



“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



Consiliul Județean
Bacău

The 17th International Conference of Constructive Design and Technological Optimization in Machine Building Field

OPROTEH 2022

PROGRAM

BACAU
MAY 25-27, 2022



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Assoc.Prof.Ph.D. Emilian MOSNEGUTU
Lect.Ph.D. Andrei SIMION
Lect.Ph.D. Eugen HERGHELEGIU





CONFERENCE PROGRAM

WEDNESDAY 25 MAY 2022		
15 ⁰⁰ -19 ⁰⁰	Welcome & Registration	Building D Central hall, first floor
15 ⁰⁰ -17 ⁰⁰	Goals and expectation for University and Industry AEROSTAR S.A. BACĂU	Building B BI28
19 ⁰⁰ -20 ³⁰	Dinner	"Vasile Alecsandri" University of Bacau Restaurant
THURSDAY 26 MAY 2022		
08 ⁰⁰ -10 ⁰⁰	Welcome & Registration	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
20 ⁰⁰	Gala Diner	Casa Grande Restaurant
FRIDAY 27 MAY 2022		
09 ⁰⁰ – 11 ⁰⁰	Section lectures and Poster sessions	Buildings B/D and Central hall
11 ⁰⁰ – 11 ³⁰	Coffee break	Central hall, first floor
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 17th 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**

THURSDAY 26 MAY 2022 10³⁰ – 13⁰⁰

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

- 1. HYBRIDIZATION CONCEPT FOR HORIZONTAL AXIS WIND/TIDAL SYSTEMS APPLICABLE TO REAL-TIME EMULATION METHODS**
EZZEDINNE TOUT, CRISTIAN NICHITA, MOHAMED ASHGLAF
- 2. ROBO-PVAFM PROPER SOFTWARE PLATFORM FOR THE ASISTED RESEARCH OF THE KINEMATICS AND DYNAMICS OF INDUSTRIAL ROBOTS**
ADRIAN OLARU, SERBAN OLARU, NICULAE MIHAI
- 3. THE COMBINED EFFECT OF HIGH-PRESSURE PROCESSING AND THERMAL TREATMENT ON THE PROPERTIES OF FETEASCA REGALA WHITE WINE**
LIUDMILA NOVITCHI, DANIELA BORDA, MARIA TURTOI
- 4. COATING OF BIODEGRADABLE POLYMERS**
SIMONA-NICOLETA MAZURCHEVICI, ALINA MARGUTA, JUSTINA GEORGIANA MOTAS, CONSTANTIN CARAUSU, DUMITRU NEDELICU
- 5. NATIONAL COMPANY FOR THE CONTROL OF BOILERS FOR LIFTING INSTALLATIONS AND PRESSURE VESSELS (C.N.C.I.R) - A HIGH-PERFORMING INSTITUTION**
GHEORGHE SERGIU ADOMNICA
- 6. ARMASEC CYBERSECURITY SPECIAL FORCE**
GILAD RAZ, GUY RUDNITZKY
- 7. AEROSTAR S.A. BACĂU**
- 8. AGRICOLA INTERNAȚIONAL S.A.**



The 17th International Conference of Constructive Design and Technological Optimization in Machine Building Field

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OPROTEH 2022



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 25-27 MAY on the Central Hall (Building D).



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

BUILDING B HALL BI42

THURSDAY 26 MAY 2022 15⁰⁰ – 18⁰⁰

FRIDAY 27 MAY 2022 09⁰⁰ – 11⁰⁰

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

A.1. CONSIDERATIONS ON IMPLEMENTATION PROCESS IN EDUCATIONAL ACTIVITY OF CLOUD-BASED CAD APPLICATIONS - CASE STUDY

IONEL CRINEL RAVEICA, GABRIELA RAVEICA

A.2. ACTIVE LEARNING IN ENGINEERING EDUCATIONS: EXPERIENCES IN COVID 19 PANDEMY

IONEL CRINEL RAVEICA, GABRIELA RAVEICA

A.3. FEM ANALYSIS OF INITIAL TEMPERATURE INFLUENCE ON SURFACE RESIDUAL STRESS DISTRIBUTION IN SURFACE LAYER

CATALIN TAMPU, RALUCA TAMPU, BOGDAN CHIRITA, CAROL SCHNAKOVSKY, EUGEN HERGHELEGIU, BOGDA NITA, COSMIN IANCU

A.4. A FEM ANALYSIS OF CUTTING PARAMETERS INFLUENCE IN TURNING OF MAGNESIUM ALLOY

CATALIN TAMPU, RALUCA TAMPU, VALENTIN ZICHIL, CAROL SCHNAKOVSKY, VLAD CIUBOTARIU, COSMIN GRIGORAS, CRINA RADU, BOGDAN CHIRITA

A.5. EFFECT OF CUTTING PARAMETER ON PM2.5 POLLUTANTS AMOUNT GENERATED BY MILLING OPERATION

CATALIN TAMPU, RALUCA TAMPU, EUGEN HERGHELEGIU, BOGDAN CHIRITA

A.6. A STUDY ABOUT THE IMPLEMENT OF CAD/CAM/CAE INTEGRATED TECHNOLOGY IN INDUSTRIAL ENGINEERING

IONEL OLARU

A.7. STUDY ON THE POSSIBILITY OF USING A RECYCLED VEGETABLE OIL AS DIELECTRIC IN ELECTRICAL DISCHARGE MACHINING OF A TOOL STEEL 20

MARIA-CRINA RADU, CAROL SCHNAKOVSKY, NICOLAE-CATALIN TAMPU, OANA GHIORGHE, VLAD-ANDREI CIUBOTARIU

A.8. RESPONSE SURFACE METHODOLOGY APPLIED FOR MODELLING IN MACHINING

BOGDAN ALEXANDRU CHIRITA, NICOLAE CATALIN TAMPU, EUGEN HERGHELEGIU, COSMIN CONSTANTIN GRIGORAS

A.9. STUDY ON THE INFLUENCE OF THE FOCUSING TUBE'S LENGTH ON THE QUALITY OF CUT PERFORMED BY ABRASIVE WATER JET CUTTING OF THE AL6061T651 ALLOY

EUGEN HERGHELEGIU, MARIA CRINA RADU, CAROL SCHNAKOVSKY, BOGDAN CHIRITA, COSMIN GRIGORAS, CATALIN NICOLAE TAMPU

A.10. THE CORRELATION BETWEEN THE PHYSICAL-MECHANICAL AND TRIBOLOGICAL CHARACTERISTICS OF COMPOSITES MATERIALS REINFORCED WITH CARBON FIBERS

RADU CALIMAN

A.11. THE VOLUME FRACTION INFLUENCE ON THE WEAR BEHAVIOR OF THE FIBER REINFORCED COMPOSITE SYSTEMS

RADU CALIMAN



A.12. COATING OF BIODEGRADABLE POLYMERS

SIMONA-NICOLETA MAZURCHEVICI, ALINA MARGUTA, JUSTINA GEORGIANA MOTAS, CONSTANTIN CARAUSU, DUMITRU NEDELICU

A.13. STUDY REGARDING THE PROCESSING OF C120 AND 304L MATERIALS BY ELECTROEROSION WITH FILIFORM ELECTRODE

OANA GHIORGHE, CAROL SCHNAKOVSKY

A.14. INVESTIGATING THE RELATIONSHIP OF CUSTOMER EXPECTATIONS TO PRODUCT QUALITY IN A STAINLESS STEEL FACTORY

ATAKAN ALKAN, GÜLŞEN AKMAN, MINE AYDEMİR, GAMZE ŞEN

A.15. PROFILING OF THE HOB TOOL FOR WORM SHAFTS DEFORMATION

VIRGIL GABRIEL TEODOR, GEORGIANA-ALEXANDRA MOROŞANU, NICUŞOR BAROIU, RĂZVAN SEBASTIAN CRĂCIUN, VIOREL PĂUNOIU



B. OPTIMIZATION OF TECHNOLOGIES AND EQUIPMENT FROM PROCESS INDUSTRIES

BUILDING D HALL DP12

THURSDAY 26 MAY 2022 15⁰⁰ – 18⁰⁰

FRIDAY 27 MAY 2022 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. RADU IATAN
ASSOC.PROF.PH.D IOAN BĂISAN
ASSOC.PROF.PH.D MOSNEGUTU EMILIAN**

B.1. ENERGY SAVINGS AND ECONOMIC ANALYSIS OF HYBRID DOWNDRAFT EVAPORATIVE COOLER

IBRAHIM USMAN HARUNA, IBRAHIM AHMAD RUFAl, DALHATU BALARABE YAHAYA

B.2. NUMERICAL INVESTIGATION OF THE EFFECT OF WINDOW GEOMETRY ON INDOOR AIR QUALITY OF AN OFFICE BUILDING EQUIPPED WITH A HYBRID DOWNDRAFT EVAPORATIVE COOLER

IBRAHIM USMAN HARUNA, IBRAHIM AHMAD RUFAl, DALHATU BALARABE YAHAYA

B.3. EXPERIMENTAL OPTIMIZATION OF AERODYNAMIC DRAG COEFFICIENT OF A MINIBUS MODEL WITH NON-SMOOTH SURFACE PLATE APPLICATION

CIHAN BAYINDIRLI, MEHMET CELIK

B.4. OPTIMIZATION OF THERMOPHYSICAL PROPERTIES, COMBUSTION PERFORMANCE AND HARMFUL EXHAUST GASES OF BIODIESEL FUEL WITH NANOPARTICLE ADDITIVES

MEHMET CELIK, CIHAN BAYINDIRLI

B.5. GEOMETRIC CALCULATION OF THE INFLUENCE OF AN OSCILLATING SIEVE'S ACTUATION MECHANISM POSITION ON IT'S MOTION

EMILIAN MOSNEGUTU, CLAUDIA TOMOZEI, VALENTIN NEDEFF, PANAINTE PANAINTE-LEHADUS, OANA IRIMIA, CARP LOREDANA

B.6. INFLUENCE STUDY OF CORROSIVE AGENTS ON THE SURFACE OF METALLIC MATERIAL LIKE STEEL

OLGA POPA

B.7. THE RECENT DEVELOPMENTS IN AGRICULTURAL MACHINERY DESIGN, CONSTRUCTION AND MAINTENANCE

IOAN BĂISAN

B.8. TENSOMETRY ANALYSIS OF THE STATE OF STRESS AND STRAIN OF A PIPE-TYPE CYLINDRICAL STRUCTURE TO A HYDRAULIC PRESSURE TESTING

GHEORGHE-COSMIN CIOCOIU, RADU IATAN, ION DURBACĂ, NICOLETA SPOREA

B.9. IN THE STUDY OF MECHANICAL STRUCTURES UNDER PRESSURE, STUDY INTO THE USE OF THE FINITE ELEMENT METHOD IN COMBINATION WITH NONDESTRUCTIVE TESTING. CASE STUDY

COSTEL-DORINEL ULERIU, CRISTINA CECILIA MREJNERIU

B.10. IDENTIFICATION OF WELDING BEAD DEFECTS, AND THE CAUSES OF THESE DEFECTS, IN TUBULAR HEAT EXCHANGERS. CASE STUDY: TWO-PASS TUBULAR FASCICLE HEAT EXCHANGER

LUMINIȚA BIBIRE, IONEL PAȘALĂU, ADRIAN SORIN UMBRĂRESCU, CONSTANTIN CIUCHE, CĂȚĂLIN ȘTEFAN ȘTIULETE



B.11. NATIONAL COMPANY FOR THE CONTROL OF BOILERS FOR LIFTING INSTALLATIONS AND PRESSURE VESSELS (C.N.C.I.R) - A HIGH-PERFORMING INSTITUTION

GHEORGHE SERGIU ADOMNICAI

B.12. SOME ASPECTS REGARDING THE MAINTENANCE OF THE PIPES, AT THE HEAT EXCHANGER WITH THE TUBULAR FASCICLE. CASE STUDY

LUMINIȚA BIBIRE, ADRIAN SORIN UMBRĂRESCU, CONSTANTIN CIUCHE, IONEL PAȘALĂU, ȘTEFAN OLARU

B.13. STUDY ON THE CONSEQUENCES OF NON-COMPLIANCE FOR MAINTENANCE PROCEDURES, IN THE CASE OF REMEDIAL OPERATIONS, OF DEFECTS IN A PIPE-LINE NETWORK. CASE STUDY

LUMINIȚA BIBIRE, CONSTANTIN CIUCHE, IONEL PAȘALĂU, ADRIAN SORIN UMBRĂRESCU, ROXANA ZAMFIR (ROȘU)

B.14. NEXTGEN: A POWERFUL AND FEATURE-RICH SOFTWARE FOR PRESSURE VESSEL AND HEAT EXCHANGER DESIGN

EMIL CĂLȚARU

B.15. IMPLEMENTATION OF MODERN METHODS FOR IDENTIFYING RISK FACTORS IN THE TEACHING-LEARNING PROCESS, IN TECHNICAL EDUCATION 32

GABRIELA TOMA, ȘTEFAN LUCIAN TOMA



C. OPTIMIZATION IN ENVIRONMENTAL ENGINEERING AND ENVIRONMENTAL PROTECTION

BUILDING D HALL DP12

THURSDAY 26 MAY 2022 15⁰⁰ – 18⁰⁰

FRIDAY 27 MAY 2022 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. VALENTIN NEDEFF
PROF.PH.D. ION DURBACĂ
ASSOC.PROF.PH.D. MIRELA PANAINTE-LEHĂDUȘ**

C.1. RESPONSE TO STRESS CAUSED BY LEAD, CADMIUM AND NICKEL TOXICITY IN OREGANO (ORIGANUM VULGARE L.) SEEDLINGS

RALUCA MARIA HLIHOR, LAURA HAGIU ZALESCHI, ISABELA MARIA SIMION, MARIA APOSTOL

C.2 BEHAVIOUR OF MEDICAGO SATIVA L. (ALFALFA) IN THE PRESENCE OF COBALT IONS: A PRELIMINARY APPROACH

MARIANA MINUT, PETRONELA COZMA, MIHAELA ROȘCA, MARIANA DIACONU, MARIA GAVRILESCU

C.3. A STUDY OF MUSTARD SEED GERMINATION AND GROWTH UNDER THE INFLUENCE OF ZINC STRESS

MARIA PAIU, IONELA-CĂTĂLINA VASILACHI, MARIANA MINUȚ, MARIA GAVRILESCU

C.4 HAZARDOUS WASTE ADVANCED MANAGEMENT IN A POLAND – CASE STUDY MALOPOLSKIE REGION

GRZEGORZ PRZYDATEK

C.5. EFFECTS OF METALS STRESS ON THE DEVELOPMENT AND GROW OF SINAPIS ALBA (WHITE MUSTARD) IN URBAN SOILS

PETRONELA COZMA, MARIANA MINUT, MARIA PAIU, RALUCA-MARIA HLIHOR, MIHAELA ROSCA, MARIA GAVRILESCU

C.6. STATISTICAL ANALYSIS AND OPTIMIZATION OF LEAD BIOSORPTION FROM WASTEWATER BY NON-VIABLE BIOMASS OF ARTHROBACTER VISCOSUS

PETRONELA COZMA, MIHAELA ROSCA, RALUCA-MARIA HLIHOR, ISABELA MARIA SIMION, MARIA GAVRILESCU

C.7. PRELIMINARY STUDY ON THE INFLUENCE OF COPPER ON RAPESEED GROWTH AND DEVELOPMENT

IONELA CĂTĂLINA VASILACHI, ELENA-DIANA COMĂNIȚĂ, MARIANA MINUȚ, MARIA PAIU, MARIA GAVRILESCU

C.8. A BINARY RETENTION OF LEAD AND NICKEL ONTO CLAYEY AND CLAYEY ORGANIC SOIL

MOHAMED ABDELWAHEB, HATEM DHAOUADI, SONIA DRIDI-DHAOUADI

C.9. MATHEMATICAL MODELING FOR THE TRANSFER OF CHROMIUM FROM THE SOIL IN THE CASE OF PHRAGMITES AUSTRALIS PLANT

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

C.10. MATHEMATICAL MODELING OF THE LEACHING SPEED OF LIQUID POLLUTANT IN THE SOIL

ALEXANDRA-DANA CHITIMUS, VALENTIN NEDEFF, NARCIS BARSAN, EMILIAN MOSNEGUTU, COSMINA SIPOS, GRIGORAS MARIA



C.11. TECHNOLOGICAL OPTIMIZATION AND EMPIRICAL MODELING OF BRILLIANT RED HE-3B DYE BIOSORPTION ONTO RESIDUAL BIOMASS OF SACCHAROMYCES PASTURIANUS ENCAPSULATED IN SODIUM ALGINATE

CARMEN ZAHARIA, DANIELA SUTEU, ALEXANDRA-CRISTINA BLAGA, ALEXANDRA TĂNASĂ, CRINUTA-LARISA ORTOVAN

C.12. ASPECTS REGARDING THE TECHNOLOGICAL DESIGN OF A WASTE SLUDGE TANK

ELENA SURDU, DANA-CLAUDIA FARCAȘ-FLAMAROPOL, ION DURBACĂ

C.13. POTENTIAL OF MICROALGAE TO PRODUCE SUSTAINABLE BIODIESEL FROM INDUSTRIAL WASTEWATER

KATIA GHEZALI, NOUREDDINE BENTAHAR

C.14. VISIBLE-LIGHT PHOTOCATALYTIC PERFORMANCE OF AL:SRTiO₃@Δ-COOH CORE@SHELL NANOHETEROSTRUCTURES

IOANA RADU, ADRIAN BORHAN, AUREL PUI

C.15. STUDY REGARDING THE DETERMINATION OF THE DUST CONCENTRATION LEVEL IN THE CENTER OF BACAU CITY

CLAUDIA TOMOZEI, OANA IRIMIA, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU, FLORIN NEDEFF, COSMIN DOSOFTEI, CRISTINA VIȘAN

C.16. MICROBIAL REMOVAL OF THE PHARMACEUTICAL COMPOUNDS

CLAUDIA-VERONICA UNGUREANU, NICOLETA BADALUTA, ANA –MARIA GEORGESCU, DUMITRA RADUCANU

C.17. EVALUATION OF THE AIR MICROBIOTA INSIDE UNIVERSITY SPACES, DURING AND AFTER THE RESTRICTIONS CAUSED BY THE COVID-19 PANDEMIC

DUMITRA RADUCANU, NICOLETA BADALUTA, ANA –MARIA GEORGESCU, CLAUDIA-VERONICA UNGUREANU

C.18. SOME APPLICATIONS OF THE ORGANIC FLOCCULANTS IN THE SLUDGE TREATMENT. CASE STUDY: LABORATORY MUNICIPAL SLUDGE DEWATERING

NARCIS BARSAN, MARIANA TURCU, VALENTIN NEDEFF, GRZEGORZ PRZYDATEK, DANA CHITIMUS, MIRELA PANAINTE-LEHADUS, EMILIAN MOSNEGUTU, IOSIF IOJA

C.19. HIERARCHICAL CARBON BASED-NiFe₂O₄ COMPOSITE NANOSTRUCTURES WITH EXCELLENT LIGHT RESPONSE AND MAGNETIC PERFORMANCE SYNTHESIZED TOWARD ENHANCED PHOTOCATALYTIC DEGRADATION OF ACTIVE PHARMACEUTICAL INGREDIENTS

ADRIAN BORHAN, DANIEL GHERCA, IOANA RADU, ALIN DIRTU, DANIELA DIRTU, MIRCEA PALAMARU, DANA POPESCU, MARIUS HUSANU, ALEXANDRA RALUCA IORDAN

C.20. INCORPORATION OF MICROBIAL BIOREMEDIATION IN WASTEWATER TREATMENT PLANTS FLOW FOR PERSISTENT POLLUTANTS REMOVAL

MIHAELA ROȘCA, RALUCA-MARIA HLIHOR, ISABELA MARIA SIMION, PETRONELA COZMA, CĂTĂLINA FILOTE

C.21. QUANTIFICATION OF THE ENVIRONMENTAL IMPACTS GENERATED BY THE REMOVAL OF HEAVY METALS FROM AQUEOUS SOLUTION BY INACTIVE YEAST

ISABELA MARIA SIMION, CĂTĂLINA FILOTE, MIHAELA ROȘCA, MARIA APOSTOL, RALUCA MARIA HLIHOR

C.22. TOXIC EFFECTS OF SINGLE AND BINARY MIXTURE OF LEAD, CADMIUM AND NICKEL ON BASIL (*OCIMUM BASILICUM* L.) GERMINATION AND EARLY GROWTH STAGES

LAURA HAGIU ZALESCHI, RALUCA MARIA HLIHOR, ISABELA MARIA SIMION, MARIA APOSTOL

C.23. IMPACTS OF Pb(II) BIOACCUMULATION FROM WASTEWATERS USING BACTERIAL BIOMASS CONSIDERING PROCESS LIFE CYCLE ASSESSMENT

CĂTĂLINA FILOTE, ISABELA MARIA SIMION, MIHAELA ROȘCA, RALUCA MARIA HLIHOR



C.24. 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

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D. MECHATRONICS & ROBOTICS

BUILDING D HALL D131

THURSDAY 26 MAY 2022 15⁰⁰ – 18⁰⁰

FRIDAY 27 MAY 2022 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. ADRIAN OLARU
PROF.PH.D. PETRU LIVINTI
PROF.PH.D. GHEORGHE STAN**

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E. ECONOMIC ENGINEERING

BUILDING D HALL D131

THURSDAY 26 MAY 2022 15⁰⁰ – 18⁰⁰

FRIDAY 27 MAY 2022 09⁰⁰ – 11⁰⁰

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

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BUILDING D HALL DP18

THURSDAY 26 MAY 2022 15⁰⁰ – 18⁰⁰

FRIDAY 27 MAY 2022 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. MARIA TURTOI
PROF.PH.D. ILEANA DENISA NISTOR
ASSOC.PROF.PH.D. ALISA ARUS**

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The 17th International Conference of Constructive Design and Technological Optimization in Machine Building Field

SAMI SIAMER, SOUAD BOUAFIA, AMALIA MARIA SESCU, MARIA HARJA, ANDREI-IONUȚ SIMION, CRISTINA-GABRIELA GRIGORAȘ, MARIANA LILIANA PACALA, LIDIA FAVIER

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G. INDUSTRIAL POWER ENGINEERING & COMPUTER SCIENCE

BUILDING D HALL DP17

THURSDAY 26 MAY 2022 15⁰⁰ – 18⁰⁰

FRIDAY 27 MAY 2022 09⁰⁰ – 11⁰⁰

**CHAIRPERSONS: PROF.PH.D. CRISTIAN NICHITA
PROF.PH.D. FLORENTIN PALADI
PROF.PH.D. GEORGE CULEA**

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G.33. RESEARCH ON ALGORITHMS FOR RECOGNIZING THE FEELINGS OF RESPONDENTS TO THE QUESTIONNAIRE

UNGUREANU ANDREI-GABRIEL

G.34. USE OF GREEN ENERGY IN THE DOMAIN OF RAILWAY TRACTION

DANIEL APOSTOL

