

**Conference Program  
INASE events**



**Bratislava, Slovakia  
November 28-30, 2015**

**Conference Location:**  
**Crowne Plaza Bratislava**  
**Hodžovo námestie 2**  
**816 25 Bratislava, Slovakia**

**Saturday 28th November 2015**

**Conference Room: A**

**Time: 09:15-10:00**

**Plenary Lecture 1:**



**A Strategic Market Perspective to Renewable Energy Systems**

by Associate Professor George Papageorgiou,  
Department of Management and Marketing, School of  
Business Administration, European University Cyprus, CYPRUS.

**Conference Room: A**

**Time: 10:00-12:00**

**Special Session EEEAD 2015: Merging Landscape Management, Agricultural Development and Biodiversity towards the Challenge of Sustainability**

**Chair: Luis Loures**

Effect of Different Management Practices on Soil Properties of Mediterranean Paddy Fields	J. Sánchez-Llerena, A. López-Piñeiro, A. Albarrán, D. Peña, J. M. Rato-Nunes, L. Cox, M. A. Rozas, A. Brito	6148031
Behavior of Clomazone in Paddy Soil Under Different Management and Irrigation Techniques: Preliminary Results	D. Peña, A. López-Piñeiro, A. Albarrán, J. Sánchez-Llerena, L. Cox, J. M. Rato-Nunes, M. A. Rozas, S. Gaytán	6274003
Characterization and Soil Mapping of the Caia Irrigation Perimeter	J. Nunes, L. Loures, A. Loures, A. Piñeiro, A. Albarran	6274011
The Green Revolution – Converting Post-Industrial Sites into Urban Parks – a Case Study Analysis	L. Loures, A. Loures, J. Nunes, T. Panagopoulos	6274007

## Saturday 28th November 2015

**Conference Room: B**

**Time: 10:00-12:00**

**ESPCO 2015: Electronics, Signal Processing and Communication Systems**

**Chair: Martin Blaha, Feklistov K.V.**

Analyze of SIP Messages and Proposal of SIP Routing	F. Csoka, I. Baronak, E. Chromy, L. Kockovic	6256003
On Optimal Signal Detection Using Covariance Shaping Method	S. Karthikeyan, P. Ganesh Kumar, S. Sasikumar	6283003
An Efficient Approach for MFCC Feature Extraction for Text Independent Speaker Identification System	R. Aigou, S. Sbaa, S. Ghendir, A. Chems, A. Taleb-Ahmed	6176003
Improving Threshold Distributed Energy Efficient Clustering Algorithm for Heterogeneous Wireless Sensor Networks Using Firefly Algorithm	Mostafa Baghour, Saad Chakkor, Abderrahmane Hajraoui	6241003
Application Support for Tactical and Technical Control of Artillery Units – PVNPG-14M	Martin Blaha, Milan Kalina, Karel Šilinger	6172003
Silicon Shallow Doping by Erbium Recoils Implantation	Feklistov K.V.	6261003
Implementation of « Oak Ridge Air Quality Index Computation » in WSN Design	Mohamed Fezari, Ali Al-Dahoud, Ahmed Al-Dahoud	6209007
An Extensive View of OSPF for the Development of an Efficient High Quality OSPF Scheme	Pertik Garg, Ashu Gupta	6233007
The Influence of the Inmotics for the Growth of Industrial Safety Against Fires and Toxic Gases	Cristian O. Gómez Ochoa, Miguel A. Castañeda Cárdenas, Juan Diego López Vargas	6148027
Sliding Mode Controller and Fault Tolerant Control for Flying Capacitors Four Levels Multicell Converter Three Cells	S. Meradi, K. Benmansour, M. Tadjine, M. S. Boucherit	6286003
Analyze of SIP Messages and Proposal of SIP Routing	F. Csoka, I. Baronak, E. Chromy, L. Kockovic	6256003

## Saturday 28th November 2015

**Conference Room: C**

**Time: 10:00-12:00**

**BAME 2015: Business Administration**

**Chair: Katerina Seinerova, Tihomir Luković**

Bayesian Estimates of Health Care Costs in Slovakian Insurance Companies	P. Jindrová, K. Seinerová	6180007
The Effect Social Media on Business (Marketing & Customer Satisfaction): A Case Study on the Jordanian Hashemite Fund for Human Development Organizations Beneficiaries	Hussam Shorman, Majdi Azzam	6236003
The Impact of Culture on Technology Alignment within e-Government in Jordan	Hussam Shorman, Majdi Azzam	6235003
The Role of Management of Marketing in Strategy "divide et impera" in World Cruising	Tihomir Luković, Antun Asić, Ivo Šperanda	6268003
Automated Collection System Using Tablets and GIS	Zakaria Yehia Ahmed	6242027
Theoretical Extension of the Technology Acceptance Model in Smart Wearable Devices	Fen Fen Huang	6170003
Selecting Various Industrial Competitors Affect the Risk Level of Viet Nam Manufacturing Material Industry During and After the Global Crisis 2007-2011	Dinh Tran Ngoc Huy	6121015
Use of Timebanking as a Non-Monetary Component in Agent-Based Computational Economics Models	Petr Tucnik, Lukas Valek, Vladimir Bures, Petr Blecha	6278003
Did Agricultural and Food Business Change with the Financial and Economic Crisis in Portugal? An Empirical Answer Based on Statistical Data	Carlos A. F. Marques	6302003
The Impact of Inflation on Financial Development	Haroon Khan	6247003

**12:00-12:30: Coffee Break**

**Saturday 28th November 2015**

**Conference Room: A**

**Time: 12:30-14:30**

**MMCTSE 2015: Mathematical Methods in Engineering**

**Chair: Se Young Park, Yiannis Saridakis**

Knowledge Base for an Intelligent System in order to Identify Security Requirements for Software Development	Beltrán G. Adán, Duarte A. Nixon, Ordoñez S. Sonia, Contreras B. Eddie, Calvo L. Mario, Molina Jorge, Garcés Jairo, Albarracín Román, Caviativa Janeth, Lombana Cristian	6257007
Combining Stochastic Optimization and Numerical Methods-Software for the Pumping Management of Coastal Aquifers: Case Study of a Rectangular Homogeneous Aquifer	I. E. Athanasakis, Z. A. Dokou, E. N. Mathioudakis, P. N. Stratis, N. D. Vilanakis	6296007
Piecewise Kriging Metamodeling	Husam Hamad, Ala'a Bani Irshaid	6290011
A Novel Mathematical Method of 2D Data Trends Anticipation	Dariusz Jacek Jakóbczak	6149007
Schwarz Splitting for the Steady State Problem of Saltwater Intrusion in Coastal Aquifers	E. Maroudas, N. Vilanakis, Ch. Antonopoulos, E. Mathioudakis, Y. Saridakis, M. Vavalis	6297003
Teachers' Perception on Computational Thinking in Science Practices	Se Young Park, Young Jeon	6282003
Parameter Tuning for the Ant Colony Optimization Algorithm Used in ISR Systems	P. Stodola, J. Mazal, M. Podhorec	6166003
On the Stochastic/Deterministic Numerical Solution of Composite Deterministic Elliptic PDE Problems	George Sarailidis, Manolis Vavalis	6297007

Saturday 28th November 2015

**Conference Room: B**

**Time: 12:30-14:30**

**EMET 2015: Education and Modern Educational Technologies**

**Chair: Marie Hubalovska, P. Hanzalova**

Astronomy Communication: The REAL Knowledge Hub	Dario La Guardia, Marco Arrigo, Manuel Gentile, Simona Ottaviano, Valentina Dal Grande, Mario Allegra	6277007
Student's Belief in Higher Education Based on E-learning System Readiness	Adel Bessadok, Abdulkhaliq Abdulsalam	6313003
Applying SFIA Framework in ITI Mobile Application Development Track: Case Study	Rasha El Banna, Hesham Farouk, Heba Saleh	6251011
Primary E-Learning from the Perspective of the Revised Bloom's Taxonomy	Marie Hubalovska	6200015
Algorithm Development and Programming at Elementary Education in the Czech Republic	P. Hanzalova, S. Hubalovsky	6182007
Modern Methods Used in Foreign Language Learning in the 21. Century	K. Myska, L. Samkova	6260007

## Saturday 28th November 2015

**Conference Room: C**

**Time: 12:30-14:30**

**EEEAD 2015 & CEWHH 2015: Chemical Engineering and Environment**

**Chair: George Papageorgiou, Ingrid Belčáková**

Impact of Urbanization on the Stream Water Quality in the Lesser Carpathian Region	P. Miklanek, P. Pekarova, J. Pekar, V. Kovacova	6304003
The Utilization Rate of Potential Heat Accumulation Capabilities Using Latent Heat of Phase-Change Materials'	Anna Zastawna-Rumin, Katarzyna Nowak	6267003
Application of Exergy Rate Profiles to the Simulation and Thermodynamic Efficiency Evaluation of Multicomponent Distillation System	Adesina, Kehinde Adewale, Popoola Abiodun Caleb	6291007
Analysis of the Waste Disposal in the Context of European Standards	Baťa R., Kropáčková J.	6252003
Catalytic Cleaning of Gas from Biomass Gasification	Marek Balas, Martin Lisy, Michal Spilacek, Jiri Pospisil	6319003
Evaluating the Potential and Value of Innovative Renewable Energy Systems; a Strategic Market Perspective	George Papageorgiou, Evripides Papachristoforou, Athanasios Maimaris	6293007
New Technology of Renewable Energy Generation	S. Tounsi	6181027
Robust Design and Control of Linear Actuator Dedicated to Stamping Press Application	S. Tounsi	6191003
Strategic Environmental Assessment – an Instrument for Better Decision-Making Towards Sustainable Development	Ingrid Belčáková	6239007



## Saturday 28th November 2015

**Conference Room: A**

**Time: 14:30-16:30**

**AMCM 2015: Applied Mathematics and Computational Methods**

**Chair: Alexander Kolnogorov, Antoine Zambelli**

Probabilistic Data Interpolation and Object Recognition	Dariusz Jacek Jakóbczak	6149000
Methods for the Electricity Supplier Selection – Case Study of the Czech Republic	Martina Kuncova	6261007
Breadth-First-Search Tree – Levels and Subtrees	Eva Milková	6249003
Effect of Density Parameter in Solid Disk	Satya Bir Singh, Pankaj Thakur	6123011
Incorporating Views on Market Dynamics in Options Hedging	Antoine E. Zambelli	6236007
On the Practical Implementation of L-Systems	David Brebera	6291015
Numerical Solution of Boundary Inverse Problems for Plane Orthotropic Elastic Solids	Igor Brilla, František Janíček	6282007
Fuzzified Weighted OWA (FWOWA) Operator	Pavel Holeček, Jana Talašová, Tomáš Talášek	6276003
Using of Finite Element Method and Computational Analysis of Mechanical Properties of Stent-Grafts	Stepan Major, Marie Hubalovska	6258003
Principle and Computer Simulation Model of Variation of Delastell's Cipher BIFID	M. Musilek, S. Hubalovsky	6309003
Contributions to the Asymptotic Minimax Theorem for the Two-Armed Bandit Problem	A. V. Kolnogorov	6218003
Numerical Investigation of the One Class of Two-Dimensional Integral Hammerstein Type Equations with Branched Solutions	Petro Savenko	6292003

## Saturday 28th November 2015

**Conference Room: B**

**Time: 14:30-16:30**

**SCI 2015: Applications of Control**

**Chair: Jakub Chvatal, Dănuț-Octavian Simion**

KnotsRNA: A Network Computing Approach for Predicting the Pseudoknots RNA Secondary Structure	Ra'ed M. Al-Khatib, Ahmad Al-Odat, Mohammed Al-Madi, Asef Al-Khateeb, Bilal Al-Khateeb	6265003
Stability analysis of Discrete Predictive Sliding Mode Control for Multivariable Systems	Houda Ben Mansour, Khadija Dehri, Ahmed Said Nouri	6275003
Integration of Data Using Java for Web Applications	Dănuț-Octavian Simion	6298003
Database-as-a-Service for Big Data	Manar Abourezq, Abdellah Idrissi	6255007
Skyline Method in Wireless Ad-Hoc Networks Routing	Fadoua Yakine, Manar Abourezq, Abdellah Idrissi	6262003
Working with Information at the Period of Tomas Bata and now	Ladislav Burita, Jakub Chvatal	6138003
An Approach for Network Security with Graph Coloring Problem	Seyed Mahmood Hashemi, Jingsha He	6250003
Electro-Technical Kits in Science Didactics and Technology Lessons	K. Radocha, J. Sedivy, S. Hubalovsky	6309011

## Saturday 28th November 2015

**Conference Room: C**

**Time: 14:30-16:30**

**EEEAD 2015: Ecosystem and Development and Renewable Energy**

**Chair: Sebaa Haddi, R. Kříž**

Study for Reducing CO2 Emissions from a Building in Climate Zone 3 of Romania Including the Contribution of Renewable Energy	I. L. Cîrstolovean, P. Mizgan, M. Verdeş, Diana Ancaş, V. Ciocan	6253003
Study of Combined Economic Dispatch Problem Including Renewable Energy Using PSOWS	Sebaa Haddi, Tarek Bouktir	6243003
The Necessity of Expensive Environmental Regulations	R. Kříž, P. Lešáková	6303003
Identification of Risk of Port Logistics in the Republic of Guinea	Jaromir Mares, Aly Hawa Camara	6223003
Energy Efficient for Heat Exchanger, Refrigeration and Air Conditioning	Abdeen Mustafa Omer	6322007
Pollution Reduction Management: The Map of Feasible Coalition Solutions	P. Šauer, P. Fiala	6306007

**16:30-17:00: Coffee Break**

Saturday 28th November 2015

**Conference Room: A**

**Time: 17:00-19:00**

**MMCTSE 2015: Applications of Computational Mathematics**

**Chair: Milena Janáková, David Fülep**

Parallel Simulation Methodological Issues for Creating 3D Nanostructures	D. Fülep, I. László	6315023
Orthogonal Matrices in 2D Data Modeling and Simulation	Dariusz Jacek Jakóbczak	6167007
Probabilistic Nodes Combination in Reconstruction and Extrapolation of 2D Data	Dariusz J. Jakóbczak	6167003
Management of Data Science: How to Prevent Errors in Work with Data for Sustainable Development?	M. Janakova	6178003
Simulation of an Electrical Discharge in O2 Using the Monte Carlo Method	L. Zeghichi, L. Mokhnache, M. Djebabra	6179007
Implementation of Type Wheels to Design Caterpillar Prototype Chair with Automated Features for People with Disabilities in Paraplegia	Echeverri Maribel A., Romero Arnold Y., Pirajan Milena A., López Juan D.	6088011

## Saturday 28th November 2015

**Conference Room: B**

**Time: 17:00-19:00**

**SCI 2015: Control and Informatics**

**Chair: Stepan Hubalovsky, Meriem Jgouta**

Evaluation of Algorithmic Thinking of Students Using Control Testing Environment	Stepan Hubalovsky, Ondrej Korinek	6309007
Particle Filtering with Particle Swarm Optimization for GPS/INS Navigation System	Meriem Jgouta, Benayad Nsiri	6314039
Pallet System Design Using Fanuc Robotic ARM M- 710iC / 70 6 Degrees of Freedom	Cristian Mateo Rocha Pérez, Jesús Alarcón Hurtado, Jhonatan Andrés Bustos Torres, Juan Diego López Vargas	6148023
Autonomic Computing and Policy Based Systems: Lessons Learned	Bel G. Raggad, Rahim Choudhary	6287003
PID Controller Tuning Based on the Guardian Map Technique	Tanya Boone, Gerardo Romero, David Lara, Irma Pérez, Aldo Méndez, Alberto Reyna, Jaime Ramos	6295003
Robust Stability Analysis for Affine Linear Plants with Time-Delay Using the Value Set Concept	Silvia Florida, Gerardo Romero, Ramiro Ibarra, David Lara, Irma Pérez, Aldo Méndez, Alberto Reyna	6301003
Fuzzy Logic Based Automatic Vehicle Collision Prevention System	Abbad Ur Rehman, Muhammad Attique Qamar, Zohaib Mushtaq	6175003
Stability of a Single Machine Infinite Bus Power System Using Fuzzy Logic Controller	I. Y. Ibrahim, H. Abd. El Fattah, M. M. El-Metwally	6317007

## Saturday 28th November 2015

**Conference Room: C**

**Time: 17:00-19:00**

**TAP 2015 & CCEMS 2015 & MFHEEF 2015: Applications of Theoretical and Applied Physics and Chemistry**

**Chair: Nikolay Rodionov, A. Ziouche**

Monte Carlo Computer Simulation of the Surface Deposited Energy on a Lead Target: Effect of the Target Thickness on the Temperature Distribution	Walid Oueslati, Nejmeddine Chorfi	6248003
Improving Neutron Shielding Capacities of Galena and Barite Hybrid Fiber Heavyweight Aggregate Concrete for Nuclear Reactor	Rasoul Mehrnejad	6228003
The Problem of High-Temperature Superconductivity of Ammonia Systems	Vladimir K. Mukhomorov	6289003
Convertor of Ionizing Radiation into Electric Power Based on the Synthetic Diamond	N. B. Rodionov, V. N. Amosov, S. A. Meshchaninov, R. N. Rodionov, A. F. Pal, A. G. Trapeznikov	6285015
Thermal Ageing, Kinetics and Mechanical Properties of Al-7 wt.% Mg Alloy	M. Fatmi, F. Sahnoune, H. Belhouchet, T. Chihi, M. A. Ghebouli, B. Ghebouli, B. Barka, T. Rechidi	6232003
Consideration about Lateritic Mineral Pneumatic Conveying in Dense Phase	Enrique Torres Tamayo, Hernán Yáñez Ávila, Ángel León Segovia, Gustavo Rodríguez Bárcenas	6270003
Pulsed Eddy Current Signal Analysis of Ferrous and Non-Ferrous Metals under Thermal and Corrosion Solicitations	A. Ziouche, M. Zergoug, N. Boucherou, H. Boudjellal, M. Mokhari, S. Abaidia	6251003

### Poster

The Design of an Experimental Setup Study for the Use of Bioethanol Fuel in the Small Turbojet Engine	Onder Turan, Funda Ates, T. Hikmet Karakoc, Alper Uludag, Nur Polat, Kahraman Coban, Samet Aslan, Ahmet Topal, Ersin Basaran	6246003
-------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------	---------

## Sunday 29th November 2015

**Conference Room: A**

**Time: 09:00-11:00**

**BAME 2015: Marketing and Economics**

**Chair: Asuncion Hernandez Fernandez, Changrae Park**

Software Quality Control with the Usage of IDEAL and TMMi Models	Petr Bris, Michal Frantis, Monika Kolkova	6204003
Not only the Social Aspects of Creeping Societal Changes	Š. Brychtová	6164003
Selecting Different Industrial Competitors Influence the Risk Level of Viet Nam Telecommunication and Education Companies	Dinh Tran Ngoc Huy	6165011
The Comparative Analysis of some Eastern European Corporate Governance Standards after the Global Crisis	Dinh Tran Ngoc Huy	6121007
Healthy Nutrition 2.0 in Spain: Healthy Education and Control of Misinformation	A. Hernández, P. Canales, N. Vila, I. Küster	6296003
Friendship Networks in Nurses' Job Satisfaction- Hierarchical Multiple Regression	Fen Fen Huang	6170011
Theoretical Extension of the Cognitive-Behavioral Theory in Internet Health Information Searching	Fen Fen Huang	6170007
Municipal Regulation of Gambling in the Czech Republic	J. Janderová, V. Schejbalová	6185003
Financial Characteristics of the Companies Designated as "Issues for Administration"	Joonhwan Choi, Changrae Park	6170015
Increasing the Success Rate of Restructuring Projects with Portfolio Management Techniques and the Role of the Controlling Function	Valerian Laval	6153003

**11:00-11:30: Coffee Break**

## Sunday 29th November 2015

**Conference Room: A**

**Time: 11:30-13:30**

**BIOMED 2015: Biochemistry and Biomedical Engineering**

**Chair: Giuseppe Coviello, Y. I. Koryukalov**

Preliminary Study on Gait Variability Analysis with a Single Axis Gyroscope for Alzheimer and Parkinson's Diseases	G. Avitabile, G. Coviello, N. Margiotta	6240003
Biological Materials Phantoms Permittivity Measurement Using Non-Resonant Microwave Methods	Dagmar Faktorová, Eva Maniaková	6260003
Gamma-Frequency Band Responses to Age-Related Cortical Changes	Mario Christov, Juliana Dushanova	6284003
Classification of Various Types of Leukemia Using Fuzzy and Non-Fuzzy Artificial Neural Networks	Sherif Kassem Fathy	6248007
Synchronization of Alpha Wave Generators During Onset of Relaxation and Doing Cognitive Tasks	Y. I. Koryukalov	6318019
Methodological Guide to Give Low to Biomedical Equipment in an Institution Service Provider Low Complexity Health	Jenn Pamela Murillo, Juan Diego López Vargas	6157015
Psychophysical State of School Students and its Correction	T. V. Popova, O. G. Kourova, E. G. Kokoreva, G. I. Maksutova	6318015
Experimental Study on the Stability Level Assessment of Mini-Implants for Orthodontic Anchorages	Alexandru Mircea Nicolau, Elisabeta Vasilescu, Vlad Gabriel Vasilescu, Marian Iulian Neacsu	6263011



## Sunday 29th November 2015

**Conference Room: A**

**Time: 13:30-15:30**

**MMCTSE 2015: Applied Mathematics in Engineering**

**Chair: Viera Pacáková, Oana Mocian**

Low Velocity Impact on a Sandwich Panel with an Irregular Honeycomb Shaped Foam Core	O. A. Mocian, D. A. Apostol, D. M. Constantinescu	6170027
Application of the Logistic Regression in Non-Bank Financial Institutions	M. Papoušková, V. Pacáková	6226003
Towards an Algorithm for Efficient Use of Social Network Resources by Using Web Scraping Techniques	Valon Xhafa, Korab Rrmoku, Blerim Rexha	6263015
Modeling the Precipitation of Bidisperse Suspension with Allowance for the Aggregation of Clusters of Various Fractions	D. Dairabay, V. Golubev, L. Musabekova, B. Korganbayev	6323003
Social Network Analysis Framework in Telecom	Mona Saleh Amer	6251015
Mesh Refinement with Finite Elements and Artificial Neural Networks	Fatima Belhabi, Mohamed Ettaouil	6280003

**15:30-16: 00 Coffee Break**

## Sunday 29th November 2015

**Conference Room: A**

**Time: 16:00-18:00**

**Title: Application of Technologies**

**Chair: Haydar Demirhan, Andrey Dmitriev**

Creation of Sample Changers and Software for Automation of Reactor Neutron Activation Analysis	A. Yu. Dmitriev, S. S. Pavlov, M. V. Frontasyeva	6213003
On the Statistical Qualities of Cryptographic Randomness Tests	Haydar Demirhan, Nihan Bitirim	6237003
Monitoring of Organic Substance Biotransformation in Siberian Conifer Forest Ecosystems Under the Effect of Aluminium Manufacture (Industrial) Air Pollution	Penzina T. A., Osipenko S. N., Polyakova M. S.	6272003
Anti-Inflammatory and Antiplatelet Activity of Isolated Phenols from Wine Wastes	Liakopoulou-Kyriakides Maria, Moschona Alexandra, Papi Rigini, Kyriakidis A. Dimitrios	6245003
Model HL7 EHR Interoperable in Complementary Therapies	Adán Beltrán Gómez, Alejandra Bojacá Bazarro, Rosmary Martínez Rueda, Nixon Duarte Acosta, Mónica Alexandra García, Irma Paola Saavedra Pardo, Lombana Cristian	6266003
Environmental and Public Health Impact of Agricultural Food Quality-Control, through Certification by GlobalGap Protocols	Aikaterini N. Kokkinaki, Emmanuel N. Kokkinakis, Emmanuel Tzatzarakis, Aristidis M. Tsatsakis, George A. Fragkiadakis	6254003
Investigation of the Traffic Induced Plume of Dust and Aerosols with an Instrumented Octocopter Unmanned Aerial Vehicle (UAV) at a Bridge in Düsseldorf, Germany - First Results	Konradin Weber, Georg Heveling, Christian Fischer	6322003

**20:00: Conference Dinner**

