



The 12th International Conference

INTER-ENG 2018

Interdisciplinarity in Engineering



2018

CONFERENCE PROGRAM

University of Medicine, Pharmacy, Sciences
and Technology of Tîrgu Mureş
Faculty of Engineering

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4 - 5 October 2018
Tîrgu Mureş, România

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Opening Ceremony

Thursday, October 4th; 10:00 – 10:30

Aula Magna – A200, Faculty of Engineering

Welcome Addresses:

Prof. dr. Călin ENĂCHESCU – Vice Rector

Prof. dr. eng. Liviu MOLDOVAN – Vice Rector

Assoc. Prof. dr. eng. Mircea DULĂU - Dean of the Faculty of Engineering

Plenary Session

Thursday, October 4th; 10:30 – 12:00

Aula Magna – A200, Faculty of Engineering

Industry 4.0 - Approach of Bosch

Arnold Dirk – Technical Plant manager, Bosch Plant Blaj, Romania

Light alloys for automotive: opportunities and challenges

Dr. Ildiko Peter – Department of Applied Science and Technology, Politecnico di Torino, Italy

Future of Autonomous Robotic Self-Driving Cars

Prof. Dr. Gyula Mester – Óbuda University, Doctoral School of Safety and Security Sciences, Budapest, Hungary

Coffee Break

Thursday, October 4th; 12:00 – 12:15

Plenary Session

Thursday, October 4th; 12:15 – 13:15

Location: Aula Magna – A200, Faculty of Engineering

Food Safety Challenges and Adequate Modern Technological and Biotechnological Approaches

Prof. dr. Mahmoud Zaky Sitohy – Biochemistry Department, Faculty of Agriculture, Zagazig University, Egypt

Sustainability of University Campus

Prof. dr. eng. Abdelazim M. Negm – Zagazig University Crisis and Disaster Center, Egypt

Conference Break - Lunch

Thursday, October 4th; 13:30 - 15:00

Parallel Sessions

Thursday, October 4th; 15:00 – 19:00

Location: Conference Rooms - Faculty of Engineering

Gala dinner

Thursday, October 4th; 19:00

Virtual Panel Sessions

Friday, October 5th; 9:00 – 13:00 14:30-16:30

Location: Conference Rooms - Faculty of Engineering

Joint Technical Visit

Friday, October 5th; 10:00 – 14:00

Keynote Talks

Friday, October 5th; 11:00 – 12:30

Scientific Thinking Coaching to Drive Innovation & Superior Performance

Edgar Cardenas-Sanchez – Lean Management Coach Operations Director for ALFRA Consulting Europe

Smart Forestry

Alexandru Pozdîrcă – R&D Center for Agricultural and Forestry Machinery – iFOR, IRUM S.A. Reghin, Romania

Closing Ceremony, Lunch, Social and Cultural Event

Friday, October 5th; 14:00

Location: Aula Magna– A200, Faculty of Engineering

Advanced Manufacturing Technologies and Materials
Room: A307 – Faculty of Engineering
Thursday, October 4th 2018; 15:00 – 16:45, 17:00 – 19:00

Session chairs:

Ildiko Peter – Politecnico di Torino, Italy
Gabriela Strnad – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş, Romania
Dana-Adriana Iluţiu-Varvara – Technical University of Cluj-Napoca, Romania

Invited keynote: Additive Manufacturing

Prof. Dr. Mo Elbestawi – McMaster W Booth School of Engineering Practice and Technology
(SEPT), Canada

Research on the Optimal Regime of Recrystallization in 1050 Aluminium Alloy

Liviu Dorin Pop

Researches on the Mechanical Properties of C45/S235JR Multilayer Steel Systems

Ioana Monica Sas-Boca, Marius Constantin Tintelecan, Dana Adriana Ilutiu-Varvara, Mariana
Pop, Dan Frunza, Florin Popa

**An Assessment of the Substance Losses from Charge Composition Used to the
Steelmaking – Key Factor for Sustainable Steel Manufacturing**

Dana-Adriana Iluţiu-Varvara

CAD-CAM System for Manufacturing Innovative Hybrid Design Using 3D Printing

Tadeusz Mikolajczyk, Tomasz Malinowski, Liviu Moldovan, Fuwen Hu, Tomasz Paczkowski

Machining of Internal Cylindrical Surfaces with Adjustable Tool

Tanya Avramova, Evstati Lefterov

**Simulation of Processing of a Helical Surface with the Aid of a Frontal-Cylindrical Milling
Tool**

Sorin Cristian Albu

Analytical Calculation of Cutting Forces and Analysis of Their Change at 3-D Milling

Victor A. Batuev, Victor V. Batuev, Dmitrii V. Ardashev, Leonid V. Shipulin, Anastasia S.
Degtyareva-Kashutina

Incremental Sheet Forming for Prototyping Automotive Modules

Ildiko Peter, Irene Canale, Roberto Maiorano

A Device for Gear Fabrication by Hot Rolling, on Presses

Marius Tintelecan, Dana-Adriana Iluțiu-Varvara, Oscar Rodriguez Alabanda, Ioana Monica Sas-Boca

Injection Process Design for Manufacturing of Bicycle Plastic Bottle Holder Using CAD Tools

Ile Mircheski, Andrzej Łukaszewicz, Ryszard Szczebiot

Impact of Extraction Agents in Pur Injection

Ana Toderita

Design of Smart Forestry Cableway

Daniel Lates, Sorina Moica, Alexandru Pozdirca, Cristina Veres, Elena Harpa

Versatility of the Humble Seaweed in Biomanufacturing

Jae-Llane Ditchburn, Carlos Brais Carballeira

Recent Trends in Bioprinting

Flaviu Moldovan

Study of the Milling Tools When Machining X37CrMoV5-1 after Heat Treatment

Bogdan Pralea, Gheorghe Nagit

Innovative Technologies and Design in Civil Engineering

Room: A308 – Faculty of Engineering

Thursday, October 4th 2018; 15:00 – 17:00

Session chairs:

Ahmed H. Ibrahim – Zagazig University, Egypt

Răzvan Cazacu – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş Romania

Mihai Şimon – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş Romania

Post-Tensioned Flat Slabs with Unbonded Tendons for Public Buildings

Iosif Török, Attila Puskás, Jácint Virág

Meeting of the Analytical and Numerical Dimensioning at the Level of Tomorrow's Railway Superstructures

Szabolcs Attila Köllő, Attila Puskás, Gábor Köllő

Cross-Correlation Analysis of the Vertical Accelerations of Railway Vehicle Bogie

Madalina Dumitriu, Marius Alin Gheti

The Fire Performance of Cross Laminated Timber Beams

Ruxandra Dârmon, Octavian Lalu

Newline CSD Composite Steel-Concrete Folded Slab Bridge Superstructure Design Program

Zsolt Laszlo Orban, Gavril Kollo, Madalina Ciotlaus

A Numerical Assessment of the Progressive Collapse Resistance of RC Frames with Respect to the Number of Stories

Adrian G. Marchis, Mircea D. Botez

Bending Behavior of a High Rigidity Circular Plate Made by Composite Panel

Calin Itu, Sorin Vlase, Maria Luminița Scutaru

Bending Behavior of Composite Panels Used in Civil Engineering

Maria Luminița Scutaru, Călin Itu, Arina Modrea, Mircea Mihălcică

Optimizing Urban Landscapes in Regard to Noise Pollution

Vladimir Marusceac, Madalina Ciotlaus

Acoustic Optimization of a Music Practice Classroom

Daniela-Roxana Tamas-Gavrea, Constantin Munteanu, Raluca Istoan (Fernea), Adrian Loghin

Calculation of the Ordinates of Influence Surfaces on Straight and Oblique Plates Using the Finite Strips Method

Ovidiu Gavriș, Mihaela Dumitran

Analysis of Vibrations of the Structures Used in Nuclear Engineering, in Case of an Earthquake

Leonard Serbina, Arina Modrea, Dumitru Daniel Scărlătescu

Three-Point Bend Test to Determine the Mechanical Behavior of the Tubes Used in Water Supply Networks

Arina Florenta Modrea, Dumitru Daniel Scărlătescu, Mariana Domnica Stanciu

Using the Symmetries in the Civil Engineering. An Overview

Arina Florenta Modrea

FEM Applied to Determine the Stress-Strain Field in the Tubes of the Water Supply Networks

Arina Florenta Modrea, Hektor Hebert, Dumitru Daniel Scărlătescu

Configuration of Structures Used in Nuclear Engineering at Vibrations

Arina Modrea, Leonard Serbina, Marius Ghitescu

Mechanical Behavior of the HDPE Tubes Used in Water Supply Networks Determined with the Four-Point Bending Test

Arina Modrea, Dumitru Daniel Scărlătescu

Innovative Technologies and Materials in Civil Engineering

Room: A308 – Faculty of Engineering

Thursday, October 4th 2018; 17:00 – 19:00

Session chairs:

Sabry A. Ahmed – Zagazig University, Egypt

Răzvan Cazacu – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş Romania

Sorin Albu – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş Romania

New Types of Mortars Obtained by Aditiving Traditional Mortars with Natural Polymers to Increase Physico-Mechanical Performances

Alexandra Olga Pinteau, Daniela Lucia Manea

Acoustic and Thermal Properties of Hemp-Cement Building Materials

Raluca Fernea, Daniela Lucia Manea, Luminita Plesa, Razvan Iernutan, Mihaela Dumitran

Hemp-Clay Building Materials- an Investigation on Acoustic, Thermal and Mechanical Properties

Raluca Fernea, Daniela Lucia Manea, Daniela Roxana Tămaş-Gavrea, Ioan Călin Roşca

NMR Study on New Natural Building Materials

Iacob Florea, Elena Jumate, Daniela Lucia Manea, Radu Fecete

Analysis of Thermal Insulation Building Materials Based on Natural Fibers

Iacob Florea, Daniela-Lucia Manea

Utilization of Sheep Wool as a Building Material

Orsolya Denes, Iacob Florea, Daniela Lucia Manea

Psyllium Seeds Used as Pore Forming Agent in Clay Brick

Anca Andreea Balog, Nicoleta Cobirzan, Gyorgy Thalmaier, Horia Constantinescu, Mirela Voinea

Tensile Properties of Green Polymer Concrete

Giovanni Zanvetto, Alexandru Timu, Ancuta Rotaru, Liliana Bejan, Marinela Barbuta

Mechanical and Environmental Performances of Concrete Using Recycled Materials

Alexandru Timu, Marinela Barbuta, Laura Dumitrescu, Irina Baran

Traction-Compression Tests of the Components of a Composite Sandwich Used to High-Rigidity Circular Plates

Calin Itu, Maria Luminita Scutaru, Mircea Mihalcica

Bending Tests Used to Determine the Mechanical Properties of the Components of a Composite Sandwich Used in Civil Engineering

Maria Luminita Scutaru, Calin Itu, Marin Marin

Determination of the Dynamic Young's Modulus and Poisson's Ratio Based on Higher Frequencies of a Beam Transverse Vibration

Victor Alexeevich Chirikov, Diyan Minkov Dimitrov, Yordan Simeonov Boyadjiev

Traction Tests to Determine the Behavior of the Materials Used in Water Supply Networks

Dumitru Daniel Scărlătescu, Marin Marin, Arina Modrea

Study of Materials Used in Construction of Water Supply Networks

Dumitru Daniel Scărlătescu, Arina Modrea, Horatiu Teodorescu-Draghicescu, Mariana Stanciu

Experimental Analysis of Hysteretic Phenomena Related to Materials Used in Construction of Water Supply Networks

Arina Modrea, Dumitru Daniel Scărlătescu, Horatiu Teodorescu-Draghicescu

Management and Education for Sustainable Manufacturing

Room: A309 – Faculty of Engineering

Thursday, October 4th 2018; 15:00 – 16:45 17:00 – 18:00

Session chairs:

Liviu Moldovan – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş

Mihaela Bucur – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş

Dana Rus – University of Medicine, Pharmacy, Sciences and Technology of Tîrgu Mureş

State-of-the-Art Analysis on the Knowledge and Skills Gaps on the Topic of Industry 4.0 and the Requirements for Work-Based Learning

Liviu Moldovan

Review of Legislation Framework in the Field of Work-Based Learning

Liviu Moldovan

The Importance of Corporate Social Responsibility Among Organizations in the Centre Development Region of Romania

Mihaela Bucur, Sorina Moica, Flavius Ardelean, Călin Ciprian Oţel

Entrepreneurial Intention Among Engineering Students and Its Main Determinants

Emilia Herman

Eco-Industrial Development and European Union Policies

Lucretia Dogaru

The Consequences of Industrial Waste Management on the Quality of the Environment. Case Study

Lucretia Dogaru

The Influence of the Specific Indicators of the Chemical Treatment on the Production Costs of Painting in Electrostatic Field

Petruta Blaga, Jozsef Boer

Intelligent Computer-Aided Resource Planning and Scheduling of Machining Operation

Fatmir Azemi, Goran Šimunović, Roberto Lujčić, Dániel Tokody

Problem-Based Learning Strategy for CAD Software Using Free-Choice and Open-Ended Group Projects

Lucian Balan, Timber Yuen, Moein Mehrtash

The Importance of the Concept of Communication Among Future Engineers - a Pre-Test for a European Study

Andreea Ban, Mihaela Bucur

Pedagogical Methods to Teach Prototyping Using 3D Printers

Adrian Robert Suciu, Santiago Ferrandiz Bou, Angela Repanovici, Diana Cotoros

Assessment Techniques in Teaching English for Specific Purposes to Engineering Students

Dana Rus

Communicative Competence in the Context of ESP Methodology

Dana Rus

The selection of ESP materials- the case of English for manufacturing

Nicoleta Aurelia Marcu

Power and Energy Systems
Room: A211 – Faculty of Engineering
Thursday, October 4th 2018; 15:00 – 17:00

Session chairs:

Pavel Atănăsoae – “Ștefan cel Mare” University of Suceava, Romania
Agoston Katalin – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureș, Romania
Daniel-Cornel Bălan – SDEE Transilvania Sud SA, Romania

Invited keynote: Smart Grid: an Interdisciplinary Engineering Application

Köksal Erentürk – Electrical & Electronics Engineering Department, Ataturk University, Turkey

Modeling General Energy Balance of Systems

Attila Albin, Zoltan Rajnai

Voltage Monitoring and Supply Controlling System

Katalin Agoston

The Cost-Benefit Analysis of the Electricity Production from Small Scale Renewable Energy Sources in the Conditions of Romania

Pavel Atănăsoae, Radu Dumitru Pentiu, Dan Laurentiu Milici, Elena Daniela Olariu, Mihaela Poienar

Optimization of Generation Cost in a Microgrid Considering Load Demand

Lucian Ioan Dulau, Dorin Bica

Safety in Operation Improvement of Automatic Connection Integrated Reserve Systems (AAR) of a Power System

Petru Claudiu Pasc, Cristian Dumitru, Catalin Moldovan

Enhancement of Power Production of an Autonomous Photovoltaic System Based Robust MPPT Technique

Hanane Yatimi, Elhassan Aroudam

Aspects Regarding the Generation of Electricity Using Recycled Materials

Andreea-Daniela Bucur, Bogdan Bucur

A Study on the Development of Solar Energy in the Countries Households in Europe

Daniel Cornel Bălan, Sorina Mihaela Bălan

The Influence of Distibuted Generation Over the Voltage Curve Quality in Power Distribution Systems

Catalin-Eugen Moldovan, Claudiu Pasc, Claudiu Damian

Charge Plate Configurations Analysis in Unipolar Capacitive Power Transfer System for Electric Vehicles' Batteries Charging

Mohammed Al-Saadi, Ammar Al-Gizi, Sadiq Ahmed, Sarab Alchlahawi, Aurelian Craciunescu

Analysis and Comparison of Resonance Topologies in 6.6KW Wireless Inductive Charging of Electric Vehicles' Batteries

Mohammed Al-Saadi, Ammar Ibrahim, Ali Al-Omari, Ammar Al-Gizi, Aurelian Craciunescu

Energy Efficiency and Renewable Technologies

Room: A211 – Faculty of Engineering

Thursday, October 4th 2018; 17:00 – 19:00

Session chairs:

Cristian-Dragoş Dumitru – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş, Romania

Daniel Dragomir-Stanciu – University of Medicine, Pharmacy, Sciences and Technology
of Tîrgu Mureş, Romania

Cătălin-Eugen Moldovan – SDEE Transilvania Sud SA, Romania

Invited keynote: Metaheuristic Algorithm for Photovoltaic Power System

Mohamed Louzazni – Applied Mathematics and Informatics, National School of Applied
Science, Tanger, Morocco

Artificial Intelligence Based Prediction Model for the Long-Term Heat Flux Losses Through Ground Applied to Large Non-Residential Buildings

Ancuţa Maria Măgurean, Levente Czumbil, Daniela Lucia Manea, Dan Doru Micu

Calculation and Analysis of Corrected Thermal Resistance in a Common Dwelling Building in Romania, in Various Thermal Insulation Options – the Exterior Wall

Florin Babota

Case Study of Nearly Zero Energy Building (nZEB) Concept Implementation Into an Early Stage of the The Design Phase for a New Residential Building

Ancuţa Maria Măgurean

Risk Analysis About Lightning Protection for Buildings

Zoltan Kasza, Karoly Kovacs

Optimizing the Luminous Environment Using Dialux Software at "Constantin and Elena" Elderly House - Case Study

Estelle Guerry, Catalin Daniel Galatanu, Laurent Canale, Georges Zissis

Luminance Contrast Assessment for Elderly Visual Comfort Using Imaging Measurements

Estelle Guerry, Catalin Daniel Galatanu, Laurent Canale, Georges Zissis

Influence of the Systemic Operating Temperatures on the Energy Efficiency of the Existing Heat Exchangers

Gheorghe Badea, Teodora - Melania Șoimoșan, Raluca - Andreea Felseghi

CFD Analysis of an Inovative Heat Recovery System

Robert Ștefan Vizitiu, Andrei Burlacu, Dorina Nicolina Isopescu, Marina Verdeș, Gavril Sosoi

Energy Efficient Phase Change Materials Used for an Originally Designed Heat Recovery System

Robert Ștefan Vizitiu, Dorina Nicolina Isopescu, Andrei Burlacu, Vasiliță Ciocan, Gavril Sosoi

Study on Condensing Boiler Technology Potential Accounting Various Fuels

Dan-Teodor Bălănescu, Vlad-Mario Homutescu

A Heat Pipe Cooler for High Power LED's Cooling in Harsh Conditions

Gavril Sosoi, Robert Ștefan Vizitiu, Andrei Burlacu, Cătălin Daniel Gălățanu

Performance Analysis of a Gas Turbine Combined Cycle Power Plant with Waste Heat Recovery in Organic Rankine Cycle

Dan-Teodor Balanescu, Vlad-Mario Homutescu

Influences of Engine Faults on Pollutant Emission

Marius Toma, Dan Micu, Cristian Andreescu

The Theoretical Study Regarding the Fuel Consumption Performance for a Vehicle Equipped with a Mechanical Transmission

Alexandru Dobre

The Influence of Condensing Temperature on the Efficiency of Solar Power Systems with ORC

Dragomir-Stanciu Daniel, Luca Constantin

Investigation of the Impact of Planetary Boundary Layer Turbulence on the Performance of Onshore Wind Farm

Mohamed Marouan Ichenial, Abdellah El Hajjaji

Automation, Intelligent Systems and Technologies
Room: A316 – Faculty of Engineering
Thursday, October 4th 2018; 15:00 – 16:45 17:00 – 19:00

Session chairs:

Mircea Dulău – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş, Romania

Katalin György – Sapiența University, Romania

Stelian-Emilian Oltean – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş, Romania

**Invited keynote: Mathematics, Computational and Communication Science and
Engineering (MCCSE) for Enhanced Development Projects and Increased Productivity**

Prof. dr. eng. Omar Fakh Hamad – Faculty of Engineering, Zanzibar University, Tanzania

Development of a Control System for Wood Drying Process

Mircea Dulău

The LQG Control Algorithms for Nonlinear Dynamic Systems

Katalin György

Modelling and Control a Quadcopter Using Nonlinear Method

Abdelhay Sabir, Alia Zakriti

Mobile Robot Platform with Arduino Uno and Raspberry PI for Autonomous Navigation

Stelian-Emilian Oltean

Implementation of an Absorber Design for Vibration Control in Automation Systems

Timber Yuen, Lucian Balan, Moein Mehtash

Machinery Fault Diagnosis Using Signal Analysis

Zoltan German-Sallo, Gabriela Strnad

Hilbert-Huang Transform in Fault Detection

Zoltan German-Sallo, Horațiu-Ștefan Grif

**Four Axis Bipolar Stepper Motor Control System Using Mach 3 Software Controlled CNC
Mill**

Alexandru Morar

Experimental Device for Monitoring Dentists' Posture During Work

Adrian Robert Suciu, Angela Repanovici, Diana Cotoros, Cornel Druga, Ionel Serban

Influence of Temperature on the Chromatic Dispersion of Photonic Crystal Fiber by Infiltrating the Air Holes with Water

Mohammed Debbal, Mohammed El Kebir Chikh Bled, Mohammed Chamse Eddine Ouadah, Hicham Chikh Bled, Mouweffeq Bouregaa

Eccentric Fiber Bragg Grating for Accurate Refractometry Sensing

Hicham Chikh-Bled, Mohammed Debbal, Mohammed El-Kebir Chikh-Bled, Venancio Calero Vila, Mohammed Chemss Eddine Ouadah, Mouweffeq Bouregaa

Circular Photonic Crystal Fiber Used for Dispersion Compensation in S+C+L+U Bands

Mohammed Chamse Eddine Ouadah, Chikh Bled Mohammed El Kebir, Mohammed Debbal, Chikh-Bled Hicham, Mouweffek Bouregaa

Review of Mobile Communication and the 5G in Manufacturing

Zsolt Marcell Temesvari, Dóra Maros, Péter Kádár

Internet of Things

Traian Danila Turc

Extracting Customer Traces from CRMS: from Software to Process Models

Cristina-Claudia Osman, Ana-Maria Ghiran

Comparative Study Concerning the Impact of IT&C Indicators on Performances of Organizations in the Industry

Manuela Rozalia Gabor, Lacramioara Cimpian, Flavia Dana Oltean

An Implementation Attempt for Solving Cauchy Problem with a Sequential Approach

Marcel Bogdan, Ioan Ispas

Some Examples of Non-Measurable Lebesgue Functions

Diana Marginean Petrovai

An Algorithm to Calculate the Inverse Matrix of an Infinite Matrix

Bela Finta

Virtual Panel Session - Sustainable Development Technologies

Room L14 – Faculty of Engineering

Friday, October 5th 2018; 9:00 – 13:00 14:30 - 16:30 (10 min/talk)

Session chairs:

Gabriela Strnad – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş, Romania

Răzvan Cazacu – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş, Romania

Liviu Pop – University of Medicine, Pharmacy, Sciences and Technology of Tîrgu
Mureş, Romania

Mihai Şimon – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş, Romania

Experimental Study of Resistance Spot Welding of Martensitic Stainless Steel and AISI 1000 Series Steel : Welds Microstructure Properties and Mechanical Performance.

Hamza Essoussi, Saoussan El Mouhri, Said Ettaqi, El Hachmi Essadiqi

Heat Treatment Effect on the Mechanical Properties of AISI 304 Austenitic Stainless Steel

Hamza Essoussi, Saoussan El Mouhri, Said Ettaqi, El Hachmi Essadiqi

Relationship Between Microstructure, Residual Stress and Thermal Aspect in Friction Stir Welding of Aluminum AA1050

Saoussan El Mouhri, Hamza Essoussi, Said Ettaqi, Stephane Benayoun

Rail-Wheel Interaction and Its Influence on Rail and Wheels Wear

Madalina Ciotlaus, Gavril Kollo, Vladimir Marusceac, Zsolt Orban

Composite Materials Made of Carbon Fibers Reinforced with Aluminum Nets

Razvan Andrei Iernutan, Florin Babota, Raluca Istoan

Numerical Tests for AAC(Autoclaved Aerated Concrete) Masonry Modules and a Structural Wall of AAC Confined Masonry with Disperse Reinforced Concrete Pylons

Razvan Andrei Iernutan

Monte Carlo Simulation of Electron-Gas-Solid Interactions in Silicate Phases Under VP-SEM

Mohamed El Azzouzi, Abdelfattah Achahbar, Lahcen Khouchaf

Resistance to Buckling of a Stiffened Panel Under Axial Compression; Effect of Imperfections Resulting from Welding Process

Ikram Feddal, Abdellatif Khamlichi, Koutaiba Ameziane

Design of Tracking System for Prefabricated Building Components Using RFID Technology and CAD Model

Vishal Naranje, Swarnalata Rajguru

Traffic Macrosimulation Model with a Park and Ride Component

Florin Valentin Rusca, Aura Rusca, Eugen Rosca, Mircea Rosca, Oana Dinu, Florian Ghionea

Health Impact Assessment Study on Active Travel in Large Urban Areas

Anamaria Ilie, Cristina Oprea, Aura Ruscă, Oana Maria Dinu, Ștefan Burciu

Development and Application of Mechanized Matching Equipment for High-Speed Railway Tunnel Construction

Heng Zhang, Jianchun Sun, Hui Ma, Shougen Chen, Muyan Huang

Optimal Trajectory Planning for Spherical Robot Using Evolutionary Algorithms

Dikra El Haiek, Badreddine Aboulissane, Larbi El Bakkali, Jalal El Bahaoui

Paper for Chromatographic Technique from Coconut Pulp Cellulose

Jaruwan Chutrtong, Waradoon Chutrtong

On the Workspace Optimization of Parallel Robots Based on CAD Approach

Badreddine Aboulissane, Dikra El Haiek, Larbi El Bakkali, Jalal El Bahaoui

An Heuristic Model for Port Optimization

Floriana Cristina Oprea, Florin Rusca, Stefan Burciu, Anamaria Ilie, Sergiu Olteanu

Comparison of the Power, Lift and Drag Coefficients of Wind Turbine Blade from Aerodynamics Characteristics of NACA0012 and NACA2412

Karim Oukassou, Sanaa El Mouhsine, Abdellah El Hajjaji, Boussselham Kharbouch

Simple Method for Monitoring Melamine in Food by Ion Pair Chromatography

Jaruwan Chutrtong, Waradoon Chutrtong

Evaluating the Usability of a Moroccan University Research Management Web Platform

Khaoula Benmoussa, Majida Laaziri, Samira Khoulji, Mohamed Larbi Kerkeb

The Combination of Big Data and Marketing Strategies: Towards a Better Product Success

Jihad Saidali, Abdellatif Medouri, Yassine Tabaa

Analyzing the Process of Supplier Selection Criteria and Methods

Hamed Taherdoost, Aurélie Brard

Assessment of Leadership Effectiveness Dimensions in Small & Medium Enterprises (SMEs)

Mitra Madanchian, Hamed Taherdoost

Organizational Culture and Its Motivational Potential in Manufacturing Industry: Subculture Perspective

Lukáš Copuš, Helena Šajgalíková, Emil Wojčák

Research on Online Promoting Methods Used in a Technological Society

Olivia Doina Negoită, Anca Alexandra Purcărea, Mirona Ana Maria Popescu

Digital-Age Learning and Business Engineering Education – a Pilot Study on Students E-Skills

Elena Fleaca, Radu D. Stanciu

Product Acceptance Model

Geanina Silvana Banu

Intellectual Assets Management Model

Geanina Silvana Banu

Value Co-Creation Between Manufacturing Companies and Customers. the Role of Information Technology Competency

Andreea Barbu, Gheorghe Militaru

The Moderating Effect of Intellectual Property Rights on Relationship Between Innovation and Company Performance in Manufacturing Sector

Andreea Barbu, Gheorghe Militaru

Virtual Panel Session – Intelligent Systems and Technologies

Room L12 – Faculty of Engineering

Friday, October 5th 2018; 9:00 – 13:00 14:30 - 16:30 (10 min/talk)

Session chairs:

Dulău Mircea – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş

Adrian Gligor – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş

Adrian Duka – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş

Stelian-Emilian Oltean – University of Medicine, Pharmacy, Sciences and Technology of
Tîrgu Mureş

Spatial and Polarization Diversity Performance Analysis of a Compact MIMO Antenna

Aicha Mchbal, Naima Amar Touhami, Hanae Elftouh, Mahmoud Moubadir, Aziz Dkiouak

Suppression of Harmonic of Microstrip Patch Antenna Using Defected Ground and Defected Microstrip Structure

Hanae Elftouh, Naima Touhami Amar, Aicha Mchbal, Alia Zakriti, Moustapha Elbakkali

Analysis and Two-Dimensional Modeling of Directional Coupler Based on Two Coplanar Lines

Anouar Acheghaf, Naima Amar Touhami, Mohamed Boussois, Reda Maouhoub

Design and Analysis of Compact Microstrip UWB Bandpass Filter with a Notched Band Using Defected Microstrip Structure

Sanae Azizi, Mariam El Gharbi, Saida Ahyoud, Adel Asselman

A High Gain SIW Cavity Backed Triangular Slot Antenna

Mariam El Gharbi, Sanae Azizi, Noura Aknin, Saida Ahyoud

Effect of Rotational Split Ring Resonator on Dual Bandstop Filter

Mohssine El Ouahabi, Alia Zakriti, Mohamed Essaïdi, Aziz Dkiouak

Design of SIW Cavity Backed Triangular Slot Antenna Using Two Different Feeding Transitions

Mariam El Gharbi, Noura Aknin, Saida Ahyoud

A UWB Antenna with Reconfigurable Rejection Band Using Split Ring Resonator for Radio Cognitive Technology

Omar El Maleky, Farid Ben Abdelouahab

A New Circular Polarization Dual Feed Microstrip Square Patch Antenna Using Branch Coupler Feeds for Wlan/Hiperlan Applications.

Mahmoud Moubadir, Naima Amar Touhami, Mohamed Aghoutane, Imane Badaoui

Dual Band 28/38GHz Inverted-F Array Antenna for Fifth Generation Mobile Applications.

Mustapha El Halaoui, Abdelmoumen Kaabal, Lahcen Amhaimar, Saida Ahyoud, Adel Asselman

Range Distance Measurements Using an UWB Tapered Slot 0.43 GHz to 6 GHz Antenna for IoT Application.

Younes Ahajjam, Otman Aghzout, José Manuel Catala-Civera, Felipe Peñaranda-Foix, Abdellah Driouach

Substrate Integrated Waveguide Symmetrical Window Bandpass Filter for Satellite Applications

Imane Badaoui, Naima Amar Touhami, Mahmoud Moubadir, Mohamed Taha El Khorassani

CPW-Fed Planar Ultra Wideband Notched Antenna at Wimax Frequency

Nihade Taher, Hanae Elftouh, Alia Zakriti, Naima Amar Touhami

High-Performance Indium–Gallium–Zinc Oxide Thin-Film (IGZO TFT) Transistors Based on Anodic Aluminum Oxide (Al_2O_3) Compare with Thermally Grown (SiO_2)

Abdelhafid Marroun, Naima Amar Touhami, Taj-Eddin El Hamadi, Moustapha El Bakkali

Design of 5.2 GHz Low Noise Amplifier for Wireless LAN

Moustapha El Bakkali, Naima Amar Touhami, Hanae El Ftouh, Abdelhafid Marroun

Monitoring and Warning System of a Route Based on Roadside Sensors in VANET

Maria Claudia Surugiu, Ion Nicolae Stancel, Angel Ciprian Cormos

A Switched Beamforming Network for 5G Modern Wireless Communications Applications.

Mahmoud Moubadir, Naima Amar Touhami, Mohamed Aghoutane, Aicha Mchbal

Modeling the Impedance Characterization of Prismatic Lithium-Ion Batteries

Maryam Ghalkhani, Moein Mehtash

Implementation of Experiential Learning for Vehicle Dynamic in Automotive Engineering: Roll-Over and Fishhook Test

Moein Mehrtash, Timber Yuen, Lucian Balan

A Study of the Wind Turbine Wake Dynamics in the Neutral Boundary Layer Using Large-Eddy Simulation

Mohamed Marouan Ichenial, Abdellah Elhajjaji

Assessment of Annual Variations of Wind Energy in Tetouan – Morocco by Estimating Wind Speed Weibull Distribution Parameters

Mohamed Hatim Ouahabi, Farid Benabdelouahab, Abdellatif Khamlichi

Wind Speed Data Analysis Using Weibull and Rayleigh Distribution Functions, Case Study: Five Cities Northern Morocco

Hicham Bidaoui, Ikram El Abbassi, Abdel Moumen Darcherif, Abdelmajid El Bouardi

Investigation of Photovoltaic Output Characteristics with Iterative Methods

Rachid Herbazi, Khalid Amechnoue, Ahmed Khouya, Mohamed Louzazni

Bond Graph Modelling of Different Equivalent Models of Photovoltaic Cell

Mohamed Louzazni, Ahmed Kouya, Khalid Amechnoue, Rachid Herbazi

Simplified Mathematical Model for Polarization Curve Validation and Experimental Performance Evaluation of a PEM Fuel Cell System

Adriana Andronie, Ioan Stamatin, Valentin Girleanu, Viorel Ionescu, Nicolae Buzbuchi

Numerical Investigation of a MEMs Thermal Actuator Performance by Modifying Its Geometric Dimensions

Viorel Ionescu

Peak-To-Average Power Ratio Reduction Using New Swarm Intelligence Algorithm in OFDM Systems

Lahcen Amhaimar, Kamal Attari, Mustapha Halaoui, Ali Elyakoubi, Saida Ahyoud, Adel Asselman

A Real Time Intrusion Detection System for Wormhole Attack in the RPL Based Internet of Things

Snehal Bhosale, Santosh Sonavane

Information Security Aspects of Industry 4.0

Miklós Kiss, Lajos Muha, Gábor Bréda

AHP-Based Approach for Evaluating Ergonomic Criteria

Khaoula Benmoussa, Majida Laaziri, Samira Khouliji, Mohamed Larbi Kerkeb, Abir El Yamami

A Comparative Study of PHP Frameworks

Majida Laaziri, Khaoula Benmoussa, Samira Khouliji, Mohamed Larbi Kerkeb