AGEN **TECIS 2016**





Agenda TECIS, October, 26-28 2016

Hotel Bleart lobby 14:00-18:00 Registration

We1A Room A 9:00-9:45 Opening Regular Session

Chair: Hajrizi, Edmond University for Business and Technology

WeP1A Plenary 1 **Plenary Session**

Chair: Kopacek, Peter Vienna Univ. of Tech

10:00-10:45, Paper WeP1A.1

Smart Solution for Smart Factory

Hajrizi, Edmond University for Business and Technology

10:45 - 11:15 Coffee Break

WeA1A Room A **Invited Session** Robots

Vienna Univ. of Tech. Inst. for Production Engineering and Laser Tech Chair: Durakbasa, Numan M. Co-Chair: Kopacek, Peter Vienna Univ. of Tech

Organizer: Kopacek, Peter Vienna Univ. of Tech Vienna Univ. of Tech. Inst. for Production Engineering and Laser Organizer: Durakbasa, Numan M.

Organizer: Bauer, Jorge Facultad Regional Buenos Aires Univ. Tech. Nacional

11:15-11:35, Paper WeA1A.1

Novel Trends in the Development of Autonomation and Robotics in Metrology for Production in the Future (I)

Vienna Univ. of Tech. Inst. for Production Engine Durakbasa, Numan M. Bauer, Jorge Facultad Regional Buenos Aires Univ. Tech. Nacional Bas, Gokcen Vienna Univ. of Tech KRÄUTER, Lukas TU Wien, Interchangeable Manufacturing and Industrial Metrology

11:35-11:55, Paper WeA1A.2

A Computer-Simulated Environment for Modeling and Dynamic Behavior-Analysis of Special Brushless Motors for Mechatronic Mobile Robotics Systems (I)

Durakbasa, Numan M. Vienna Univ. of Tech. Inst. for Production Engine Facultad Regional Buenos Aires Univ. Tech. Nacional Bauer, Jorge Alcoberro, Rodrigo Univ. Tecnológica Nacional Capuano, Esteban Univ. Tecnológica Nacional

11:55-12:15, Paper WeA1A.3

Control of a Cost Oriented Humanoid Robot (I)

d'Apolito, Francesco Austrian Inst. of Tech Mehmeti, Xhemajl University for Business and Technology Kopacek, Peter Vienna Univ. of Tech

12:15-12:35, Paper WeA1A.4

Robots for Education (Edutainment) (I)

TU Wien, Inst. IHRT Kopacek, Peter Vienna Univ. of Tech

12:35-12:55, Paper WeA1A.5

Investigation of Effects (Welding Sequence, Fixturing, Welding Points) on Distortions after Spot Welding for Determining Individual and Cumulative Tolerances (I)

Yurci, Cem Yildiz Tech. Univ Yildiz Tech. Univ Akdogan, Anil Vienna Univ. of Tech. Inst. for Production Engine Durakbasa, Numan M.

13:35-14:10 Lunch Break

WeP2A Room A 13:00-13:30, Plenary 2 **Plenary Session**

QuinScape GmbH Chair: Jesse, Norbert

14:15-15:00, Paper WeP2A.1

Development Trends in Robotics

Kopacek, Peter Vienna Univ. of Tech

WeA2A Cost Effective Operation and Maintenance

Room A Regular Session

Chair: Stapleton, Larry Co-Chair: Shala, Muzafer Waterford Inst. of Tech Univ. for Business and Tech

15:00-15:20, Paper WeA2A.1

Efficiencies through the Automatic Control of Age-Profiled Manufacturing Machines: A Case Study of Cost-Savings in an Irish Production Facility

Stapleton, Larry Norton, Stephen J Doyle-Kent, Mary Curtis, Helen Darcy, Raymond Waterford Inst. of Tech Waterford Inst. of Tech Waterford Inst. of Tech Waterford Inst. of Tech Waterford Insitute of Tech

15:20-15:40, Paper WeA2A.2

Cost-Oriented Innovation Methods and Education in Developing Countries: Re-Engineering Industrial Production Systems

Shala, Muzafer Hoxha, Valmir Bula, Ines Hajrizi, Edmond Stapleton, Larry University for Business and Technology Waterford Institute of Tech

15:40-16:00, Paper WeA2A.3

Analytical Calculation of Vehicles Noise in the Road Traffic and Graphical Presentation

Kyçyku, Azem Lajqi, Shpetim Hoxha, Gezim Univ. of Prishtina, Faculty of Mechanical Engineering Univ. of Prishtina, Faculty of Mechanical Engineering Univ. of Prishtina, Faculty of Mechanical Engineering

WeA2B Sustainable Design and Control

Chair: Dugolli, Mimoza Co-Chair: ATAN, Ozkan Univ. of Prizreni Yuzuncu Yil Univ

Room B Regular Session

15:00-15:20, Paper WeA2B.1

Photovoltaic and Micro-Hydroelectric Proposed Plant for Stand Alone Electric Generation in a Sixty-Floor Skyscraper (P60)

Bylykbashi, Kliton Capata, Roberto Cirillo, Raffaello Department of Mechanical and Aerospace Engineering, Sapienza Univ. Of Roma Department of Mechanical and Aerospace Engineering, Sapienza Univ. Of Roma Department of Mechanical and Aerospace Engineering, Sapienza Univ. Of Roma

15:20-15:40, Paper WeA2B.2

Safety from Asbestos Exposure in Kosovo

Dugolli, Mimoza Univ. of Prizreni

15:40-16:00, Paper WeA2B.3

Synchronisation and Circuit Model of Fractional-Order Chaotic Systems with Time-Delay

ATAN, Ozkan Yuzuncu Yil Univ

16:00 - 16:30 Coffee Break

WeA3A Mechatronic Systems and Robotics Room A Regular Session

Co-Chair: Ibrahimov, Bahadur

Chair: d'Apolito, Francesco

Vienna Univ. of Tech
Austrian Inst. of Tech

16:30-16:50, Paper WeA3A.1

Remote Control User Interfaces for Service Mobile Robots for Elderly Care

Chivarov, Nayden European Pol. Univ

16:50-17:10, Paper WeA3A.2

Development of a Decision Making Guide for Locomotion Design for In-Pipe Inspection Robots - One Step towards Open Innovation in Robotics

Ibrahimov, Bahadur Vienna Univ. of Tech

17:10-17:30, Paper WeA3A.3

Walking Trajectory Modeling of Biped Robot "Archie" for Stable Walking

Mehmeti, Xhemajl Karahoda, Bertan Kopacek, Peter University for Business and Technology University for Business and Technology Vienna Univ. of Tech

17:30-17:50, Paper WeA3A.4

Trajectory Planning and Inverse Kinematics Solver for Real Biped Robot with 10 DOF-S

Bajrami, Xhevahir Dermaku, Artan Likaj, Ramë Demaku, Nysret Kikaj, Adem Maloku, Sali Kikaj, Dafina Vienna Univ. of Tech Vienna Univ. of Tech Univ. of Prishtina Kingston Univ. of London, Faculty of Science, Engineering A

Univ. of Prizren Univ. of Prizren

Jo` Zef Stefan International Postgraduate School, Jamova Ces

17:50-18:10, Paper WeA3A.5

The Second Prototype Design of the Upper Body of Archie

Sutaj, Abedin Vienna Univ. of Tech

18:10-18:30, Paper WeA3A.6

The First Prototype Sutaj, Abedin

Vienna Univ. of Tech

WeBr4Br 18:30 - 20:30 Welcome Restaurant

Thursday, October 27, 2016

ThP1A Plenary 3 Room A Plenary Session

Chair: Groumpos, Peter Univ. of Patras

08:30-09:15, Paper ThP1A.1

3D Metal Printing Technology

Duda, Thomas Raghavan, Venkat Pentair Valves & Controls, Schaffhausen Pentair Global Engineering Center, Bangalore

ThA1A Managing the Introduction of Technological Change to Improve Stability

Chair: Gill, Karamjit S Co-Chair: Limani, Ylber Room A Regular Session

Univ. of Brighton University for Business and Technology

09:15-09:35, Paper ThA1A.1

Building a Responsible Europe - the Value of Circular Economy

Kobza, Natalia Schuster, Anna Students of Industrial Engineering and Management (ESTI Vrije Univ. Brussel

09:35-09:55, Paper ThA1A.2

Data Driven Wave of Certainty a Question of Ethical Sustainability

Gill, Karamjit S Univ. of Brighton

09:55-10:15, Paper ThA1A.3

Applied Relationship between Transport and Economy

Limani, Ylber University for Business and Technology

10:15-10:35, Paper ThA1A.4

Comparison of Some Chemical Parameters of Urban and Industrial Water Discharges Onto the River Lumbardhi of Prizren

Gashi, Sami University for Business and Technology

ThA1B Enterprise Integration and Networking, Software Room B Regular Session

Chair: Jansen, Christoph Siemens AG Co-Chair: Dermaku, Artan Vienna Univ. of Tech

09:15-09:35, Paper ThA1B.1

Developing and Operating Industrial Security Services to Mitigate Risks of Digitalization

Jansen, Christoph Siemens AG

09:35-09:55, Paper ThA1B.2

Educational and School Management Platform

Dermaku, Artan Bajrami, Xhevahir Démaku, Nysret Kikaj, Adem Maloku, Sali Gashi, Blendi Sina, Shkelgim Demolli, Bujar

Vienna Univ. of Tech Vienna Univ. of Tech

Kingston Univ. of London, Faculty of Science, Engineering A Univ. of Prizren

Univ. of Prizren

Univ. of Prizren, Faculty of Computer Science Univ. of Prizren, Faculty of Computer Science Univ. of Prizren, Faculty of Computer Science

09:55-10:15, Paper ThA1B.3

Enterprise Integration, Networking and Virtual Communications

Qehaja, Besnik Bajraliu, Ardian Shabani, Amet Hajrizi, Edmond

Abazi, Blerton

University for Business and Technology Universitý for Business and Technology University for Business and Technology University for Business and Technology

10:15-10:35, Paper ThA1B.4

An Approach to the Impact of Switching from the Traditional Use of ICT to the Internet of Things: How Smart Solutions, Can Transform SMEs

University for Business and Technology

10:35 11:15 Coffee Break **Hotel Bleart Terrace**

ThA2A Control and Automation to Improve Stability

Room A Regular Session

Chair: Kopacek, Peter Vienna Univ. of Tech University for Business and Technology Co-Chair: Ahmeti, Muhamet

11:15-11:35, Paper ThA2A.1

Sliding-Mode Observer for IPMSM Sensorless Control by MTPA Control Strategy

Dhamo, Lindita Spahiu, Aida Nemec, Mitja Ambrozic, Vanja

Pol. Univ. of Tirana Pol. Univ. Oftirana, Electrical Engineering Faculty Ŭniv. of Ljubljana Univ. of Ljubljana

11:35-11:55, Paper ThA2A.2

Model Reference Neural-Fuzzy Adaptive Control of the Concentration in a Chemical Reactor (CSTR)

Mohamed, Bahita Belarbi, Khaled, Khaled Faculty of Chemical Engineering, Univ. of Constantine 3 Faculty of Chemical Engineering, Univ. of Constantine 1

11:55-12:15, Paper ThA2A.3

Dynamic Analysis and Control of Jib Crane in Case of Jib Luffing Motion Using Modelling and Simulations

Doçi, Ilir Hamidi, Beqir Lajqi, Shpetim Univ. of Prishtina, Faculty of Mechanical Engineering UP - Faculty of Mechanical Engineering UP - Faculty of Mechanical Engineering

12:15-12:35, Paper ThA2A.4

Impact of Time Relay for Changing of the Tariff on Commercial Losses at Mechanical Meters

Avni, Alidemaj Vehebi, Sofiu

Kosovo Energetic Corporate University for Business and Technology

12:35-12:55, Paper ThA2A.5

Automatic Controll on Water Supply Netowrks

Xhafa, Sokol Abdullahu, Ilir Ahmeti, Muhamet University for Business and Technology University for Business and Technology Universitý for Business and Technologý

12:35 - 14:00 Lunch Break

14:10-18:00 Excursion

Tirana

18:30 - 19:00 Dinner

ThBr5Br 13:00 - 22:00 Banquet Restaurant

Friday, October 28, 2016

FrP1A Room A Plenary 4 Plenary Session

Chair: Stapleton, Larry Waterford Inst. of Tech

09:00-09:45, Paper FrP1A.1

Deep Learning vs. Wise Learning: A Critical and Challenging Overview

Groumpos, Peter Univ. of Patras

FrA1A
Environmental Issues Regular Session

Chair: Kopacek, Peter Vienna Univ. of Tech Co-Chair: Hoxha, Valmir University for Business and Technology

09:45-10:05, Paper FrA1A.1

Intelligent Disassembly of Components from Printed Circuit Boards to Enable Re-Use and More Efficient Recovery of Critical Metals

Kopacek, Bernd Austrian Society for Systems Engineering and Automation -SAT

10:05-10:25, Paper FrA1A.2

Surface Characterization of Glas Fibers Made from Jarosite Waste Using Contact Angle Measurements

Kerolli-Mustafa, Mihone
University for Business and Technology

10:25-10:45, Paper FrA1A.3

Variations in the Physico-Chemical Parameters of under Groundwater of Blinajë Catchment, Kosovo

Cadraku, Hazir University for Business and Technology Shala, Ahmet University for Business and Technology

FrA1B Room B Cost Oriented Automation: Regular Session

Chair: Shala, Muzafer University for Business and Technology Co-Chair: Bula, Ines University for Business and Technology

09:45-10:05, Paper FrA1B.1

Minimizing Non-Technical Loses with Point-To-Point Measurement of Voltage Drop between "SMART" Meters

Bula, Ines
Hoxha, Valmir
Shala, Muzafer
Hajrizi, Edmond
University for Business and Technology
University for Business and Technology
University for Business and Technology

10:05-10:25, Paper FrA1B.2

Cost-Oriented Open Source Automation Potential Application in Industrial Control Applications

Hoxha, Valmir
Bula, Ines
University for Business and Technology
University for Business and Technology
Shala, Muzafer
University for Business and Technology
Hajrizi, Edmond
University for Business and Technology

10:25-10:45, Paper FrA1B.3

Cost-Oriented Open Source Automation Potential Application in Industrial Control Applications

Vehebi, Sofiu

University for Business and Technology
Avni, Alidemaj

Kosovo Energetic Corporate

10:45 11:15 Coffee Break

Hotel Bleart Terrace

FrA2A Room A Models & Simulation Regular Session

Chair: Breitenecker, Felix
Vienna Univ. of Tech
Co-Chair: Hamidi, Beqir
Univ. of Pristina - Faculty of Mechanical Engineering

11:15-11:35, Paper FrA2A.1

Modelling, Simulation and Analysis of a Spatial Interaction Model

Vobruba, Tamara Körner, Andreas Breitenecker, Felix Vienna Univ. of Tech Vienna Univ. of Tech. Inst. for Analysis and Scie Vienna Univ. of Tech

11:35-11:55, Paper FrA2A.2

Optimization of the Battery Schedule for Residential Microgrid Applications

MARINOVA, GALIA

Tech. Univ
GULIASHKI, Vassil

Inst. of Information and Communication Tech. - BAS

11:55-12:15, Paper FrA2A.3

Modelling and Sensitive Analysis of the Impact on Telematics System in Vehicles

Hamidi, Beqir
Lajqi, Naser
Univ. of Pristina - Faculty of Mechanical Engineering
Up – Fim
Hamidi, Beqir
Univ. of Pristina - Faculty of Mechanical Engineering
Up – Fim
Univ. of Pristina

12:15-12:35, Paper FrA2A.4

Modelling and Simulation of the Turbocharged Diesel Engine with Intercooler

Lajqi, Naser
Up – Fim
Doçi, Ilir
Univ. of Pristina - Faculty of Mechanical Engineering

12:35-12:55, Paper FrA2A.5

Modeling and Analysis of Nominal Conveying Capacity for the Toothed Belt with STD Profile

Kycyku, Azem UP - FIM Professor Likaj, Ramë Univ. of Prishtina

Room B

Intelligent Systems and Applications

Regular Session

Chaire Shale Abroat

Chair: Shala, Ahmet University for Business and Technology

Co-Chair: Krasniqi, Xhafer University for Business and Technology

11:15-11:35, Paper FrA2B.1

FrA2B

Perimeter Detection and Surveillance of Polluted Areas by Robotized Agents in a Hybrid Wireless Sensor Network

Ahmed, Sevil Aptula
Popov, Vasil Liubenov
Tech. Univ. of Sofia, Branch Plovdiv, Plovdiv, Bulgaria
Topalov, Andon Venelinov
Tech. Univ. of Sofia, Branch Plovdiv, Plovdiv, Bulgaria
Tech. Univ. of Sofia, Branch Plovdiv, Plovdiv, Bulgaria
Shakev, Nikola Georgiev
Tech. Univ. of Sofia, Branch Plovdiv, Plovdiv, Bulgaria

11:35-11:55, Paper FrA2B.2

File Formats - Characterization and Validation

Shala, Lavdërim
Univ. of Freiburg
Shala, Ahmet
Univ. of Prishtina

11:55-12:15, Paper FrA2B.3

Alternative Creation of Text to Speech Technology for the Albanian Language

Koshi, Blerand Univ. of Prizren
Bajrami, Xhevahir Vienna Univ. of Tech
Hamiti, Mentor Univ. of Prizren

12:15-12:35, Paper FrA2B.4

HyperCode: Voice Aided Programming

Maloku, Rinor
University for Business and Technology
Pllana, Besart
University for Business and Technology

12:35-12:55, Paper FrA2B.5

Use of IoT Technology to Drive the Automotive Industry from Connected to Full Autonomous Vehicles

Krasniqi, Xhafer University for Business and Technology Hajrizi, Edmond University for Business and Technology

12:55 - 14:15 Lunch Break

FrP2A Room A Plenary 5 Plenary Session

Chair: Duda, Thomas Pentair Valves & Controls, Schaffhausen

14:15-15:00, Paper FrP2A.1

Internet of Things and Big Data - the Disruption of the Value Chain and the Rise of New Software Ecosystems

Jesse, Norbert QuinScape GmbH

FrA3A Cross-Cultural Aspects of Engineering 1

Room A Regular

Room A

Room A

Regular Session

Waterford Inst. of Tech Univ. Lille III Chair: Stapleton, Larry Co-Chair: Stapleton, Amy

15:00-15:20, Paper FrA3A.1

Human Values and Religion: Semi-Automatic Human Values Systems Analysis for Religious Institutional Diagnostics

Stapleton, Larry Waterford Inst. of Tech **INSYTE** Marques, Dawton

15:20-15:40, Paper FrA3A.2

Entrepreneurship Leading a Change in Europe: A Perspective of Young Professionals

Kobza, Natalia European Students of Industrial Engineering and Management (ESTI Mutlucan, Cosku Yildiz Tech. Univ

15:40-16:00, Paper FrA3A.3

Inter-Enterprise Networking in Developing Regions: An International Stability Perspective

Limani, Ylber Univ. for Business and Tech Stapleton, Larry Waterford Inst. of Tech

FrA3B Room B **Regular Session** Various Aspects

Chair: Groumpos, Peter Univ. of Patras Co-Chair: Stapleton, Amy Univ. Lille III

15:00-15:20, Paper FrA3B.1

A New Conception on the Fuzzy Cognitive Maps Method

Groumpos, Peter Univ. of Patras Vergini, Eleni S. Department of Electrical and Computer Engineering, Univ. of Patras

15:20-15:40, Paper FrA3B.2

Comparing Distance Education versus Traditional Education in Engineering Management Masters Program: Sakarya

University Sample

Celik, Fatih Vienna Univ. of Tech

16:00 - 16:30 Coffee Break

FrA4A Cross-Cultural Aspects of Engineering, 2

Chair: Stapleton, Amy Univ. Lille III Co-Chair: Stapleton, Larry Waterford Inst. of Tech

16:30-16:50, Paper FrA4A.1

Increase Business Productivity with IT

Skenderi, Besnik University for Business and Technology

16:50-17:10, Paper FrA4A.2

The Importance of Geographical Position of Kosovo in Increased Trade, Transit and International Transport in the Balkans

Mazrekaj, Ramadan Pjetër Budi

17:10-17:30, Paper FrA4A.3

Public Space, Public Interest and Challenges of Urban Transformation

Begaj, Binak University for Business and Technology

17:30 - 19:00 Dinner

Towards a New Agenda for Systems Engineering and International Stability

Round table discussion

Chair: Stapleton, Larry Co-Chair: Stapleton, Amy Waterford Inst. of Tech Univ. Lille III

17:30-19:00, Paper FrBr4A.1

Towards a New Agenda for Systems Engineering and International Stability: Panel Proposal

Waterford Inst. of Tech Stapleton, Larry Stapleton, Amy Univ. Lille III Univ. of Patras Groumpos, Peter QuinScape GmbH Jesse, Norbert

Restaurant

19:00 - 21:00 Closing/Farewell

