

# Conference Program



World Scientific and Engineering Academy and Society

**Advances in Environmental Technology and Biotechnology**

Editors  
Nikos Mastorakis  
Valeri Mladenov  
Nedelcu Anisor  
Ivana Mijatovic  
Dorin Dumitrascu  
Akata Erol

Proceedings of the 3<sup>rd</sup> International Conference on Energy and Environment Technologies and Equipment (EETE '14)  
Proceedings of the 3<sup>rd</sup> International Conference on Agricultural Science, Biotechnology, Food and Animal Production (ASBFAP '14)

Brasov, Romania, June 26-28, 2014

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**Advances in Environmental Geomatics Engineering and Tourism**

Editors  
Nikos Mastorakis  
Carol Csontos  
Konstantinos Athanasiadis  
Nicolae Tane  
Walter Thierheimr  
Livi Gaceu

Proceedings of the 12<sup>th</sup> International Conference on Environment, Ecosystems and Development (EED '14)  
Proceedings of the 3<sup>rd</sup> International Conference on Sustainable Tourism and Cultural Heritage (STACH '14)  
Proceedings of the 2<sup>nd</sup> European Conference of Geodesy & Geomatics Engineering (GENG '14)

Brasov, Romania, June 26-28, 2014

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**Advances in Economics, Law and Political Sciences**

Editors  
Nikos Mastorakis  
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Ion Bucur  
Vladimir Misha  
Fota Adriana  
Valentina Ciobanu

Proceedings of the 3<sup>rd</sup> International Conference on Risk Management, Assessment and Mitigation (RIMA '14)  
Proceedings of the 3<sup>rd</sup> International Conference on Economics, Political and Law Science (EPLS '14)  
Proceedings of the 3<sup>rd</sup> International Conference on Finance, Accounting and Auditing (FAA '14)

Brasov, Romania, June 26-28, 2014

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Business and Economics Series | 15

**Advances in Mathematical Models of Production Systems in Engineering**

Editors  
Nikos Mastorakis  
Vladimir Marascu Klein  
Lubomir Dimitrov  
Andreea Deaconescu  
Mircea Dragoi  
Ioan Balcu

Proceedings of the 7<sup>th</sup> International Conference on Manufacturing Engineering, Quality and Production Systems (MEQAPS '14)  
Proceedings of the 5<sup>th</sup> International Conference on Mathematical Models for Engineering Science (MMES '14)

Brasov, Romania, June 26-28, 2014

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**Advances in Automatic Control**

Editors  
Nikos Mastorakis  
Constantin Udrisite  
Oancea Gheorghe  
Snejana Yordanova  
Buzatu Constantin  
Adele Eliza Dumitrascu

Proceedings of the 16<sup>th</sup> International Conference on Automatic Control, Modelling & Simulation (ACMOS '14)

Brasov, Romania, June 26-28, 2014

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Recent Advances in Electrical Engineering Series | 35

Brasov, Romania  
June 26-28, 2014

## Scientific Sponsors:



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Bucharest, Romania**



**Faculty of Civil Engineering,  
Politehnica University of Timisoara, Romania**

## Conference Location:

**Aula Magna Building,  
Transilvania University of Brasov  
Str. Iuliu Maniu nr. 41A, Brasov, Romania**

**16th International Conference on Automatic Control, Modelling & Simulation  
(ACMOS '14)**

**7th International Conference on Manufacturing Engineering, Quality and Production  
Systems (MEQAPS '14)**

**3rd International Conference on Finance, Accounting and Auditing (FAA '14)**

**3rd International Conference on Economics, Political and Law Science (EPLS '14)**

**3rd International Conference on Risk Management, Assessment and Mitigation  
(RIMA '14)**

**12th International Conference on Environment, Ecosystems and Development  
(EED '14)**

**3rd International Conference on Energy and Environment Technologies and  
Equipment (EEETE '14)**

**3rd International Conference on Agricultural Science, Biotechnology, Food and  
Animal Science (ABIFA '14)**

**5th International Conference on Mathematical Models for Engineering Science  
(MMES '14)**

**3rd International Conference on Sustainable Tourism and Cultural Heritage  
(STACH '14)**

**2nd European Conference of Geodesy & Geomatics Engineering (GENG '14)**

**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, 30 minutes for an invited paper and 45 minutes for a plenary speech, including questions. Invited papers are marked in *Italic letters*
- (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.

**Brasov, Romania  
June 26-28, 2014**

**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 affiliate NAUN 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**

Thursday June 26<sup>th</sup> 2014

Registration: 08:00-08:45

Conference Room: A

Time: 08:45-09:00



**Welcome Speech**

by Assoc. Prof. Badea Lepadatescu, Transilvania University of Brasov, ROMANIA.

Conference Room: A

Time: 09:00-09:45

Keynote Lecture:



**Contribution to Sustainable Development Education in an Engineering High School: Design of Small Scale “green House” and Example of Experiments**

by Prof. Philippe Dondon, Domaine Universitaire, FRANCE.

Conference Room: A

Time: 09:45-10:30

Plenary Lecture 1:



**Non-Stationary Dynamics in Reliability Analysis of Adaptive Multi-Agent Systems**

by Assoc. Prof. Gabriela Tont, University of Oradea, ROMANIA.

Thursday June 26<sup>th</sup> 2014

**Conference Room: B**

**Time: 09:45-10:30**

**Plenary Lecture 2:**



**New Product Development, Multi-BOARD – From Idea to Prototype**

by Prof. Mihaiela Iliescu, SC OPTOELECTRONICA-2001 SA, ROMANIA.

**Conference Room: C**

**Time: 09:45-10:30**

**Plenary Lecture 3:**



**Extremum Seeking Control Applied to Different Renewable Energy Sources**

by Prof. Nicu Bizon, University of Pitesti, ROMANIA.

**Coffee Break: 10:30-11:00**

Thursday June 26<sup>th</sup> 2014

**Conference Room: A**

**Time: 11:00-13:30**

**EED Session: Environment, Ecosystems and Development**

**Chair: Badea Catalin, Paul Marc**

Clay Bound Building Materials Environment Friendly	Cătălin Badea, Silvia Smeu, Andrei Gal, Liana Iureș, Sorin Dan	71509-145
Operation Behavior of Road Pavements in the Hypothesis of Bound Road Layers	Ciprian Costescu, Alexandra Ciopec, Paul Marc	71509-130
An Environmental - Friendly Technology for the Realization of Road Foundation Layers	Florin Belc, Paul Marc, Alin Buzuriu	71509-127
<i>Intelligent Data Analysis and Modeling for the Determinants of Carbon Dioxide Emissions</i>	<i>Hsiao-Tien Pao, Yi-Ying Li, L. X. Zheng, Hsin-Chia Fu</i>	<i>71509-163</i>
<i>Friendly Environmental Concrete Made with Industrial Waste</i>	<i>Jebelean Eugen, Liana Iures, Catalin Badea, Sorin Dan</i>	<i>71509-136</i>
Palaeobiogeographical and Paleoenvironmental Study of the Middle-Upper Jurassic Corals in East-Central Iran carbonate Platform	Kaveh Khaksar	71509-160
<i>Chemical and Environmental Problems of Utilization of Trinitrotoluene</i>	<i>Olga Kovalchukova, Konstantin Kobrakov</i>	<i>71509-181</i>
Eco-Design for Product Life Cycle Management	Simona Sofia Duicu	71509-175

Thursday June 26<sup>th</sup> 2014

**Conference Room: B**

**Time: 11:00-13:30**

**GENG Session: Geodesy & Geomatics Engineering**

**Chair: Ana-Cornelia Badea, Savu Adrian**

Aspects of Cadastral Data Management Using GIS and 3D Software	Ana Cornelia Badea, Gheorghe Badea, Didulescu Caius, Savu Adrian	71510-118
Improving the Railway Bridges Monitoring Techniques	Andreea Carmen Rădulescu, Vintilă Cătălin Ionut, Petre Iuliu Dragomir	71510-106
Modern Technologies for Management of Historic Sites	Aurel Florentin Cătălin Negrilă, Constantin Coșarcă, Caius Didulescu, Aurel Sărăcin, Adrian Savu	71510-124
Using InSAR Technology for Monitoring vertical Deformation of the Earth Surface	Aurel Sărăcin, Constantin Cosarcă, Caius Didulescu, Adrian Savu, Aurel Negrilă	71510-109
Monitoring Vertical Displacements by Means of Geometric Levelling for Sky Tower Building from Floreasca City Center, Bucharest	Cătălin Ionut Vintilă, Andreea Carmen Rădulescu, Petre Iuliu Dragomir	71510-121
Cadastru 2020 – A New Perspective of Romanian Cadastral System	Cosmin Constantin Mușat, Clara-Beatrice Vîlceanu, Anca-Maria Moscovici	71510-103
Mine Monitoring using 3D Scanning	Maria-Roberta Gridan, Floarea Maria Brebu, Alina Corina Bălă	71510-100
Information System for Real Estate and Utility Network	Savu Adrian, Didulescu Caius, Ana Cornelia Badea, Gheorghe Badea	71510-115
Evaluation of Structure Deformation Using Geodetic Methods	Sorin Herban, Carmen Grecea, Georgiana Rusu, Adrian Alionescu	71510-112



Thursday June 26<sup>th</sup> 2014

**Conference Room: C**

**Time: 11:00-13:30**

**ACMOS Session: Systems Theory and Automatic Control**

**Chair: Cristian Patrascioiu, Gabriela Tont**

Evaluation Method and Modelling of Electromagnetic Processes in the Power Stage of Closed Loop DC Drive System in Condition of Periodic Speed Reverse with Current Limitation	Borisov Pavel, Poliakov Nikolai	71501-202
System Identification. System Identification Toolbox or Properly Algorithms?	Cristian Patrascioiu, Cristina Popa	71501-244
Non-Stationary Dynamics in Reliability Analysis of Adaptive Multi-Agent Systems	Gabriela Tont	71501-109
Multiwavelet Based MC-CDMA System to Track MIMO Channel Variations	Mayurakshi Roy Medhi, Kandarpa Kumar Sarma, Nikos Mastorakis	71501-271
<i>Power Spectral Analysis of a Multiscale Chaotic Dynamical System</i>	<i>Sergei Soldatenko</i>	<i>71501-232</i>
Simple Speed-Maintain Control System for Reversible Scanning Device	Subbotin Dmitrii, Sergey Lovlin, Madina Cvetkova	71501-175
Astatic Speed Control System for Triaxial Telescope Scanning Axis	Subbotin Dmitrii, Sergey Lovlin, Madina Cvetkova	71501-178
Control System of the Reverse Electromechanical Scanner	Valentin Drozdov, Valentin Tomasov, Sergey Tushev	71501-115

**Thursday June 26<sup>th</sup> 2014**

**Conference Room: A**

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

**EEETE Session: Environmental Technologies and Equipment**

**Chair: Badea Lepadatescu, Egon Ortjohann**

F.E.M. Studies Concerning New Devices for Seismic Damping of Buildings Subjected to Romanian Vrancea Earthquakes	Adriana Ionescu, Cristian Burada, Madalina Calbureanu, Mihai Negru	71506-166
Computational Model of Buildings Equipped with Different Devices for Seismic Damping	Adriana Ionescu, Cristian Burada, Madalina Calbureanu, Mihai Negru	71506-169
Researches Regarding Spruce Wood Processing with Circular Saw Blades	Cosmin Spirchez, Loredana Anne-Marie Badescu	71506-130
Realization of Multi-Level Cluster Control Approach based on Smart Grid Inverter	Egon Ortjohann, Daniel Holtschulte, Jan Kortenbruck, Sasiphong Leksawat, Paramet Wirasanti, Danny Morton	71506-172
About the Introduction of the "Ecoluminance" Concept in Design Practice of the Lighting Systems for Roundabouts in Romania	Elena Otilia Pîrlea, Gabriel Ispas	71506-148
A Theoretical Comparison between Batwing and Lambertian Distributions of Power LEDs Related to an Interior Lighting System	Gabriel Ispas	71506-151
Modelling and Analysis of Neural Network and Incremental Conductance MPPT Algorithm for PV Array Using Boost Converter	Naoufel Khaldi, Hassan Mahmoudi, Malika Zazi, Youssef Barradi	71506-163

**Conference Room: B**

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

**EPLS Session: Business Management and Administration**

**Chair: Irina Rudaleva, Šárka Brychtová**

Dynamic Lag Structure of Deposits and Loans Interest Rates and Business Cycles Formation	Bijan Bidabad, Abul Hassan, Nikos Mastorakis	71504-133
Developing a Simulation Model for the Effects of Introducing a Sharing Economy among SMEs: Focusing on the Shipping and Handling Tasks at Distribution Center	Hyung Rim Choi, Chang Hyun Park, Kang Bae Lee, Soon Goo Hong, Min Je Cho	71504-127
How to Succeed on the Labour Market. What Do Employers Really Expect?	Iva Stavjaničková	71504-118
A Method of Interorganizational Cooperative Profit and Cost Allocation Considering the Transaction Costs	Kangbae Lee, Doohwan Kim, Hyung Rim Choi, Soon Goo Hong, Min Je Cho, Daehan Baek	71504-121
Business Model for the Sharing Economy between Enterprises	Min Je Cho, Chea Ryeon Woo, Hyung Rim Choi, Soon Goo Hong, Kang Bae Lee, Su Jin Park	71504-124
Assessment of Material Job Satisfaction of Health Workers	Rudaleva Irina, Kabasheva Irina, Kovaleva Elvina	71504-103

Thursday June 26<sup>th</sup> 2014

**Conference Room: C**

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

**STATCH Session: Sustainable Tourism and Cultural Heritage**

**Chair: Carlos Hiroo Saito, Mirela Stoican**

The Environment - A Factor of Sustainable Development and of Tourism's Competitiveness in Romania	Adina Liana Camarda, Adriana Elena Daniş	71511-121
<i>An Integrative Systemic Framework for Sustainability when Environment and Tourism are Connected: Capacitation of the Volunteers to the FIFA Football World Cup in Brazil</i>	Carlos Hiroo Saito	71509-112b
Effects on Tourism and Sustainable Development of Economic Evolution In South East Romania	Mihaela Rusu, Mirela Stoican, Adina Liana Camarda	71511-118
Cultural Village - A Form of Exploitation of Spiritual and Cultural Wealth of the Romanian Village	Mirela Stoican	71511-115
<i>Sustainable Development and the Need to Implement a System of Quality Management in (The Country of) Barsa</i>	Mirela Stoican, Adina Liana Camarda, Mihaela Rusu, Cristinel Sonea	71509-109b
Sustainability Issues and Ecological Architecture	Ruxandra Crutescu-Gherasim	71509-106b

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

**Conference Room: A**

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

**EED Session: Renewable Energy Systems**

**Chair: Alexandra Ciopec, Gabriela Tont**

Wind Energy - The Efficiency Analysis of Some Modern Foundation Solutions for Wind Turbines	Alexandra Ciopec, Ciprian Costescu, Ioan Petru Boldurean	71509-124
Reliability Performance Assessment in Modeling Photovoltaic Networks	Gabriela Tont, Dan George Tont	71509-109
Un-used Arable Land Evaluation in Romania for Low Indirect Impact Biofuel Production	Irina Calciu, Mircea Mihalache, Sorina Dumitru, Olga Vizitiu	71509-112
Diversity Management in Energy Companies	Nicolae Coroiu, Petru Ioan Tigan	71509-151
Study of a Small Scale Solar Tracking System for a Green House Model	Ph. Dondon, L. Miron	71506-100b

**Thursday June 26<sup>th</sup> 2014**

**Conference Room: B**

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

**FAA Session: Finance, Accounting and Auditing**

**Chair: Mirela Momcilovic, Badea Lepadatescu**

Education and Youth in European Union. A Case Study – Erasmus+	Bianca Tescasiu	71503-121
A New Financial and Economic Context of Crisis a New Principle for Analyzing its Mechanism and Determinants	Ezzeddine Mosbah, Nikos Mastorakis	71503-112
Researches Regarding Behaviours of the Recruitment, Selection, Induction and Communication Processes in Human Resources of Companies	Guga Lucian	71503-115
Profit and Loss Account, Information Source to Determine Performance Rates for Companies Listed on the Bucharest Stock Exchange	Hada Teodor, Avram Teodora Maria	71503-100
Performance Analysis in the Construction Industry by the DuPont Model-Case Study	Mărginean Radu, Mihălțan Delia Corina, Țepeș Bobescu Anamaria	71503-103
Influence of Return Interval on Stock's Beta	Mirela Momcilovic, Sanja Vlaovic Begovic, Stevan Tomasevic	71503-106
Quality of Hotel Services. Case study: ARO Palace Hotel Brașov	Neacsu Nicoleta Andreea, Madar Anca, Boscor Dana, Bratucu Gabriel	71503-118
Transaction Costs and Transparency of Public Procurement	Radek Jurčik	71503-124

**Conference Room: C**

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

**MMES Session: Mathematical Models for Engineering Science**

**Chair: Erchin Serpedin, Cristina Serbanescu**

Aspects Regarding the Equivalent Input Impedance of Antireciprocal Two-Ports	Dan George Tont	71508-115
Supersonic and Hypersonic Flows on 2D Unstructured Context: Part III - Other Turbulence Models	Edisson S. G. Maciel, Nikos E. Mastorakis	71508-181
Theoretical Analysis of the Optical and Solid State Properties of Thin Film	Emmanuel Ifeanyi Ugwu	71508-130
Variational Methods in Signal and Image Processing	Xu Wang, Erchin Serpedin, Khalid Qaraqe	71508-118
Absolute Value Strategy and Application to Block Tridiagonal Preconditioner for Helmholtz Equations	Zhuo-Hong Huang	71508-121
On the Use of Optimization Techniques in the Design of FSS	Pavel Tomasek	71508-160
On the Use of Modern Evolutionary Algorithms in Source Reconstruction of Electromagnetic Fields	Pavel Tomasek	71508-169

Friday June 27<sup>th</sup> 2014

**Conference Room: A**

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

**Plenary Lecture 4:**



**Aspects Regarding Environment Conditions Improvement in Industrial Zones**

by Assoc. Prof. Niculae Boteanu, University of Craiova, ROMANIA.

**Conference Room: B**

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

**Plenary Lecture 5:**



**Optimization Techniques and Variable Transformation for 2-D and 3-D Filter Design**

by Prof. Nikos Mastorakis, Technical University of Sofia, BULGARIA.

**Conference Room: C**

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

**Plenary Lecture 6:**



**Cultural Village - A Form of Exploitation of Spiritual and Cultural Wealth of the Romanian Village**

by Prof. Mirela Stoican, Transilvania University of Brasov, ROMANIA.

**Coffee Break: 10:00-10:30**

Friday June 27<sup>th</sup> 2014

**Conference Room: A**

**Time: 10:30-13:00**

**ACMOS Special Session: Simulation and Modelling in Engineering I**

**Chair: Constantin Udriste**

Techniques of Modeling and Simulation for the Students and Researchers Achievement	Brandusa Prepelita-Raileanu, Oana Maria Pastae	71501-142
Experimental Test and Computer Simulation Research on Rollover Impact of a Bus Structure	Dan Alexandru Micu, Mihail Daniel Iozsa, Gheorghe Frătilă	71501-139
A Study of the Stability of the System with Linear Characteristic Subjected to One-Sided Connection	Dumitru Bălă	71501-130
Evaluating Vehicles Emissions through Traffic Simulation	Eugen Rosca, Mihaela Popa, Florin Rusca, Mircea Rosca	71501-145
Replacement Period Evaluation of Petrol Engines Air Filters Based on Restriction Measurement	Marius Toma, Gabriel Anghelache, Raluca Moisescu	71501-133
Analysis of the Requirements for the Communication Link Used in the Transmission of eCall Messages	Mihai Niculescu, Rares Ropot, Marius Minea	71501-148
A Measure Differential Inclusion Approach to Rigid Bodies Impacts	Razvan Andrei Oprea, Cornelia Stan	71501-121
An Event Driven Resolution of Driving Axles Stick-Slip	Razvan Andrei Oprea, Cristina Tudorache	71501-124

Friday June 27<sup>th</sup> 2014

**Conference Room: B**

**Time: 10:30-13:00**

**ABIFA Session: Agricultural Science and Biotechnology**

**Chair: Florin Fainisi, Monica Parvu**

Research on the Biology of the <i>Alternaria Brassicae</i> Fungus Isolated from Mustard	Cristinel Relu Zală, Stelica Cristea, Liviu Gruia, Mali-Sanda Manole	71507-115
Food Additives, between Necessity and Normative Restriction	Florin Fainisi	71507-106
The Productive Capacity of Three Hens Breeds Exposed to Heat Stress	Monica Parvu, Ioana Cristina Andronie, Violeta Elena Simion Andadriana Amfim	71507-139
Setting Requirement of Agricultural Machinery in a Vegetal Farm	Nicolae Farcaș, Paul Dobre, Cristian Ovidiu Simion, Mariana Simion	71507-109
<i>Tissue Culture in Vitro as a Model System for Studying the Effects of Abiotic Stresses on Different Species of Wheat</i>	<i>Nina Terletskaya, Nina Khailenko</i>	71507-124
Survey of <i>Leptospira</i> spp. in Captive Street Dogs Housed in Shelters	Stelian Baraitareanu, Maria Rodica Gurau, Doina Danes	71507-127
Acidity of Grape Marc Extracts Obtained in the Subcritical Water Environment	V. Sukmanov, Y. Petrova, A. Golubev, I. Lagovskiy, L. Gaceu, A. Birca, O. Oprea, B. Lepadatescu	71507-136
Yield and Yield Components at Maize under Different Row Spacing, Plant Population and Growing Conditions	Viorel Ion, Adrian Gheorghe Basa, Marin Dumbrava, Georgeta Dicu, Georgeta Temocico, Lenuta Iuliana Epure, Daniel State	71507-121
A Survey on Oncological Cases in Sentinel Animals in Campania Region	Angelo Ferrari, Marianna D'Amore, Chiara Campanella, Guendalina Vito, Guido Rosato, Vincenzo Mizzoni, Stefania Cavallo, Loredana Baldi, Giorgio Galiero, Barbara Degli Uberti	71507-145
Marine Environment & Aquaculture as Sustainable Tool of CO2 Capture	Angelo Ferrari, Guendalina Vito, Mauro Doimi	71507-148

**Friday June 27<sup>th</sup> 2014**

**Conference Room: C**

**Time: 10:30-13:00**

**EEETE Session: Power and Energy Systems**

**Chair: Asad Salem, Mihai Andronie**

Evaluation of Al Qattara Depression Renewable Energy Potentials	Asad Salem, Emad Hudaib	71506-136
Study on the Life Cycle Cost of Energy Efficient Residential Buildings	Cristina Tanasa, Cristian Sabau, Dan Stoian, Daniel Dan, Valeriu Stoian	71506-160
Studies on Ensuring a Longer Operation Lifetime of the Component Parts of the Heat Exchangers	Florin Ciofu, Ionela Ramona Surdu	71506-157
Exotic and Native Species as Biomass for Renewable Energy	Grîu Dobrev Tatiana, Lunguleasa Aurel	71506-115
The Compulsoriness of the Energy Performance Certificate of Buildings in Some European Countries	Mihai Andronie	71506-118
Technical and Economical Analysis of the Wind Turbines Interconnection with the Windfarm Substation	Nicolae Coroiu	71506-121
Opportunities for Building Off-Shore Wind Farms in Romania	Nicolae Coroiu	71506-154
Natural Gas Consumption and Economic Growth in Iran	Soheila Khoshnevis Yazdi, Nikos Mastorakis	71506-145

**Conference Room: A**

**Time: 13:00-15:30**

**ACMOS Special Session: Simulation and Modelling in Engineering II**

**Chair: Constantin Udriste**

Scientific Modelling in the Learning Process	Brandusa Prepelita-Raileanu, Oana Maria Pastae	71501-154
Study Concerning the Optimization of the Mounting System of the Truck Cab	Cornelia Stan, Daniel Iozsa, Razvan Oprea	71501-166
Quasi-Static Simulation Approaches on Rollover Impact of a Bus Structure	Dan Alexandru Micu, Mihail Daniel Iozsa, Cornelia Stan	71501-160
Social Inequity Induced by Bucharest Road Network Vulnerability	Florin Valentin Ruscă, Eugen Roșca, Aura Ruscă, Vasile Dragu, Ștefan Burciu	71501-157
A Gas Dispersion Model for Traffic-Congested Urban Areas	Maria Claudia Surugiu, Marius Minea, Ionel Petrescu	71501-169
Modelling the Quality of Service for the Communication Chain Employed in Mobile Real-Time Information Systems	Marius Minea	71501-151
Base Vehicle Equivalents Standardization for Rail and Road Capacity Analysis	Oana Dinu, Mircea Augustin Roșca, Cristina Ștefănică	71501-172
About the Destination Split within Transport Planning Models	Vasile Dragu, Ștefan Burciu, Aura Ruscă, Anamaria Ilie	71501-163



**Friday June 27<sup>th</sup> 2014**

**Conference Room: B**

**Time: 13:00-15:30**

**MEQAPS Session: Manufacturing Engineering and Production Systems**

**Chair: Mihaiela Iliescu, Petr Voborník**

The Choice of the Pyrometers used for Pyrogravure Devices	Adrian Petru, Aurel Lunguleasa	71502-112
Education for Industry and Business of the Mechanical Engineering Students	Aurora Cătălina Ianăși	71502-118
Aerospace Hybrid Lightweight Metallic Structures. Case Study – Design of a Turboprop Engine Support	Gabriel Dima, Ion Balcu	71502-127
Representative Steps of Multi-BOARD Product Development	Mihaiela Iliescu, Eugen Ochea, Victor Visan, Corneliu Nastase	71502-103
Self-Modulation by Resonant Jumps in Feedback Nonlinear Systems at Variation of Transfer Coefficient of Linear Part and Slope of the Constant-Range, Saturation-Type Nonlinearity	Mitica Temneanu	71502-106
Modification of the Perfect Cipher for Practical Use	Petr Voborník	71502-124
Quality Estimation of Assembly Line Balance	Waldemar Grzechca, Michał Błachuciński	71502-121

**Conference Room: C**

**Time: 13:00-15:30**

**RIMA Session: Risk Management, Assessment and Mitigation**

**Chair: Sorin Dan, Pavel Manas**

Human Resource Management from the Perspective of Fuzzy Logic in the Soccer Clubs – A Catalyzer for Facilitating the Balance between Sports High Performance and Financial High Performance	Alin Molcut, Lucian Sirb	71505-127
Integrated Framework for Risk Assessment in Socio-Technical Systems	Daiana Maria Tont, Gabriela Tont, Dan George Tont	71505-100
Influence of Manufacturing Flaws in the Truss Beams Welded Joints Behaviour	Dorin Radu	71505-109
Implementation of Risk Management Principles in Industrial Projects	Dumitrascu Dorin-Ion	71505-121
Risk Assessment Affecting Organization Performance	Flavia Fehete, Anișor Nedelcu	71505-124
Risk Assessment and Rehabilitation of Historical Masonry Buildings	Sorin Dan, Corneliu Bob, Catalin Badea, Liana Iures	71505-106
The Failure of Temporary Bridge MS Type at Chrastava	V. Kaplan, P. Manas, M. Benda	71505-112
Large-Scale Industrial Company Alarm Receiving Centre Modernization	Jiri Sevcik, Malus Martin, Svoboda Petr	71505-118

**Friday June 27<sup>th</sup> 2014**

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

**Conference Room: A**

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

**ACMOS Special Session: Simulation and Modelling in Engineering III**

**Chair: Constantin Udriste**

Some Properties of S-Decomposable Systems	Cristina Şerbănescu	71508-106
On Estimate of Risk Associated with Urban Road Traffic	Dorinela Costescu, Serban Raicu	71501-196
Post Processing Elements of Artificial Intelligence Adaptive Spatial Filtering with Wavelet for Boundary Detection	I. Badescu, C. Dumitrescu	71501-208
Traffic Data Transmission Using Wireless Sensor Networks (WSN) Principles	Ionel Petrescu, Maria Claudia Surugiu	71501-190
Using Genetic Algorithms to Solving the Allocation Problem of Loading/Unloading Ramps from a Warehouse	Olteanu Sergiu, Petrescu Victoria Relly	71501-193
Use of Inductive Loops to Transmit Information to Vehicles	Răzvan Andrei Gheorghiu, Iulian Bădescu, Radu Şerban Timnea	71501-181
Researches on the Thermal Stress Influences over the Brakes Performances	Stefan Voloaca, Marius Toma	71501-187
Steganography in Image using Discrete Wavelet Transformation	I. Badescu, C. Dumitrescu	71508-127

**Conference Room: B**

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

**EPLS Session: Economics and Statistics**

**Chair: Özlen Hiç Birol, Ingrid Majerová**

<i>The Evaluation of Post-Keynesian Economics</i>	<i>Ayşen Hiç Gencer, Özlen Hiç Birol</i>	71504-169
General Characteristics of Rastin Banking	Bijan Bidabad, Nikos Mastorakis	71504-157
Evaluation of the Economic Levels by Angresano Criteria	Ingrid Majerova	71504-130
State Magnitude and Economic Governance	Ion Bucur	71504-178
The Role of Home Production for College Students in the Czech Republic	Monika Horáková	71504-166
Tourism Development and Economic Growth in Iran: Using ARDL Bounds Tests	Soheila Khoshnevis Yazdi, Nikos Mastorakis	71504-175

**Conference Banquet: 19:30**

**Saturday June 28<sup>th</sup> 2014**

**Conference Room: A**

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

**ACMOS Session: Recent Advances in Automatic Control I**

**Chair: Gabriela Tont, Dan Micu**

Optimal Control System with Guaranteed Degree of Stability for Precision Electric Drive	Abdullin Artur, Valentin Drozdov, Andrey Plotitsyn	71501-199
Implementation of a Block Interleaver Structure for Use in Wireless Channels	Barnali Das, Manash P. Sarma, Kandarpa Kumar Sarma, Nikos Mastorakis	71501-262
Implementation of Systolic Array Based SVM Classifier Using Multiplierless Kernel	Bhaswati Mandal, Manash P. Sarma, Kandarpa Kumar Sarma, Nikos Mastorakis	71501-265
Optimal Movement Planning of Semi-Independent Elements	Florian Ghionea, Sergiu Olteanu, Emma Popa	71501-250
A Framework for Two-Port Parameters Assessment	Mihu Dan Tont, Dan George Tont, Gabriela Tont	71501-112

**Conference Room: B**

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

**EED Session: Soil and Land Development**

**Chair: Luiza Roman, Ioana Alina Costescu**

Landslides – Phenomena that Influence Negatively the Environment – Consolidation Solution of an Unstable Slope	Alexandra Ciopec, Monica Mirea, Cristina Voicu	71509-148
Study of Land Management and Soil Type Influences on Runoff using Advanced Hydroinformatic Tools	Erika Beilicci, Robert Beilicci, Teodor Eugen Man, George Narcis Pelea	71509-139
Reinforced Soil Slopes	Florin Belc, Luiza Roman, Octavian Roman, Alin Buzuriu	71509-118
Modeling Soil Erosion by Water on Agricultural Land in Cenei, Timiș County, Romania	George Narcis Pelea, Ioana Alina Costescu, Erika Beilicci, Teodor Eugen Man, Robert Beilicci	71509-133
The Use of Netafim Hydrocalc Program Version 2.21, for Designing Drip Irrigation Arrangements	Ioana Alina Costescu, Mircea Constantin Orlescu, Rareș Hălbac-Cotoară-Zamfir, Emanuel Hațegan, George Narcis Pelea	71509-121
Indicators for Water Scarcity Designation in European Agricultural Areas affected by Drought	Olga Vizitiu, Catalin Simota, Irina Calciu, Mircea Mihalache	71509-154
Effect of Various Growth Mediums on the Germination and Growth of Jatropha Curcas	Sadia Iqbal, Nikos Mastorakis	71509-172

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

**Saturday June 28<sup>th</sup> 2014**

**Conference Room: A**

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

**ACMOS Session: Recent Advances in Automatic Control II**

**Chair: Sergei Soldatenko, Razvan Andrei Oprea**

Identification of a Permanent Magnet Synchronous Motor System with Dead-Zone Characteristics	Sergey Lovlin, Madina Tcvetkova, Dmitrii Subbotin	71501-184
Solving Interference Problem with Multi-Objective Evolutionary Optimization	Seyed Mahmood Hashemi, Nikos Mastorakis	71501-220
An Approach to Reduce Overfitting in FCM with Evolutionary Optimization	Seyed Mahmood Hashemi, Nikos Mastorakis	71501-235
Group Decision-Making Model Using Fuzzy-TOPSIS Method for FMS Evaluation	Shanliang Yang, Ge Li, Kedi Huang	71501-103
Elasticity Influence on Properties of Electromechanical Scanner	Valentin Drozdov, Valentin Tomasov, Sergey Tushev	71501-118
<i>Features Analysis for Tracking Players in Water Polo</i>	<i>Vladimir Pleština, Vladan Papić</i>	<i>71501-247</i>
The Advanced Techniques of PSI Scenarios Development in VBS2	Petr Svoboda, Jiri Sevcik	71501-256

**Conference Room: B**

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

**EPLS Session: Political, Law and Fiscal Sciences**

**Chair: Alin Speriusi-Vlad, Šárka Brychtová**

The Nature of Intellectual Property Rights Considering the Relation between the Author's Prerogatives and the Human Rights and Civil Liberties	Alin Speriusi-Vlad	71504-154
Triangular Causality in Controlling Parallel Exchange Market by Monetary Targeting and Anti-Inflationary Policies	Bijan Bidabad, Nikos Mastorakis	71504-151
Money-Transaction-Income Process (Quatification of Quantity Theory of Money)	Bijan Bidabad, Nikos Mastorakis	71504-160
Technical and Military Cooperation between Romania and Great Britain (1929-1939)	Marusia Cîrstea	71504-109
Not Only The Social Aspects of Creeping Societal Changes	Šárka Brychtová	71504-112

Saturday June 28<sup>th</sup> 2014

## Group Excursion for WSEAS

### Itinerary:

15:00 Meet Mr. Dorin Dumitrascu at Aula Magna Building  
15:30 Depart  
16:00 Arrive at the Castle Bran  
16:15 Tour of Castle Bran (2hrs)  
18:15 Depart from Castle Bran to visit Rasnov Fortress for photos  
18:35 Arrive at Rasnov Fortress  
19:00 Depart from Rasnov Fortress to Aula Magna  
19:30 Arrive at Aula Magna Building



### Program

We will take you on a guided tour to the Castle Bran. Bran Castle (Romanian: Castelul Bran), situated near Bran and in the immediate vicinity of Braşov, is a national monument and landmark in Romania. The fortress is situated on the border between Transylvania and Wallachia. Commonly known as "Dracula's Castle" (although it is one among several locations linked to the Dracula legend, including Poenari Castle and Hunyad Castle), it is marketed as the home of the titular character in Bram Stoker's Dracula. There is, however, no evidence that Stoker knew anything about this castle, which has only tangential associations with Vlad III, voivode of Wallachia, the putative inspiration for Dracula.

As discovered by the Dutch author Hans Corneel de Roos, the location Bram Stoker actually had in mind for Castle Dracula while writing his novel was an empty mountain top, Mount Izvorul Călimanului, 2,033 m high, located in the Transylvanian Kelemen Alps near the former border with Moldavia.

The castle is now a museum open to tourists, displaying art and furniture collected by Queen Marie. Tourists can see the interior individually or by a guided tour. At the bottom of the hill is a small open air museum park exhibiting traditional Romanian peasant structures (cottages, barns, etc.) from across the country. As of 2014, the castle is reportedly for sale.

### Price

**The cost per person is 10,00 € inclusive of;**

- Transportation from/to Aula Magna Building
- Tourist guide

The entrance ticket to the Castle Bran is not included in the price.

#### TICKET PRICES

Adults: 25Lei (6€)  
Seniors (65+): 15Lei (3.5€)  
Students: 10Lei (2.4€)  
Pupils: 5Lei (1.2€)  
Filming: 20Lei (4.8€)

#### FREE / REDUCED ADMISSION

Admission is free for disabled persons and for institutionalized persons. Seniors admission is valid for people over 65 years. Students and pupils require to display their StudentID.

**Reserve your Seat at the Registration Counter from June 26<sup>th</sup>-27<sup>th</sup>, 09:00-17:00.**

*The tickets are subject to the bus seats availability.*

**Brasov, Romania**  
**June 26-28, 2014**