

**Lucian Blaga University of Sibiu – Romania**

**Faculty of Engineering**

Department of Industrial Engineering and Management

Department of Industrial Machines and Equipment



# **CONFERENCE PROGRAM**

## **The 9<sup>th</sup> International Conference on Manufacturing Science and Education - MSE 2019 -**

June 5 – 7, 2019  
Sibiu, Romania



**Main Partner:  
Hasso Plattner Institut**

HPI Knowledge Transfer Institute at ULBS



# Sponsors:

Continental Automotive Systems



Asociația Universitară de Ingineria Fabricației



## **CONFERENCE CHAIRMAN**

BONDREA Ioan, Romania

## **HONORARY COMMITTEE**

BANABIC Dorel, Romania

BERCE Petru, Romania

BRÎNDAȘU Paul Dan, Romania

DRĂGHICI George, Romania

DUȘE Dan Maniu, Romania

OPREAN Constantin, Romania

## **ORGANIZING COMMITTEE**

### **CHAIRPERSON**

Nicolae Florin COFARU

### **MEMBERS**

BEJU Livia Dana

BIBU Marius

BIRIȘ Cristina Maria

BONDREA Ioan

CHICEA Anca

CIOCA Lucian-Ionel

CIOFU Florin Cristian

CRENGANIȘ Mihai

DEAC Cristian

DOBROTA Dan

GIUREA Ramona

GÎRJOB Claudia Emilia

GLIGOR Alina

GRECU Valentin

INȚĂ Marinela

LOBONȚ Lucian

MIRICESCU Dan

MORARU Gina

OLEKSIK Mihaela

PASCU Adrian

PETRUSE Radu Emanuil

POPA Daniela

POPESCU Liliana

PURCAR Carmen

ROȘCA Liviu

ROTARU Ionela

ROTARU Mihaela

SIMION Carmen Mihaela

TERA Melania

VLAD Dorin

ZERBEȘ Mihai

## INTERNATIONAL SCIENTIFIC COMMITTEE

ABRUDAN Ioan, Romania  
ALEGRE de la ROSA Olga María , Spain  
AVASILCĂI Silvia, Romania  
AVRAM Mihai, Romania  
BADEA Adrian, Romania  
BATOĞ Jacek, Poland  
BĂDESCU Mircea, Romania  
BALAN Tudor, France  
BĂLC Nicolae Octavian, Romania  
BARANOWSKA Wanda, Poland  
BÂRSAN Ghiță, Romania  
BECK Walter, Germany  
BEJU Livia Dana, Romania  
BELU Radian, USA  
BIRO Istvan, Hungary  
BLAGOJEVIĆ Mirko, Serbia  
BOLOGA Octavian, Romania  
BONDREA Ioan, Romania  
BORZAN Marian, Romania  
BRATU Dantăș Nicolae, Romania  
BREAZ Radu Eugen, Romania  
BUNGĂU Constantin, Romania  
CERNUȘCĂ Dan, USA  
CHIOU Richard, USA  
CIOCA Lucian Ionel, Romania  
CIOCA Marius, Romania  
COFARU Nicolae, Romania  
COTEȚ Costel Emil, Romania  
CRETU Daniela, Romania  
CROITORU Sorin, Romania  
CZERNIACHOWICZ Barbara, Poland  
DARABONT Doru Costin, Romania  
DAYNIER Rolando Delgado Sobrino, Slovakia  
DENEȘ Călin, Romania  
DETTORI Giuseppe Filippo, Italy  
DEZSŐ Gergely, Hungary  
DOBRESCU Tiberiu, Romania  
DOICIN Cristian, Romania  
DRĂGHICI Anca, Romania  
DRĂGOI Mircea, Romania  
DRÉGELYI-KISS Ágota, HUNGARY  
DUDESCU CRISTIAN, Romania  
DUMITRAȘ Cătălin Gabriel, Romania  
DUMITRAȘCU Dănuț, Romania  
DUȘE Carmen Sonia, Romania  
FETECĂU Cătălin, Romania  
KIFOR Claudiu, Romania  
KRÁLIKOVÁ Ružena, Slovakia  
KROLCZYK Grzegorz, Poland  
KUZMANOVIĆ Siniša, Serbia  
KYRATSIS Panagiotis, Greece  
LANG Jürgen, Germany  
LEGUTKO Stanislaw, Poland  
LUNGU Florin, Romania  
MARA Daniel, Romania  
Margareta Thomson, USA  
MARJANOVIĆ Nenad, Serbia  
MĂSĂLAR Liviu, Belgium  
MEIXNER Gerrit, Germany  
MILOJEVIĆ Zoran, Serbia  
MILOVANOVIĆ Dobrica, Serbia  
MILTENOVIĆ Aleksandar, Serbia  
MILTENOVIĆ Vojislav, Serbia  
MIRICESCU Dan, Romania  
MITROVIĆ Radivoje, Serbia  
MOCAN Marian, Romania  
MOHORA Cristina, Romania  
MOLDOVAN Liviu, Romania  
MORARU Roland Iosif, Romania  
MOREY Merce, Spain  
MOSER Thomas, Austria  
MUNTEAN Achim, Romania  
NAGÍȚ Gheorghe, Romania  
NAVALUŠIĆ Slobodan, Serbia  
NEDELICU Dumitru, Romania  
OANCEA Gheorghe, Romania  
OLESIK Valentin, Romania  
PASCU Adrian, Romania  
PETRESCU Valentin, Romania  
PETRUSE Radu Emanuil, Romania  
PIRVU Bogdan-Constantin, Romania  
POPESCU Daniela, Romania  
PURCĂREA Anca, Romania  
PUȘCĂ Daniela, Canada  
RACKOV Milan, Serbia  
RACZ Sever Gabriel, Romania  
RADA Elena Cristina, Italy  
RADOVANOVIĆ Miroslav, Serbia  
RAGAZZI Marco, Italy  
RATH Setik, Cambodia  
ROȘCA Liviu, Romania  
ROTHMUND Johannes, Germany

FRANZ Charles, USA  
GABOR Aron, France  
GĂMAN George Artur, Romania  
GÁL József, Hungary  
GAVRUS Adinel, France  
GONET Andrzej, Poland  
GORECKY Dominic , Germany  
GRABARA Janusz, Poland  
GRECU Valentin, Romania  
GRZEBIETA Raphael, Australia  
HADAR Anton, Romania  
HEINISCH Martin, Germany  
HOLUBEK Radovan, Slovakia  
HORODINCĂ Mihăiță, Romania  
HUANG Regina, China  
HUSI Géza, Hungary  
INTA Marinela, Romania  
IONESCU Florin, Germany

RUZAROVSKY Roman, Slovakia  
RYBICKI Czesław, Poland  
ŠAJN Viktor, Slovenia  
SAROSI Jozsef, Hungary  
SAVU Tom, Romania  
SCHUPP Peter, Germany  
SIEMEK Jakub, Poland  
SIMION Carmen Mihaela, Romania  
SLOMKA Tadeusz, Poland  
STAN Simona, USA  
ȘTEFĂNESCU Dan Paul, Romania  
ȚÎȚU Mihail Aurel, Romania  
TORRETTA Vincenzo, Italy  
TROTMAN Dave, United Kingdom  
ULIASZ-MISIAK Barbara, Poland  
VELISEK Karol, Slovakia  
WISNIOWSKI Rafae, Poland  
ZELJKOVIĆ Milan, Serbia  
ZUHLKE Detlef, Germany

## REVIEWING COMMITTEE

Ioan Abrudan  
Olga María Alegre de la Rosa  
Silvia Avasilcai  
Eugen Avrigean  
Tudor Balan  
Dorel Banabic  
Ghita Barsan  
Mircea Bădescu  
Costica Bejinariu  
Livia Beju  
Marius Bibu  
Cristina Biris  
Mirko Blagojevic  
Octavian Bologna  
Dominik Bork  
Radu-Eugen Breaz  
Dan Paul Brindasu  
Olga Bucovetchi  
Constantin Bungau  
Dan Cernușcă  
Lucian Cioca  
Marius Cioca  
Florin Cristian Ciofu  
Nicolae Florin Cofaru

Costel Emil Cotet  
Mihai Crenganin  
Daniela Cretu  
Sorin Mihai Croitoru  
Nicoleta Dan  
Doru Costin Darabont  
Alegre De La Rosa Olga Maria  
Cristian Deac  
Daynier Rolando Delgado Sobrino  
Călin Deneș  
Dan Dobrota  
Anca Draghici  
George Draghici  
Mircea Viorel Dragoi  
Ágota Drégelyi-Kiss  
Danut Dumitru Dumitrascu  
Oana Dumitrascu  
Carmen Duse  
Dan Maniu Duse  
Cătălin Fetecău  
Adrian Florea  
Aron Gabor  
George Artur Gaman  
Adinel Gavrus

Claudia Girjob  
Alina Gligor  
Valentin Grecu  
Martin Heinisch  
Radovan Holubek  
Geza Husi  
Liliana Indrie  
Marinela Ință  
Alina Iovan-Dragomir  
Claudiu Laurentiu Isarie  
Larisa Ivascu  
Joerg Kaufmann  
Panagiotis Kyratsis  
Stanislaw Legutko  
Lucian Lobont  
Florin Lungu  
Daniel Mara  
Nenad Marjanovic  
Aleksandar Miltenovic  
Dan Miricescu  
Ion Mironescu  
Marian Mocan  
Cristina Mohora  
Gina-Maria Moraru  
Roland Iosif Moraru  
Merce Morey  
Achim Muntean  
Gheorghe Nagit  
Slobodan Navalusic  
Dumitru Nedelcu

Mihai Neghina  
Valentin Oleksik  
Adrian Pascu  
Valentin Petrescu  
Radu Emanuil Petruse  
Roberto Pinto  
Bogdan-Constantin Pirvu  
Liliana Georgeta Popescu  
Ilie Popp  
Carmen Purcar  
Daniela Pusca  
Milan Rackov  
Alexandru Racovitza  
Sever-Gabriel Racz  
Elena Cristina Rada  
Liviu Rosca  
Mihaela Rotaru  
Roman Ruzarovsky  
Tom Savu  
Elena Sima  
Carmen Mihaela Simion  
Croitoru Sorin  
Radu Stanciu  
Dan-Paul Stefanescu  
Melania Tera  
Vincenzo Torretta  
Karol Velisek  
Dorin Vlad  
Milan Zeljković  
Mihai-Victor Zerbes



## PROGRAM OVERVIEW

---

### WEDNESDAY, JUNE 5<sup>th</sup>, 2019

- 18:00 -19:00      **Registration**  
19:00 – 21:00      **Welcome Reception**  
*(Faculty of Engineering)*

---

### THURSDAY, JUNE 6<sup>th</sup>, 2019

- 8:30 – 9:30      **Registration**  
*University's Library - Aula Magna,  
2A Lucian Blaga St*

- 9:30 – 10:00      **Opening Ceremony**  
*University's Library - Aula Magna,  
2A Lucian Blaga St*

- Opening Remarks -Prof. Eng. Liviu ROȘCA, Sc.D., MBA, dean of Faculty of Engineering
- Welcome speech - Prof. Eng. Ioan BONDREA, Sc.D., rector of Lucian Blaga University of Sibiu
- Guest's Speech - Prof. Eng. Christoph MEINEL, Ph.D. CEO Hasso Plattner Institut

- 
- 10:00 – 11:30      **Plenary Session: Invited Keynote Speakers**  
*University's Library - Aula Magna,  
2A Lucian Blaga St*

- 10:00 – 10:30, Acad. Dorel BANABIC – invited keynote speaker
- 10:30 – 11:00, Prof. Eng. Christoph MEINEL, Ph.D. – invited keynote speaker
- 11:00 – 11:30, Prof. Eng. Anca DRĂGHICI, Ph.D. – invited keynote speaker

- 
- 11:30 – 11:45      **Coffee Break**  
*University's Library - Aula Magna,  
2A Lucian Blaga St*

- 
- 11:45 – 13:15      **Plenary Session: Invited Keynote Speakers**  
*University's Library - Aula Magna,  
2A Lucian Blaga St*

- 11:45 – 12:15, Prof. Eng. Detlef ZUEHLKE, Ph.D. – invited keynote speaker
- 12:15 – 12:45, Prof. Eng. Nicolae BĂLC, Ph.D. – invited keynote speaker
- 12:45 – 13:15, Prof. Eng. Gerrit MEIXNER, Ph.D. – invited keynote speaker

13:30 – 14:30	<b>Lunch</b> <i>(University's Library, 2A Lucian Blaga St, Aula Magna)</i>
15:00 – 16:30	<b>Parallel Sessions</b> <i>Faculty of Engineering, 4 Emil Cioran St Academic Meeting Center, 6 Banatului St</i>
16:30 – 16:45	<b>Coffee Break</b> <i>Faculty of Engineering, 4 Emil Cioran St Academic Meeting Center, 6 Banatului St</i>
16:45 – 19:00	<b>Parallel Sessions</b> <i>Faculty of Engineering, 4 Emil Cioran St Academic Meeting Center, 6 Banatului St</i>
16:45 – 19:00	<b>“Using Simulation Software to Design and Prove-Out Additive Manufacturing Processes”</b> 16:45- 17:45 - Presentation in room IE101 17:45-19:00 - Hands-on demo in room IM117C <i>Faculty of Engineering, 4 Emil Cioran St</i> Chairmen: Lee Fowkes and Radu Emanuil Petrusc.
20:00 – 23:00	<b>Gala Dinner</b> <i>“Împăratul Romanilor” Restaurant, 4 Nicolae Bălcescu St</i>
<b>FRIDAY, JUNE 7<sup>th</sup>, 2019</b>	
9:00 – 10:30	<b>Parallel Sessions</b> <i>Faculty of Engineering, 4 Emil Cioran St Academic Meeting Center, 6 Banatului St</i>
10:30 – 11:00	<b>Coffee Break</b> <i>Faculty of Engineering, 4 Emil Cioran St Academic Meeting Center, 6 Banatului St</i>
11:00 – 13:00	<b>Workshop</b> “Occupational Safety and Early Career Orientation Education” ROOM: <i>Academic Meeting Center - Room 12,6 Banatului St</i> Chairmen: Lucian-Ionel CIOCA, Niculae VOINOIU and Remus FURTUNĂ.
13:30 – 14:30	<b>Lunch</b> <i>(Faculty of Engineering, 4 Emil Cioran St)</i>

# PARALLEL SESSIONS

## SESSION 1 - DESIGN, MANUFACTURING AND MANAGEMENT OF TECHNOLOGICAL EQUIPMENT AND SYSTEMS

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 301, Faculty of Engineering, 4 Emil Cioran St  
15:00 - 16:30**

**Chairmen: Sorin-Mihai Croitoru, Mirko Blagojevic, Milan Rackov**

1.	Răzvan Bogăţeanu, Claudiu Bişu, Constantin Dogariu, Sorin-Mihai Croitoru and Dana Tiliñă. RESEARCHES REGARDING THE MECHANICAL VIBRATIONS APPLIED IN THE MANUFACTURING OF ASSISTIVE DEVICES
2.	Stefan Djurdjevic, Dragoljub Novakovic, Sandra Dedijer, Nemanja Kasikovic and Zeljko Zeljkovic. DEVELOPMENT OF AUGMENTED REALITY APPLICATION FOR INTERACTIVE SMART MATERIALS
3.	Dan Dobrota and Valentin Petrescu. OPTIMIZATION OF WELDING REGIMES FOR OBTAINING OF CORROSION-RESISTANT WELDED CONSTRUCTIONS
4.	Constantin Ştefan Ionescu, Aurel Lunguleasa, Cosmin Spîrchez and Anamaria Avram. ALTERNATIVE METHOD FOR MINIMALLY INVASIVE DETERMINATION OF THE WOOD FRAGILITY FROM CULTURAL HERITAGE ASSETS
5.	Ivan Kneţević, Aleksandar Źivković, Mirjana Bojanić Šejat, Milan Rackov, Milan Zeljković and Nicolae Florin Cofaru. ANALYSIS THE AMOUNT OF LUBRICATION AND ROUGHNESS OF RACEWAYS ON DYNAMIC BEHAVIOR ON THE BALL BEARING
6.	Paweł Maciąg and Leszek Chałko. USE OF SOUND SPECTRAL SIGNALS ANALYSIS TO ASSESS THE TECHNICAL CONDITION OF MECHANICAL DEVICES
7.	Paweł Maćkowiak, Dominika Płaczek and Agnieszka Sołtysiak. MECHANICAL PROPERTIES OF METHACRYLIC PLEXUS MA300 ADHESIVE MATERIAL DETERMINED IN TENSILE TEST AND BUTT JOINTS OF ALUMINUM THICK PLATES
8.	Milos Matejic, Mirko Blagojevic, Ioana Ileana Cofaru, Nenad Kostic, Nenad Petrovic, Nenad Marjanovic. DETERMINING EFFICIENCY OF CYCLOID REDUCERS USING DIFFERENT CALCULATION METHODS

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IE 101, Faculty of Engineering, 4 Emil Cioran St**

**16:45 - 17:45**

**WORKSHOP “Using Simulation Software to Design and Prove-Out Additive Manufacturing Processes”**

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 301, Faculty of Engineering, 4 Emil Cioran St**

**17:45 - 19:00**

**Chairmen: Slobodan Navalusic, Nenad Marjanovic, Livia Dana Beju**

9.	Aleksandar Zivkovic, Milos Knezev, Milan Zeljkovic, Slobodan Navalusic and Livia Dana Beju. A STUDY OF THERMO-ELASTIC CHARACTERISTICS OF THE MACHINE TOOL SPINDLE
10.	Marius Leonard Olar, Marius Risteiu and Monica Leba. INTERFACES USED FOR SMARTGLASS DEVICES IN THE CONTEXT OF AUGMENTED REALITY PROJECTS
11.	Arun Fabian Panaite and Lorand Bogdanffy. REIMAGINING VISION WITH INFINITY MIRRORS
12.	Dominika Płaczek. ADHESION BETWEEN THE BED AND COMPONENT MANUFACTURED IN FDM TECHNOLOGY USING SELECTED TYPES OF INTERMEDIARY MATERIALS
13.	Lizeta Popescu and Lucian Diodiu. OPTIMIZING THE MAGNETIC CIRCUIT OF AN ACTUATOR
14.	Lizeta Popescu and Lucian Diodiu. THERMAL SIMULATION OF AN ACTUATOR
15.	Ilie Octavian Popp. Some Aspects Regarding THE TERMIC BEHAVIOR OF A BASALT PARTS IN THE MACHINE BUILDING INDUSTRY

**FRIDAY, JUNE 7<sup>th</sup>, 2019**

**ROOM: IM 301, Faculty of Engineering, 4 Emil Cioran St**

**9:00 - 10:30**

**Chairmen: Milan Rackov, Dan Dobrotă, Siniša Kuzmanović**

1.	Carmen Purcar, Mircea Badescu and Marinela Ință. STUDIES ON THE WHEEL MOUNTING VARIANTS ON THE SHAFTS
2.	Samuel Puscasu. CONTACTLESS POWER TRANSFER APPLICATION FOR DEVICES IDENTIFICATION

3.	Milan Rackov, Siniša Kuzmanović, Ivan Knežević, Maja Čavić, Marko Penčić, Dijana Čavić and Nicolae Florin Cofaru. ANALYSIS OF POSSIBLE CONCEPT SOLUTIONS OF CHAIN DRIVES
4.	Sebastian Rosca and Monica Leba. DESIGN OF A BRAIN-CONTROLLED VIDEO GAME BASED ON A BCI SYSTEM
5.	Ovidiu-BogdanTomus, Andrei Andras, Dumitru Jula and Stela Dinescu. ASPECTS RELATING TO THE RELIABILITY CALCULATION OF THE CUTTING-TEETH MOUNTED ON THE BUCKET WHEEL EXCAVATORS USED IN LIGNITE MINING
6.	Sorin Dan Volosciuc and Monica Elena Dragosin. PROSUMER' S IMPACT ON LOW VOLTAGE DISTRIBUTION NETWORKS
7.	Željko Zeljković, Dragoljub Novaković, Sandra Dedijer, Nemanja Kašiković and Stefan Đurđević. DEVELOPMENT OF DISTANCE LEARNING CONCEPT WITH GRAPHIC MACHINES WORKING PROCESS VISUALIZATION
8.	Diana Muntean and Octavian Bologa. FROM PART TO POINT CLOUD, THE MODELING OF A 3D PART

## SESSION 2 - MANAGEMENT, MODELLING AND MONITORING OF MANUFACTURING PROCESSES

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 109, Faculty of Engineering, 4 Emil Cioran St**

**15:00 - 16:30**

**Chairmen: Nagiț Gheorghe, Laurențiu Slătineanu , Cristina Mohora**

1.	Liviu Berculescu, Emilia Bălan, Cristina Mohora and Mariana Tudor. EFFICIENCY ANALYSIS OF IMPLEMENTING HYBRID PRINTING TECHNOLOGIES
2.	Crina Narcisa Deac, Gicu Calin Deac, Florina Chiscop and Cicerone Laurențiu Popa. METHODS TO IDENTIFY TIME SERIES ABNORMALITIES AND PREDICTING ISSUES CAUSED BY COMPONENT FAILURES
3.	Camelia-Gabriela Arsene and George Constantin. INDUSTRY 4.0: KEY QUESTIONS IN MANUFACTURING
4.	Maria Popa, Ioana Glevitzky and Adina Sârb. IMPROVEMENT OF THE TECHNOLOGICAL PROCESS OF CARBONATED SPRING WATER BY IMPLEMENTING THE QUALITY AND FOOD SAFETY MANAGEMENT STANDARDS
5.	Laurentiu Slătineanu, Adelina Hrituc, Gheorghe Nagit, Oana Dodun, Irina Beșliu-Bancescu, Bogdan Oroian, Ionut Condrea, Carmen Botezatu and Mihaela Etcu. CREATIVE SYNTHESIS OF THE TECHNICAL SOLUTIONS IN THE FIELD OF INDUSTRIAL PROCESSES

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IE 101, Faculty of Engineering, 4 Emil Cioran St**

**16:45 - 17:45**

**WORKSHOP “Using Simulation Software to Design and Prove-Out Additive Manufacturing Processes”**

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 109, Faculty of Engineering, 4 Emil Cioran St**

**17:45 - 19:00**

**Chairmen: Anca Drăghici, Tom Savu, Aurel Mihail Țițu**

6.	Anca Mocan and Anca Drăghici. AUTOMATION POSSIBILITIES IN A LOW ROTATION WAREHOUSE OF A BELGIAN MANUFACTURING PLANT- A CASE STUDY
7.	Radu Dan Paltan, Cristina Maria Biriș and Anne-Marie Rădulescu. MONITORING THE TECHNOLOGICAL PROCESSES IN THE WOOD INDUSTRY IN ORDER TO MAKE THEM MORE EFFICIENT THROUGH TECHNICAL OVERHAULING
8.	Piotr Paszta. THE POSSIBILITY OF CUTTING SHAPES ON CNC MACHINE TOOLS
9.	Tom Savu and Bogdan Alexandru Jugravu. REMANENT BATTERY CAPACITY ESTIMATION FOR AUTONOMOUS GROUND INDUSTRIAL VEHICLES
10.	Alina Bianca Pop and Aurel Mihail Țițu. STUDY OF THE CUTTING PROCESS PARAMETERS THAT INFLUENCE THE SURFACE QUALITY MACHINED BY END MILLING OF THE ALUMINUM ALLOY

### SESSION 3 - ADVANCED MANUFACTURING TECHNOLOGIES

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 106, Faculty of Engineering, 4 Emil Cioran St**

**15:00 - 16:30**

**Chairmen: Dan Chicea, Oana Dodun, Marius Bibu**

1.	Theoharis Babanatsas, Dan Ovidiu Glavan, Roxana Mihaela Babanatis Merce and Andreea Ioana Glavan. STUDY OF FORCES INFLUENCING THE SHAKING PARAMETERS IN MECHANIZED/ ROBOT-ASSISTED HARVESTING OF OLIVES
2.	Marius Bibu and Florin Ciofu. METALLOGRAPHICAL ASPECTS OF APPLICATION OF SPECIAL PAINT LAYERS FOR THE PROTECTIVE MACHINE PART SECTIONS AGAINST THE EFFECT OF IONITRIDING

3.	Dan Chicea and Liana Maria Chicea. A STUDY OF MILK PARTICLES SIZE VARIATION WITH PH CHANGE USING DYNAMIC LIGHT SCATTERING
4.	Florin Cristian Ciofu. INCREASING THE WEAR RESISTANCE OF METALLIC MATERIALS BY APPLYING THERMOCHEMICAL TREATMENTS
5.	Adelina Hrițuc, Margareta Coteață, Oana Dodun, Gheorghe Nagiț and Laurențiu Slătineanu. OPTIMAL SELECTION OF EQUIPMENT FOR INJECTION MOLDING PROCESS USING AHP METHOD
6.	Martin Heinisch, José Jácome and Dan Miricescu. CURRENT EXPERIENCE WITH APPLICATION OF METAL-BASED NANOFERTILIZERS
7.	Libuše Sýkorová, Jana Knedlová, Dagmar Měřinská and Vladimír Pata. COMPARISON OF QUANTITATIVE CHANGES AFTER PASSING THE LASER BEAM THROUGH POLYMERIC MATERIAL

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IE 101, Faculty of Engineering, 4 Emil Cioran St**

**16:45 - 17:45**

**WORKSHOP “Using Simulation Software to Design and Prove-Out Additive Manufacturing Processes”**

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 106, Faculty of Engineering, 4 Emil Cioran St**

**17:45 - 19:00**

**Chairmen: Valentin Oleksik, Radu Breaz**

8.	Marek Kowalik and Tomasz Trzepiecinski. EXPERIMENTAL ASSESSMENT OF THE DEPTH OF THE DEFORMED LAYER IN THE ROLLER BURNISHING PROCESS
9.	Marek Kowalik, Tomasz Trzepiecinski and Hirpa G. Lemu. EFFECT OF PRESSING PARAMETERS ON THE QUALITY OF JOINT FORMATION OF HEAT EXCHANGER FINS WITH THE BASE PLATE
10.	Dorin Luca, Cristina M. Biriș and Dorian D. Luca. ELECTROMAGNETIC FORMING ANALYSIS OF THE AL 99.0 SHEET WITH TOOLS OF DIFFERENT CONFIGURATIONS
11.	Edgar Moraru, Octavian Dontu, Daniel Besnea, Ciprian Rizescu, Dana Rizescu and Alina Popescu-Cuta. EXPERIMENTAL RESEARCHES REGARDING MECHANICAL BEHAVIOR OF DENTAL PROTOTYPES REALIZED BY ADDITIVE TECHNOLOGIES

12.	Valentin Oleksik, Radu Breaz, Gabriel Racz, Paul Dan Brindasu and Octavian Bologna. ADVANCED TECHNIQUES USED IN NUMERICAL SIMULATION FOR DEEP-DRAWING PROCESS
13.	Andrzej Perek. MODELING OF HIGH PRESSURE ABRASIVE WATER JET CUTTING OF MARBLE

**FRIDAY, JUNE 7<sup>th</sup>, 2019**

**ROOM: IM 106, Faculty of Engineering, 4 Emil Cioran St**

**09:00 - 10:30**

**Chairmen: Livia-Dana Beju, Cătălin Fetecău**

1.	Andrzej Perek and Aleksandra Radomska-Zalas. ABRASIVE WATER JET CUTTING OF STAINLESS STEEL OPTIMIZATION BY ORTHOGONAL ARRAY APPROACH
2.	Claudiu Rodean, Livia-Dana Beju, Mihai Popp and Gabriela Rusu. THE USAGE OF THE JOHNSON-COOK CONSTITUTIVE MODEL IN THE FINITE ELEMENT ANALYSIS OF THE CAULKING PROCESS
3.	Nicolae Alexandru Rosca and Mihaela Oleksik. SIMULATION OF THE SINGLE POINT INCREMENTAL FORMING OF POLYAMIDE AND POLYETHYLENE SHEETS
4.	Daniel Serban and Constantin Gheorghe Opran. COMPLEX MICRO MACHINING OF AN INJECTION MOLD SURFACE FOR A CONDUCTIVE POLYMERIC COMPOSITE PRODUCT
5.	Robert Sołtysiak, Piotr Wasilewski, Adam Troszyński, Paweł Maćkowiak and Agnieszka Sołtysiak. THE ANALYSIS OF FIBER AND CO2 LASER CUTTING ACCURACY
6.	Nicoleta-Violeta Stanciu, Felicia Stan, Cătălin Fetecau and Florin Susac. ON THE FEASIBILITY OF PRINTING 3D COMPOSITE OBJECTS BASED ON POLYPROPYLENE/MULTI-WALLED CARBON NANOTUBES



## SESSION 4 - CAD-CAM AND VIRTUAL ENGINEERING

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 103, Faculty of Engineering, 4 Emil Cioran St  
15:00 - 16:30**

**Chairmen: Nicolae Bâlc, Diana Popescu, Paul Dan Brîndașu**

1.	Cătălin Gheorghe Amza, Aurelian Zapciu and Diana Popescu. 3D-PRINTED SHOE LAST FOR BESPOKE SHOE MANUFACTURING
2.	Cătălin Gheorghe Amza, Aurelian Zapciu, Arnheiður Eyþórsdóttir, Auðbjörg Björnsdóttir and Jonathan Borg. MECHANICAL PROPERTIES OF 3D PRINTED COMPOSITES WITH ABS/ASA SUBSTRATE AND GLASS FIBER INSERTS
3.	Roxana Mihaela Babanatis, Merce Theoharis Babanatsas and Dan Ovidiu Glavan. EXPERIMENTAL STUDY ON THE AUTOMATIC SELECTION OF OLIVES
4.	Cristian Bucurenciu, Victor Sebastian Costache and Gabriela Simona Candea. STUDY OF AORTIC DISSECTION TREATMENT. SEGMENTATION, SIMULATION AND VALIDATION OF SURGICAL
5.	Raluca Diaconu and Paul Dan Brindasu. PERSONALISED FORMWORK – SCIENTIFIC APPROACH FOR NEW SOLUTION VARIANTS
6.	Robert Iacob and Diana Popescu. HAPTICS DEMOCRATIZATION – CHALLENGES AND OPPORTUNITIES

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IE 101, Faculty of Engineering, 4 Emil Cioran St  
16:45 - 17:45**

**WORKSHOP “Using Simulation Software to Design and Prove-Out Additive Manufacturing Processes”**

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 103, Faculty of Engineering, 4 Emil Cioran St**

**17:45 - 19:00**

**Chairmen: Nicolae Bâlc, Cristina Mohora, Sever-Gabriel Racz**

7.	Florin Dumitru Popescu, Sorin Mihai Radu, Andrei Andras and Ildiko Kertesz Brinas. A GRAFO-NUMERIC METHOD OF DETERMINATION OF THE OPERATION POWER OF THE ROTOR OF ESRC-1400 BUCKET WHEEL EXCAVATOR USING COMPUTER SIMULATION IN SOLIDWORKS
8.	Mihai Octavian Popp, Gabriela Petruta Rusu, Sever-Gabriel Racz and Ilie-Octavian Popp. FORCE AND THICKNESS PREDICTION WITH FEA OF THE CRANIAL IMPLANTS MANUFACTURED THROUGH SPIF
9.	Vasile Prisăcariu, Constantin Rotaru and Mihai Leonida Niculescu. NUMERICAL CONSIDERATIONS AND SIMULATIONS ABOUT PULSE DETONATION ENGINE (PDE)
10.	Alina Rodica Spănu, George Drăgoi and Iolanda Panait. IMPROVEMENTS ON GRASPING OBJECTS WITH IRREGULAR SHAPES
11.	Alexandru - Lucian Stanciu, Nicoleta- Elisabeta Pascu, Constantin Dogariu and Cristina Mohora. RESEARCHES REGARDING SCALE REDUCED MODELS FOR THE OPTIMISATION OF THE AERODYNAMIC COEFFICIENT

## SESSION 5 - QUALITY ENGINEERING AND MANAGEMENT

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IE 301, Faculty of Engineering, 4 Emil Cioran St**

**15:00 - 16:30**

**Chairmen: Carmen Simion, Lucian Lobont**

1.	Alexander V. Aleksakhin, Ivan Zaytsev, Yuliya V. Aleksakhina, Evgeniya Eliseeva and Luydmila Kostygova. COST MANAGEMENT IN THE QUALITY MANAGEMENT SYSTEM IN AN INDUSTRIAL ENTERPRISE
2.	Mirona Ana-Maria Popescu, Olivia Doina Negoita, Anca Alexandra Purcarea and Valeriu Popescu. RESEARCH ON HUMAN RESOURCE FROM INFORM. TECHNOLOGY INDUSTRY
3.	Simona Riurean. An EFFICIENT PROCEDURE FOR MATERIALS' MARKING IN METALLIC CONSTRUCTIONS INDUSTRY BASED ON QR CODES

4.	Adina Sârb, Ioana Glevitzky, Liliana Itul and Maria Popa. THE IMPROVEMENT OF QUALITY MANAGEMENT SYSTEM IN A PORCELAIN FACTORY
5.	Carmen Simion. MEASUREMENT SYSTEM ANALYSIS BY ATTRIBUTE, AN EFFECTIVE TOOL TO ENSURE THE QUALITY OF THE VISUAL INSPECTION PROCESS WITHIN AN ORGANIZATION
6.	Ovidiu Tita, Adelina Maria Constantinescu and Mihaela Adriana Tita. RESEARCH ON THE QUALITY ASSURANCE OF FERMENTED DAIRY PRODUCTS WITH ADDITION OF BIOACTIVE COMPOUNDS FROM MEDICINAL PLANTS

**SESSION 6 - TRANSPORT ENGINEERING AND ROAD VEHICLES, TRAFFIC MANAGEMENT**

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 217, Faculty of Engineering, 4 Emil Cioran St**

**15:00 - 16:30**

**Chairmen: Alexandru Racovitza, Vasile Dragu, Marinela Ință**

1.	Iudit Bere - Semeredi and Anca Mocan. A REVIEW OF THE EUROPE INDICATORS ON CLIMATE CHANGE - INDUSTRY, INNOVATION AND INFRASTRUCTURE
2.	Cătălin Cioacă, Mircea Boșcoianu, Ioan-Dănuț Bălos and Doru Luc ANALITICAL MODEL FOR ASSESSING THE INVESTMENT CONNECTIVITY FOR SMALL AIRPORTS
3.	Ionica Circiu and Constantin Rotaru. THEORETICAL AND PRACTICAL ASPECTS OF THE COANDĂ EFFECT APPLIED IN AERONAUTICS
4.	Cristian Deac and Lucian Tarnu. CONSIDERATIONS ON THE ROLE OF MODERNIZING THE ROAD INFRASTRUCTURE IN THE PREVENTION OF ROAD ACCIDENTS
5.	Lucian Tarnu and Cristian Deac. ANALYSIS OF THE ROAD RISK ON THE NATIONAL ROAD 7 SECTOR OF THE OLT RIVER GORGE, BETWEEN BOITA AND CALIMANESTI, FOR THE YEARS 2011-2018
6.	Lucian Lobont and Andrei Marius Pinzariu. EFFECTS OF REVERSIBLE LANE IMPLEMENTATION, A CASE STUDY SIMULATION

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 217, Faculty of Engineering, 4 Emil Cioran St**

**16:45 - 19:00**

**Chairmen: Alexandru Racovitza, Vasile Dragu, Marinela Ință**

7.	Liliana Georgeta Popescu and Mihaela Elena Fratila. STUDY ON THE OPENING OF AN NEW WORKING PLACE IN ROMANIA OF AN EUROPEAN EXPEDITION HOUSE
8.	Bogdan Radu and Alexandru Racovitza. ON THE POSSIBILITY TO DECREASE THE FUEL CONSUMPTION FOR A HEAVY-DUTY TRUCK DIESEL ENGINE USING THE TURBO-COMPOUND METHOD: A CASE STUDY
9.	Cosmin Rus, Razvan Marcus and Olimpiu Stoicuta. ROAD TRAFFIC MONITORING SYSTEM WITH SELF-LEARNING FUNCTION USING THE RASPBERRY PI PLATFORM
10.	Dragu Vasile and Roman Eugenia Alina. THE ORIGIN-DESTINATION MATRIX DEVELOPMENT

## SESSION 7 - MANAGEMENT AND ECONOMIC ENGINEERING

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IE 302, Faculty of Engineering, 4 Emil Cioran St**

**15:00 - 16:30**

**Chairmen: Anca Draghici, Dan Miricescu, Gina-Maria Moraru**

1.	Alexander Aleksakhin, Ivan Zaytsev, Evgeniya Eliseeva, Angelina Petergova and Luydmila Kostygova. THE PLANNING OF BUSINESS PROCESSES IN AN UNCERTAIN ENVIRONMENT ON OLIGOPOLISTIC MARKETS
2.	Gina-Maria Moraru and Daniela Popa. CHANGES REQUIRED IN ORGAN THE CREATIVITY MANAGEMENT IN ROMANIAN FIRMS
3.	Raluca Mihaela Bârsan and Felicia-Mihaela Codrea. LEAN UNIVERSITY: APPLYING THE ECRS METHOD TO IMPROVE AN ADMINISTRATIVE PROCESS
4.	Mihaela Laura Bratu and Lucian Ionel Cioca. MANAGERIAL STRATEGIES OF THE PERSONAL VALUES, USED TO IMPROVE ENGINEERS COMMUNICATION
5.	Iulia Dumitrascu-Baldau and Dănuț Dumitru Dumitrascu. INTERCULTURAL COMMUNICATION AND ITS CHALLENGES WITHIN THE INTERNATIONAL VIRTUAL PROJECT TEAM

6.	Monica Faur and Constantin Bungau. OUTSOURCING TOWARDS GREATER AGILITY THROUGH INVESTIGATING DECOUPLING POINTS IN LEAGILE SUPPLY CHAINS
----	---

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IE 302, Faculty of Engineering, 4 Emil Cioran St**

**16:45 - 19:00**

**Chairmen: Dănuț Dumitrașcu, Constantin Bungău**

7.	Ion Cosmin Gherghea, Constantin Bungau and Dan Claudiu Negrau. BEST PRACTICES TO INCREASE MANUFACTURING PRODUCTIVITY - COMPARATIVE STUDY
8.	Mihaela Ghicajanu. ANALYSIS OF FACTORS FROM THE EXTERNAL ENVIRONMENT IN CHANGING BUSINESS PROCESSES
9.	Andreea Ionica, Yunnis Nassar and Sorin Mangu. ORGANIZATIONAL CLIMATE ASPECTS AND PRINCIPAL'S BURNOUT IN SOUTHERN ISRAEL SCHOOLS
10.	Elena-Izabela Popa, Amalia Furdui, and Eduard-Victor Edelhauser. ORGANIZATIONAL CULTURE VECTOR IMPORTANT FOR THE PERFORMANCE OF A COMPANY
11.	Elena-Izabela Popa, Amalia Furdui and Eduard-Victor Edelhauser. CONSIDERATIONS ON MANAGEMENT FOR TECHNOLOGICAL ENTREPRENEURSHIP
12.	Arik Sadeh, Claudia Florina Radu, Cristina Feniser and Ken Brown. GOVERNMENTAL INTERVENTIONISM DEGREE IN ECONOMY - A CASE STUDY IN OECD COUNTRIES
13.	Szilárd Székely, Lucian-Ionel Cioca and Adriana Benedek. TECHNICAL AND COMMERCIAL COMMUNICATION METHODS USED IN SEMI-FINISHED INDUSTRIAL GOODS MARKET IN SOUTH EAST EUROPEAN MARKETS

**SESSION 8 - MECHANICAL ENGINEERING, MECHATRONICS  
AND ROBOTICS**

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 203, Faculty of Engineering, 4 Emil Cioran St  
15:00 - 16:30**

**Chairmen: Radu Breaz, Mihai Avram**

1.	Daniel Besnea, Ciprian Rizescu, Edgar Moraru, Elena Dinu and Iolanda Panait. COMPARATIVE STUDY REGARDING THE WEAR OF GEARWHEELS MANUFACTURED THROUGH ADDITIVE TECHNOLOGIES
2.	Adriana Sandu, Lucian Bogatu, Georgeta Ionascu, Elena Manea and Viorel Gheorghe. MODELING, SIMULATION AND EXPERIMENTAL RESEARCH FOR MEMS CANTILEVERS OF COMPLEX GEOMETRY
3.	Mihai Avram, Victor Constantin and Emil-Ionut Niță. RESEARCH ON THE DESIGNING OF PNEUMATIC POSITIONING UNITS CONTROLLED WITH VALVES COMMANDED IN MODULATED PULSES
4.	Victor Constantin, Mihai Avram, Constantin Bucșan and Alexandru Vlăsceanu. HARDWARE STRUCTURE OF A SURVEILLANCE SYSTEM FOR STRATEGIC OBJECTIVES
5.	Camil Ion Crăciun and Cătălin Cruceanu. THE EFFECTS OF FILLING CHARACTERISTICS ON THE LONGITUDINAL FORCES DEVELOPED IN THE BRAKING TRAIN
6.	Lavinia Cuda, Elena Stela Muncut and Geza Mihai Erdodi. THE ANALYSIS OF THE ROBOTIZED HANDLING OF OXYGEN GAS BOTTLE WITH THE HELP OF THE PETRI NETWORKS
7.	Andrea Deaconescu and Tudor Deaconescu. FIN-RAY EFFECT® BASED STRUCTURE FOR THE PASSIVE MOBILIZATION OF THE HAND JOINTS

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 203, Faculty of Engineering, 4 Emil Cioran St**

**16:45 - 19:00**

**Chairmen: Sever-Gabriel Racz, Roman Ruzarovsky, Aleksandar Miltenović**

8.	Mădălina Dumitriu and Marius Alin Gheți. ON THE LONGITUDINAL VIBRATION OF THE RAILWAY BOGIE
9.	Matej Janíček, Karol Velisek, Radovan Holubek and Roman Ruzarovsky. EVALUATIONS OF THE VOICE TO TEXT TRANSFER IN DIFFERENT CONDITIONS
10.	Karolina Karolewska and Bogdan Ligaj. MECHANICAL PROPERTIES COMPARISON OF Ti6Al4V PRODUCED BY DIFFERENT TECHNOLOGIES UNDER STATIC LOAD CONDITIONS
11.	Maciej Kotyk and Dariusz Boronski. INFLUENCE OF THE THEORETICAL LOAD POINT ON THE VALUE OF THE J <sub>IQ</sub> INTEGRAL, DURING DETERMINATION OF FRACTURE TOUGHNESS OF 2519 ALUMINIUM ALLOY
12.	Tesfaye Olana Terefe, Hirpa G. Lemu and Addisu K Mariam. REVIEW AND SYNTHESIS OF A WALKING MACHINE (ROBOT) LEG MECHANISM
13.	Aleksandar Miltenović, Milan Banić and Nikola Velimirović. TECHNICAL SOLUTION OF THE DRIVE SYSTEM FOR MIXING DOUGH MACHINE
14.	Elena Stela Muncut, Lavinia Ioana Cuda, Geza Mihai Erdodi and Gheorghe Sima. THE WELDING PROGRAM OPTIMIZATION OF A S355 STEEL ASSEMBLY USED IN AGRICULTURAL MACHINERY
15.	Constantin Nițu, Bogdan Grănescu, Adrian Cartal and Sachit Hashim. MANIPULATOR FOR THE SCANNING OF THE PIPES EXTERNAL SURFACE
16.	Iosif Dumitrescu, Danut Grecea, Cosmin Vitan and Dorel Vitan. RESEARCH REGARDING THE UPGRADING OF THE ATTACHMENTS FOR BALANCE ROPES OF MINE HOISTS
17.	Mateusz Wirwicki. EFFECT OF THE AGING PROCESS AT A TEMPERATURE OF 300 DEGREES CELSIUS OF Ti6Al4V ALLOY ON MECHANICAL STRENGTH UNDER STATIC LOADING CONDITIONS

## SESSION 9 - TEXTILE TECHNOLOGIES

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 219, Faculty of Engineering, 4 Emil Cioran St**

**15:00 - 16:30**

**Chairmen: Diana Coman, Dorin Vlad**

1.	Milena Dinu and Diana Coman. AN EXPERIMENTAL STUDY ON THE IMPROVEMENT OF FUNCTIONALITY OF KNITTED COMPOSITE FOR MATTRESS
2.	Elena Spînachii, Cristian Matran, Marina Malcoci and Evgheni Pîrvan INTERNET – A SUCCESSFUL TECHNOLOGY FOR THE FOOT FACTORIES FROM THE REPUBLIC OF MOLDOVA
3.	Dorin Vlad and Mihaela Oleksik. RESEARCH REGARDING UNIAXIAL TENSILE STRENGTH OF NYLON WOVEN FABRICS, COATED AND UNCOATED WITH SILICONE

## SESSION 10 – ENGINEERING IN OIL AND GAS FIELD

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IE 301, Faculty of Engineering, 4 Emil Cioran St**

**16:45 - 19:00**

**Chairmen: Dan Paul Ștefănescu, Sorin Neacșu**

1.	Cristian Nicolae Eparu, Sorin Neacsu and Adrian Neacsu. CORRELATION OF GAS QUALITY WITH HYDRODYNAMIC PARAMETERS IN TRANSMISSION NETWORKS
2.	Cristian Nicolae Eparu, Sorin Neacsu, Renata Rădulescu and Alina Petronela Prundurel. THE BALANCE OF MULTI-PHASE GATHERING AND TRANSPORT SYSTEMS
3.	Ion Foidas, Dan Paul Ștefănescu and Mihai Șerbancea. CASING WHILE DRILLING - A VIABLE ALTERNATIVE TO CONVENTIONAL DRILLING
4.	Alina Gligor and Sorin Alecu Huidan. CONSIDERATIONS ON THE OPTIMIZATION OF NATURAL GAS DELIVERIES BY USING AUTOMATED CONTROL SYSTEMS
5.	Nicoleta Mihaela Ionescu (Goidescu) and Tudora Cristescu. THE PRESENCE OF UNCERTAINTIES IN THE RESERVOIR SIMULATION



6.	Diana-Andreea Lupu. CURRENT TRENDS IN THE EXPLOITATION OF MATURE GAS FIELDS IN THE CONTEXT OF REHABILITATION CONCEPT
7.	Cristian Patrascioiu. MODELLING THE ATMOSPHERIC DISTILLATION USING THE UNISIM DESIGN SIMULATOR
8.	Silvian Suditu, Monica Emanuela Stoica and Tudora Cristescu. FACTORS INFLUENCING THE ENHANCEMENT OF ENERGY EFFICIENCY IN THE OIL AND GAS INDUSTRY

## SESSION 11 – ENVIRONMENTAL ENGINEERING

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 323, Faculty of Engineering, 4 Emil Cioran St**

**15:00 - 16:30**

**Chairmen: Gabriela Ionescu, Ciofu Florin Cristian**

1.	Dan Nitoi, Zoia Apostolescu, Gabriel Iacobescu and Corneliu Rontescu. PRACTICAL REALISATION AND EXPERIMENTAL RESULTS OF ULTRASONIC FILTERS USED IN AIR FILTRATION
2.	Izabela Maria Apostu and Florin Faur. IDENTIFICATION AND ANALYSIS OF GEOTECHNICAL RISKS IN THE CONDITIONS OF FLOODING OF REMAINING GAPS
3.	Iulian Alexandru Bratu. OPEN SOURCE SOLUTIONS TO IMPROVE THE QUALITY OF SUSTAINABLE FOREST MANAGEMENT
4.	Gabriela Ionescu, Cora Bulmau and Cosmin Mărculescu. BIO-GASEOUS FUELS FROM AGRICULTURAL WASTE PYROLYSIS (PART I)
5.	Cora Bulmau, Gabriela Ionescu and Cosmin Mărculescu. BIO-GASEOUS FUELS FROM AGRICULTURAL WASTE PYROLYSIS (PART II)
6.	Ramona-Victoria Chirita and Maria Lazăr. REHABILITATION OPPORTUNITIES OF GEOMORPHOLOGICAL MODIFIED LANDS IN PANGA OPEN PIT – COAL BASIN BERBEȘTI

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM: IM 323, Faculty of Engineering, 4 Emil Cioran St**

**16:45 - 19:00**

**Chairmen: Gabriela Ionescu, Ciofu Florin Cristian**

7.	Mădălina Elena Delayat and Maria Lazăr. CRITICAL ANALYSIS OF LOCALIZATION OF MICRO-HYDROPOWER PLANT IN THE SUPERIOR BASIN OF ARGEȘ RIVER
8.	Marin Silviu Nan, Alin Sultan, Dănuț Grecea and Daniel Cosmin Vitan. RESEARCH ON SOLAR RADIATION POTENTIAL AS A SOURCE OF RENEWABLE ENERGY IN THE MOTRU AREA
9.	Nitoi Dan, Apostolescu Zoia, Petriceanu Stefan and Rontescu Corneliu. DESIGNING THE ULTRASONIC SYSTEM USED IN INDUSTRIAL AIR FILTRATION BASED ON THE ULTRASONIC CAVITATION PHENOMENON
10.	Constantin Rada and Florin Faur. THE RISK OF LANDSLIDE OCCURRENCE IN THE WASTE DUMP BELONGING TO THE RUGET QUARRY AND MEASURES TO COMBAT IT
11.	Cosmin Spirchez, Aurel Lunguleasa, Constantin Ionescu and Cătălin Croitoru. PHYSICAL AND CALORIFIC PROPERTIES OF WHEAT STRAW BRIQUETTES AND PELLETS
12.	Tataru Andreea Cristina and Stanci Aurora. STUDY OF PHONIC POLLUTION PRODUCED BY CAR TRAFFIC IN PETROSANI
13.	Mihaela Toderas, Ionela Samuil, Andreea Ionica, Marius Leonard Olar and Stefan Militaru. ASPECTS REGARDING A MINING AREA REHABILITATION FOR POST-INDUSTRIAL TOURISM

## SESSION 12 - SAFETY AND HEALTH AT WORK

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM 12: Academic Meeting Center, 6 Banatului St**

**15:00 - 16:30**

**Chairmen: Lucian-Ionel Cioca, Marco Ragazzi, Roland-Iosif Moraru**

1.	Daniel-Constantin Anghel, Eduard-Laurentiu Nitu, Alin Daniel Rizea, Alin Gavriluța, Ana Gavriluța and Nadia Belu. ERGONOMICS STUDY ON AN ASSEMBLY LINE USED IN THE AUTOMOTIVE INDUSTRY
2.	Ioan Popescu, Nicolae Romandas, Nicoleta-Monica Lohan, Andrei-George Albulescu, Elena Mihalache and Constantin Baciuc. CRIMINAL LIABILITY IN CASE OF INFRINGEMENT OF THE RULES ON OCCUPATIONAL SAFETY AND HEALTH AND THE OCCURRENCE OF ACCIDENTS AT WORK – SUBJECTS OF THE OFFENSES

3.	Crina Maria Barb and Nicolae Daniel Fita. A COMPARATIVE ANALYSIS OF RISK ASSESSMENT TECHNIQUES FROM THE RISK MANAGEMENT PERSPECTIVE
4.	Diana-Petronela Burduhos-Nergis, Andrei Victor Sandu, Dumitru-Doru Burduhos-Nergis, Doru-Costin Darabont, Radu-Ioachim Comaneci and Costica Bejinariu. SHOCK RESISTANCE IMPROVEMENT OF CARBON STEEL CARABINERS USED AT PPE
5.	Andrei-George Albulescu, Ioan Popescu, Anișoara Corăbieru, Alin Marian Cazac and Mihai-Adrian Bernevig-Sava. YOU HAVE MANY ACCIDENTS, YOU PAY LITTLE, YOU HAVE NO ACCIDENTS YOU PAY THE SAME
6.	Cristina-Maria Mihalache, Cristin Bigan, Valentin Panduru and Cristian Tsakiris. MODELLING OF NOISE REDUCTION FOR DATACENTER BUILDINGS FIRE PROTECTION WITH INERT GAS SYSTEMS
7.	Georgeta Buica and Constantin Beiu. PRINCIPLES FOR THE ASSESSMENT OF WORK EQUIPMENT FOR WORKING AT HEIGHTS IN ELECTRICAL INSTALLATIONS
8.	Doru Costin Darabont, Eduard Smîdu, Alina Trifu, Vicențiu Ciocîrlea, Iulian Ivan, Costica Bejinariu, Constantin Baci, and Mihai-Adrian Bernevig-Sava. MEVA - A NEW METHOD OF OCCUPATIONAL HEALTH AND SAFETY RISK ASSESSMENT

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

***ROOM 12:Academic Meeting Center, 6 Banatului St***

***16:45 - 19:00***

**Chairmen:Doru Costin Darabont, Adam Górný, Gabriel Băbuț**

9.	Loredana Cristina Dascălu, Gabriel Iacobescu, Andrei Dimitrescu, Augustin Semenescu and Valentin Petrescu. IMPLEMENTATION OF AN OCCUPATIONAL STRESS CONTROL MODEL
10.	Loredana Cristina Dascălu, Claudiu Babiș, Oana Roxana Chivu, Gabriel Iacobescu, Ana Maria Alecusan and Augustin Semenescu. MEASUREMENTS OF GALVANIC SKIN RESPONSE ON SUBJECTS AFFECTED BY STRESS
11.	Daniel N. Fîță, Crina Barb, Dragoș Păsculescu and Leon Pană. THE DESCRIPTION AND EVALUATION OF TECHNICAL INCIDENT RISK ON THE NATIONAL POWER GRID IN THE CONTEXT OF POWER SAFETY GROWTH
12.	Dan Gabor, Emilian Ghiciei, Mihaela Părăian, Niculina Vatavu, Florin Adrian Păun and Mihai Popa. SENSITIVITY TO IGNITION BY ELECTROSTATIC DISCHARGE OF EXPLOSIVE DUST / AIR

13.	Mihaela Luminita Barhalescu, Simona Ghita and Tudor-Cristian Petrescu. THE RISK OF LIQUID WOOD DEGRADATION UNDER THE INFLUENCE OF MARINE FACTORS
14.	Adam Górný. APPLICATION OF THE CSR GUIDELINES TO IMPROVE THE WORKING ENVIRONMENT
15.	Janusz K.Grabara. HEALTH AND SAFETY MANAGEMENT IN THE ASPECTS OF SINGULARITY AND HUMAN FACTOR
16.	Raluca Maria Iordache and Viorica Petreanu. THE ASSESSMENT OF MENTAL LOAD OF AIR TRAFFIC CONTROLLERS BASED ON PSYCHOPHYSIOLOGICAL INDICATORS
17.	Alin Găureanu, Larisa Ivascu and Corina Dufour. HIGHLIGHTS OF OSH TRAINING QUALITY: CONTINUOUS TRAINING OF TRAINERS
18.	Larisa Ivascu, Alin Artene, Attila Turi, Monica Bălan and Corina Dufour. OSH-SUSTAINABILITY CONNECTION: INNOVATION, EDUCATION, AND BENEFITS

**FRIDAY, JUNE 7<sup>th</sup>, 2019**

**ROOM 11: Academic Meeting Center, 6 Banatului St**

**9:00 - 10:30**

**Chairmen: Costică Bejinariu, Augustin Semenescu, Mihai Zerbeş**

1.	Izabella Kovacs, Artur George Găman, Angelica Călămar, Daniel Pupăzan and Cristian Nicolescu. PERSONALITY AND OCCUPATIONAL STRESS IN THE FIELD OF MINE RESCUE AND INTERVENTION
2.	Iosif Moraru Roland, Gabriel Bujor Băbut, Mihai Popescu-Stelea and Marius Simion Morar. A MODEL FOR INTEGRATING WORK SAFETY INTO THE DESIGN OF TECHNICAL EQUIPMENTS
3.	Nicoleta Paula Neag and Alin Gaureanu. ASPECTS ABOUT THE IMPLEMENTATION OF THE OCCUPATIONAL SAFETY AND HEALTH STRATEGY IN ROMANIA
4.	Nicoleta Paula Neag. A COMPARISON STUDY OF THE ROMANIAN OCCUPATIONAL SAFETY AND HEALTH STRATEGY WITH OTHER EUROPEAN COUNTRIES' STRATEGY
5.	Olivia Negoita, Oana Chivu, Claudiu Babis and Alina Gligor. RESEARCHES ON THE ERGONOMIC DESIGN OF THE WORKPLACE FOR THE CAR DRIVER PROFESION
6.	Vlad Mihai Pasculescu, Emilian Ghicioi, Marius Simion Morar, Marius Cornel Suvar and Nicolae Ioan Vlasin. CONSEQUENCE MODELLING OF A TRUCK EXPLOSION

**FRIDAY, JUNE 7<sup>th</sup>, 2019**

**ROOM 12: Academic Meeting Center, 6 Banatului St**

**9:00 - 10:30**

**Chairmen:George Artur Găman, Janusz Grabara, Mihaela Rotaru**

1.	Mihai Popescu-Stelea, Roland Iosif Moraru, Gabriel Bujor Băbuț and Lucian Lupu-Dima. AN EXPORATORY STUDY ON WORKPLACE ACCIDENTS AND ILLNESSES COST ANALYSIS TOOLS
2.	Vincenzo Torretta, Marco Barozzi, Luca Talamona, Sabrina Copelli, Fabio Conti, Elena Cristina Rada, Paolo Viotti and Marco Schiavon. IMPORTANCE OF EXPERIMENTAL TESTS FOR THE DETERMINATION OF MODELING PARAMETERS IN FIRE SAFETY ENGINEERING
3.	Marco Schiavon, Luca Adami, Elena Magaril and Marco Ragazzi. INDOOR CO2: POTENTIAL CRITICALITIES AND SOLUTIONS
4.	Joanna Tabor. USING THE GREY-TOPSIS METHOD TO ASSESS THE FUNCTIONING OF THE OCCUPATIONAL RISK MANAGEMENT
5.	Cristian Tomescu, Doru Cioclea, Emeric Chiuzan, Adrian Matei and Razvan Dragoescu. RESEARCH ON THE PHENOMENON OF EXPLOSIVE GAS OCCURRENCE IN DRILLS FOR AN ENGINEERING BUILDING – CASE STUDY.
6.	Gabriel Vasilescu, Robert Laszlo, Attila Kovacs, Ilie Ciprian Jitea, Daniela Carmen Rus, Cristian Radeanu and Claudia Miron. DETERMINATION OF THREATS TRACEABILITY IN THE USE OF EXPLOSIVE MATERIALS IN DIFFERENT ENVIRONMENTS

**SESSION 13 - ACADEMIC EDUCATION AND MANAGEMENT**

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

**ROOM 11:Academic Meeting Center, 6 Banatului St**

**15:00 - 16:30**

**Chairmen:Cristian Doicin,Daniela Cretu, Alina Mag**

1.	Ana Maria Alecusan, Andrei Dimitrescu and George Adir. IMPROVEMENT OF THE NATIONAL RESEARCH, DEVELOPMENT AND INNOVATION STRATEGY 2014-2020 IN COMPARISON WITH THE NATIONAL RESEARCH, DEVELOPMENT AND INNOVATION STRATEGY 2007-2013
2.	Dorel Badea, Gabriel Manescu, Dumitru Iancu, Olga Bucovetchi and Anca Dinicu. CIVILIAN – MILITARY INTERFERENCES IN THE MANAGEMENT OF RESEARCH FOR THE SECURITY AND DEFENSE FIELD

3.	Daniela-Maria Crețu. DESIGNING RIGOROUS AND RELEVANT LEARNING EXPERIENCES FOR FUTURE TEACHERS
4.	Daniela-Maria Crețu. GAINING INSIGHT INTO THE TEACHING PROFESSION BY USING FILM: A PRESERVICE TEACHERS' EXPERIENCE
5.	Anca Drăghici. EDUCATION FOR SUSTAINABLE DEVELOPMENT
6.	Jakub Drobnik. LEGAL AWARENESS AS A FACTOR TO ESTABLISH ENTREPRENEURSHIP

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

***ROOM 11:Academic Meeting Center, 6 Banatului St***

***16:45 - 19:00***

**Chairmen:Cristian Doicin,Daniela Crețu, Alina GeorgetaMag**

7.	Tomasz Lis. METHODS OF ACADEMIC EDUCATION IN THE FIELD OCCUPATIONAL SAFETY AND HEALTH ANALYSIS OF APPLIED SOLUTIONS IN THE OPINION OF STUDENTS, EMPLOYEES AND EMPLOYERS
8.	Alina Georgeta Mag. THE VALUE OF STUDENTS' FEEDBACK
9.	Eduard Mihai. COMPARATIVE ANALYSIS OF THE MILITARY PILOTS TRAINING PROGRAMS IN THE ROMANIAN AIR FORCE AND THE POLISH AIR FORCE
10.	Eduard Mihai and Ioan Dănuț Balos. VULNERABILITIES IN THE ROMANIAN MILITARY PILOTS TRAINING SYSTEM MANIFESTED DURING THE INITIAL FLIGHT TRAINING PROCESS
11.	Gina-Maria Moraru and Daniela Popa. PROPOSALS FOR A MORE CREATIVE EDUCATION SYSTEM
12.	Małgorzata Rembiasz and Paulina Siemieniak. THE IMPORTANCE OF KNOWLEDGE IN THE PROCESS OF SHAPING THE ENTREPRENEURIAL ATTITUDES OF YOUNG PEOPLE
13.	Małgorzata Rembiasz. COMPETENCES IN EDUCATING POTENTIAL ENTREPRENEURS. RESEARCH AMONG STUDENTS OF TECHNICAL FACULTIES
14.	Mariusz Sroka. APPLICATION OF E-LEARNING IN ACADEMIC EDUCATION ON THE DIRECTION OF SAFETY AND HYGIENE OF WORK - OPPORTUNITIES AND CHALLENGES IN OPINIONS CONDUCTING CLASSES AND STUDENTS

15.	Mihaela Ulmeanu, Cristian Doicin, Liviu Roşca, Allan Rennie, Tom Abram and Paula Bajdor. TECHUB 4.0 - TECHNOLOGY AND ENTREPRENEURSHIP EDUCATION FOR BRIDGING THE GAP IN SMART PRODUCT DEVELOPMENT
-----	---

**SESSION 14 – TRAINING WORKFORCE SKILLS IN DIGITALIZATION ERA OF FACTORY OF THE FUTURE**

**THURSDAY, JUNE 6<sup>th</sup>, 2019**

***ROOM: IM 219, Faculty of Engineering, 4 Emil Cioran St  
16:45 - 19:00***

**Chairmen: Adrian Florea, Ioana Cofaru**

1.	Daniel Volovici and Daniel-Cristian Crăciunean. MM-DSL, SUPPORT FOR IMPLEMENTING MODELING TOOLS FOR MANUFACTURING PROCESSES
2.	Adrian Florea. DIGITAL DESIGN SKILLS FOR FACTORIES OF THE FUTURE
3.	Ion Mironescu. AN ADOxx BASED ENVIRONMENT FOR PROBLEM BASED LEARNING IN MANUFACTURING SYSTEMS DESIGN

## NOTES



## NOTES