



УНИВЕРЗИТЕТ У БАЊОЈ ЛУЦИ

UNIVERSITY OF BANJA LUKA

МАШИНСКИ ФАКУЛТЕТ

FACULTY OF MECHANICAL ENGINEERING



upr

Universitatea
Poli tehnica
Timisoara

University of Banja Luka
Faculty of Mechanical Engineering

CONFERENCE PROGRAM

Banja Luka 2018

6th INTERNATIONAL CONFERENCE OF APPLIED SCIENCE

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Oleh Onysko, Ivano-Frankivsk National Technical University of Oil and Gas, Ukraine
Vitalii Panchuk, Ivano-Frankivsk National Technical University of Oil and Gas, Ukraine
Alin Costandoiu, University of Petrosani, Romania
Dorian Nedelcu, "Eftimie Murgu" University of Resita, Romania
Rat Cezara, Polytechnic University of Timisoara, Romania

CONFERENCE PROGRAM

Thursday, the 10th May

TIME	PLACE	ACTIVITY
8:00 -9:00	Entrance hall	REGISTRATION OF THE PARTICIPANTS
9:00 –9:30	Amphitheater	CONFERENCE OPENING
9:30 –10:15	Entrance hall	GROUP PHOTO AND COFFEE BREAK
10:15-12:15	Amphitheater	Keynote Lectures:
		Mohsen Razzaghi NUMERICAL METHODS FOR FRACTIONAL CALCULUS IN ENGINEERING PROBLEMS
		Gabor Sziebig WIRE ARC ADDITIVE MANUFACTURING WITH INDUSTRIAL ROBOTS
		Branislav Borovac DESIGN OF ROBOT AS ASSISTIVE TECHNOLOGY TOOL FOR TREATMENT OF CHILDREN WITH DEVELOPMENTAL DISORDERS

10:15-12:15	Amphitheater	Ioan Ilca STRUCTURAL RESEARCH AT HIGH TEMPERATURE ON INDUSTRIAL SEMI-FINISHED PRODUCTS MADE FROM THERMOSTABLE STAINLESS STEELS	
		Zora Konjovic INTERNATIONALIZED HIGHER EDUCATION AS A SERVICE: A SOFTWARE ENGINEERING BASED APPROACH TO DEVELOPMENT AND PROVISION	
12:30-14:00	Entrance hall	WELCOME COCKTAIL AND CATERING	
14:30-19:00 With coffee break			
	Amphitheater, Room 11, Room 19, Room 21, Room 29	Work in Section	
		Thursday, the 10th May	
19:00 – 20:30 Free Time			
20:30	Gala Dinner Restaurant “AQUANA” Address: Aleja Svetog Save 80 78000 Banja Luka, Republika Srpska, BiH		

Work in Section – Thursday, the 10th May		
14:30-19:00 With coffee break	Amphitheater	Section I FUNDAMENTAL SCIENCE
		Moderators: Daniel Romano Bistrian Diana
1.	FLASH BOILING STEAM ENGINE Virgil Stoica , Gavriela Trif-Tordai, Mariana Ilie and Delia Calinoiu	
2.	EXPERIMENTAL TEST BENCH FOR STUDYING THE BOILING DYNAMICS Virgil Stoica , Mariana Ilie , Andrei Borborean , Cioabla Adrian, Dorin Lelea	
3.	AN ISOTHERMAL COMPRESSIBLE SLIP GAS FLOW THROUGH MICROTUBE Iva Guranov, Snežana Milićev and Nevena Stevanović	
4.	IDENTIFICATION OF SIGNIFICANT METRICS AND INDICATORS FOR SMART MOBILITY Mădălin-Dorin Pop and Octavian Proștean	
5.	A STUDY OF THE DRAG COEFFICIENT IN THE GAS FLOW OVER A SPHERE Ivana D. Cvetković, Snežana S. Milićev	
6.	ENERGY EFFICIENCY OF BUILDINGS REVIEW IN 2016 Marko Serafimov, Gradimir Ilić, Mirko Dobrnjac, Filip Mojsovski, Igor Shesho,	
7.	FUZZY CLASSIFICATION BASED ON COMBINATIVE ALGORITHMS Nur Amira Mat Saffie and Khairul A. Rasmani	
8.	M. Todić, B. Anđelković, T. Latinović, A. Majstorović, B. Vranješ SAFETY APPLICATIONS BREATHING VALVE	

9.	DEFINING A MATRIX OF CRITERIA NECESSARY TO OBTAIN AN OPTIMAL COMBINATION OF LOCAL COMMUNITY ENERGY SUPPLY Maja Mrkić Bosancic, Petar Gvero and Srdjan Vaskovic
10.	ANALYSIS OF 2D FRUIT DRYING PROCESS THROUGH HEAT AND MASS TRANSFER MODEL N. Shahari, H.A.Hasnan, A.Y. Hanan and N.A.H. Noor Ishak
11.	Dragana Malivuk Gak, Zoran Rajilic and Nikola Stupar MECHANICAL EQUILIBRIUM, THERMODYNAMIC EQUILIBRIUM AND CRYSTAL GROWTH FROM SOLUTION
12.	Ana Momčilović, Gordana Stefanović, Anđela Pantić and Nevena Tomić TECHNO-ECONOMIC ASPECTS OF THE WTE FACILITY - A CASE STUDY CITY OF NIŠ
13.	NECESSARY MEASURES AND CALCULATION FOR DIMENSION OF COAXIAL HEAT EXCHANGERS FOR DEEP BOREHOLES Velimir Stefanović, Bojan Drobnjaković and Saša Pavlović
14.	IDENTIFICATION OF SIGNIFICANT METRICS AND INDICATORS FOR SMART MOBILITY Mădălin-Dorin Pop and Octavian Proștean
15.	ANALYSIS OF THE FINANCIAL RESULTS (INDICATORS) OF THE FOOD INDUSTRY "SWISSLION D.O.O." REALIZED BY THE IMPLEMENTATION OF THE MARKET DEVELOPMENT STRATEGY Siniša Mutabdžić
16.	Damir Hodžić, Atif Hodžić and Esad Bajramović LATIN SQUARE EXPERIMENT DESIGN BY R
17.	Popa, M, TRENDS IN ROMANIAN UNIVERSITY SPORT – COMPARATIVE ANALYSIS
18.	Jelena Vuković, Bratislav P. Marinković, Dijana Đeordžić and Jelena B. Maljković RELATIVE DIFFERENTIAL CROSS SECTIONS FOR ELASTIC ELECTRON SCATTERING FROM TRIETHYL PHOSPHATE

19.	A Budiul Berghian, T Vasiu, C. Birtok Baneasa DETERMINATION OF RELIABILITY FOR DACIA SOLENZA, 1,9D
20.	EXPERIMENTAL STUDIES ON AIRFLOW AND THERMAL MANAGEMENT FOR A CAR AIR CONDITIONING SYSTEM Sorin Rațiu, Diana Monica Stoica, Ana Josan and Vasile Alexa
21.	Ana Josan, Camelia Pinca Bretotean and Sorin Rațiu RESEARCHES AND STUDIES REGARDING THE CASTING OF BRAKE DRUMS FROM CAST IRON
22.	ANALYSIS OF THE PERFORMANCE OF OCCUPATIONAL HEALTH AND SAFETY IN THE PRODUCTION BUSINESS SYSTEM Biljana Vranješ, Branislav Anđelković
23.	GENERAL PROCEDURE IN COMPUTATIONAL HEAT TRANSFER - CHT OR COMPUTATIONAL FLUID DYNAMICS - CFD Gradimir Ilić, Marko Serafimov, Mirko Dobrnjac and Marko Ilic
24.	Mirko Dobrnjac, Duško Dobrnjac, Miloš Markovic and Sanja Dobrnjac THE NEW DESIGN AND MANUFACTURING OF ESSENTIAL OIL DISTILLATION PLANT
25.	BUBBLING FLUIDIZATION OF ZEOLITE AND POLYETHYLENE BINARY MIXTURES: MINIMUM FLUIDIZATION VELOCITY Jelena N. Janevski, Branislav Stojanović, Mladen Stojiljković, Predrag Živković, Dejan Mitrović and Dragana Dimitrijević
26.	Corneliu Birtok-Băneasă, Sorin Rațiu, Vasile Puțan and Laurențiu Zgripcea EXPERIMENTAL STUDIES REGARDING THE INFLUENCE OF THE INTAKE MANIFOLD MATERIAL ON THE THERMODYNAMICS PROCESSES IN THE INTERNAL COMBUSTION ENGINES
27.	Dušan Lj. Petković, Miloš Madić, Goran Radenković and Predrag Živković HEAT EXCHANGERS MATERIALS SELECTION

28.	Laurentiu Zgripcea , Oana Lupu , Vasile Putan and Corneliu Birtok Baneasa RESEARCHES FOR IMPROVING MECHANICAL CHARACTERISTICS OF HIGH STRENGTH WELD
29.	A COMPANY NEEDS NOT ONLY MANAGEMENT BUT ESPECIALLY CREATIVE LEADERSHIP Benea Marius Calin
30.	Benea Marius Calin WHY DID NOT LEARN, SOMME UNIVERSITY'S LEADERS, ANYTHING FROM THEIR SUCCESSES AND FAILURES
31.	EFFECTS OF TEMPERATURE ON THE CONTENT FREE FATTY ACIDS IN SUNFLOWER EDIBLE OIL Ljubica Vasiljević, Sanja Dobrnjac, Radoslav Grujić and Miladin Gligorić
32.	Dragana Dimitrijević Jovanović, Predrag Živković , Jelena Janevski and Mića Vukić INFLUENCES OF THE SOIL LAYER ON VAPOR DIFFUSION IN EXTENSIVE GREEN ROOF
33.	Predrag Živković, Mladen Tomić, Dragana Dimitrijević Jovanović, Dušan Petković and Mirko Dobrnjac RADAN MOUNTAIN WIND ENERGY POTENTIALS
34.	FLASH BOILING STEAM ENGINE Virgil Stoica, Gavrilă Trif-Tordai, Mariana Ilie and Delia Calinoiu
35.	A CASE STUDY THAT INCREASING FROM BUILDING ENERGY CLASS C TO B AFFECTS THE FLOW OF REQUIRED MATERIALS AND CO2 EMISSIONS Marina Nikolić Topalović, Gordana Stefanović i Ana Momčilović.

14:30-19:00 With coffee break	ROOM 11	Section II MATERIALS
		Moderators: Ardelean Erika Dragoslav Dobraš
	KEYNOTE LECTURE	
	Natasa Trisovic TECHNIQUES FOR IMPROVING THE DYNAMIC BEHAVIOR OF STRUCTURES	
1.	GENERAL PROCEDURE IN COMPUTATIONAL HEAT TRANSFER - CHT OR COMPUTATIONAL FLUID DYNAMICS - CFD Gradimir Ilić, Marko Serafimov, Mirko Dobrnjac and Marko Ilic	
2.	Alaeddine Kaouka, Khedidja Benarous and Omar Allaoui SURFACE MODIFICATION AND CORROSION BEHAVIOR OF BORIDING ON CARBON STEEL	
3.	Alaeddine Kaouka and Khedidja Benarous THE EFFECTS OF PM ON THE CORROSION BEHAVIOR OF TITANIUM ALLOY TI-64AL	
4.	NEURO-FUZZY SYSTEMS MODELING OF HARD STEEL SURFACE ROUGHNESS PARAMETERS Pavel KOVAČ, M Taric, Dragan RODIĆ, Borislav SAVKOVIĆ, Dušan JEŠIĆ, D. Golubovic	
5.	Oana Lupu, Laurentiu Zgripcea, Ana Socalici, Erika Popa and Carmen Harau PULVEROUS FERROUS WASTE PROCESSING BY AGGLOMERATION	
6.	EVALUATION OF THE BRASS CUZN39PB3 RESISTANCE AT VIBRATORY CAVITATION EROSION Iosif LAZAR, Ilare BORDEASU, Mircea O. POPOVICIU, Ion MITELEA, Corneliu M.CRACIUNESCU, Liviu D. PIRVULESCU, Marcela SAVA, Lavinia Madalina MICU	
7.	MATERIAL AND THERMAL BALANCES OF THE PROCESS OF DRYING IN THE TUNNEL DISHES Mirko Dobrnjac, Dragana Dragojević, Miloš Marković, Predrag Živković	

8.	Erika Ardelean, Marius Ardelean, Ana Socalici, Vasile Puțan and Adriana Puțan RESEARCHES ON THE INFLUENCE OF SLAG ADDITION AND SECONDARY TREATMENT DURATION ON STEEL QUALITY
9.	Pero Petrović, Milovan Kotur and Danijela Kardaš "THIRD" APPROACH TO WORK LOSS FENOME
10.	CHITOSAN NANOPARTICLES AS COATING FOR SILICONE BASED MEDICAL MATERIALS Lidija Fras Zemljiča, Urška Jereneca, Matej Bračiča, Janez Rebolb
11.	C Pinca-Bretotean, A Josan, M Ardelean and A L Craciun FRICTION AND WEAR CHARACTERISTICS OF ORGANIC BRAKE PAD MATERIAL
12.	Nebojša Radić, Dejan Jeremić VIBRATION RESPONSE OF ORTHOTROPIC DOUBLE-NANOPLATE SYSTEM SUBJECTED TO UNIDIRECTIONAL IN-PLANE MAGNETIC FIELD AND INITIAL IN-PLANE PRELOAD WITH DIFFERENT BOUNDARY CONDITIONS
13.	Blaž KARPE, Mateja VODLAN, Zorana TANASIĆ, Igor KOPAČ, Igor BUDAK, Aleš NAGODE, Alenka PAVLIČ, Tatjana PUŠKAR, Goran JANJIĆ, Henry TAUBMANN, Mirko GOJIĆ, Mirko SOKOVIĆ, Milan BIZJAK, Borut KOSEC THERMAL CONDUCTIVITY OF DENTAL MATERIALS
14.	Elvin Okugić, Milan Jurković IMPROVING AND OPTIMIZING THE TECHNOLOGICAL PROCESS OF MANUFACTURING MASSIVE PANELS WITH REGARD TO THE COMPANION "SANI GLOBAL" BIHAĆ
15.	Gordana Tica MITIGATION OF CLIMATE CHANGE IN TERMS OF CONTROLLING THE F-GASES IN REFRIGERATION

16.	Gordana Tica MITIGATION OF CLIMATE CHANGE IN TERMS OF THE USE OF RENEWABLE ENERGY SOURCES IN BOSNIA AND HERZEGOVINA AND MITIGATION SCENARIOS DEFINED
17.	A COMPARISON BETWEEN CAVITATION EROSION RESISTANCE, HARDNESS AND DRY SLIDING WEAR BEHAVIOR OF SOME CU-SN ALLOYS ALLIED WITH LEAD Lidia Nedeloni, Marian-Dumitru Nedeloni, Patricia Carolina Pedrali, Eugen Birtărescu, Constantin Viorel Câmpian, Lenuța Cîndea, Adrian Valentin Petrica, Camelia Dodenciu, Bogdan Clavac and Ileana Loredana Conciatu
18.	ASPECTS CONCERNING THE CAVITATION EROSION AND DRY SLIDING WEAR BEHAVIOR OF THE YSN83 ANTIFRICTION ALLOY AND EN-GJS-400-15 SPHEROIDAL CAST IRON Eugen Birtărescu, Lidia Nedeloni, Marian-Dumitru Nedeloni, Patricia Carolina Pedrali, Tudorel Ene, Lenuța Cîndea, Adrian Valentin Petrica, Luminița Păduraru and Adrian Pellac
19.	DRY SLIDING WEAR RESEARCH ON C45 CARBON STEEL, 41CR4 ALLOYED STEEL AND X3CRNI13-4 MARTENSITIC STAINLESS STEEL Luminița Păduraru, Lidia Nedeloni, Marian-Dumitru Nedeloni, Patricia Carolina Pedrali, Lenuța Cîndea, Adrian Valentin Petrica, Ana-Maria Budai, Aurel Băra and Camelia Dodenciu
20.	Lidia Nedeloni, Zoltan-Iosif Korka, Marian-Dumitru Nedeloni, Patricia Carolina Pedrali, Tudorel Ene, Luminița Păduraru, Lenuța Cîndea, Adrian Valentin Petrica, Bogdan Clavac and Ileana Loredana Conciatu STUDY REGARDING THE DRY SLIDING WEAR RESISTANCE OF SOME CU AND AL ALLOYS
21.	CHARACTERISATION OF THE AL₂O₃ COATINGS DEPOSITED BY PLASMA SPRAYING Maria Laura BENEĂ and Licinius Pompiliu BENEĂ
22.	Maria Laura BENEĂ, THE INFLUENCE OF THE SOIL TYPE ON THE REDUCTION OF POLLUTION

23.	Borislav N. Malinovic, Tijana Djuricic, Dusko Zoric THE IMPACT OF ELECTRODE MATERIAL IN THE TREATMENT OF LANDFILL LEACHATE BY ELECTROCOAGULATION PROCESS
24.	Ioan Ilca STRUCTURAL RESEARCH AT HIGH-TEMPERATURE ON INDUSTRIAL SEMI-FINISHED PRODUCTS MADE FROM THERMOSTABLE STAINLESS STEELS
25.	Ioan Ilca, Imre Kiss and Daniela Milostean STUDY ON THE QUALITY OF BORON MICRO-ALLOYED STEELS DESTINED TO APPLICATIONS IN THE AUTOMOTIVE SECTOR
26.	MODELING AND SIMULATION OF THE ASYMMETRIC ROLLING PROCESS - ESTABLISHING OPTIMAL TECHNOLOGY PARAMETERS TO ASYMMETRIC ROLLING Vasile Alexa, Imre Kiss, Vasile George Cioată and Sorin Aurel Rațiu
27.	DETERMINATION OF PRESSURE LOSSES IN THE COOLING WATER CIRCUIT IN THE SECONDARY COOLING ZONE OF CONTINUOUS CAST STEEL Vasile Alexa, Sorin Aurel Rațiu, Imre Kiss and Vasile George Cioată
28.	ALUMINIUM MATRIX COMPOSITES: PROCESSING OF MATRIX FROM RE-MELTED ALUMINIUM WASTES IN MICRO MELTING STATION Ciprian BULEI, Mihai-Paul TODOR, Imre KISS and Vasile ALEXA
29.	ALUMINIUM MATRIX COMPOSITES: THE PARTICLE INCORPORATION IN THE LIQUID METALLURGY TECHNIQUE Ciprian BULEI, Mihai-Paul TODOR, Imre KISS and Vasile George CIOATĂ
30.	Mihai-Paul TODOR, Ciprian BULEI, Imre KISS and Vasile ALEXA RECYCLING OF TEXTILE WASTES INTO TEXTILE COMPOSITES BASED ON NATURAL FIBERS: THE VALORIZATION POTENTIAL
31.	Mihai-Paul TODOR, Ciprian BULEI, Imre KISS and Vasile George CIOATĂ RECYCLING OF TEXTILE WASTES INTO TEXTILE COMPOSITES BASED ON NATURAL FIBERS: THE REINFORCEMENT TYPE AND THE ARCHITECTURE

32.	Milisav Markovic, Dragoslav Dobras, Goran Radenkovic and Zdravko Grbic TESTING MECHANICAL PROPERTIES OF COMPOSITE MATERIALS BASED ON EPOXY RESINS REINFORCED WITH SILICON STEEL ALLOY	
33.	ANALYSIS OF STRUCTURE OF WELDING JOINT ACHIEVED WITH FLUX CORED WIRE WELDING TYPE OK E71T Dragoslav Dobras, Milisav Markovic and Nenad Bukejlovic	
34.	Luka Panić, Atif Hodžić and Mirko Dobrnjac SOLAR DRYING OF WOOD IN THE AREA OF BOSNIA AND HERZEGOVINA	
35.	V Iancu and D Nedelcu INNOVATIVE NATURAL RUBBER BEARING FOR EARTHQUAKE ISOLATION	
14:30-19:00 With coffee break	ROOM 19	Section III MECHATRONICS
		Moderators: Miroslav Rogić Bordeasu Ilare
1.	APPLICATION A MACHINE VISION SYSTEM IN LABELING MACHINES Dr. Eng. Remigiusz Łabudzki and Eng. Jędrzej Leopold	
2.	Dr. Eng. Marcin Pelic and Eng. Jędrzej Leopold GENERATION OF HIGH POWER ULTRASOUNDS AS NON-INVASIVE METHOD OF DEFOAMING	
3.	Andrei Tiberiu Borborean, Virgil Stoica, and Dorin Lelea TEST BENCH FOR STUDYING THE EFFECTS OF WATER INJECTION INSIDE AN INTERNAL COMBUSTION ENGINE	
4.	COMPUTERIZED SYSTEM BASED ON FREECAD FOR GEOMETRIC SIMULATION OF THREAD TURNING OF OIL AND GAS PIPES Volodymyr Kopei, Oleh Onysko and Vitalii Panchuk	

5.	Oleh Onysko , Vitalii Panchuk, Iuliia Medvid TECHNOLOGY OF THE OIL AND GAS DRILLSTRING PIPE CONNECTOR MANUFACTURING WITH LOW-PERMEABILITY LEVEL OF THE DRILLING MUD IN IT'S SCREW PART
6.	Remigiusz LABUDZKI, Jdrzej LEOPOLD APPLICATION A MACHINE VISION SYSTEM IN LABELING MACHINES
7.	THE IMPACT OF ENVIRONMENTAL PARAMETERS AND MAINTENANCE ON THE COMPRESSED MEDICAL AIR QUALITY Aleksandar Majstorović, Mladen Todić, Predrag Ilić, Ljiljana Erić, Dijana Vukajlović, Branka Čulibrk
8.	APPLICATION OF GENETIC ALGORITHMS TO GENERATE THE GEOMETRY OF ELEMENTS WITH A GIVEN STIFFNESS COEFFICIENT Filip SARBINOWSKI, Remigiusz LABUDZKI
9.	DESIGN OF REMOTE ELECTRO-PNEUMATIC CONTROL SYSTEM USING MICROCONTROLLER Mihaylo Y Stoychitch and Bojan Z. Knezevic
10.	Bojan Z. Knezevic, Saša S. Laloš, Mihaylo Y. Stoychitch and Darko M. Knežević DEVELOPMENT OF THE RESOURCES FOR THE MODERN EDUCATION IN MECHATRONICS AND HYDRAULICS
11.	THE RESPONSE OF THE SHELL AND TUBE HEAT EXCHANGER TO THE CHANGE OF THE BAFFLES GEOMETRY Mića Vukić, Predrag Živković, Mladen Tomić, Mirko Dobrnjac, Goran Vučković
12.	INSIGHT INTO THE TURBULENT SWIRL JET BEHIND THE AXIAL FAN Novica Z. Janković, Djordje S. Čantrak, Dejan B. Ilić and Milan R. Lečić
13.	Dejan B. Ilić, Novica Z. Janković, Miloš Z. Slijepčević and Djordje S. Čantrak HIGH ACCURACY INSTALLATION FOR FLOW METER CALIBRATION WITH WEIGHING METHOD

14:30-19:00 With coffee break	ROOM 21	Section IV ELECTRICAL ENGINEERING
		Moderators: Branko Blanuša Deacon Sorin
1.	HIGH-EFFICIENCY POWER TRAIN PROPULSION WITH AXIAL FLUX MACHINES Sorin Ioan Deaconu, Marcel Topor, Fabrizio Marignetti, Ilie Nucă and Vasile Horga	
2.	AN ANALYSE ON ANALOGUE ESR METER Corina Maria Diniş, Gabriel Nicolae Popa, Corina Daniela Cunţan and Angela Iagăr	
3.	Gabriel Nicolae Popa, Corina Maria Diniş, Angela Iagăr and Sorin Ioan Deaconu STUDY ON A MAXIMUM POWER POINT TRACKING CONTROLLER FOR PHOTOVOLTAIC PANELS	
4.	COMPARATIVE MEASUREMENTS OF GROUND RESISTIVITY Gorana Mijatović, Karolina Kasaš-Lažetić, Dejana Herceg and Miroslav Prša	
5.	GRAPHICAL PRESENTATION OF GROUND CURRENT DISTRIBUTION Karolina Kasaš-Lažetić, Gorana Mijatović, Dejana Herceg and Miroslav Prša	
6.	Boris Nedić, Zlatko Bundalo, Dušanka Bundalo, Drago Talijan and Goran Kuzmić EMBEDDED MICROPROCESSOR SYSTEMS AND WIRELESS COMMUNICATION IN MOTOR VEHICLES	
7.	APPLICATION OF DRIVE-BY-WIRE CONCEPT AND CAN PROTOCOL IN AUTOMOBILES Siniša Kuzmanović, Zlatko Bundalo, Dušanka Bundalo and Boris Nedić	

8.	APPLICATION OF THE SENSOR AND CAMERA FOR IMPROVING SAFETY OF DRIVERS AND PEDESTRIANS Benjamin Haurdić, Senad Haurdić
9.	Benjamin Haurdić THE IMPLEMENTATION OF VIDEO SURVEILLANCE IN THE CITY OF BIHAC TO IMPROVE THE ROAD SAFETY
10.	Dejana Herceg, Karolina Kasaš-Lažetić, Gorana Mijatović and Miroslav Prša LINEARITY OF CORELESS MEASURING TRANSFORMERS
11.	CHAOS CONTROL IN AN ECOLOGICAL SYSTEM MODEL WITH FEEDBACK CONTROL Selçuk Emiroğlu, Yılmaz Uyaroğlu
12.	Marius Savu Lolea, Emeric Szabo, Simona Dzitac, Andrea Amalia Minda and Alina Dragos STATISTICAL PROBABILISTIC APPROACHES OF THE CONSEQUENCES SEVERITY OF THE HUMAN BODY EXPOSURE INTO ELECTROMAGNETIC FIELD
13.	Marius Savu Lolea, Emeric Szabo, Simona Dzitac , Gheorghe Ias and Sorin Mortan REGIONAL ENERGY SUBSYSTEM LOCATED IN THE SOUTH OF BIHOR COUNTY – ROMANIA, BASED ON RENEWABLE ENERGY SOURCES
14.	Otilia Nedelcu, Ioan Corneliu Salisteanu, Ciprian Virgil Oprescu, Paul Bogdan Salisteanu USING MODELICA FOR CALCULATING THE POWER REQUIREMENTS OF A MID-SIZED CITY WATER SUPPLY PUMPING SYSTEM.
15.	PHASE BALANCING IN DISTRIBUTION NETWORKS CONSIDERING THE EFFECT OF LOAD MODELLING Saeid Eftekhari, Mahmoud Oukati Sadegh*

16.	ANALYSIS AND FORMING MECHANISM OF A NEW CHAOTIC ATTRACTOR Yılmaz Uyaroğlu, Selçuk Emiroğlu
17.	Dumitru CIULICĂ STUDY ON THE CONNECTION TIME OF THE 400 KV WITH SF6 CIRCUIT BREAKERS
18.	ADVANTAGE OF PLC USING IN THE CONTROL OF ENVIRONMENT APPLICATIONS Barz Cristian, Jalba Klaus, Latinovic Tihomir, Erdei Zoltan and Preradovic Dragana
19.	HYBRID POWER GENERATOR BASED ON WIND, HYDRO AND SOLAR FOR USE AS AN ALTERNATIVE SOLUTION FOR POWER SUPPLY Voicu Valentin MIHUT, Caius PANOIU, Ioan BACIU, Manuela PANOIU
20.	Loredana Ghiormez, Manuela Panoiu , Caius Panoiu and Ionel Muscalagiu PROPORTIONAL REGULATOR-BASED APPROACH FOR A THREE-PHASE ELECTRIC ARC FURNACE
21.	APPLICATION OF PIC MICROCONTROLLER IN WIND GENERATORS CONDITION MONITORING Ana Kitić, Natalija Tomić, Miloš Milovančević
22.	OPTIMAL MICRO CONFIGURATION FOR VIBRATION MONITORING IN PUMPING AGGREGATES OPERATING CONDITION ANALYSIS Miloš Milovančević, Natalija Tomić, Ana Kitić
23.	APPLICATIVE CHARACTERISTICS OF VIBRATION MONITORING SYSTEM BASED ON PIC MICROCONTROLLER Natalija Tomić ^{1*} , Ana Kitić ¹ , Miloš Milovančević ¹
24.	DETERMINATION THE CONTACT FORCES BETWEEN WORKPIECE AND FIXTURE USING DYNAMIC ANALYSIS Vasile George Cioată, Imre Kiss , Vasile Alexa, Sorin Rațiu

14:30-19:00 With coffee break	ROOM 29	Section V COMPUTER ENGINEERING
		Moderators: Tihomir Latinović Panoiu Manuela
1.	BIG DATA AS THE BASIS FOR THE INNOVATIVE DEVELOPMENT STRATEGY OF THE INDUSTRY 4.0 T. S. Latinović, D. M. Preradović, C. R. Barz, M. T. Latinović, P. V. Adina	
2.	Ismail KOC, Hasan KIVRAK, Ismail BABAOGLU THE ESTIMATION OF THE ENERGY DEMAND IN TURKEY USING GRAY WOLF OPTIMIZER ALGORITHM	
3.	Ismail KOC, Huseyin Hakli A New Mutation Operator for Differential Evolution Algorithm in Solving Continuous Problems	
4.	DEVELOPMENT OF APPLICATION SOFTWARE WITHOUT PROGRAMMING Jasna Hamzabegović	
5.	Özkan İNİK and Erkan ÜLKER THE EFFECT SIZE AND NUMBER OF FILTER ON DEEP LEARNING MODELS.	
6.	Özkan İNİK , Esra BALCIOĞLU, Ayşe CEYHAN and Erkan ÜLKER USING CONVOLUTION NEURAL NETWORK FOR CLASSIFICATION OF DIFFERENT TISSUE IMAGES IN HISTOLOGICAL SECTIONS.	
7.	Ahmed Ould Brahim and Souad Abderafi OPTIMISATION OF THE ENERGY CONSUMPTION AND ENVIRONMENT PROTECTION IN PETROLEUM RAFINERY	
8.	INTELLIGENT SKIN AND OCCUPANCY IN THE CONTEXT OF INCREASING ENERGY EFFICIENCY IN BUILDINGS Milica Ljubenović, Petar Mitković, Branislav Stojanović, Marko Ignjatović, Jelena Janevski, Predrag Živković	

9.	S.L. Bogdan, D. Nedelcu, I. Pădurean THE REVERSE ENGINEERING TECHNIQUE PERFORMED ON A FRANCIS RUNNER GEOMETRY THROUGH PHOTOGRAMMETRY
10.	D. Nedelcu, I. Pădurean, PhD Adelina BOSTAN THE CALCULATION OF THE KAPLAN TURBINE HILL CHART USING THE HYDROHILLCHART SOFTWARE
11.	ASSESSMENT OF THE TURBULENCE MODELING ACCURACY DEPENDING ON THE TKE LEVEL IN SWIRL-FREE DIFFUSER FLOW Đorđe M. Novković, Jela M. Burazer, Milan M. Raković and Milan R. Lečić
12.	Aleksandar Čočić, Nataša Janić, Mirjana Stamenić, Aleksa Janić and Marija Đurić NUMERICAL SIMULATION OF AIR FLOW IN NASAL CAVITY
13.	Milan Raković, Aleksandar Čočić, Cvetko Crnojević and Milan Lečić NUMERICAL STUDY OF FLOW PAST SOLID SPHERE USING OPENFOAM
14.	Caius Panoiu , Raluca Rob USING LABVIEW LINX FOR CREATING 3D OBJECTS
15.	NIDES as an IS Audit Tool Dalibor P Drljaca , Dusan Starcevic and Branko Latinovic

Friday, the 11th May		
9:00 – 10:30 With coffee break	ROOM Trondheim	Section VI VIDEO SESSION
		Moderators: Bojan Knežević Muscalagiu Ionel
1.	ETHICAL HACKING OF WIRELESS NETWORKS IN KALI LINUX ENVIRONMENT Petar Čisar and Sanja Maravić Čisar	
2.	ECONOMIC EVALUATION OF TOURISM INFRASTRUCTURE DEVELOPMENT IN UKRAINE Iryna Kinash, Liudmyla Arkhypova, Alla Polyanska, Oleh Dzoba, Uliana Andrusiv, and Iuliia Iuras	
3.	Anca-Elena IORDAN OPTIMAL SOLUTION OF THE GUARINI PUZZLE EXTENSION USING TRIPARTITE GRAPHS	
4.	Alin Costandoiu and Monica Leba CONVERGENCE OF V2X COMMUNICATION SYSTEMS AND NEXT GENERATION NETWORKS	
5.	Cunțan Corina Daniela, Baciu Ioan, Diniș Corina Maria XILINX IMPLEMENTATION OF A SERIAL -PARALLEL DIGITAL CONVERTER	
6.	Adela Diana Berdie, Adeline Alexandra Berdie and Simion Jitian THE DEPENDENCE OF ELLIPSOMETRICAL PARAMETERS D AND Y ON REFRACTIVE INDEX OF SUPERFICIAL FILM	
7.	Ioan Bratu and Simion Jitian MODIFICATION OF THE OPTICAL PROPERTIES OF POLY(METHYL METHACRYLATE) SUPERFICIAL FILMS DURING UV IRRADIATION	
8.	ASPECTS CONCERNING THE FRICTION FOR THE MOTION ON AN INCLINED PLANE OF AN AXISYMMETRIC BODY	

	Florina-Carmen Ciornei, Stelian Alaci, Ionut-Cristian Romanu , Ioan Mihai and Vladut-Constantin Lazar
9.	Florina-Carmen Ciornei, Stelian Alaci, Ionut-Cristian Romanu, Ioan Mihai and Gabriel-Andrei Tibu KINEMATICAL ANALYSIS OF A GENERALIZED CARDANIC JOINT
10.	FINANCING OF ENERGY SECTOR IN THE EUROPEAN MEMBER STATES Mihaela Stet
11.	Angela Iagăr, Gabriel Nicolae Popa and Corina Maria Diniş INVESTIGATION OF HARMONIC POLLUTION PRODUCED BY POWER TOOLS
12.	LOADING THREE PHASED TRANSFORMER FOLLOWING THE QUADERGY Elisabeta Spunei, Ion Piroi and Florina Piroi
13.	OVERVIEW OF THE MAIN TOPICS IN WIND ENERGY SYSTEMS PLANNING Cristian Paul Chioncel, Nicoleta Gillich, Elisabeta Spunei and Ovidiu Gelu Tirian
14.	LINEAR REGRESSION EQUATION OF MINING TERRAIN CURVATURES CAUSED BY HARD COAL EXCAVATION FROM A FEW SEAMS AND THEIR APPROXIMATED VALUES BY THE USE OF SMOOTHED SPLINE J Orwat
15.	RELATION BETWEEN THE FORECASTED AND APPROXIMATED CURVATURES OF MINING AREA FROM THE SURVEYS RESULTS J Orwat
16.	COMPARATIVE ANALYSIS OF HEAT RECOVERY METHODS FROM INTERNAL COMBUSTION ENGINES M E Filip, G Csaba and D Lelea
17.	Design of a SCADA system for a Traffic Turbine C L Rat, O Prostean, I Filip and C Vasar

10:30-11:00

Coffee break

11:0-12:00

ROUNDTABLE

Applied science

12:00 – 18:00

Excursion

Excursion by buss with sightseeing around of the city of Banja Luka and visit to one of the famous PRIMAPROM - Mlinska rijeka with barbecue (obligatory casual sports equipment)





УНИВЕРЗИТЕТ У БАЊОЈ ЛУЦИ
UNIVERSITY OF BANJA LUKA
МАШИНСКИ ФАКУЛТЕТ
FACULTY OF MECHANICAL ENGINEERING



Универзитет
Политехника
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