OF THE REACTIVE POWER CONTROL PROCESS IN A WIND FARM – CASE STUDY VANATORI WIND FARM**
MIHAI CRISTIAN MOȚOC, MARIA-CRISTINA GRĂDINARU(DINU), ROXANA-MARGARETA GRIGORE, GEORGE CULEA, MARTA HERAS, JAVIER GRACIA BERNAL
17. **ELECTRICITY METER WITH THE FACILITY TO DETERMINE THE QUALITY OF THE ELECTRICITY SUPPLIED**
DAN ROTAR, GEORGE CULEA
18. **REDUCING THE ENERGY CONSUMPTION OF SYSTEMS WITH THE INTEGRATED CIRCUIT TI 430FR2433**
DAN ROTAR, DRAGOȘ ALEXANDRU ANDRIOAIA
19. **CYBER SECURITY OF SIMATIC S7 1500 SYSTEMS**
GEORGE CULEA, CORNEL POPESCU
20. **DESIGN ANALYSIS OF AN AUTOMATIC PHASE SELECTOR**
ADEDOTUN OWOJORI, ABIODUN AKINBOLADE, KAYODE AKINGBADE
21. **TRANSFER OF DATA FROM SCREEN TO VIDEO CAMERAIMPERCEPTIBLE BY THE HUMAN EYE**
CORNEL POPESCU

Poster session

1. **DETERMINING THE FUNCTIONAL CHARACTERISTICS OF HALL CURRENT SENSORS USING SOFTWARE SIMULATION APPLICATIONS**
SORIN EUGEN POPA
2. **STUDY ON PHOTOLUMINESCENCE CHARACTERISTICS OF POLYCRYSTALLINE ZNO THIN FILMS**
DRAGOS-IOAN RUSU
3. **SOLAR PANEL CARPORT WITH SECOND LIFE ELECTRIC VEHICLE BATTERIES**
ISTÓK RÓBERT

