University of Oradea

Faculty of Managerial and Technological Engineering

Association for Integrated Engineering and Industrial Management

THE PROGRAM of the CONFERENCE "IMT Oradea 2018"

May 31st – June 01st
Felix SPA, Oradea
ROMÂNIA
THE PROGRAM of the CONFERENCE

Thursday, 31st May 2018

10:00-13:00 Registration
13:00-14:00 Lunch
15:00-20:00 Plenary Session
20:00-24:00 Friendly Dinner

Friday, 01st June 2018

9:00-14:00 Works on Sections
(11:00-11:20 Coffee Break)
14:00-15:00 Lunch
PLENUM
Thursday, May 31st, 2018
Hotel President, Room 1
Chairman prof.dr.ing.habil. Tiberiu VESSELENYI

1500-1510
OPENING OF THE CONFERENCE
Alexandru-Viorel PELE
University of Oradea

1510-1525
Doru BALDEAN, Dan MOLDOVANU and Adela-ioana BORZAN
Technical University of Cluj-Napoca
CONTRIBUTION TO EXPERIMENTAL RESEARCH OF ALTERNATE FUEL FUMIGATION IN SINGLE CYLINDER RESEARCH DIESEL ENGINE

1525-1540
Doru BALDEAN and Adela-ioana BORZAN
Technical University of Cluj-Napoca
CONTRIBUTIONS ON EXPERIMENTAL RESEARCH OF FUEL CONSUMPTION AND MANAGEMENT SYSTEM IN K9K892 DIESEL ENGINE FROM DACIA-RENAULT

1540-1555
Dan MOLDOVANU, Florin MARIASIU
Technical University of Cluj-Napoca
NUMERICAL ANALYSIS OF THE INJECTION LAW INFLUENCE ON NOX EMISSIONS FOR A COMPRESSION IGNITED ENGINE

1555-1610
Norbert BAGAMERI, Bogdan VARGA, Aron CSATO and Dan MOLDOVANU
Technical University of Cluj-Napoca
COMPARATIVE ANALYSIS OF AUTOMATIC TRANSMISSION AND MANUAL TRANSMISSION BEHAVIOUR ON THE WORLDWIDE HARMONIZED LIGHT DUTY TEST CYCLE

1610-1625
Norbert BAGAMERI, Bogdan VARGA, Aron CSATO and Dan MOLDOVANU
Technical University of Cluj-Napoca
OPTIMIZATION OF SHIFTING STRATEGY FOR A DUAL CLUTCH TRANSMISSION THROUGH MATHEMATICAL MODEL

1625-1640
Dan MOLDOVANU, Florin MARIASIU, Norbert BAGAMERI
Technical University of Cluj-Napoca
INFLUENCE OF SWIRL AND TUMBLE MOTION INSIDE THE COMBUSTION CHAMBER OF A COMPRESSION IGNITED ENGINE ON VERTICES FORMATION

1640-1655
SPONSOR TIME- HAHN KOLB ROMANIA SRL-
Eng. Radu Bothaza, Sales Representative: Bihor, Satu Mare,

1655-1700
INTUITIVE METHODS IN TEACHING ROBOTICS - Tiberiu VESSELENYI,
Daniel PASCA

1700-1725
COFFEE BREAK
Judit T. KISS  
University of Debrecen  
EXAMINATION OF FISCAL EXPENDITURES ON EDUCATION AND RESEARCH AS HUMAN CAPITAL INVESTMENTS.

Dániel SALÁNKI, Kornél SARVAJČZ  
University of Debrecen  
ANALYSIS OF GAIT RECOGNITION SYSTEM DEVELOPED IN NI LABVIEW

Gyula KORSOVECZKI, Géza HUSI and Timotei István ERDEI  
University of Debrecen  
THE MAINTENANCE, COMMISSIONING OF FANUC M-1IA 0.5A TYPE SELECTING ROBOT AND IMPLEMENTATION OF IRVISION PICTURE-RECOGNIZING PROCEDURE

Tamás TEMPLOM¹, Timotei István ERDEI¹, Zsolt MOLNÁR¹,², Edwin SHAW² and Géza HUSI¹  
¹University of Debrecen,  
DESIGNING A DELTA TRIPOD ROBOT BASED FUSED DEPOSITION MODELLING 3 DIMENSIONAL PRINTER USING AN OPEN-SOURCE ARDUINO DEVELOPMENT PLATFORM

Viktor VARGA, Timotei István ERDEI and Géza HUSI  
University of Debrecen  
REDESIGNING THE GRIPPING SYSTEM OF KUKA KR5 BY UTILIZING 3 DIMENSION PRINTING TECHNOLOGIES AND ARDUINO

István KOVÁCS, Kornél SARVAJČZ  
University of Debrecen  
MODELLING AND SIMULATION OF A SERIES WOUND DIRECT CURRENT MOTOR USING ANSYS

Dávid DEZSŐ and Kornél SARVAJČZ  
University of Debrecen  
MEASURING DRONE FLIGHT STABILITY USING COMPUTER VISION

Bence KOVÁCS, János TÓTH  
University of Debrecen  
HOMES OF THE FUTURE

Ahmet Mehmet KARADENIZ, Ammar ALSABBAGH and Geza HUSI  
University of Debrecen  
COMPARISON OF PROPORTIONAL, INTEGRAL, DERIVATIVE AND FUZZY LOGIC APPROACHES ON CONTROLLING QUARTER CAR SUSPENSION SYSTEM

Wadee KHOURY, Aram NASSER and Peter Tamas SZEMES  
University of Debrecen  
THREE PHASE INDUCTION MOTOR MODELING AND SPEED CONTROL USING VECTOR CONTROL IN LABVIEW

Wadee KHOURY and Peter Tamas SZEMES  
University of Debrecen  
ROBUST CONTROL SYSTEM DESIGN FOR A BRUSHED DC MOTOR USING LABVIEW SIMULATION LOOP

2000-FRIENDLY DINNER
SECTION 1

MECHANICAL ENGINEERING AND AUTOMOTIVE

Friday, June 01th, 2018
Hotel President, Room 1
Chairman
Prof.dr.ing. Alexandru RUS

900-915
Cătălin ALEXANDRU
Transilvania University of Brașov
OPTIMIZING THE MECHANICAL DEVICE OF A MONO-AXIAL SUN TRACKING MECHANISM

915-930
Cătălin ALEXANDRU
Transilvania University of Brașov
OPTIMIZING THE CONTROL SYSTEM OF A SINGLE-AXIS SUN TRACKING MECHANISM

930-945
Dana LUCA MOTOC, Santiago Ferrándiz BOU and Adrian Petru POP
1Transilvania University of Brașov
THERMAL DEGRADATION AND STABILITY OF WOOD PARTICLE COMPOSITES DEPLOYED AS DECORATIVE COMPONENTS

945-1000
Stelian ALACI, Florina-Carmen CIORNEI, Sorinel-Toderaș SIRETEAN, Mariana-Cătălina CIORNEI and Gabriel Andrei ȚIBU
1Stefan cel Mare University, Suceava
DYNAMICAL ANALYSIS OF A 2-DEGREES OF FREEDOM SPATIAL PENDULUM

1000-1015
Jorge Segura ALCARAZ, José María Gadea BORRELL, Ernesto Juliá SANCHIS, José Enrique Crespo AMORÓS, Isaac Montava BELDA, Sofia Rebagliato TORREGROSA
Universitat Politècnica de València
VIBROACOUSTICS AND PSYCHOACOUSTICS INVESTIGATION OF BIODEGRADABLE COMPOSITES FOR MUSICAL INSTRUMENTS

1015-1030
Géza LÁMER
University of Debrecen
CONTINUOUS AND DISCRETE MODELS IN THE MECHANICS OF DEFORMABLE SOLID BODIES

1030-1045
Ion BULAC
University of Pitesti
ALGORITHM FOR THE CALCULATION OF VIBRATION INHERENT FREQUENCIES - BENDING FROM TWO-SHAFTS TRANSMISSION WITH TECHNOLOGICAL DEVIATIONS

1045-1100
Alexandru THIERHEIMER, Cătălin ALEXANDRU and Walter THIERHEIMER
Transilvania University of Brașov
ASPECTS REGARDING THE EXPERIMENTAL RESEARCH OF THE STRESSORS OF THE HUMAN PREGNANCY IN CASE OF ROAD EVENTS

1100-1130
COFFEE BREAK
Ion BULAC
University of Pitesti
MATHEMATICAL MODEL FOR THE CALCULATION OF VIBRATION INHERENT FREQUENCIES AT BENDING FROM THREE-SHAFTS TRANSMISSION

Alexandru Ionut RADU¹, Corneliu COFARU¹, Bogdan TOLEA² and Dragoș DIMA¹
¹University “TRANSILVANIA” of Brasov
STUDY REGARDING THE INFLUENCE OF AIRBAG DEPLOYMENT TIME ON THE OCCUPANT INJURY LEVEL DURING A FRONTAL VEHICLE COLLISION

Florina-Carmen CIORNEI¹, Stelian ALACI¹, Sorin-Toderaș SIRETEAN¹ and Mariana-Cătălina CIORNEI²
¹Stefan cel Mare University, Suceava
AN IMPROVED MODEL FOR THE DAMPED IMPACT OF COMPOSITE MATERIALS APPLICABLE TO WIND TURBINE BLADES

Florina-Carmen CIORNEI¹, Stelian ALACI¹, Sorin-Toderaș SIRETEAN¹, Mariana-Cătălina CIORNEI², Ioan-Bogdan DRAGO¹ and Vlăduț-Constantin LAZĂR¹
¹Stefan cel Mare University, Suceava
CONSIDERATIONS ON FINDING THE ROLLING AND SPINNING FRICTION COEFFICIENTS

Stelian ALACI¹, Florina-Carmen CIORNEI¹, Sorin-Toderaș SIRETEAN¹ and Mariana-Cătălina CIORNEI²
¹Stefan cel Mare University, Suceava
GRAPHICAL-ANALYTICAL ANALYSIS OF THE MECHANISM WITH ROTATING CAM AND FLAT-FACE FOLLOWER

Lucian TARNU and Cristian DEAC
Lucian Blaga University of Sibiu
ANALYSIS OF THE EVOLUTION OF THE NUMBER OF FATAL ROAD ACCIDENTS IN ROMANIA

Lucian TARNU and Cristian DEAC
Lucian Blaga University of Sibiu
CONSIDERATIONS ON THE RIGHT OF WAY AS CAUSE OF ROAD ACCIDENTS IN ROMANIA

Corneliu COFARU, Mihaela Virginia POPESCU
Transilvania University of Brasov
RESEARCH ON COMBUSTION PROCESS OF GASOLINE HOMOGENOUS CHARGE COMPRESSION IGNITION ENGINE

Vlatko MARUŠIĆ, Predrag DAŠIĆ, Ivan OPAČAK
Mechanical Engineering Faculty in Slavonski Brod
THE POSSIBILITY OF EXTENDING WORK TIME OF TRIBOCOUPLE WELDING IMPROVED STAINLESS STEEL WITH IMPROVED CARBON STEEL

Raul TURMANIDZE, Predrag DAŠIĆ, and Giorgi POPKHADZE
Georgian Technical University
SELECTION CRITERIA OF OPTIMAL CHARACTERISTIC MATERIAL AND TECHNOLOGIES FOR PRECISION PROCESSING OF BASIC WORKING SURFACE OF HUMAN HIP-JOINT IMPLANT

LUNCH
SECTION 2
MECHATRONICS and ROBOTICS
Friday, June 01st, 2018
Hotel President, Room 2
Chairman
Conf. dr. ing. Sorin PATER

900-920
Cornel Cătălin GAVRILĂ and Mihai-Tiberiu LATEȘ
Transilvania University of Brasov
SNOW FENCE LOAD ON A HOUSE ROOF WITH TILES

920-940
Lenard JURJ and Radu VELICU
Transilvania University of Brasov
ON THE BENCHMARKING OF FRICTION IN TIMING CHAINS

940-1000
Lenard JURJ, Radu VELICU and Radu SĂULESCU
Transilvania University of Brasov
GEOMETRY OF SILENT CHAIN - INVOLUTE SPROCKET

1000-1020
Radu PAPUC, Mihai-Tiberiu LATEȘ
Transilvania University of Brasov
THE COMPARATIVE STUDY OF THE STATIC FRICTION COEFFICIENT BETWEEN CHAIN LINK AND DIFFERENT TYPES OF POLYAMIDES

1020-1040
Cornel Cătălin GAVRILĂ and Radu SĂULESCU
Transilvania University of Brasov
DETERMINING THE OPTIMAL OPERATING PARAMETERS OF A WIND SYSTEM

1040-1100
Mariana RAȚIU¹, Alexandru RUS¹ and Monica Loredana BALAŞ²
¹University of Oradea
MODELING IN ADAMS OF A 6R INDUSTRIAL ROBOT

1100-1120
COFFEE BREAK

1120-1140
Daniela Mariana BARBU
Transilvania University of Brasov
ANDROID APPLICATION FOR OCULAR TRAINING IN AMBLYOPIA

1140-1200
Vlad Horățiu SÎRBU, Daniela Mariana BARBU
Transilvania University of Brasov
DEVICE FOR PERSONS WITH LOW VISION

1200-1240
Dan Ioan ȚARCĂ¹, Radu Cătălin ȚARCĂ² and Ioan Constantin ȚARCĂ²
¹Țarcă Dan Ioan, PFA, Oradea
INTERNET OF THINGS AND MACHINE PARTS LABORATORY
Roxana ANDREIAȘ and Daniela Mariana BARBU
Transilvania University of Brasov
MECHATRONICAL SYSTEM USED FOR THE RECOVERY OF MOTOR FUNCTIONS

Komal D/o Shoukat Ali KHUWAJA¹, Brohi Arif ALI², Vlad O. MIHALCA¹ and Radu Cătălin ȚARCĂ¹
¹University of Oradea, ²MUET Jamshoro, Pakistan
AUTOMATIC FUEL TANK MONITORING, TRACKING & THEFT DETECTION SYSTEM

LUNCH
SECTION 3
MACHINES ENGINEERING and TECHNOLOGIES
Friday, May 31st, 2018
Hotel President, Room 3
Chairman
Prof.dr.ing. Florin Sandu BLAGA

900-920
Andjelija MITROVIĆ¹, Pavel KOVAČ², Nenad KULUNDŽIĆ², Borislav SAVKOVIĆ², Ildiko MANKOVA³
Visoka Škola Tehničkih Strukovnih Studija Čačak, Serbia
3D END MILLING FINITE ELEMENT THERMAL ANALYSIS

920-940
Florin BLAGA and Iulian STĂNĂȘEL
University of Oradea
STUDY OF FUNCTIONAL PARAMETERS OF A CONVEYOR BY MODELING AND SIMULATION

940-1000
Iaroslav Francisc PIȘEC and Alin POP
University of Oradea
CONTRIBUTION FOR INCREASING THE MANUFACTURING COMPANIES PRODUCTIVITY USING A TRACKING AND PLANNING PRODUCTION PROGRAM

1000-1020
Eugen PĂMÎNTAŞ and Felicia Veronica BANCIU
Politehnica University of Timișoara
A BRIEF OVERVIEW OF THE EVOLUTION AND TRENDS IN MAINTENANCE

1020-1040
Iulian STĂNĂȘEL, Florin BLAGA, Traian BUIDOȘ and Dan CRĂCIUN
University of Oradea
REVERSE ENGINEERING AND CAD-CAM APPROACH FOR MANUFACTURING OF SPARE PARTS. CASE STUDY

1040-1100
Alina Maria GLIGOR and Valentin PETRESCU
Lucian Blaga University of Sibiu
CONSIDERATIONS ON DETERMINING THE EXPLOSION RISK AND THE AREAS WITH EXPLOSION HAZARD IN A NATURAL GAS COMPRESSOR STATION

1100-1120
COFFEE BREAK

1120-1140
Alina Maria GLIGOR
"Lucian Blaga“ University of Sibiu
CONSIDERATIONS ON THE AUTOMATION OF A NATURAL GAS COMPRESSOR STATION

1140-1200
Gavril GREBENISAN, Nazzal Salem, Sanda Bogdan
University of Oradea
LUBRICANTS PARAMETERS MONITORING AND DATA COLLECTING
Gavril GREBENISAN, Nazzal Salem, Sanda Bogdan
University of Oradea
AN APPROACH OF CLASSIFICATION AND PARAMETERS ESTIMATION, USING NEURAL NETWORK, FOR
LUBRICANT DEGRADATION DIAGNOSIS

LUNCH
SECTION 4

MANAGEMENT and ECONOMICS in ENGINEERING

Friday, June 01st, 2018
Hotel President, Room 4
Chairman
Prof.dr.ing. Mircea Teodor POP

900-915
Dan SĂVESCU
Transilvania University of Brașov
ASPECTS OF HUMAN BEHAVIOUR IN NEGOTIATION PROCESS

915-930
Adriana BUJOR and Silvia AVASILCĂI
“Gheorghe Asachi” Technical University of Iasi
INNOVATIVE ARCHITECTURAL DESIGN DEVELOPMENT: THE ARCBAZAR CREATIVE CROWDSOURCING CONTESTS PERSPECTIVE.

930-945
Carmen-Elena STOENOUI
Technical University of Cluj-Napoca
SENSITIVITY OF INDICATORS USED IN COST-VOLUME-PROFIT ANALYSIS

945-1000
Carmen-Elena STOENOUI, Ciprian CRISTEA
Technical University of Cluj-Napoca
COMPARATIVE ANALYSIS FOR ESTIMATING PRODUCTION COSTS

1000-1015
Mariana RATIU and Ioan-Florin OARGA2
1University of Oradea
EDUCATION AND TRAINING IN ROMANIA ON OCCUPATIONAL SAFETY AND HEALTH IN THE OFFSHORE INDUSTRY

1015-1030
Maria CRISTEA, Radu Adrian TÎRNOVAN, Ciprian CRISTEA, Constantin Sorin PICĂ and Cristian FĂGĂRĂȘAN
Technical University of Cluj-Napoca
A MULTI-CRITERIA DECISION MAKING APPROACH FOR PUBLIC LIGHTING SYSTEM SELECTION

1030-1045
Maria CRISTEA, Radu Adrian TÎRNOVAN, Ciprian CRISTEA and Constantin Sorin PICĂ
Technical University of Cluj-Napoca
A MULTI-CRITERIA DECISION MAKING APPROACH IN LIGHTING TECHNOLOGY SELECTION FOR A PRODUCTION HALL

1045-1100
Ciprian Cristea, Maria Cristea
Technical University of Cluj-Napoca
THE INFLUENCE OF DIVIDEND POLICY ON THE VOLATILITY OF SHARES IN THE ROMANIAN EQUITY CAPITAL MARKET

1100-1115
COFFEE BREAK
Lidia ALEXA and Silvia AVASILCĂI
“Gheorghe Asachi” Technical University of Iasi
THE REQUIREMENT ELICITATION PROCESS OF DESIGNING A COLLABORATIVE
ENVIRONMENT – THE CRE@TIVE.BIZ CASE

Elena GĂLĂȚEANU (AVRAM) and Silvia AVASILCĂI
“Gheorghe Asachi” Technical University of Iasi
VALUE CO – CREATION THROUGH CROWDSOURCING: THE CASE OF SQUADHELP
COMPETITION PLATFORM

Ioan-Florin OARGA¹, Mariana RAȚIU² and Ioan-Tudor OARGA¹
¹Technical University of Cluj-Napoca
OCCUPATIONAL HEALTH AND SAFETY RISK MANAGEMENT

Felicia Veronica BANCIU, Eugen PĂMÎNTAȘ
Politehnica University of Timisoara
CHALLENGES IN ROMANIAN TECHNICAL HIGHER EDUCATION FROM THE PERSPECTIVE
OF THE EUROPEAN REQUIREMENTS FOR ITS MODERNIZATION

Gina-Maria MORARU and Daniela POPA
Lucian Blaga University of Sibiu
ABSORPTION OF MANAGEMENT KNOWLEDGE IN ROMANIAN SMALL AND MEDIUM-SIZED
ENTERPRISES

Gina-Maria MORARU and Daniela POPA
Lucian Blaga University of Sibiu
STRATEGIC MANAGEMENT PROBLEMS IN ROMANIAN SMALL AND MEDIUM-SIZED ENTERPRISES

Olga BUCOVETCHI¹, Dorel BADEA² and Radu D. STANCIU¹
¹‘University Politehnica of Bucharest
BLOCKCHAIN TECHNOLOGY – A NEW APPROACH IN BUSINESS ENVIRONMENT

Răzvan Mihai DOBRESCU, Cristina Petronela SIMION, Iuliana GRECU and Cristian Aurelian POPESCU
Politehnica University of Bucharest
STUDY ON THE DEGREE OF USE AND KNOWLEDGE OF DIGITAL MARKETING ELEMENTS IN
ROMANIAN SMALL AND MEDIUM ENTERPRISES

Delia Marcela POP, Mircea Teodor POP
University of Oradea
MEASURING THE INNOVATION OF ECONOMY THROUGHT GLOBAL AND EUROPEAN TOOLS

Constantin BUNGĂU, Ion Cosmin GHERGHEA
University of Oradea
ANALYSIS OF SUPPORTING INDICATORS FOR INNOVATION IN ROMANIA COMPARED TO
NEIGHBORING EU COUNTRIES

Mihai Victor ZERBES, and Liliana Georgeta POPESCU
Lucian Blaga University of Sibiu
STUDY ON IMPROVING SILICONE LOSSES IN THE PROCESS OF MIXING COMPONENTS
OF SOLDERING MACHINES

LUNCH