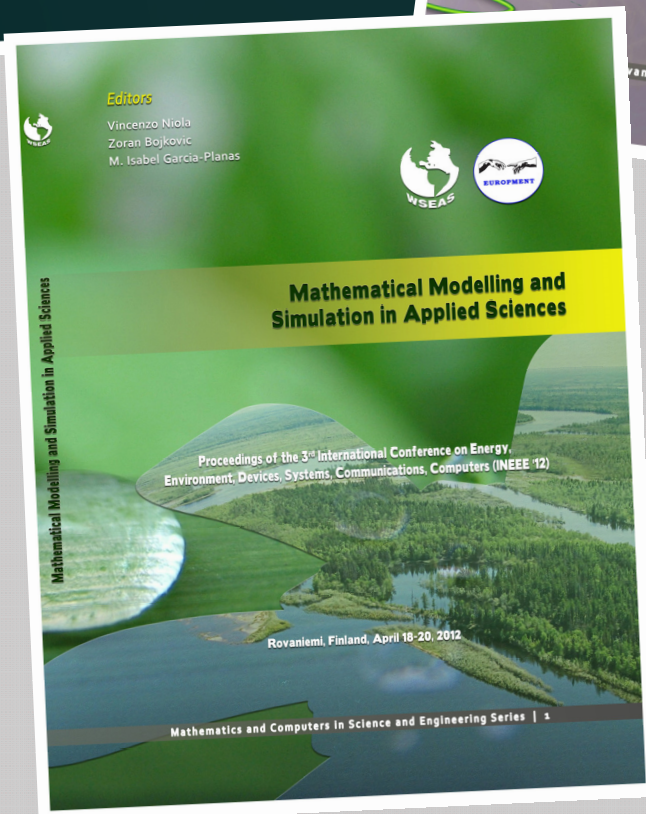


# Conference Program



World Scientific and Engineering Academy and Society



Rovaniemi, Finland  
April 18-20, 2012

**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.

**11th WSEAS International Conference on Applied Computer and Applied Computational Science (ACACOS '12)**

**11th WSEAS International Conference on Instrumentation, Measurement, Circuits and Systems (IMCAS '12)**

**12th WSEAS International Conference on Robotics, Control and Manufacturing Technology (ROCOM '12)**

**12th WSEAS International Conference on Multimedia Systems & Signal Processing (MUSP '12)**

**3rd International Conference on Energy, Environment, Devices, Systems, Communications, Computers (INEEE '12)**

**Rovaniemi, Finland  
April 18-20, 2012**

**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 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**

Wednesday April 18<sup>th</sup> 2012

Registration: 08:15-09:15

Conference Room A:

Time: 09:15-10:00

Plenary Lecture 1:



**On Robust Possibilistic C-Means Clustering Algorithm**

by Prof. Miin-Shen Yang, Chung Yuan Christian University, TAIWAN.

Conference Room B:

Time: 09:15-10:00

Plenary Lecture 2:



**Efficient Isolated DC-DC Converters with Maximum Integration Scale**

by Prof. Jan Doutreloigne, CMST (University of Gent + IMEC), BELGIUM.

Conference Room A:

Time: 10:00-10:45

Plenary Lecture 3:



**Decentralized Cyber Secure Public Safety Communications and Information Management Systems for a Multi Organizational Environment**

by Dr. Jyri Rajamaki, Laurea University of Applied Sciences, FINLAND.

Wednesday April 18<sup>th</sup> 2012

**Conference Room B:**

**Time: 10:00-10:45**

**Plenary Lecture 4:**



**Computational Methods In Real Life Problem**

by Assoc. Prof. Alina Barbulescu, Ovidius University of Constanta, ROMANIA.

**Conference Room A:**

**Time: 10:45-11:30**

**Plenary Lecture 5:**



**Input observability analysis of Fixed speed wind turbine**

by Prof. M. Isabel Garcia-Planas, Universitat Politecnica de Catalunya, SPAIN.

**Conference Room B:**

**Time: 10:45-11:30**

**Plenary Lecture 6:**



**Current Communications Networks Status for Smart Grid**

by Prof. Zoran Bojkovic, University of Belgrade, SERBIA.

**Coffee Break: 11:30-12:00**

## Wednesday April 18<sup>th</sup> 2012

**Conference Room: A**

**Time: 12:00-14:00**

**INEEE Session: Applications of Engineering**

**Chair: Maria Isabel Garcia-Planas, Motti Haridim**

Fault Location in MV Unearthed Distribution Network Using the Undamped Frequency of the Transient Signal	Mohd Rafi Adzman, Matti Lehtonen	6755-127
Input Observability Analysis of Fixed Speed Wind Turbine	M. I. Garcia-Planas, J. L. Dominguez-Garcia, B. Mediano-Valiente	6755-002
Mobile Phones without Antenna	M. Bank, M. Haridim, V. Tsingouz, Z. Ibragimov	6755-064
A Novel MIMO Antenna System for Small Handsets	M. Bank, M. Haridim, V. Tsingouz, K. Slupenko	6755-070
Optimal Design of SVC-PI Controller for Damping Improvement Using New Computational Intelligence Approach	N. A. M. Kamari, I. Musirin, M. M. Othman, Z. A. Hamid, M. N. A. Rahim	6755-169
Exploiting Security, Safety and Situational Related Services by Using Remotely Piloted Aircrafts	Ilkka Tikanmaki, Jyri Rajamaki	6755-025
A Flight Data Recorder for Radio-Controlled Model Aircraft	Andre Du Plooy, James Swart, Christo Pienaar	6755-005

**Conference Room: B**

**Time: 12:00-14:00**

**IMCAS Session: Circuits and Systems Design & Implementation**

**Chair: Jan Doutreloigne, Winai Jaikla**

Monolithic Integration of the Synchronous Rectifier in Isolated Forward DC-DC Converters	Jan Doutreloigne, Benoit Bakeroot, Ann Monte, Jindrich Windels	6752-001
Monolithic Integration of an Active Clamping H-Bridge for Isolated Forward DC-DC Converters	Jan Doutreloigne, Ann Monte, Benoit Bakeroot, Jindrich Windels	6752-004
CFTA Based MISO Current-Mode Biquad Filter	Peerawut Suwanjan, Winai Jaikla	6752-046
A Low Power High CMRR CMOS Instrumentation Amplifier Based on Differential Voltage – Current Conveyor for Beta-Dispersion Range Bio-Impedance Applications	Angelito A. Silverio, Rosula S. J. Reyes, Wen-Yaw Chung	6752-010
Heartbeat Detection Applying Activity Index on Optical Interferometric Signal	Sebastijan Sprager, Denis Donlagic, Damjan Zazula	6752-037

**Break: 14:00-14:30**

## Wednesday April 18<sup>th</sup> 2012

**Conference Room: A**

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

**INEEE Session: Waste Management and Recycling**

**Chair: Erika Ardelean, Ana Virginia Socalici**

Recovery of Powdery Ferrous Waste through Pelleting	Adela Susana Todorut, Socalici Ana	6755-085
The Integrated Urban Waste Management in Romania	Ardelean Erika, Harau Carmen, Ardelean Marius	6755-115
Recycling Waste from the Steel Industry	Eugen Crisan, Lucia Vilceanu, Marius Ardelean, Vasile Putan	6755-112
Valorization of Metallic Wastes by Rolling Them in Different Profiles	Pauca Adina, Socalici Ana, Moisa Ioan-Marius	6755-133
The Use of Industrial Waste in the Production of Lubrication Dusts to Be Used in Steel Continuous Casting	Popa Erika, Socalici Ana, Ardelean Marius, Ardelean Erika	6755-097
The Use of Ironless Industrial Wastes in Steelmaking	Putan Adriana, Putan Vasile, Vilceanu Lucia, Socalici Ana	6755-100
Possibilities of Turning into Account Steel Plant Powdery Wastes	Socalici Ana, Ardelean Erika, Heput Teodor, Ardelean Marius	6755-082

**Conference Room: B**

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

**ROCOM Session: Robotics and Automation**

**Chair: Khalid Abd, Paul Ciprian Patic**

Intelligent Modeling of Scheduling Robotic Flexible Assembly Cells Using Fuzzy Logic	Khalid Abd, Kazem Abhary, Romeo Marian	6753-117
Experimental Study of Volatile Liquid Influence on Behaviour of an Electromechanic Actuator with Volatile Liquid	Milici Mariana-Rodica, Ungureanu Constantin, Chatziathanasiou Vasilis, Cernomazu Dorel, Milici Laurentiu-Dan	6753-067
Study on Implementing of an Ultrasonic Motor in Robotics	L. Dan Milici, Mariana R. Milici, Valentin Popa, Dragos Calitoiu	6753-072
Modeling and Simulation Applied for Robotics Manipulator's Driving	Paul Ciprian Patic	6753-022
Cellular Automata Models for Cooperation in Multirobot Systems	Radu Dobrescu, Dan Popescu, Gheorghe Florea	6753-017
Robotics in Education: A Tool for Recruiting, Engaging, Retaining and Educating Students	Michele Van Dyne, Jacob Fjermestad	6753-107
Social Service Robots in Public and Private Environments	Sakari Pieskä, Mika Luimula, Juhana Jauhiainen, Van Spiz	6753-102

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



Wednesday April 18<sup>th</sup> 2012

**Conference Room: A**

**Time: 17:00-19:30**

**INEEE Session: Energy, Environment and Development**

**Chair: Üllas Ehrlich, Luis Alberiko Gil-Alana**

The Use of Regenerated Mold Mixtures in Manganese Steel Piece Casting	Josan Ana, Pinca Bretotean Camelia, Pauca Adina	6755-121
Review on LCA in the Construction Industry: Case Studies	Matthias Buyle, Johan Braet, Amaryllis Audenaert	6755-055
Coastal Area with or without Wind Turbines: A Contingent Valuation Study in Estonia	Ullas Ehrlich, Margot Muursepp	6755-148
Long Memory in Energy Prices in Gemany	Gil-Alana Luis Alberiko, Barros Carlos Pestana, Caporale Guglielmo Maria	6755-013
Energy Efficiency Estimation of a Combined Production Chain – Forming and Machining	Karl Kuzman	6755-010
Nash Equilibriums in a Game of Natural Gas Suppliers Competition	Oleg I. Nikonov, Marina A. Medvedeva	6755-196
Secure Data Communications for Controlling Electric Power Stations and Distribution Systems	Jari Ahokas, Tewodros Guday, Teemu Lyytinen, Jyri Rajamaki	6755-067
Sustainable Development Review; From Old Tribal Beliefs to Rio+20	Omidreza Saadatian, Sohif Bin Mat, Ch. Lim, K. Sopian	6755-076

## Wednesday April 18<sup>th</sup> 2012

**Conference Room: B**

**Time: 17:00-19:30**

**ACACOS Session: Modelling and Simulation**

**Chair: Alina Barbulescu, Yongwimon Lenbury**

Fitting Precipitation Variability in Dobrudja Region	Alina Barbulescu, Judicael Deguenon	6751-015
Nonparametric Models for the Regional Precipitation Evolution in Dobrudja	Alina Barbulescu, Judicael Deguenon	6751-023
Statistical Analysis of the Precipitation from Constanta (Romania) Meteorological Station	Carmen Maftei, Alina Barbulescu, Pierre Hubert, Cristina Serban (Gherghina), Gabriel Dobrica	6751-035
Presenting a Combined E-Government Framework Using DSS and GIS	Shapoor Zarei, Amin Daneshmand Malayeri, Nikos E.Mastorakis	6751-211
E-Voting and E-Democracy: Basic Approach to E-Government Issuance	Shapoor Zarei, Amin Daneshmand Malayeri, Nikos E.Mastorakis	6751-215
Intelligent Model in B2C E-Commerce Using Fuzzy Approaches	Shapoor Zarei, Amin Daneshmand Malayeri, Nikos E.Mastorakis	6751-227
A New Fast Neural Network Model	Hazem M. El-Bakry, Nikos Mastorakis	6751-219
Statistical Evaluation of a Glucose / Insulin Nonlinear Differential Equation Model with Classical and Bayesian Procedures	Sutharot Lueabunchong, Yongwimon Lenbury, Simona Panunzi, Alice Matone	6751-019
Travelling Wave Solutions of a Nonlinear Model for Drug Release: Analytical Solution in Comparison to Numerical Approximation	Chontita Rattanakul, Yongwimon Lenbury	6751-031
Signal Transduction Process Subject to Response Delays: Stability and Oscillations	Wanwarat Anlamlert, Yongwimon Lenbury, Warunee Sarika	6751-059
An Agent-Based Computational Model for Strategic Investment Decision Processes	G. Mircea, M. Pirtea, M. Neamtu, S. Bazavan	6751-179
The Study of Some Stochastic Macroeconomic Models	Mihaela Neamtu, Gabriela Mircea, Marilen Pirtea, Dumitru Opris	6751-163
Flow Modeling of Turbulent Flow and Heat Transfer	Sabah Tamimi	6751-039

Thursday April 19<sup>th</sup> 2012

Conference Room A:

Time: 09:00-09:45

Plenary Lecture 7:



**A Safer Future: Reducing the Impacts of Earthquake Disasters through Soft Computing**

by Prof. Silvia Garcia, National University of Mexico, MEXICO.

Conference Room B:

Time: 09:00-09:45

Plenary Lecture 8:



**A Framework for Physical Interaction and its Execution based on Multiple Sensors**

by Prof. Angel P. del Pobil, Universitat Jaume-I, SPAIN.

Conference Room A:

Time: 09:45-10:30

Plenary Lecture 9:



**Evaluation of the Mean Cycle Time in Stochastic Discrete Event Dynamic Systems**

by Assoc. Prof. Nikolai Krivulin, St. Petersburg State University, RUSSIA.

Thursday April 19<sup>th</sup> 2012

**Conference Room B:**

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

**Plenary Lecture 10:**



**Mobile Radio Handsets without Antenna**

by Prof. Motti Haridim, Holon Institute of Technology, ISRAEL.

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

**Conference Room: A**

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

**IMCAS Session: Systems and Control**

**Chair: Dalibor Bielek, Hamid Reza Karimi**

Unified Approach to Synthesis of Mutators Employing Operational Transimpedance Amplifiers for Memristor Emulation	Viera Biolkova, Dalibor Bielek, Zdenek Kolka	6752-061
High Output Impedance Current-Mode Universal Filter with Independent Control of Pole Frequency and Quality Factor	Surapong Siripongdee, Sunti Tuntrakool, Winai Jaikla	6752-043
Modeling and Control Design for a Semi-Active Suspension System with Magnetorheological Rotary Brake	Geir-Arne Moslatt, Erik Myklebust, Palmer Kolberg, Hamid Reza Karimi	6752-025
Estimating the Physical Preparation Level of Male Athletes Using Tests for Evaluating the Energetic Parameters	Elena Mereuta, Claudiu Mereuta	6752-028
Control Parameters Provided by MGM Test – Tool for Assessing Physical Training	Claudiu Mereuta, Elena Mereuta	6752-031
A Numerical Approach for Modeling Squeeze-Film Damping in Rigid Microstructures Including Rarefaction Effects	Salvatore Nigro, Leonardo Pagnotta, Maria F. Pantano	6752-013
On using PIC24F Microcontroller to Modify the Pulse Width of the Signals which Control Electronic Fuel Injectors	Gabriel Vasiiu, Septimiu Mischie	6752-034

**Thursday April 19<sup>th</sup> 2012**

**Conference Room: B**

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

**INEEE Session: Informatics in Biology and Biochemistry**

**Chair: Janis Ievins, Shafiga Topchiyeva**

The Dangers of Acrylonitrile and the Improvement of Risk Prevention	Janis Ievins, Valentina Urbane, Daiga Mazrima	6755-049
Influence of Heavy Metals and Radiation on Biodiversity of Coccinellidae	Sh. A. Topchiyeva, Z. Y. Musayeva, M. A. Mehrabova	6755-040
Spiders as Bioindicators of Radiation Pollution	Sh. A. Topchiyeva, M. A. Mehrabova, N. I. Huseynov	6755-043
Influence of Ecological Factors (Heavy Metals and Radiation) on Lizards of Azerbaijan	Sh. A. Topchiyeva, M. A. Mehrabova, A. R. Jafarov	6755-046
Application of the Artificial Neural Networks for the Prediction of Reactivity of Molecules in Radical Reactions	Tumanov V. E., Gaifullin B. N.	6755-034

**Break: 13:00-13:30**

**Conference Room: A**

**Time: 13:30-16:00**

**ACACOS Session: Corporate Strategies and Management**

**Chair: Hua-Line Tsai, Laura Monica Gorghiu**

The Moderating and Mediating Effects of Corporate Governance on Firm Performance	Wen-Hsi Lydia Hsu, George Yungchih Wang, Hua-Lin Tsai, Chun-Wei Lu	6751-107
The Impacts of Expatriate Selection Criteria on Organizational Performance in Subsidiaries of Transnational Corporate	Hua-Lin Tsai, Shih-Yun Zeng, Cherng-Horng Lan, Rong-Jyue Fang	6751-111
Collaboration between Foreign Direct Investments by Japanese Manufacturers in Vietnam and the Domestic Suppliers	Hua-Lin Tsai, Chun-Wei Lu, Wen-Yu Chen, Yente Wu	6751-115
The Impacts of Corporate Culture on Organizational Performance	Hua-Lin Tsai, Shih-Yun Zeng, Chun-Wei Lu, Sheng-Hsu Chuang	6751-123
A Study of Employer Background in Care Demand in Southern Taiwan	Chen-Ru Chen, Wen-Hsi Lydia Hsu, Hua-Lin Tsai, Chun-Wei Lu	6751-127
Apply Logistic Management on Vocation Training Center	Hua-Lin Tsai, Chun-Wei Lu, Yu-Hsin Chang, Wei-Chin Lee	6751-139
On the Integration of Knowledge Management, Cloud Computing and LOHAS Economy as a Corporate Strategy	Hua-Lin Tsai, Cherng-Horng Lan, Yu-Hsin Chang, Chen-Ru Chen	6751-143
The Liquidity Effect in Taiwan's Stock Market	George Yungchih Wang, Wen-Hsi Lydia Hsu, Hua-Lin Tsai, Chun-Wei Lu	6751-079
Competitive Advantage of Collaboration between Taiwan and Japan Transformer Industries	Chun-Wei Lu, Hua-Lin Tsai, George Yungchih Wang, Yi-Han Wu	6751-083

Thursday April 19<sup>th</sup> 2012

**Conference Room: B**

**Time: 13:30-16:00**

**ROCOM Session: Latest Advances in Manufacturing Technology**

**Chair: Dan Popescu, Nikolai Krivulin**

Performance Improvement of Contactless Distance Sensors using Neural Network	R. Abdubrani, S. S. N. Alhady	6753-047
Collaborative Estimation of Environmental Parameters	Dan Popescu, Radu Dobrescu, Mircea Ionel Strutu	6753-027
Local Model Network based Dynamic Battery Cell Model Identification	Christoph Hametner, Johannes Unger, Stefan Jakubek	6753-001
Gaze Direction Detection from Thermal Camera Image	Sewoong Jun, Ilkyun Jung	6753-082
Alternative Configured Objects Towards Optimal Control using ABB 800xa	Yousef Iskandarani, Hamid Reza Karimi, Erik Andre Nerhus, Bjornar Haeras, Henrik Johan Ask	6753-042
LQG Control of a Semi-Active Suspension System Equipped with MR Rotary Brake	Asha Dharan, Silje Helene Olsen Storhaug, Hamid Reza Karimi	6753-077
Evaluation of the Lyapunov Exponent for Stochastic Dynamical Systems with Event Synchronization	Nikolai Krivulin	6753-052
Investigation through Ultrasound Examination of the Interface Base Material - Deposited Layer of 35% Carbon Laminated Steel Test	Botez Sorin-Constantin, Gabriel Marius Dumitru, Alexandru Dumitrache-Rujinski, Dina Viorel-Cristian	6753-097
Analyzing the Characteristics of Sampling by Attributes	Eraldo Banovac, Darko Pavlovic, Nikola Vistica	6753-057

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

**Conference Room: A**

**Time: 16:30-18:30**

**IMCAS Session: Instrumentation and Measurement**

**Chair: Hamid Reza Karimi, Gyung-Suk Kil**

A Vehicle Crash Test Apparatus for Universities and Small Researched Institutions	J. S. Johnsen, H. R. Karimi, K. G. Robbersmyr	6752-016
Detection of Partial Discharges by a Monopole Antenna in Insulation Oil	Chang-Hwan Jin, Jung-Yoon Lee, Dae-Won Park, Gyung-Suk Kil	6752-007
Approximate Symbolic Analysis with Emphasis on Frequency Filters	Zdenek Kolka, Viera Biolkova, Dalibor Biolek	6752-052
Statistical Analysis of Fade Events on FSO Systems	Zdenek Kolka, Viera Biolkova, Dalibor Biolek	6751-175
A Prospective on Power Quality Analyze of Three Sections Plate-Type Electrostatic Precipitator Supplies	Gabriel Nicolae Popa, Corina Maria Dinis, Sorin Ioan Deaconu, Angela Iagar	6752-022
Ultrasound in Vehicle System for On-Board Monitoring	A. S. Fiorillo, A. La Gatta, S. A. Pullano	6752-040
Development In Wind Energy Technology: An Update	Faeka M. H. Khater	6752-049

**Thursday April 19<sup>th</sup> 2012**

**Conference Room: B**

**Time: 16:30-18:00**

**MUSP Session: Multimedia and Signal Processing**

**Chair: Chandrasekaran Subramaniam, Mischie Septimiu**

Emotional Expressiveness in Romanian Language	Silvia Monica Feraru	6754-005
Situation Aware Content Driven Multimedia Service Fusion in Avionic Informatics	Chandrasekaran Subramaniam, Vishal Ravikumar, K. Narendra Varun, S. Ashwanth	6754-009
A Comparison of Convolutional Model and Real Recording for Using in Acoustic Echo Cancellation	Septimiu Mischie	6754-013
Intelligent Modeling of Scheduling Robotic Flexible Assembly Cells Using Fuzzy Logic	Khalid Abd, Kazem Abhary, Romeo Marian	6754-001

**Conference Banquet: 19:00**

Friday April 20<sup>th</sup> 2012

**Conference Room: A**

**Time: 09:00-11:30**

**ACACOS Session: E-Learning and Web-based Learning**

**Chair: Mohammed Alawairdhi, Sylvia Encheva**

A Top Down Approach for Designing an E-learning Pattern Language Based on IMS-LD Specification	Maysoon Aldekhail, Alaa Eldeen Sayed Ahmed, Mohammed Alawairdhi, Azeddine Chikh	6751-047
Success and Failure of IT Projects: A Study in Saudi Arabia	Fahad Alfaadel, Mohammed Alawairdhi, Mahran Al-Zyoud	6751-051
Closure Lattices for Avoiding Overtesting of Students	Sylvia Encheva	6751-191
Ranking Reusable Learning Objects with Rough Sets Based Methods	Sylvia Encheva	6751-195
Logical Implications	Sylvia Encheva	6751-199
Teachers' and Students' Feedback Concerning the Use of ICT Tools in Learning Science through Nanotechnology	Laura Monica Gorghiu, Gabriel Gorghiu	6751-183
An Adaptive E-Learning System Based on Intelligent Agents	Hua-Lin Tsai, Chi-Jen Lee, Wen-Hsi Lydia Hsu, Yu-Hsin Chang	6751-131
Using Moodle to Build an E-Learning Platform for the After-class Learning Activities of Taiwanese Language	Hua-Lin Tsai, Rong-Jyue Fang, Chi-Jen Lee, Yung-Sheng Chang	6751-135



**Friday April 20<sup>th</sup> 2012**

**Conference Room: B**

**Time: 09:00-11:30**

**INEEE Session: Simulation and Modelling**

**Chair: Rauno Pirinen, Jelena Sulojeva**

FACTS Devices Installation via Stability Index Tracing and Blended Crossover Continuous Ant Colony Optimization	Z. Hamid, I. Musirin, M. N. A. Rahim	6755-079
Safe Maintenance – Saving Money for Employers	Harangus Victoria, Carmen Harau	6755-136
Evaluating the Safety Risk in Relation to the O.H.S. Management Specific to Work Systems	Victoria Harangus, Gabriel Vasilescu, Angelica Draghici, Teodor Heput	6755-118
Regional Development: Four Perspectives of Interactions of Research and Development in University of Applied Sciences	Rauno Pirinen	6755-019
Redundant Multichannel Public Safety Communication Network for Public Protection and Disaster Relief (PPDR) Organizations	Jyri Rajamaki	6755-028
The Flow Visualization In Freezer Evaporator	Tugba Saricay, L. Berrin Erbay	6755-006
Economic Trends in the Provision of Labor Safety and Health Protection in the Industries of Latvia	Aleksandrs Grigorjevs, Valentina Urbane, Jelena Sulojeva	6755-052
Using Outcomes-Based Education as a Strategy for Improving the Academic Achievement of Senior Engineering Students	Arthur James Swart	6755-004

**Coffee Break: 11:30-12:00**

Friday April 20<sup>th</sup> 2012

**Conference Room: A**

**Time: 12:00-15:00**

**ACACOS Session: Latest Trends in Computers and Computational Science**

**Chair: Radovan Antonic. Zoran Bojkovic**

Ship Speed Prediction in Real Sea Environment Using Advanced Technologies	Radovan Antonic, Marko Valcic, Vinko Tomas	6751-007
Smart Grid Communications Architecture: A Survey and Challenges	Zoran Bojkovic, Bojan Bakmaz	6751-055
Self Organizing Packet Routing with Ant Colonies: Tools	Luis Fernando De Mingo, Nuria Gomez Blas, Alberto Arteta	6751-103
Numerical Analysis of the Heat Transfer for Packing Design of Cryogenic Gate Valve	Si Pom Kim, Rock Won Jeon, Il Ju Hwang, Jae Hoon Lee, Won Heaop Shin	6751-223
Automatic Creation of Countermeasure Plan against Process Delay: Creation of Countermeasures Based on Crashing and Fast-Tracking	Yuichi Inoue, Kazuki Mori, Seiichi Komiya	6751-231
Possibilistic Risk Aversion and Its Indicators	Irina Georgescu, Jani Kinnunen	6751-171
Conceptualised View on Can Cloud Computing Improve the Rescue Services in Finland?	Jouni Lehto, Jyri Rajamaki, Paresch Rathod	6751-043
Estimation of Execution Time of Data-Intensive Out-of-Core Processes	Tamas Schradi, Akos Dudas, Sandor Juhasz	6751-159
Adaptive Service Node Placements in P2P-like Architectures	Sunantha Sodsee, Phayung Meesad, Herwig Unger	6751-011
Usage of Data Mining Techniques on Marketing Research Data	Pavel Turcinek, Jiri Stastny, Arnost Motycka	6751-155



**Rovaniemi, Finland**  
**April 18-20, 2012**