

#### Important Notes:

(1) You may register at any time during the conference.

(2) The Invoice of payment can be collected at the registration desk at any time.

(3) The Certificate of Participation can be collected at the registration desk only after your presentation.

(4) Session chairmen can ask for a special Certificate at the registration desk after the session

(5) The duration of a presentation slot is 20 minutes for a regular paper and 45 minutes for a plenary speech, including questions.

(6) All authors should give their biographies to the chairmen before the beginning of the session.

(7) Authors can upload their presentations to the available computers 10 minutes before the beginning of their session.

14th WSEAS International Conference on Mathematical Methods, Computational Techniques and Intelligent Systems (MAMECTIS '12)

11th WSEAS International Conference on Non-Linear Analysis, Non-Linear Systems and Chaos (NOLASC '12)

8th WSEAS International Conference on Educational Technologies (EDUTE '12)

8th WSEAS International Conference on Dynamical Systems and Control (CONTROL '12)

4th WSEAS World Multiconference on Applied Economics, Business and Development (AEBD '12)

6th WSEAS International Conference on Renewable Energy Sources (RES '12)

6th WSEAS International Conference on Energy Planning, Energy Saving, Environmental Education (EPESE '12)

6th WSEAS International Conference on Waste Management, Water Pollution, Air Pollution, Indoor Climate (WWAI '12)

1st International Conference on Automatic Control, Soft Computing and Human-Machine Interaction (ASME '12)

1st International Conference on Networks and Systems for Communications, Education and Data Processing (NSCED '12)

1st International Conference on Materials, Energy, Planning, Transportation, for Environmental Protection and Sustainable Economy (MEPTEPSE '12)

1st International Conference on Food Industry, Agriculture and Applied Chemistry (FIAAC '12)

Porto, Portugal July 1-3, 2012 Dear colleague,

The WSEAS staff welcome you to another prestigious event.

Since 1996, the World Scientific and Engineering Academy and Society has proudly organized a vast number of successful conferences and published the work of hundreds of scientists from all over the world. We and our affiliates NAUN and EUROPMENT would like to express our sincere gratitude to you for helping us continue our mission by honoring us with your presence in this conference.

WSEAS publications have succeeded in joining most important International Scientific Indexes and Libraries. Thanks to our latest efforts of adopting strict deadlines and a more rigorous review process, the quality of our proceedings and journals is continuing to rise exponentially.

We trust that you will enjoy discussing the latest scientific developments with your peers during these three days, and that you will find your stay as pleasant as possible.

The WSEAS Team

#### Registration: 08:00-09:00

Conference Room: H202 Time: 09:00-09:45 Keynote Lecture:



Conference Room: H207 Time: 09:00-09:45 Plenary Lecture 1:

	Multipoint Boundary Value Problem for Integral-Differential Equations by Prof. Olga Martin, University "Politehnica" of Bucharest, ROMANIA.
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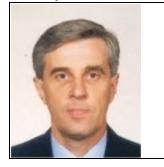
Conference Room: H208 Time: 09:00-09:45 Plenary Lecture 2:



Weak Chaos in the Nonlinear Schroedinger Equation: Why Subdiffusion?

by Dr. Alexander Iomin, Technion - Israel Institute of Technology, ISRAEL.

Conference Room: H202 Time: 09:45-10:30 Plenary Lecture 3:



Solution of direct and inverse problems in eddy current testing by Prof. Andrei Kolyshkin, Riga Technical University, LATVIA.

Conference Room: H207 Time: 09:45-10:30 Plenary Lecture 4:



Conference Room: H208 Time: 09:45-10:30 Plenary Lecture 5:



**The Evolution of Business Intelligence: From Historical Data Mining to Mobile and Location-based Intelligence** by Prof. Zeljko Panian, University of Zagreb, CROATIA.

Coffee Break: 10:30-11:00

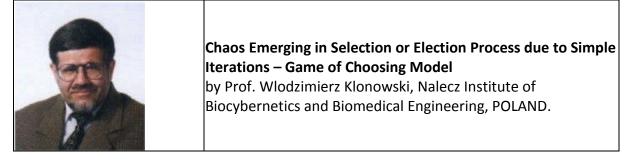
Conference Room: H202 Time: 11:00-11:45 Plenary Lecture 6:



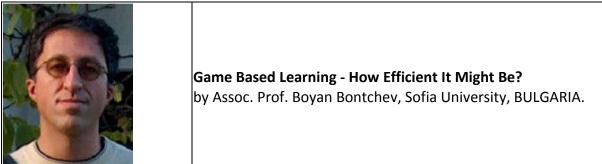
Fractional Dynamical Systems

by Prof. J. A. Tenreiro Machado, Institute of Engineering of Polytechnic of Porto, PORTUGAL.

Conference Room: H207 Time: 11:00-11:45 Plenary Lecture 7:



Conference Room: H208 Time: 11:00-11:45 Plenary Lecture 8:



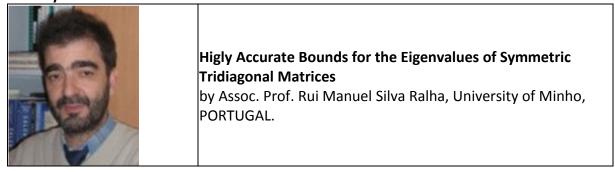
Conference Room: H202 Time: 11:45-12:30 Plenary Lecture 9:



Interactive e-Learning Material Helps TO Motivate Learners in a Self-Learning Environment by Assoc. Prof. Cittoor Girija Navaneedhan. Rajalakshmi College

by Assoc. Prof. Cittoor Girija Navaneedhan, Rajalakshmi College of Education, INDIA.

Conference Room: H207 Time: 11:45-12:30 Plenary Lecture 10:



Conference Room: H208 Time: 11:45-12:30 Plenary Lecture 11:



#### Conference Room: H202

#### Time: 12:30-14:30

#### EDUTE Special Session: Service Learning, E-Learning and Multimedia

Chair: Nives Mikelić Preradović

Service Learning as a Method of University Impact on Public Knowledge. Case Study of University Students	Dilde De žerić	C0002 070
Contributions to Wikipedia	Đilda Pečarić	68003-079
International Service Learning Assisting Foreigners in Learning Croatian	Kristina Posavec, Nives Mikelic Preradovic	68003-040
Introduction of a Language Technology System as a Support for Air Traffic Control Communication	Mira Zokić, Damir Boras	68003-088
Social Implications of Service e-Learning in Primary Education	Nives Mikelic Preradovic, Tomislava Lauc, Damir Boras	68003-037
Using Multimedia Resources in an Online Course with Respect to Students' Learning Preferences	Sanja Kišiček, Tomislava Lauc, Ana Garić	68003-031
From Violence to the Shelter – Service Learning Experience in Social Work Education in Croatia	Vendi Keserica, Gordana Berc	68003-085

#### **Conference Room: H207**

Time: 12:30-14:30

#### AEBD Session: Advances in Modern Economics

#### Chair: Maria do Carmo Neves da Silva, Hana Lostakova

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Cross–Cultural Research: Adaptation and Validation of		
Emotional Development Questionnaire for Adults		
(QDE_A)	Carmo Neves, Rui Pimenta, Ana Galvão	68005-109
Consulting Services - an Important Part of Providing		
Customer Value in E-commerce with Pharmaceutical	Hana Lostakova, Marketa Curdova, Zuzana	
Products: Customer Perspective	Pecinova	68005-085
Analysis of Selected Financing the Public Goods by		
Municipalities	Pavla Koťátková Stránská	68005-009
Estimating CES Aggregate Production Functions of China		
and India	Yong Wang	68005-045
The Evolution of Business Intelligence: From Historical		
Data Mining to Mobile and Location-based Intelligence	Zeljko Panian	68005-077

#### Conference Room: H208

#### Time: 12:30-14:30

### MAMECTIS Session: Mathematical Modelling and Techniques

Chair: Svyatoslav I. Solodushkin, Norazan Mohamed Ramli

Dynamical Systems-based Approach for Simulation and		
Estimation of Random Processes with Separable		
Covariance Functions	Hong Son Hoang, Remy Baraille	68001-102
Identifying Bad Leverage Points in Logistic Regression		
Model Based on Robust Deviance Components	M. R. Norazan, A. Sanizah, M. Habshah	68001-147
Fuzzy Connectivity of Graphical Fuzzy State Space	Noor Ainy Harish, Tahir Ahmad, Razidah	
Model of Fuzzy Graph Type 3	Ismail	68001-242
Identifying Prognosis Factors of Pathological Staging	Nor Azura Md Ghani, Khairul Asri Mohd	
Among Colorectal Patients Using Ordinal Logistic	Ghani, Zamalia Mahmud, Nurhasniza Idham	
Regression Model	Abu Hassan, Norazan Mohamed Ramli	68001-157
	S. Norin Rahayu, M. R. Norazan, M. F. Noor	
Robust Linear Regression Model for Health Related	Zafarina, A. H. Azlina, I. Adriana, M. R.	
Quality of Life Data	Nornadiah, A. Nur Niswah Naslina	68001-197
Numerical Modeling of Evolutionary Systems in Partial		
Derivatives with Time Delay on a Remote Server	Svyatoslav I. Solodushkin	68001-217

#### Coffee Break: 14:30-15:00

#### **Conference Room: H202**

#### Time: 15:00-17:30

#### AEBD Session: Fiscal Policies and Financial Issues in European Countries I

#### Chair: Jaroslav Kovárník, Katarina Curko

The Quality of Life at Common's Level in Romanian Rural		
	Cristina Neculai	68005-033
Quality of Life Reflected through the European Rural	Cristina Neculai, Gabriel Zamfir, Ionela	
Development Policy	Sufaru	68005-029
The Analysis of Net Position Development and the		
Comparison with GDP Development for Selected		
Countries of European Union	Jaroslav Kovárník	68005-149
	Katarina Curko, Damir Stepanic, Mladen	
Strategic Success Factors in ERP System Implementation	Varga	68005-013
	Lenka Branska, Zuzana Pecinova, Hana	
Packaging Replenishment as a Tool of Benefits Creation	Lostakova	68005-089
Assessment of Cohesion in Selected European Union		
Countries by Construction of Synthetic Indices of		
Disparities	Lukáš Melecký	68005-141
Evaluation of Visegrad Countries Efficiency in		
Comparison with Austria and Germany by Selected Data		
Envelopment Analysis Models	Michaela Staníčková, Karel Skokan	68005-113

#### Conference Room: H207

#### Time: 15:00-17:30

#### ASME-NSCED-NOLASC Session: Simulation and Modelling in Automatic Control

Chair: Anca Croitoru, Wlodzimierz Klonowski

Parameter Estimation of Transfer Function of Pilot Behavior Model from Measured Data	Jan Boril, Rudolf Jalovecky	68009-007
Complete Preparation in the Perspective Automated Artillery Fire Support Control System	Martin Blaha, Karel Šilinger	68009-004
Physical Protection Systems and Critical Infrastructure Protection in the Czech Republic	Necesal Lubos, Hromada Martin	68009-013
Totally Boundedness and Compactness on Semilinear Topological Spaces	Gabriela Apreutesei, Anca Croitoru, Nikos E. Mastorakis	68002-013
Influence of Environment on Emerging Chaos in Game of Choosing models	W. Klonowski, M. Pierzchalski	68002-009
Real-Time Environmental Data Collection for Meteo Station Application	Sveatoslav Vizitiu	68010-026
Testing the Effect of Load on Delay and Voice Quality in VoIP Networks	Zuzana Vranova, Antonin Mazalek	68010-046

### Conference Room: H208

#### Time: 15:00-17:30

#### MAMECTIS Session: Systems Theory, Intelligent Systems

Chair: Benabdellah Yagoubi, Bojan Dolsak

	-	
Linear Filtering using a Geometric Approach	B. Yagoubi	68001-097
Intelligent Decision Support in Product Design	Bojan Dolšak	68001-177
Intelligent Recommendation System for e-learning platforms	Bruno Tavares, Luiz Faria, Constantino Martins	68001-287
Aspects of Power Balances Computation for the Antireciprocal Two-Ports	Dan George Tonț	68001-312
A Bayesian-Reliability Based Approach of Multi-Agent System in Dynamic Environments	Gabriela Tonț	68001-307
A Cloud System for Supporting Web Service Integration Based on User Preferences	Keinosuke Matsumoto, Tatsuya Okabe, Naoki Mori	68001-137
Plane Poiseuille Flow of a Polar Fluid through Porous Media	M. T. Kamel, M. H. Hamdan	68001-152
Measuring Match Importance in the Malaysian Super League Based on Win-Lose-Draw Results	N. Abdul Hamid, M. R. Norazan, G. Kendall, N. Mohd-Hussin	68001-172
Multi-Way Reminder System: A Solution Towards Ubiquitous and Effective Communication	Tan Shiang-Yen, Mohd Azam Osman, Genevie Loo, Shim Sheng Hooi, Abdullah Zawawi Talib	68001-087

#### **Conference Room: H202**

#### Time: 17:30-19:30

#### EDUTE Session: Distance Learning and Web-based Learning

Chair: Andra Jakobsone, Danimir Mandic

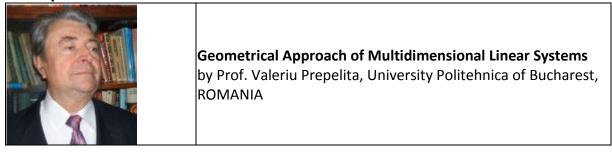
Online Experience Based Support System for Small Business Development	Andra Jakobosne, Sarma Cakula	68003-091
Informational Technologies in Creating Modern Teaching	Danimir Mandic, Danica Dzinovic, Borislav	
Aids	Samardzic	68003-025
Distance Education in Teacher Training	Danimir Mandic, Nenad Lalic, Dajana Lalic	68003-028
Role and Importance of Presentation Design in Learning	Maja Gligora Markovic, Ivan Pogarcic,	
and in Quality of Multimedia Learning Material	Jasminka Mezak	68003-067
	Marta Fernandes, Paulo Couto, Constantino	
Learning Objects Recommendation in an Adaptive	Martins, Luiz Faria, Cristina Bastos, Fátima	
Educational Hypermedia System	Costa	68003-061
Website on English Learning	Mirela-Catrinel Voicu	68003-034

Conference Room: H202 Time: 09:00-09:45 Plenary Lecture 12:



**The Chronicles Paradigm and its Computational Applications** by Prof. Jose Aguilar, Universidad de los Andes, VENEZUELA.

Conference Room: H207 Time: 09:00-09:45 Plenary Lecture 13:



Conference Room: H202 Time: 09:45-10:30 Plenary Lecture 14:

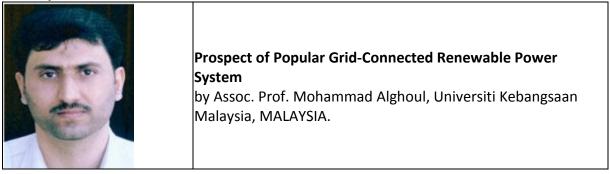


Conference Room: H207 Time: 09:45-10:30 Plenary Lecture 15:



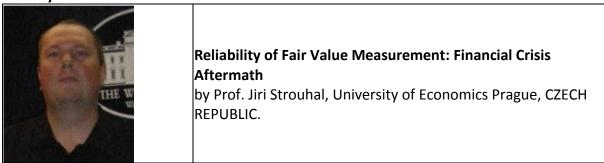
**Optimal Covariance Control Theory in Automotive Suspension Control System Design** by Prof. Sadko Mandzuka, Universiry of Zagreb, CROATIA.

Conference Room: H208 Time: 09:45-10:30 Plenary Lecture 16:



Coffee Break: 10:30-11:00

Conference Room: H202 Time: 11:00-11:45 Plenary Lecture 17:

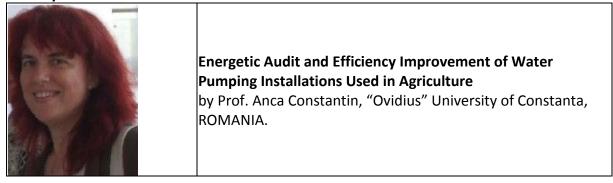


#### Conference Room: H207 Time: 11:00-11:45 Plenary Lecture 18:

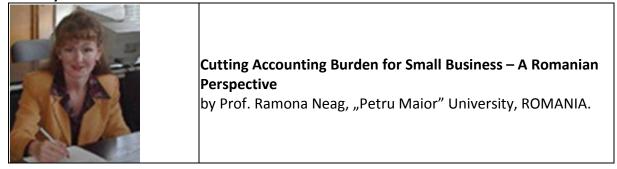


Methods and Techniques of Speed Control for the Electric Motors by Prof. Aldo Pardo Garcia, Universidad de Pamplona, COLOMBIA.

Conference Room: H208 Time: 11:00-11:45 Plenary Lecture 19:



Conference Room: H202 Time: 11:45-12:30 Plenary Lecture 20:

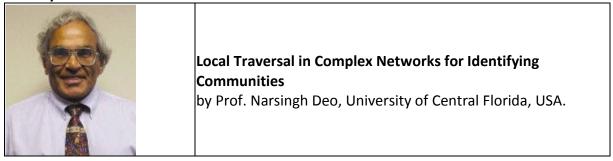


Conference Room: H207 Time: 11:45-12:30 Plenary Lecture 21:



**Trace Analysis of Toxic PAHs in Water by Combining SERS** with SERDS by Prof. Frank Hubenthal, Universität Kassel, GERMANY.

Conference Room: H208 Time: 11:45-12:30 Plenary Lecture 22:



#### Conference Room: H202

#### Time: 12:30-15:00

#### **MAMECTIS Session: Computational Analysis and Algorithms**

Chair: Matanat Mehrabova, Damjan Vlaj

The Simple Algorithm of Abiyev's Balanced Cubes of Odd Order		68001-127
	Abiyev	08001-127
Efficient Non-linear Changed Mel-Filter Bank VAD		
Algorithm	Damjan Vlaj, Zdravko Kačič, Marko Kos	68001-192
Algorithm for Generating Discrete Infinite-Valued		
Random Variables with a Given Rational Generating		
Function	Efraim Shmerling	68001-297
Reflective Middleware for Automatic Management of		
Service-Oriented Applications using the Theory of	Juan Vizcarrondo, José Aguilar, Ernesto	
Signatures of Failure	Exposito	68001-262
Algorithm based on the Ant Colony Optimization for the	Junior Altamiranda, Jose Aguilar, Rafael	
DNA Motif Fusion	Torres, Christian Delamarche	68001-257
Formalization of Emergent Properties in Computing	Nelson Fernández, Jose Aguilar, Oswaldo	
Agent Networks	Teran	68001-267
Multipoint Boundary Problems for Integral - Differential		
Equations Solved by Homotopy Perturbation Method	Nikos Mastorakis, Olga Martin	68001-167
	Wan Mohd Nazmee Wan Zainon, Abdullah	
Tree Alignment Algorithm based on Extended Triplets	Zawawi Talib, Bahari Belaton	68001-082

#### Conference Room: H207 Time: 12:30-15:00 RES Session: Renewable Energy Sources Chair: Azami Zaharim, Alamta Singarimbun

Mathematical Modeling for the Drying Curves of	Ahmad Fudholi, Mohd Hafidz Ruslan, Mohd Yusof Othman, M. A. Alghoul, Azami	
Seaweed Gracilaria cangii using a Hot Air Drying	Zaharim, Kamaruzzaman Sopian	68006-022
Estimation of Parameters Distribution in Geothermal Reservoir Using Finite Difference Method	Alamta Singarimbun, Mitra Djamal, Septian Setyoko	68006-016
Experimental Study of a Down-Draught Fixed Bed Gasifier	Daniela Tasma, Tănase Panait, Jorge Martins, Krisztina Uzuneanu, Cătălin Mocanu	68006-034
Study of the Drying Kinetics of Baccaurea angulata Merr. (Belimbing Dayak) Fruit		68006-031
Techno-Economical Study of Hybrid Power System for a Remote Village in Greece	J. G. Fantidis, D. V. Bandekas, N. Vordos	68006-019
Drying Kinetics of Chilli Pepper in a force Convection Indirect Solar Drying	M. I. Fadhel, S. Shaunmuganathan, M. A. Alghoul, Malek Ali, K. Sopian, A. Zaharim	68006-028
Developments of Al-12Si Alloys by Reinforcing TiN Particles	Malek Ali, Ali Samer Muhsan, M. I. Fadhel, M. A. Alghoul, K. Sopian, A. Zaharim	68006-025
Modeling of Tunnel Junction of Multi-junction Solar Cell	Muhammad Babar, Syed Q. Ali, Essam A. Al- Ammar	68006-004

#### **Conference Room: H208**

#### Time: 12:30-15:00

#### AEBD Session: Value Determining and Optimization

#### Chair: Jiri Strouhal, Jan Stejskal

Eva Kramna	68005-145
Fennee Chong, Venus Khim-Sen Liew, Rosita Suhaimi	68005-001
lvica Pervan, Marijana Bartulović	68005-097
Jan Stejskal, Pavla Kotatkova Stranska, Katerina Matatková, Petr Hajek	68005-093
Jiří Strouhal, Carmen Bonaci, Razvan Mustata	68005-061
Luboš Smrčka, Jiří Strouhal, Jaroslav Schönfeld	68005-057
Milan Hrdý. Petr Marek	68005-049
	Fennee Chong, Venus Khim-Sen Liew, Rosita Suhaimi Ivica Pervan, Marijana Bartulović Jan Stejskal, Pavla Kotatkova Stranska, Katerina Matatková, Petr Hajek Jiří Strouhal, Carmen Bonaci, Razvan Mustata Luboš Smrčka, Jiří Strouhal, Jaroslav Schönfeld

#### Coffee Break: 15:00-15:30

#### **Conference Room: H202**

#### Time: 15:30-17:30

#### **AEBD Session: Business Strategies and Financial Planning**

#### Chair: Ramona Neag, Lourdes Cauzo Bottala

The Equity Markets and the Flows Generated by Currency Carry Trades	Alexandru Constantinescu, Darie Moldovan, Mircea Moca	68005-129
Bank Performance Assessment: State of the Art and Perspectives	Anca Munteanu, Ramona Neag, Petre	68005-121
Analysis of the Key TQM Factors in the EFQM Model and their Relation to Key Business Results		68005-017
· · ·	Elita Paromova, Inguna Sermole, Marcis Esmits, Andrei Kolyshkin	68005-065
Corporate Brand Identity Management in a Technological Faculty – How Brand Relationships Influence Students and Companies' Reputations	Teresa Barros, F. Vitorino Martins, Hortênsia Gouveia Barandas	68005-133

#### **Conference Room: H207**

#### Time: 15:30-17:30

#### WWAI-MEPTEPSE-FIAAC Session: Environment, Agriculture and Development Chair: Eugenia Eftimie Totu, Michalis Menicou

	Eugenia Eftimie Totu, Catalina Spatarelu,	
Sensors. I.	Alexandra Maier	68012-016
	Michalis Menicou, Vasos Vassiliou, Marios Charalambides, Igor Tsukrov, Judson Decew	68012-010
Climate Change and Lessepsian Migration: An Example from the Fish Fauna of Cyprus	Niki Chartosia, Michalis Menicou	68012-013
Improving Collagenase Production from Immobilized Aspergillus sp.	Raushan K. Blieva, Zhanara B. Suleimenova	68012-007
Mathematical Modeling of a Molten Carbonate Fuel Cell for CO2 Separation	Jarosław Milewski, Janusz Lewandowski	68011-005
Influence of γ-Irradiation on Crystal Structure of Pb1- XMnXSe Thin Films	M. A. Mehrabova, I. R. Nuriyev	68011-001
IAQ as a Function of Air Exchange Rate	Jurgis Zemits, Anatolijs Borodinecs	68008-021

#### Conference Room: H208

#### Time: 15:30-17:30

#### EPESE Session: Energy Planning and Saving Chair: Amaryllis Audenaert, Anca Constantin

Energy Saving Measures in Office Buildings: A Cost- Benefit Model	Amaryllis Audenaert, Vanessa Timmerman	68007-001
Energetic Efficiency Analysis of Water Pumping Installations	Anca Constantin, Claudiu Stefan Nitescu, Madalina Stanescu	68007-031
Energetic Efficiency of the Compensation Chamber Used in Hydropower Plants with Long Adduction System	Claudiu Stefan Nitescu, Anca Constantin, Mădălina Stănescu	68007-036
	Mădălina Stănescu, Anca Constantin, Claudiu Nițescu	68007-041
Modeling Vehicle Fuel Consumption at Conditions of the EUDC Cycle	Michael Ben Chaim, Efraim Smerling	68007-021
Modeling Vehicle Fuel Consumption at Urban Operating Conditions	Michael Ben Chaim, Efraim Smerling	68007-026
The Impacts of Natural Gas Prices on the Lithuanian Economy: A CGE Analysis	Vidas Lekavičius, Arvydas Galinis	68007-011

#### Conference Room: H202

#### Time: 17:30-19:30

#### AEBD Session: Fiscal Policies and Financial Issues in European Countries II

#### Chair: Maja Pervan, Nelson Duarte

Analysis of Sticky Costs: Croatian Evidence	Maja Pervan, Ivica Pervan	68005-101
Dynamic Panel Analysis of B&H Insurance Companies' Profitability	Maja Pervan, Marijana Ćurak, Ivana Marijanović	68005-105
ABC Method – Guarantor of Real Costs in the Mining Extractive Industry Entities	Mariana Man, Ileana Sorina Rakos Boca, Sorinel Capusneanu	68005-069
Planning, Cooperation and Competition: A Case Study in Industry and Construction in a Portuguese Region	Nelson Duarte, Francisco Diniz	68005-137
Comprehensive Income under IFRS and its Impact on Financial Performance for Romanian Listed Entities	Ramona Neag, Irina-Doina Păscan, Ema Masca	68005-117
Enterprise Service Bus - A Backbone for SOA	Răzvan Daniel Zota, Radu Stefan Moleavin, Laurențiu Ciovică	68005-161

### **Conference Banquet: 20:00**

#### Conference Room: H202 Time: 09:00-12:00 MAMECTIS Session: Numerical Methods in Modern Science Chair: Asker Ali Abiyev, Maria Crina Radu

Essential Properties of Abiyev's Balanced Squares	Asker Ali Abiyev, Aghajan Abiyev, Azer Abiyev	68001-207
Analysis of the Correlation Accuracy-Distribution of Residual Stresses in the Case of Parts Processed by SPIF	Crina Radu	68001-277
Analysis and Design Insights for an E-Finance Platform Using Parallel Processing	Darie Moldovan, Mircea Moca, Mircea Rusu	68001-252
On Some Properties of I-Stable Functions	Dusan Bednarik, Andrea Berkova	68001-132
An Elitist Genetic Heuristic for the K Clusters with Fixed Cardinality Problem	Graca Marques Goncalves, Lidia Lampreia Lourenco, Margarida Vaz Pato	68001-237
Filtering Spectral Methods with Chebyshev-Pade Approximants	Joao Matos	68001-227
Report about the Probabilistic Approaches Applied in Mechanics of Continental Plates	Karel Frydrýšek, Ivo Wandrol, Pavel Kalenda	68001-222
Speech Bandwidth Classification using General Acoustic Features, Modified Spectral Roll-Off and Artificial Neural Network	Marko Kos, Zdravko Kačič, Damjan Vlaj	68001-292
Analysis of an Equipment Condition by Q & Multivariate Q Control Charts	S. S. Lampreia, J. G. Requeijo	68001-282
Coordinated Fuzzy Autocatalytic Set of Fuzzy Graph Type-3 of an Incineration Process	Sumarni Abu Bakar, Tahir Ahmad, Sabariah Baharun	68001-107

#### Conference Room: H207

#### Time: 09:30-12:00

#### EDUTE Session: Technological Advances in Engineering Education

Chair: Valeriu Prepelita, Dimitrios Bandekas

Knowledge Innovation and Technology Transfer.		
Research as Part of the Romanian Engineering Education	Brandusa Prepelita-Raileanu	68003-049
Developing a Frame for Quality and International		
Cooperation in a Romanian Engineering Context	Brandusa Prepelita-Raileanu	68003-052
New Paradigms in Artificial Intelligence. The Experience	Brandusa Prepelita-Raileanu, Valeriu	
of a Romanian Project	Prepelita	68003-046
	D. V. Bandekas, A. Ch. Mitropoulos, N.	
Employment and Career Structure of the Kavala Institute	Vordos, D. A. Gkika, V. Vogiatzi, J. W. Nolan,	
of Technology (DASTA)	K. Stergidis	68003-043
Engineering Applications of Industrial Practice in		
Education	Karel Dvořák	68003-022
Business Software Simulation for Education of Future	Veronika Faifrova, Vaclav Baroch, Zdenek	
Engineers	Riha	68003-013
	Yuzainee Md Yusoff, Azami Zaharim, Mohd	
	Zaidi Omar, Azah Mohamed, Norhamidi	
Engineering Employability Skills for Malaysian Industry:	Muhamad, Ramlee Mustapha, Riza Atiq	
Framework Development	Abdullah O. K. Rahmat	68003-019
	Yuzainee Md Yusoff, Azami Zaharim, Mohd	
	Zaidi Omar, Azah Mohamed, Norhamidi	
Measuring Engineering Employability Skills	Muhamad, Riza Atiq Abdullah O. K. Rahmat	68003-016

#### Conference Room: H208

#### Time: 09:30-12:00

#### AEBD Session: Financial Development in the Czech Republic

Chair: Jaroslav Kovárník, Jan Stejskal

Analysis of Impact of Direct Foreign Investment in the Czech Republic	Eva Hamplová, Kateřina Provazníková, Jaroslav Kovárník	68005-157
Financing and Mezzanine Capital in the Context of PPP Projects in the Czech Republic	Jan Svědík, Liběna Tetřevová	68005-073
Developmental Analysis of Mergers in the Czech Republic 2001–2009 from the Perspective of Ownership Structure	Jaroslav Sedláček, Petr Valouch, Eva Hýblová	68005-041
Indebtedness in the Czech Republic and in Some Selected EU Countries	Jindřiška Šedová, Luděk Benada	68005-125
The Effectiveness of Public Support in the Form of Innovation Vouchers – Czech Regional Case	Katerina Matatkova, Jan Stejskal	68005-053
Problems with Application of the Triple Helix in the Czech Republic	Liběna Tetřevová, Jana Kostalova	68005-025
Public Private Partnership Projects in the Conditions of the Czech Republic	Liběna Tetřevová, Veronika Sabolová	68005-037
Strategic Alliances in the Context of Strategic Partnerships from the Point of View of the Czech Republic	Liběna Tetřevová, Vladimira Vlckova	68005-021
Tax Support of Small and Medium Enterprises in Czech Republic	Pavel Jedlička, Jaroslav Kovárník	68005-153

Coffee Break: 12:00-12:30

#### Conference Room: H202

#### Time: 12:30-14:30

#### **MAMECTIS Session: Advanced Mathematical Methods**

Chair: Karel Frydrýšek, Marina Novak

A Two-Echelon Facility Location Problem with Layout Selection	Isabel Correia, Teresa Melo, Francisco Saldanha-Da-Gama	68001-162
Assessment of Centreline Temperature of Fire Plume with Respect to a Gas Hot Layer	Jiří Pokorný, Karel Frydrýšek, Horst Gondek	68001-232
Intelligent Support to Creation of the Product Design Specifications	Marina Novak	68001-182
Visualization of Multivariate Health Data Using Self- Organizing Maps	Mark Lester Ghany, Geoffrey Solano	68001-212
Weighted Ridge MM-Estimator in Robust Ridge Regression with Multicollinearity	Siti Meriam Zahari, Mohammad Said Zainol, Muhammad Iqbal Al-Banna Bin Ismail	68001-202
La sinal Lia suistia Compartia in Consult Facing	Tengku M. T. Sembok, Mohamad Fauzan Nordin, Roslina Othman, Rabiah Abdul Kadin	60001 202
Logical-Linguistic Semantic in Search Engine The Change in Impedance of a Coil Located Above a	Kadir	68001-302
Moving Half-Space	Valentina Koliskina, Inta Volodko	68001-187

#### Conference Room: H207

#### Time: 12:30-14:30 CONTROL Session: Automatic Control Chair: Aldo Pardo Garcia, Gabor Csernak

chan: Aldo Fardo Garcia, Gabor Csernak		
The Application of Genetic Algorithms in Electrical Drives to Optimize the PWM Modulation	Andrés Fernando Lizcano Villamizar, Jorge Luis Díaz Rodríguez, Aldo Pardo García	68004-061
Educational Robotic Platform of Low Cost for Brain and Servovisual Control Practice	Edward Vega, Cesar Peña, Aldo Pardo	68004-066
Disconnected Chaotic Attractors in Digitally Controlled Linear Systems	Gábor Csernák, Gábor Stépán	68004-041
Optimum Fuzzy Logic Controller Apply to Induction Motor Control	Jorge L. Diaz, Aldo Pardo, Tania L. Acevedo	68004-056
Design and Implementation of a Teaching Module for the Control of Three Phase Asynchronous Motors	Jorge Luis Diaz Rodriguez, Aldo Pardo Garcia, Amaury Caballero	68004-071
Design and Implementation of a Low Cost Speed Control System for a BLCD Motor	Jorge Luis Díaz Rodríguez, Aldo Pardo Garcia, Amaury Caballero	68004-051

#### Conference Room: H208 Time: 12:30-14:30 EDUTE Session: Electronic Media in Modern Education Chair: Boyan Bontchev, Pavel Trojovsky

Adaptive Edutainment in UML	Boyan Bontchev, Dessislava Vassileva	68003-064
	Castanon-Rodriguez Rosario, Vivaracho-	
Teacher Training with LEEMUSICA/READMUSIC	Pascual Carlos	68003-094
On Some Problems for Loci of Points via GeoGebra	Eva Trojovská, Pavel Trojovský	68003-058
	Fábio J. Costa, Samuel Pereira, Ana	
	Rosmaninho, Micael S. Couceiro, Carlos M.	
Low-Cost Access Management System in an Educational	Figueiredo, Victor Santos, N. M. Fonseca	
Environment	Ferreira	68003-076
Program Supporting the Digitally Excluded Roma		
Population	Gabriela Caltová Hepnarová, Anna Šafářová	68003-073
Electronic Media in the Environment of the	Leona Stašová, Iva Junová, Tereza	
Contemporary Households and Families	Adámková	68003-055
	Omidreza Saadatian, Sohif Bin Mat, Elias	
Sustainable Campus in Malaysia	Salleh, Ch. Lim, Bardia Bkhtyar, K. Sopian	68003-007

#### Coffee Break: 14:30-15:00

#### Conference Room: H202 Time: 15:00-17:00 CONTROL Session: Modelling in Systems and Control Chair: Alaa Abdul-Ameer, Pavel Nevriva

The Modelling and Simulation of Gas Pipeline Dynamics	Alaa Abdul-Ameer	68004-031
Gaussian and Quadratic Polynomial Equation for THAICHOTE Satellite Propellant Re-Check	Ammarin Pimnoo	68004-046
Simulation of Automatic Control of the Experimental Power Plant	Pavel Nevriva, Ladislav Vilimec, Martin Pies	68004-001
On the Equivalence of Control Systems on the Orthogonal Group SO (4)	R. M. Adams, R. Biggs, C. C. Remsing	68004-006
Integrity Analysis for Multivariable Feedback Systems	Robert Whalley	68004-036
On the Equivalence of Cost-Extended Control Systems on Lie Groups	Rory Biggs, Claudiu C. Remsing	68004-011

Porto, Portugal July 1-3, 2012