

**Joint Program  
Santorini Island, Greece, July 17-21, 2014**



**18th International Conference on Circuits, Systems, Communications and Computers (CSCC '14)**

**2014 International Conference on Education and Modern Educational Technologies (EMET '14)**

**2014 International Conference on Energy, Environment, Development and Economics (EEDS '14)**

**2014 International Conference on Water Resources, Hydraulics & Hydrology (WHH '14)**

**2014 International Conference on Chemistry and Chemical Engineering (CCE '14)**

**2014 International Conference on Pure Mathematics, Applied Mathematics, Computational Methods (PMAMCM '14)**

**2014 International Conference on Civil Engineering (CIVILENG '14)**

**2014 International Conference on Industrial Engineering (INDE '14)**

**2014 International Conference on Continuum Mechanics (COME '14)**

**2014 International Conference on Materials (MATERIALS '14)**

**2014 International Conference on Mechatronics and Robotics, Structural Analysis (MEROSTA '14)**

Note: Regular oral presentations of papers last 15 minutes. Invited papers, marked in *italic*, are presented for 30 minutes.

**Plenary Lecture 1: 08:45-09:30 Room A'**



**Unmanned Systems for Civilian Operations**

Prof. George Vachtsevanos, Georgia Institute of Technology, USA.

**Plenary Lecture 2: 09:30-10:15 Room A'**



**Floating Offshore Wind Turbines: The Technologies and the Economics**

Prof. Paul D. Sclavounos, Massachusetts Institute of Technology (MIT), USA.

**Plenary Lecture 3: 10:15-11:00 Room A'**



**Detecting Critical Elements in Large Networks**

Prof. Panos M. Pardalos, University of Florida, Gainesville, FL, USA.

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

**Plenary Lecture 4: 11:30-12:15 Room A'**



**Investigation of Air Core Phenomenon in Cylindrical Tank during Draining**

Prof. Chang Hyun Sohn, Kyungpook National University, Korea.

**Plenary Lecture 5: 12:15-13:00 Room A'**



**Stability of Multidimensional Systems: Overview and New Results**

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

EUROPMENT CONFERENCES: Thursday July 17<sup>th</sup> 2014

**CONFERENCE ROOM A': 13:00-15:30**

**CSCC Session: Systems Theory and Scientific Computation I**

**Chair: Zora Jančíková, Zdenek Kolka**

<i>Tensional Psychological Mechanism and the Topological Invariants of the Tensional Configurations</i>	<i>Alin Gilbert Sumedrea</i>	<i>4912019</i>
The Influence of Variable Friction Coefficient on Spatial Stability of Slightly Curved Shallow Mixing Layers	Andrei Kolyskin, Valentina Koliskina, Inta Volodko	4853003
Belonging Probability Inverse Image Technique to Early Detection of Volcanic Eruption	B. Yagoubi, S. Benkraouda, A. Bouziane	4702003
Resistive Parameter Identification of a Li-ion Battery Using Sliding Mode Observer	Daehyun Kim, Taedong Goh, Seung Hun Kim, Sang Woo Kim	4862075
Oilmarks Detection Algorithm in Steel Plates	Doo-Chul Choi, Yong-Ju Jeon, Sang Jun Lee, Jong Pil Yun, Sang Woo Kim	4988003
Short Distance Earth Current Measurements Related to Atmospheric Electric Fields	Ernst D. Schmitter	4868007
Device for Heat Transport Parameters Monitoring of Solids	P. Košťial, I. Ružiak, R. Igaz, Z. Jančíková, V. Rusnák, R. Garzinová, P. Hlaváček	4765003
Defect Detection for Vertical Cracks in Hot-slabs using Dual Light Switching Lighting Method	Yong-Ju Jeon, Doo-chul Choi, Sang Jun Lee, Jong Pil Yun, Sang Woo Kim	4973003
Low-Complexity Soft-Output MIMO Detection in FBMC/OQAM Systems	Marius Caus, Ana I. Perez-Neira, Miguel Angel Lagunas	4782011
Model of FSO Path for Network Simulation	Zdenek Kolka, Viera Biolkova, Dalibor Biolek	4844007
HybridLog: An Efficient Hybrid-Mapped Flash Translation Layer for Modern NAND Flash Memory	Mong-Ling Chiao, Da-Wei Chang	5058007
Can One-Chip Parallel Computing Be Liberated From Ad Hoc Solutions? A Computation Model Based Approach and Its Implementation	Gheorghe M. Stefan, Mihaela Malita	5183023
Dynamic Patients Scheduling in the Pediatric Emergency Department	Sara Ben Othman, Nesrine Zoghalmi, Slim Hammadi, Alain Quillot, Alain Martinot, Jean-Marie Renard	5178035

**EUROPMENT CONFERENCES: Thursday July 17<sup>th</sup> 2014**

**CONFERENCE ROOM B': 13:00-15:30**

**MEROSTA Session: Mechatronics and Robotics, Structural Analysis**

**Chair: Kostadin Kostadinov, Lucas Moscato**

Design Considerations for Mobile Robotic Telepresence in Museums- A Report on the Pilot Users' Feedbacks	Anahita Bagherzadhalimi, Eleonora Di Maria	5070011
Robotic Assisted Trajectory Tracking for Human Arm Rehabilitation	Cristóbal Ochoa-Luna, Mohammad Habibur Rahman, Maarouf Saad, Philippe S. Archambault	4858015
Linearity Error of Force Transducers Arising from Nonlinear Elasticity	Jang H. Yi	5182023
Force Sensing of Teleoperated Robotized Cell Injection	Kostadin G. Kostadinov, Vladimir K. Kotev, Daniel M. Penchev	4855015
Motion Control of an Exoskeleton Robot using Electromyogram Signals	Mohammad Habibur Rahman, Cristobal Ochoa-Luna, Maarouf Saad, Philippe Archambault	4955007
Cascade Wave-Based Control Applied to the Servomotor	Ondřej Marek	4952079
Finding the Parameters of the Compensation Pulse with the Use of Iterative Nelder-Mead Method for Suppressing Residual Vibrations of Electronic Cam	Pavel Dostrašil	4959003
Formal Verification of Safety Control System based on GHENESYS NET	Rodrigo Cesar Ferrarezi, Reinaldo Squillante Júnior, Jeferson A. L. Souza, Diolino J. Dos Santos Filho, José Reinaldo Silva, Paulo Eigi Miyagi, Lucas Antonio Moscato	5175027
Strength Analysis of the Complex Planetary Gears	Sung Gil Han, Yoo-In Shin, Chan Heon Yoon, Chul Ki Song	5076007
Fuel-Efficient Motion Control of Tracked Robots Equipped with AC Electric Transmissions	V. Kh. Pshikhopov, D. B. Pogosov	4974003
Mathematical Model of the Quadrotor Type Unmanned Aerial Vehicle with Neurocontroller	S. F. Jatsyn, V. E. Pavlovsky, O. V. Emelyanova, A. V. Savitsky	5174043
Modeling of Movement of the Planning Robot	Sergey F. Jatsun, Lyudmila Yu. Vorochayeva, Alexander V. Vorochayev	5182003
Cervix Position Recognition by Template Method using Linear Robot Ultrasound	Rino Ferdian Surakusumah, Christina Pahl, Muhammad Akmal Ayob, Eko Supriyanto	4952051
Wireless Remote Control of Transesophageal Echocardiography (TEE) Probe	Dolwin C. C. Kho, Christina Pahl, Eko Supriyanto, Yin M. Myint, Ahmad A. M. Faudzi, Maheza I. M. Salim	5081023
Comparison between Functional Parameters of the Four Gear Automatic Gearbox and the Seven Gear Automatic Gearbox by a Kinematic Point of View	Veronica Argeșanu, Ion Silviu Borozan, Inocențiu Maniu, Raul Miklos Kulcsar, Mihaela Julia	4965003

## EUROPMENT CONFERENCES: Thursday July 17<sup>th</sup> 2014

**CONFERENCE ROOM C': 13:00-15:30**

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

**Chair: Charalampos Arapatsakos, Attila Puskas**

Environmental Impact of Masonry and RC Frame Structures	A. Puskás, J. Virág, L. M. Moga, H. Szilágyi, M. Bindea, Sz. A. Köllő	5082051
Studies Regarding the Irrigation to the Hilly and Terraced Surfaces	B. Lepadatescu, A.-E. Dumitrascu, A. Nedelcu	5071011
Examination of Deterioration on Diesel Engine when used as Fuel Mixture of Diesel-Vegetable Oil	Charalampos Arapatsakos, Anastasios Karkanis, Ioannis Pantokratoras, Eirini Markidou	5123003
The Comparison of Wood Chips and Cocoa Shells Combustion	Michal Spilacek, Martin Lisy, Marek Balas, Zdenek Skala	5081007
Transformation of Soil Texture Classifications by Ensemble Modeling	Milan Cisty, Greta Dolakova, Jana Skalova, Peter Minaric	4948007
<i>Overview of the Most Developed Instances of Eco-Industrial Parks in Italy</i>	<i>Sara Tessitore, Tiberio Daddi, Francesco Testa</i>	<i>4854003</i>
<i>Challenges for a Sustainable Ecosystem Management of Carpathian Forests</i>	<i>Simona Frone, Dumitru Florin Frone</i>	<i>5183003</i>

## EUROPMENT CONFERENCES: Thursday July 17<sup>th</sup> 2014

### CONFERENCE ROOM A': 15:30-17:30

#### CSCC Special Session: Advanced Techniques and Simulations for Defense Applications

Chair: Nikolaos Bardis

Unidirectional Coupling Scheme of Nonlinear Circuits via a Memristor	Christos K. Volos, Sundarapandian Vaidyanathan, Ioannis M. Kyprianidis, Nikos G. Bardis, Ioannis N. Stouboulos	5178064
Comparing Accuracy and Solution Times in Coverage Models	George P. Alexandris, Nikolaos G. Bardis	5089011
Elearning Platform Assessment for Military Distance Education with Multicriteria Analysis	George Rigopoulos, Nikolaos V. Karadimas	5178061
Synchronization Error Detection of Data Transmission Errors in Asynchronous Channels	Olga Fedorechko, Oleksandr P. Markovskiy, Nikos Doukas, Nikos Bardis	7777775
Anti-Synchronization of WINDMI Systems via Adaptive Backstepping Control Method and its FPGA Implementation	Sundarapandian Vaidyanathan, Christos K. Volos, Ionnis M. Kyprianidis, Ioannis N. Stouboulos, Karthikeyan Rajagopal, Prasina Alexander	5178060
A Seven-Term Novel 3-D Chaotic System with Three Quadratic Nonlinearities and its LABVIEW Implementation	Sundarapandian Vaidyanathan, Christos K. Volos, Ionnis M. Kyprianidis, Ioannis N. Stouboulos, Karthikeyan Rajagopal, Prasina Alexander	5178062

### CONFERENCE ROOM B': 15:30-17:30

#### COME Session: Continuum Mechanics: Theory and Applications

Chair: Charalampos Arapatsakos, Leonid Savin

Stability Analysis of Nonparallel Unsteady Flows by a Symmetry-Based Method	Georgy I. Burde, Ildar Sh. Nasibullayev, Alexander Zhalij	4952071
Turbulence Models Comparison for the Numerical Study of the Air Flow, an Internal Combustion Engine	Ioannis Pantokratoras, Charalampos Arapatsakos	5102003
About the Place of Installation of a Gas Cooker in the Kitchen	Iu. H. Polandov, M. A. Barg, V. A. Babankov	5073007
Novel Aortic Cannula with Spiral Flow Inducing Design	Nadia S. Shafii, N. Darlis, Jeswant Dillon, Kahar Osman, Ahmad Zahran Md Khudzari, E. Supriyanto	4952059
The Application of Variational Principles in Hydrodynamic Theory of Lubrication	L. Savin, A. Kornaev, E. Kornaeva	5179063
Influence of Substrate Properties on Evaporation of the Sessile Drop	O. V. Nagornov, N. V. Starostin	4939003
Rotor Blade Stress and Vibration Amplitudes Monitoring During Operation Condition in One-Pass Jet Engine	Ryszard Szczepanik	5149003



EUROPMENT CONFERENCES: Thursday July 17<sup>th</sup> 2014

**CONFERENCE ROOM C': 15:30-17:30**

**PMAMCM Session: Mathematical Methods and Computational Techniques I**

**Chair: Yuri Senichenkov, Gloria Cravo**

A New Open Source Project for Modeling and Simulation of Complex Dynamical Systems	A. A. Isakov, Y. B. Senichenkov	5185103
Some Properties of Operators with Non-Analytic Functional Calculus	Cristina Șerbănescu, Ioan Bacalu	4894003
<i>Workflow Analysis - A Task Model Approach</i>	<i>Gloria Cravo</i>	<i>5141003</i>
Analysis of Physical Health Index and Children Obesity or Overweight in Western China	Jingya Bai, Ye He, Xiangjun Hai, Yutang Wang, Jinquan He, Shen Li	4929031
An Exploratory Crossover Operator for Improving the Performance of MOEAs	K. Metaxiotis, K. Liagkouras	4899003
Architecture of an Agents-Based Model for Pulmonary Tuberculosis	M. A. Gabriel Moreno Sandoval	4969003
<i>Recovering of Secrets using the BCJR Algorithm</i>	<i>Marcel Fernandez</i>	<i>4964003</i>
<i>Exponentially Scaled Point Processes and Data Classification</i>	<i>Marcel Jirina</i>	<i>5146015</i>
Comparison of Homotopy Perturbation Sumudu Transform Method and Homotopy Decomposition Method for Solving Nonlinear Fractional Partial Differential Equations	Rodrigue Batogna Gnitchogna, Abdon Atangana	5012003
The Movement Equation oh the Drivers Spine	Raul Miklos Kulcsar, Veronica Argesanu, Ion Silviu Borozan, Inocentiu Maniu, Mihaela Jula, Adrian Nagel	4960011

**Coffee Break: 17:30-18:00**

## EUROPMENT CONFERENCES: Thursday July 17<sup>th</sup> 2014

### CONFERENCE ROOM A': 18:00-20:30

#### EEDS Session: Power and Energy Systems

Chair: Asad Salem, Chonlakarn Wongkhorsub

New Tree Species for Agroforestry and Energy Purposes	Andrea Vityi, Béla Marosvölgyi	5069011
Solar Powered LNG Regasification: Enhancing Power Generation and Water Desalination	Asad A. Salem, Emad Hudiab	5051011
Engine Performance and Economic Impact Study of Gasoline-Like Tyre Pyrolysis Oil in Thailand	C. Wongkhorsub, N. Chindaprasert, S. Peanprasit	4925003
Embedding Sustainability Dynamics in Energy Conversion Chain on Electric Railway Vehicles with Traction Synchronous Motors	Cornelia A. Bulucea, Doru A. Nicola, Daniel C. Cismaru, Nikos E. Mastorakis, Carmen A. Bulucea, Constantin Brindusa	4851003
Performance Measure of Switching Device (MOSFET) in Photo-voltaic System	Kamala J., Janarthanan V., Santhosh K.	4924007
Renewable, Non-Renewable Energy Consumption, Economic Growth and CO2 Emission: Evidence for Iran	Soheila Khoshnevis Yazdi, Bahman Khanalizadeh, Nikos Mastorakis	5174023
<i>Power-Information Models of Operation and Development of Megapolises Power Supply Systems</i>	<i>Stepan A. Dmitriev, Sergey E. Kokin, Alexandra I. Khalyasmaa</i>	5179055

### CONFERENCE ROOM B': 18:00-20:30

#### PMAMCM Session: Computational Methods in Mechanics and Engineering

Chair: Attila Puskas, Ilona Dzenite

Flanged Wide Reinforced Concrete Beam Subjected to Fire - Numerical Investigations	A. Puskás, A. Chira	4935003
Analytical Solution for Some MHD Problems on a Flow of Conducting Liquid in the Initial Part of a Channel in the Case of Rotational Symmetry	Elena Ligere, Ilona Dzenite	4967003
MHD Mixed Convection Flow of a Second-Grade Fluid on a Vertical Surface	Fotini Labropulu, Daiming Li, Ioan Pop	4861015
Pulsatile Non-Newtonian Flows in a Dilated Vessel	Iqbal Husain, Christian R Langdon, Justin Schwark	4862059
Modelling of High-Temperature Behaviour of Cementitious Composites	Jiri Vala, Anna Kucerova, Petra Rozehnalova	5152007
Analytical and Experimental Modeling of the Drivers Spine	Veronica Argesanu, Raul Miklos Kulcsar, Ion Silviu Borozan, Mihaela Jula, Saša Čuković, Eugen Bota	4960003
New Tuning Method of the Wavelet Function for Inertial Sensor Signals Denoising	Ioana-Raluca Edu, Felix-Constantin Adochiei, Radu Obreja, Constantin Rotaru, Teodor Lucian Grigorie	4943011

**EUROPMENT CONFERENCES: Thursday July 17<sup>th</sup> 2014**

**CONFERENCE ROOM C': 18:00-20:30**

**COME Special Session: Development and Study of Aerial, Aerostatical and Aerospace Vehicles**

**Chair: Viacheslav Pshikhopov**

Research on the Intelligent Adaptive Hybrid Control System for an Autonomous Mobile Robot	I. Kobersy, V. Finaev, D. Beloglazov, I. Shapovalov, J. Zargaryan, V. Soloviev	5173003
Research of the Controlled Flight Dynamics based on the Full and Simplified Quadrotor Models	I. Shapovalov, V. Soloviev, V. Finaev, D. Beloglazov, J. Zargaryan, E. Kosenko	5181003
Design of the Intelligent Adaptive Hybrid Control System for Autonomous Mobile Robot on the Basis of Neuro-Fuzzy Networks	V. Finaev, I. Kobersy, D. Beloglazov, I. Shapovalov, E. Kosenko, V. Soloviev	5163003
Mobile Objects Control in Unknown Environments	Viacheslav Pshikhopov	5165003
Neural Network Method of Intellectual Planning of Mobile Robotic Object Movement in the Conditions of Uncertainty	V. Ph. Guzik, Yu. V. Chernukhin, A. O. Pyavchenko, M. Yu. Polenov, V. A. Pereverzev, R. V. Saprykin	5160003
Principles of Structural Organization of the Intellectual Movement Planning System for Mobile Robotic Object	V. Ph. Guzik, Yu. V. Chernukhin, A. O. Pyavchenko, V. A. Pereverzev, R. V. Saprykin	5179003
Neural Network Position-Path Adaptive Regulator for Vehicles	V. Pshikhopov, M. Medvedev, D. Shanin	5153003
Study of Control Forces and Torques Distribution Algorithms for Intelligent Control of Vehicle Actuators	V. Pshikhopov, M. Medvedev, V. Chufistov	5145003

## EUROPMENT CONFERENCES: Thursday July 17<sup>th</sup> 2014

### POSTER PRESENTATIONS

Effect of High Temperature on the Transconductance of AlGaN/AlN/GaN High Electron Mobility Transistors (HEMT)	Rajab Yahyazadeh, Zahra Hashempour, Gasem Abdollahi, Belal Baghdarghi	4871003
High-Q Current-Mode CMOS Companding Bandpass Tunable Filter	A. Kircay	5070003
Magnetically Dimmable Half Bridge Current Fed LED Driver	Selim Borekci, Nihal Cetin Acar	5071015
Hybrid FM Stereo Encoder using DDS for Carrier and pilot Signal Generation	Manolis G. Tampouratzis, George A. Adamidis	5079059
Motorized Remote Control of Transesophageal Echocardiography (TEE) Probe Tip: Preliminary Testing	Dolwin C. C. Kho, Christina Pahl, Eko Supriyanto, Yin M. Myint, Ahmad A. M. Faudzi, Maheza I. M. Salim	5082023
Analog Non-Linear Function Synthesizer: HSPICE Design and Simulation	Madina Hamiane	5097003
Adaptive Detection for STBCs in IEEE 802.11ac	Smriti Kana Roy, Hung-Ta Pai, Chun-Yi Wei, Debasish Ghose	4717011
Design and Implementation of a Wireless Community Network in Colombia	Galeano R. Katherine, Chávez S. Rodolfo, Pedraza M. Luis	4784011
An Efficient Resource Management Algorithm for Next Generation Networks Using Multi Network Data Path	V. Senthil Kumaran, E. D. Kanmani Ruby, G. Deepa	4920003
Chromatic Dispersion in Fiber Optic with Ordered Rotating of Glass Microstructure (ORGM)	Al-Gawagzeh Mohammed Yousef, Al-Hadidi Mohammed Rasoul	4923003
Relay Selection Techniques for Broadcast Cooperative Networks using Blind Relays	Sami Touati, Hatem Boujemaa, Nazha Abed	4999003
Denial of Sleep Detection and Mitigation	M. Wainis, K. Kabalan, R. Dandeh	5083019
Telecardiology for Rural Area in Developing Countries: Challenges	E. Supriyanto, H.T. Yew, Haikal Satria	5083027
Combination of Hybrid Chaotic Encryption and LDPC for Secure Transmission of Images Over Wireless Networks	Mona F. M. Mursi, Hossam Eldin H. Ahmed, Fathi E. Abd El-Samie, Ayman H. Abd El-Aziem	5122003
OFDM Communication System Based on PAPR Reduction Technique	M. Papez, R. Jasek, K. Vlcek	5167011
Dynamic Centralized Interference Coordination in Femto Cell Network with QoS Provision	Jiao Wang, Jay Weitzen, Volkan Sevindik, Oguz Bayat, Mingzhe Li	7777773
Efficient Answering of XML Queries Using Holistic Twig Pattern Matching	Divya Rajagopal, J. C. Miraclin Joyce Pamila	4628003
Computer Vision Applied for Accessing to Machine Information Using Sobel Operator	Chávez S. Rodolfo, Lozano C. Ruben, Pedraza M. Luis	4788015

## EUROPMENT CONFERENCES: Thursday July 17<sup>th</sup> 2014

### POSTER PRESENTATIONS

A Heuristic Cluster-Head Selection Algorithm for Clustering-Based Wireless Sensor Networks: Based on VIKOR Technique	Hossein Jadidoleslamy	4819007
Analogy of Using Intelligence and Smart Filters Such as Two Stage Kalman in Cloud Computing	Mehdi Darbandi	4824007
Augmentation Security of Cloud Computing via Sequence Unscented Kalman Filtering	Mehdi Darbandi	4824011
A Fuzzy Ontology-Based Term Weighting Algorithm for Research Papers	Zeinab E. Attia	4840007
Fuzzy Ontology-Based Model for Information Retrieval	Zeinab E. Attia	4852007
Assessing Pollution of Outdoor Insulators in the Cretan Power System	D. Pylarinos, K. Siderakis, I. Pellas, E. Thalassinakis	4861007

**Plenary Lecture 6: 09:00-09:45 Room A'**



**Robust Adaptive Control of Linear Infinite Dimensional Symmetric Hyperbolic Systems with Application to Quantum Information Systems**

Prof. Mark J. Balas, Embry-Riddle Aeronautical University, FL, USA.

**Plenary Lecture 7: 09:45-10:30 Room A'**



**The Influence of a Magnetic Field in the Fuel of a Gasoline Engine**

Prof. Charalampos Arapatsakos, Democritus University of Thrace, Greece.

**Plenary Lecture 8: 10:30-11:15 Room A'**



**Multidimensional Optimization Methods with Fewer Steps Than the Dimension: A Case of "Insider Trading" in Chemical Physics**

Prof. Paul G. Mezey, Memorial University of Newfoundland, Canada.

**Coffee Break: 11:15-11:45**

**Plenary Lecture 9: 11:45-12:30 Room A'**



**MvStudium\_Group: A Family of Tools for Modeling and Simulation of Complex Dynamical Systems**

Prof. Yuri B. Senichenkov, St. Petersburg State Polytechnical University, Russia.

**CONFERENCE ROOM A': 12:30-15:00**

**CSCC Special Session: Informatics in Control Theory and its Applications I**

**(Track: Control Theory)**

**Chair: Roman Prokop**

Two Suboptimal Controller Parameters Tuning Approaches for Systems with Delays: Selected Highlights of Preliminary Studies	Libor Pekař, Roman Prokop	5009007
Parameter Estimate of Anisochronic Models Using Method of Moments	Milan Hofreiter	5039003
Control System for Chemical Thermal Processes	Petr Chalupa, Martin Beneš, Jakub Novák, Michaela Bařinová	5029007
Families of Spherical Polynomials: Description and Robust Stability Analysis	Radek Matušů	5049003
Graphical Analysis of Robust Stability for Fractional Order Time-Delay Systems Integer Order PID Controllers	Radek Matušů, Roman Prokop	5042011
Multivariable Control of Unstable Systems – A Matrix Equation Approach	Roman Prokop, Jiřĩ Korbek	5048007
Relay Feedback Identification of Dynamical SISO Systems – Analysis Settings	Roman Prokop, Jiřĩ Korbek, Radek Matušů	5048003

## EUROPMENT CONFERENCES: Friday July 18<sup>th</sup> 2014

**CONFERENCE ROOM B': 12:30-15:00**

**CSCC Special Session: Informatics in Control Theory and its Applications II**

**(Track: Instrumentation and Measurement)**

**Chair: Michaela Bařinová**

Modeling and Optimization of Hydrolysate Yields in Leather Waste Processing	Hana Vaskova, Karel Kolomaznik	5019003
Measuring and Identification of Oils	Hana Vaskova, Martina Buckova	5019007
Edible Oil Comparison by Terahertz Time Domain Spectroscopy System Tera OSCAT	Marie Tobolova, Vojtech Kresalek	5021003
Investigation of Thermal Degradation of Vegetable Oils During Frying using Terahertz Time-Domain Spectroscopy	Marie Tobolova, Vojtech Kresalek	5021007
Modeling of Protein Sorption on Chromium Sludge as a Tool for Optimization of its Deproteination	Michaela Bařinová, Jiří Pecha, Karel Kolomazník	5036003
Mathematical Description of Magnesium Oxide Extraction from Chrome-Tanned Leather Waste	Michaela Bařinová, Karel Kolomazník	5036007
A Thermoelectric Generator as an Electric Energy Source for the Building Sensors	Michal Oplustil, Martin Zalesak, Stanislav Sehnalek, Pavel Chrobak	5018015
Scanning Probe Microscopy Method for Diagnostics of Ultra-Thin Tungsten Films on Silicon Substrate	Milan Navrátil, Vojtěch Křesálek, František Hruška, Tomáš Martínek, Josef Kudělka, Jaroslav Sobota	5026003
Testing the Properties of MATERIALS used for the Measurement of the PIR Detector in the Infrared Range	R. Drga, D. Janáčová, H. Charvátová	5031015



## EUROPMENT CONFERENCES: Friday July 18<sup>th</sup> 2014

**CONFERENCE ROOM C': 12:30-15:00**

**EMET Session: E-Learning and Distance Learning**

**Chair: Jorge Rubiano, Vladislav Slavov**

A Development of Online Lessons of Suansunandha Local Wisdom, Preparing Readiness for ASEAN	Chaiwat Waree	4836003
Platform from Mobile Learning	J. Rubiano, A. Mena, D. Sánchez	4945003
Influence of the Practice of Virtual Reality Videogames on Significant Learning for the Development of Locomotor Jumping Pattern in 5 Years Old Children	Janeth Patricia Caviativa, Lena Yalitza Coy Moreno, Yoan Manuel Guzmán Suarez, Adriana Roció Gutiérrez Galvis, Juan Diego López Vargas	4936007
IT Initiative for Creative Interactive Teaching Presentation Based on IT Blueprint Framework	Maria Seraphina Astriani, Satrio Pradono, Jurike V. Moniaga	4947003
Serious Games in Education: Towards the Standardization of the Teaching-Learning Process	Nabila Hamdaoui, Mohammed Khalidi Idrissi, Samir Bennani	5078011
Model Validation Tools Web X.0 in Teaching and Learning	Nuno Miguel Cardoso Peixoto, Sónia Rolland Sobral	4791007
The Use Systems for Measurement Using a Computer in the School Laboratory to Explanation for Temperatures during the Water Heating	Radek Nemeč, Stepan Hubalovsky	4855019
Data Processing for Turkish e-Learning Platform	Sultan Turhan, Charlotte Labat-Camy	4952067
Virtual Labs in ELFE – First Steps	Vladislav Slavov, Asya Senova, Kameliya Yotovska	4863007
Collaborative Learning in Superior Education with Learning Virtual Objects LVO	Janeth Patricia Caviativa Castro, Ruth Molina	4944003
A Physical Model for Teaching One-Dimensional Kinematic Gait	C. A. Collazos, R. E. Argothy	5184043

**EUROPMENT CONFERENCES: Friday July 18<sup>th</sup> 2014**

**CONFERENCE ROOM A': 15:00-17:30**

**CSCC Session: Circuits Design and Applications**

**Chair: Petr Dostal, Alexey Dordopulo**

Analysis of AM-to-PM Distortion Effect on ACPR Performances	Eun-Hee Kim, Hoyong Kang, Kwyro Lee	5087039
An Enhancement Text Method for Image Acquired via Digital Cameras by PDE's Stable Model	Hassan El Bahi, Zouhir Mahani, Abdelkarim Zatni	4928007
Virtex-7 FPGA-based Reconfigurable Computer System RCS-7 for Digital Image Processing	Ilya I. Levin, Igor A. Kalyaev, Alexey I. Dordopulo, Liubov M. Slasten, Slava V. Gudkov	4935007
Modelling and Control of Water Tank Model	Jiri Vojtesek, Petr Dostal	4915003
Cascade Adaptive Control of a Continuous Stirred Tank Reactor	P. Dostál, V. Bobál, J. Vojtěšek	4903003
A Fuzzy Based Controller for Wind Energy Conversion System Using PWM CSI with Diode Rectifier and Buck Converter	Shahram Javadi, Mehrnaz FardAmiri	5087007
Pseudospectral Time-Domain (PSTD) Method to Predict Fast Transients in Transmission Lines	Silvano Cruciani, Mauro Feliziani	5159003
Digital Smith Predictor for Control of Unstable and Integrating Time-delay Processes	V. Bobál, P. Chalupa, P. Dostál, M. Kubalčík	4904003
Maximizing Unavailability Interval in the WiMAX	Jia-Sheng R. Chen, Yuan-Chang Chang, Hsing Mei	4948003
A VSC Approach for Wave Energy Converters	Aitor J. Garrido, Izaskun Garrido, Mikel Alberdi, Modesto Amundarain, Edorta Carrascal	5062003
A Hybrid Wavelet-Based Distributed Image Compression	S. M. Youssef, A. Abou-Elfarag, N. S. Khalil	4927003

**EUROPMENT CONFERENCES: Friday July 18<sup>th</sup> 2014**

**CONFERENCE ROOM B': 15:30-17:30**

**EEDS Special Session: Challenging New Methods in Multidimensional Landscape and Agriculture Analysis towards Sustainable Development**

**Chair: Luís Loures**

Short Term Effect of Different Management Practices on Rice Production and Agronomic Behavior in Mediterranean Conditions	D. Becerra, J. Sánchez-Llerena, D. Peña, A. López-Piñeiro, A. Albarrán, J. Rato-Nunes, L. Loures	5179035
Fate of Metribuzin Affected by De-Oiled Two Phase Olive Mill Waste Amendment in an Olive Grove Soil	D. Peña, A. López-Piñeiro, A. Albarrán, D. Becerra, J. Sánchez-Llerena, J. Rato-Nunes	5179039
Effect of Secondary Pulp Mill Sludge Application as Soil Organic Amendment in Nitrate Leaching	J. Rato Nunes, F. Cabral, A. López-Piñeiro, L. Loures, D. Becerra	5179031
Geochemical Baseline Concentrations of Available Heavy Metals in Mediterranean Agricultural Soils: A Case Study in Calcareous Soils of Southwest Iberian Peninsula	J. Rato Nunes, J. Ramos-Miras, A. Lopez-Piñeiro, L. Loures, C. Gil, J. Coelho, D. Peña	5179027
Using Direct and Indirect Methods of Landscape Evaluation on Environmental Amenities' Valuation	L. Loures, A. Loures, J. Nunes, T. Panagopoulos	5179019
Assessing the Relation between Soil Edaphic Properties and Phosphorus Adsorption in Extremadura (Spain) Vertisols	L. Loures, J. Nunes, A. López-Piñeiro, A. Loures, A. Navarro	5179023

## EUROPMENT CONFERENCES: Friday July 18<sup>th</sup> 2014

**CONFERENCE ROOM C': 15:00-17:30**

**EEDS Session: Business and Economics**

**Chair: Benedetto Manganelli, Jaroslav Belas**

The Market Value of in Use Industrial Machinery	Benedetto Manganelli, Pierluigi Morano, Francesco Tajani	5106003
Insurance and Chain Bankruptcy Theory	Bijan Bidabad, Nikos Mastorakis	5154023
Significant Factors of Satisfaction of Bank Customers. Case Study from the Czech Republic	J. Belás, A. Chochořáková, L. Gabčová	5059007
Parameters of Insolvency Proceedings in Developed Countries and Their Dependence on Economic Performance	Luboš Smrčka, Markéta Arltová, Jaroslav Schönfeld, Lee Louda	4847007
The Role of Research and Development in the Central Region of Romania using Fuzzy Super FRM Model	Moga Monika, Calefariu Gavrilă, Sârbu Flavius Aurelian	5082059
Accounting Aspects of Risk Management and Improvement of the Entrepreneurial Venture Enterprise	Nenad R. Lalić, Srdjan M. Lalić, Dragan Milovanović, Biljana Kovačević	5147007
Impact of Steering Committee Configuration and Decisions on Project Success in Pakistan	Sabina S. Shirazi	5035015
<i>The Assessment of the Effectiveness of Reforms in Various Countries</i>	<i>Samson Davoyan, Tatevik Sahakyan</i>	<i>5140007</i>
Credit Risk Evaluation and Analysis on Chinese Commercial Banks Using Logistic Model	Xiaorong Zou	4929035

**Coffee Break: 17:30-18:00**

## EUROPMENT CONFERENCES: Friday July 18<sup>th</sup> 2014

### CONFERENCE ROOM A': 18:00-20:30

#### CSCC Special Session: Informatics in Control Theory and its Applications III

(Track: Modeling and Simulation)

Chair: Zdeněk Úředníček

Computer Application for Determination of Optimal Economic Costs of Biomaterial Waste Treatment by Enzymatic Hydrolysis	H. Charvátová, D. Janáčková, V. Vašek, K. Kolomazník	5034007
Parameterization of Module for Testing of Thermal Stability in the Room	H. Charvátová, M. Zálešák, S. Sehnálek	5034003
Measurement and Simulation of Electromagnetic Interference in Low Frequencies Range	Jiří Otáhal, František Hruška, Stanislav Sehnálek	5043003
Electromagnetic Field Distribution within a Semi Anechoic Chamber	Martin Pospisilik, Josef Soldan	5047003
Determination of Thermal Steady State in the Wall with Semi Dirichlet Boundary Conditions	Martin Zalesak	5042007
Computer Simulation of the Heating Sensor PIR Detector by Radiation	R. Drga, D. Janáčková, H. Charvátová	5031019
Evaluation of SolidWorks Flow Simulation by Ground-Coupled Heat Transfer Test Cases	S. Sehnalek, M. Zalesak, J. Vincenec, M. Oplustil, P. Chrobak	5044003
Unitary Theory of Direct Electromechanical Transformers	Zdeněk Úředníček	5018011
Equations of Motion and Physical Model of Quad-copter in Plain	Zdeněk Úředníček, Milan Opluštíl	5018007

### CONFERENCE ROOM B': 18:00-20:00

#### CSCC Special Session: Informatics in Control Theory and its Applications IV

(Track: Control Applications)

Chair: Petr Chalupa

The Cost Function for Extraction of Bound Component from Material	D. Janáčková, V. Vašek, K. Kolomazník	5035011
Optimization of a Batch Reactor Dimensions	David Novosad, Lubomír Macků, Milan Navrátil	5026007
Implementation of Fuzzy MPC on Embedded System	Jakub Novak, Petr Chalupa	5029011
Return on Investment in Photovoltaic Panels Verification their Effectiveness	P. Chrobak, M. Zalesak, M. Oplustil, S. Sehnalek, J. Vincenec	5042003
Application of Self-Tuning Polynomial Controller	Stanislav Plšek, Vladimír Vašek	5020003

## EUROPMENT CONFERENCES: Friday July 18<sup>th</sup> 2014

**CONFERENCE ROOM C': 18:00-20:30**

**CSCC Session: Data Mining and Query Processing I**

**Chair: Daniela Borissova, Dowming Yeh**

A Short-Term User Model for Adaptive Search Based on Previous Queries	Albena Turnina	4860007
A Parallel Algorithm for Optimal Job Shop Scheduling of Semi-Constrained Details Processing on Multiple Machines	Daniela I. Borissova, Ivan C. Mustakerov	4845007
Integrating Information Retrieval and Static Analysis to Assess Relationships between Components and Features in Software Systems	Dowming Yeh, Chia-Hsiang Yeh, Wei-Chen Liu, Mei-Fang Chen, Pei-Ying Tseng	4850007
Fast Information Retrieval from Big Data by Using Cross Correlation in the Frequency Domain	Hazem M. El-Bakry, Nikos E. Mastorakis, Michael E. Fafalios	5178063
Data Warehouse Minimization with ELT Fuzzy Filter	Jaroslav Zacek, Frantisek Hunka	5174027
Identification of Direct and Indirect Discrimination in Data Mining	P. Priya, J. C. Miraclin Joyce Pamila	4625011
Comparative Analysis on the Competitiveness of Conventional and Compressive Sensing-Based Query Processing	Salema Fayed, Sherin Youssef, Amr El-Helw, Akbar Sheikh Akbari, Mohammad Patwary, Mansour Moniri	4941003

## EUROPMENT CONFERENCES: Friday July 18<sup>th</sup> 2014

### POSTER PRESENTATIONS

Physical Modeling of Flow Characteristic in Dissolved Air Flotation Tank with Chitosan and Bentonite as Coagulant	M. A. Z. Mohd Remy Rozainy, M. Hasif, S. Syafalny, P. Puganeshwary	4854007
TRM Strengthening of Precast Reinforced Concrete Wall Panel with Cut-Out Opening - Experimental Investigation	C. Todut, D. Dan, V. Stoian	4986007
Natural Frequency Automatic Variation in Earthquake Isolation System	Federico Bartolozzi	5028007
Cyclic In-Plane Testing for Evaluation of Shear Capacity for Ceramic Block Walls	Eva Partene, Andrei Bindean, Mihai Fofiu, Valeriu Stoian, Luminita Fekete-Nagy	5082031
Retrofitting of Precast Reinforced Concrete Wall Panel using Carbon Fiber Strips	M. Fofiu, I. A. Bindean, E. Partene, V. Stoian	5087015
Anchoring Influence in RC Beams Flexural Strengthening Using CFRP Fabric	D. Diaconu, V. Stoian, T. Nagy-Gyorgy, S. C. Florut	5087019
Virtual Learning and Experimental Environment as an Innovative Strategy of Technical Education	Artur Rogach	4783003
Driving Factors and Management Framework in Enabling Effective University – Industry Collaborations	E. S. Lim, M. S. Liew, T. N. Tengku Shahdan	4852009
Governance and Adaptation to Innovative Modes of Higher Education Provision	Silvia Florea, Cecile Hoareau McGrath	4917003
Towards a New Approach for Constructing Concept Maps Based on Fuzzy Logic	Ali Aajli, Karim Afdel	4951115
The Use of Web 2.0 to Support Informal Learning in Third Level through the Library	Emma O'Brien, Sinead Mellett, Michael O'Haodha	5178055
Split-Teaching: Frontier Tools for Classroom Instruction	Bharat Rawal, Lucy Wilson	5179047
Fault Throw and Sealing Thickness Relationship of Middle Cretaceous Muglad Basin, South Sudan	Dorar Hamdoba Elshaikh, Zuhar Zahir Bin Tuan Harith	5178047
Catastrophic Danube Flood Scenario between Kienstock and Nagymaros Using NLN Model	V. Bacova Mitkova, P. Pekarova, J. Pekar	5080003
Simulation Methodology with Control Approach for Water Distribution Networks	Diego Ricardo Diaz Vela	5081019
The Easiest and Least Expensive Way to Control Water Hammer in Irrigation and Drainage Network of Sivand Dam	Reza Gharekhani, Sayed Abbas Mousavi, Fatemeh Kazemi	5137003
Solute Transfer in Layered Porous Media: An Approach Based on Differential Quadrature Method (DQ)	Meysam Ghamariadyan, Abbas Ghaheri	5140003
Tisza River Modelling on the Common Interest Section of Hungary and Serbia	Srdjan R. Kolakovic, Slobodan S. Kolaković, Goran B. Jeftenic, Borislav T. Masic, Svetlana R. Vujovic	5177003

## EUROPMENT CONFERENCES: Friday July 18<sup>th</sup> 2014

### POSTER PRESENTATIONS

The Analysis of Stormwater Runoff and Overflow from the Novi Sad Catchment	Srdjan R. Kolakovic, Matija B. Stipic, Goran B. Jeftenic, Borislav T. Masic, Filip M. Stipic, Slobodan S. Kolakovic, Svetlana R. Vujovic	5178007
Modelling of the Unsteady Flow-Sediment Interaction – Grain Size Approach	Srdjan R. Kolakovic, Ljubomir M. Budinski, Goran B. Jeftenic, Borislav T. Masic, Slobodan S. Kolakovic, Svetlana R. Vujovic	5178011
Assessment of Water Quality of Artificial Water Bodies in Vojvodina (Serbia) using Factor and Cluster Analysis	Srdan R. Kolaković, Svetlana R. Vujović, Slobodan S. Kolaković, Borislav T. Mašić, Goran B. Jeftenić, Ljubomir M. Budinski	5178015
Differences between Structural, Textural and Rheological Properties of two Cameroonian Mineral Clays Used as Cosmetic Mask	Orléans Ngomo, Joseph Marie Sieliechi, Jean Bosco Tchatchueng, Richard Kamga, Aurel Tabacaru, Rodica Dinica, Mirela Praisler	4848015
Novel Methods for Desulfurization of Petroleum Fractions	H. Hosseini	4976003



## EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014

### Plenary Lecture 10: 09:00-09:45 Room A'



#### **New Developments in Clifford Fourier Transforms**

Prof. Eckhard Hitzer, International Christian University, Japan.

### TUTORIAL: 09:45-10:30 Room A'



#### **Informal Introduction to Mesh Free Interpolation of Scattered Large Spatio-Temporal Data**

Prof. Vaclav Skala, University of West Bohemia, Czech Republic.

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

**EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014****CONFERENCE ROOM A': 11:00-13:30****CSCC Special Session: Informatics in Control Theory and its Applications V****(Track: Embedded Systems)****Chair: Vladimír Vašek**

Signal Condition of Embedded Unit Inputs	F. Hruska, M. Navratil, J. Otahal	5034011
Program Modules for Control Applications of Microcontrollers	Jan Dolinay, Petr Dostálek, Vladimír Vašek	5029019
Microcomputer I/O Converter and Control Unit for Heating Systems	Libor Pekař, Petr Dostálek, Zdeněk Oborný	5015003
Galvanically Isolated Interface for an Oscilloscope	Martin Pospisilik, Petr Neumann, Roman Honig, Peter Scheibenreiter	5047011
Electronic Switch for Accumulator Connection in a Backup Power Source	Martin Pospisilik, Tomas Dulik	5047007
Automatic Rehabilitation Device based on Robot and Machine Vision	Miloslav Feriančík, Ondrej Líška	4950003
Development of Control System for Rehabilitation Device Actuated by Pneumatic Artificial Muscles	O. Líška, M. More	5038003
Educational Microprocessor Development Kit – Low-Cost Access System Application	Tomas Sysala, Petr Neumann, Filip Zanka, Lubomir Vasek	5040007

**EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014**

**CONFERENCE ROOM B': 11:00-13:30**

**CSCC Special Session: Informatics in Control Theory and its Applications VI**

**(Track: Computers in Control Engineering)**

**Chair: Roman Senkerik**

Mobile Meteorological Radar Uses in Crisis Management	David Šaur, Stanislav Plšek	5017027
Conversion of 2D Medical Scan Data into 3D Printed Models	Eva Hnatkova, Petr Kratky, Zdenek Dvorak	4952075
Holonic Concept in the Heat Production Distribution Control Systems	Lubomir Vasek, Viliam Dolinay, Tomas Sysala	5035019
Communication Requirements of Laboratory Management System	M. Krbeček, F. Schauer, K. Vlček	5031003
Automatic Complexity Estimation based on Requirements	Radek Silhavy, Petr Silhavy, Zdenka Prokopova	5046007
Chaos Enhanced Differential Evolution with the Dissipative Map for the PID Tuning Problem	Roman Senkerik, Michal Pluhacek, Zuzana Kominkova Oplatkova	5028003
Simulation of Time-Continuous Chaotic Systems for the Generating of Random Numbers	Roman Senkerik, Michal Pluhacek, Zuzana Kominkova Oplatkova	5029015
On the Usage of Differential Evolution for Effort Estimation	T. Urbanek, Z. Prokopova, R. Silhavy	5045003
Analysis Web Structures Optimization	Zdenka Prokopova, Radek Silhavy, Petr Silhavy	5046003

## EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014

### CONFERENCE ROOM C': 11:00-13:30

#### EEDS Session: Water Resources, Pollution and Environmental Issues

Chair: Charalampos Arapatsakos, Sat Ghosh

Experimental Measurement of Load and Exhaust Gas Emissions on an Outboard Engine	Anastasios Karkanis, Charalampos Arapatsakos, Christina Anastasiadou	5086095
Assessing Environmental Impacts of Aviation on Connected Cities via Environmental Vulnerability Studies and Fluid Dynamics: An Indian Case Study	Gautham Ramchandran, Jethro Nagawkar, Karthik Ramaswamy, Sat Ghosh	4941023
Meeting Rural Water Supply Challenges: Lessons from a South African Groundwater Supply Scheme	Jeremiah Mutamba	4744015
The Impact of Salinity on Development the Most Important Copepoda Taxa in Baltic Sea	Lidia Dzierzbicka-Głowacka, Maja Musialik, Anna Lemieszek	4905003
<i>Effects of Environmental Factors on Noise Emissions from Pig Housing</i>	<i>M. Šítková, J. Brouček, P. Bartoš, I. Celjak, A. Dolan</i>	5082011
Wet Scrubber for Cleaning of Syngas from Biomass Gasification	Marek Balas, Martin Lisy, Zdenek Skala, Jiri Pospisil	5083047
The Effect of Regulatory Uncertainty on Water-Right Prices: The Case of the Loa Basin in the Antofagasta Region of Chile	Oscar Cristi, Carlos Díaz, Gonzalo Edwards, Eric Edwards	4926003

### CONFERENCE ROOM A': 13:30-15:30

#### CSCC Session: Data Mining and Query Processing II

Chair: Vaclav Skala , Surender Kumar Soni

Ordered Hash Map: Search Tree Optimized by a Hash Table	Petar Ivanov, Valentina Dyankova, Biserka Yovcheva	4862051
Compressive Sensing-Based Target Tracking for Wireless Visual Sensor Networks	Salema Fayed, Sherin Youssef, Amr El-Helw, Mohammad Patwary, Mansour Moniri	4941007
Energy Efficient Routing Protocol Using Time Series Prediction Based Data Reduction Scheme	Surender Kumar Soni	4989011
Distributed Sensor Network – Data Stream Mining and Architecture	T. Lojka, I. Zolotova	4864007
Fast Insight into Time Varying Datasets with Dynamic Mesh	Vaclav Skala, Slavomir Petrik	4720007
Mining Precise Typestates by Exploring Benefits of Available Specifications	Yi Zhang, Ge Chang, Yazhuo Dong	4720003
Energy Efficient Cooperative Caching in Wireless Multimedia Sensor Networks	Narottam Chand	4989019

## EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014

### CONFERENCE ROOM B': 13:30-15:30

#### EMET Special Session: Civic Education in the Training of Citizens - Civil Political Culture

Chair: Irina Dolinina

Civic Education – Experience of Preparing for Public Participation	A. A. Botalova, I. G. Dolinina	5100023
The Philosophical Roots of Civic Education, the Regulatory Framework and the Reality. New Global Thinking	E. V. Chashchin	5100019
The Political Culture of Civil Type: Methodology of Formation	I. Dolinina	4955003
Legal Education - A Purposeful Process of Formation of Legal Culture of Preparing Students for Public Participation	I. G. Dolinina, E. A. Shakirova	5100011
Interactive and Online Methods of Forming Civic Competence of Students	V. N. Alexeev, I. G. Dolinina	5100015

### CONFERENCE ROOM C': 13:30-15:30

#### INDE Session: Advances in Industrial Engineering I

Chair: Cristian Patrascioiu, Peter Poór

Implementing Knowledge based PCB Design Support System	A. Pataki, G. Horváth	5079063
BBIPED: BCAM-Baltogar Industrial Platform for Engineering Design	C. Alonso-Montes, I. Garcia, A. Ramezani, L. Remaki	4859003
Using the CONVAL <sup>®</sup> Software for the Petrochemical Plant Control Valves Checking. Case Study	C. Patrascioiu, G. Stamatescu, C. Lazar	5005011
Feasibility of Power Flow Control on LV Distribution Systems	Dario De Santis, Gaetano Abbatantuono, Sergio Bruno, Massimo La Scala, Roberto Sbrizzai	5161007
Design of a 22kW Charging Station for LV Distribution Grid Control	Dario De Santis, Gaetano Abbatantuono, Sergio Bruno, Massimo La Scala	4954011
Modern Company Maintenance Management based on the Principle Computerized Maintenance Management System (CMMS) Implementation	Peter Poór, Michal Šimon	4861023
Dimensional Accuracy Optimization of Prototypes produced by PolyJet Direct 3D Printing Technology	J. Kechagias, P. Stavropoulos, A. Koutsomichalis, I. Ntintakis, N. Vaxevanidis	5178051

## EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014

### CONFERENCE ROOM A': 16:00-17:30

#### EEDS Special Session: Towards Cleaner Energy for Sustainable Development

Chair: Liandong Zhu

Development of Autonomous Energy Supply System Using a Sail Type Wind Turbine	A. Jakovics, S. Sakipova, K. Kussaiynov, Zh. Kambarova, Ye. Kussaiynov	5078039
Energy Efficiency and Sustainability of Low Energy Houses in Latvian Climate Conditions	Andris Jakovics, Stanislavs Gendelis, Ansis Ozolins, Saule Sakipova	5090023
Development of Comsol 3D Model for Heat Collection under a Water Body	Hafiz M. K. U. Haq, Birgitta Martinkauppi, Erkki Hiltunen	5080015
Thermal Behavior of a Simplistic Asphalt Pavement Model for Heat Pulses	J. Birgitta Martinkauppi, Anne Mäkiranta, Jukka Kiijärvi, Erkki Hiltunen	5080011

### CONFERENCE ROOM B': 15:30-17:30

#### EMET Special Session: Living Labs in Education & Training

Chair: Giovanna Avellis

'Edil-Learning' Living Lab	F. Longo, S. Santoro, A. Esposito, L. Tarricone, M. Zappatore	5184047
ICT and eLEARNING2.0	Gaetano Contento	7777709
The S.P.L.A.S.H Project – A Research and Experimental Project Using Social Learning Environment in High School	Gianpaolo Chiarella, Antonio Guida	5176019
Education and Training Projects of Apulian ICT Living Lab	Giovanna Avellis, Adriana Agrimi, Gaetano Grasso, Marco Di Ciano, Francesco Surico	5179043
Apulia Future Learning 3.0: Cluster of Education and Learning in Apulia Living Labs	Italo Mattia Spada, Giovanna Avellis, Gaetano Grasso	5175059
ROBIN - ROBotic INteraction System for Visual-Spatial Data Presentation for Effective Learning	Massimo Pistoia, Paolo Casacci, Gianfranco Borrelli	5174039
Easy Perception Lab: Perceptive Ergonomy through Virtual and Augmented Reality in MAUS Museum	S. Invitto, I. Spada, D. Turco, G. Belmonte	5175035

## EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014

### CONFERENCE ROOM C': 15:30-17:30

### CIVILENG Session: Advances in Civil Engineering I

Chair: Henrique Vicente, Sergio Lagomarsino

Axial Compression Resistance of Cold-Formed Steel Lipped Channel at Elevated Temperature	A. A. S. C. Neto, P. D. A. Neto, A. A. R. Costa, R. B. Caldas, F. C. Rodrigues	4951123
Planning the Coastal Management. The Apulia Region Plan	C. Piscitelli, F. Rotondo, F. Selicato, S. Selicato	5101003
Evaluation of Concrete Deterioration through Artificial Neural Networks based Systems	Guida Gomes, Henrique Vicente, José Neves	5182007
Optimal Model of a Masonry Building Structure with Wooden Floors	Mariella Diaferio, Dora Foti, Nicola Ivan Giannoccaro, Salvador Ivorra	5116011
PERPETUATE Project: Guidelines for the Seismic Performance-based Assessment of Cultural Heritage Assets	Sergio Lagomarsino	5083011

**Coffee Break: 17:30-18:00**

**EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014**

**CONFERENCE ROOM A': 18:00-20:30**

**CSCC Special Session: Informatics in Control Theory and its Applications VII**

**(Track: Process Engineering)**

**Chair: Petr Kratky, Vojtech Senkerik**

Temperature Stability of Construction Polymers After Radiation Cross-Linking	Ales Mizera, Miroslav Manas, Zdenek Holik, David Manas, Michal Stanek, Jan Navratil, Martin Bednarik	5017015
3D Data Acquisition and CAD/CAM Systems for CNC Manufacturing of Artificial Limbs	Bílek Ondřej, Javořík Jakub, Sámek David	5025003
Statistical Analysis of Surface Roughness in Grinding of Titanium	Bílek Ondřej, Javořík Jakub, Sámek David	5025007
Numerical Model of Behavior of Pneumatic Actuator	Jakub Javorik	5030003
Analysis of Behavior of Car Stabilizer Bushing	Jakub Javorik, David Samek, Ondrej Bilek	5029023
Physical Properties' Determination of PA6/HDPE Blends	Jan Navratil, Miroslav Manas, Michal Stanek, David Manas, Martin Bednarik, Ales Mizera	5017007
The Surface Properties of Linear Low-Density Polyethylene After Radiation Cross-Linking	Martin Bednarik, David Manas, Miroslav Manas, Michal Stanek, Jan Navratil, Ales Mizera	5017019
Nano-Hardness of PA12 After Radiation	Martin Ovsik, David Manas, Miroslav Manas, Michal Stanek, Petr Kratky, Vojtech Senkerik	5017011
Treatment of Chromium Wastewater using Membrane Separation Processes	Pavel Kocurek, Karel Kolomazník, Michaela Bařinová	5036011
Impact of Irradiation Dose on Mechanical Properties of PA 11	Petr Kratky, David Manas, Miroslav Manas, Michal Stanek, Martin Ovsik, Adam Skrobak, Martin Reznicek	5017003
Impact of Irradiation Dose on Mechanical Properties of PMMA	Petr Kratky, David Manas, Miroslav Manas, Michal Stanek, Martin Ovsik, Vojtech Senkerik, Jan Navratil	5016007
The Behaviour of Recycled Material with Particles of Various Sizes at Increased Temperature and their Tensile Properties	Vojtech Senkerik, Michal Stanek, Miroslav Manas, David Manas, Adam Skrobak, Jan Navratil	5016003



EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014

**CONFERENCE ROOM B': 18:00-20:30**

**CSCC Session: Intelligent Control and Systems Engineering**

**Chair: Ilse Leal Aulenbacher, Boris Gurenko**

Architecture and Design of a Dynamic Real-Time Alarm System for Power Plants	Ilse Leal Aulenbacher, Jose Maria Suarez Jurado, Efren R. Coronel Flores	4854015
On Experimental Verification of Vehicle Active Suspension Robust Control	K. Hyniova	4819003
Pipe Measurement System Using a Laser Range Finder with KINECT	K. Yoshida, N. Hidaka, K. Kawasue	4843003
Adaptive Continuous-Time Decoupling Control	Marek Kubalčík, Vladimír Bobál	5103003
Plasticity of the Error Monitoring and Processing System	Menizibeya O. Welcome, Nikos E. Mastorakis, Vladimir A. Pereverzev	5176023
Motion Detection in Thermal Images Sequence Using Wigner Distributions	Sn. Pleshkova, Al.Bekyarski	4943007
Multiple Pattern-Dependent Controller Design for Markovian Jump Linear Systems	Taesoo Kim, Sung Hyun Kim	5083003
Indirect Adaptive Control for Underwater Vehicles on Base of Nonlinear Estimator of Disturbances	V. Kh. Pshikhopov, M. Yu. Medvedev, B. V. Gurenko, A. M. Maevsky	4769003
Using Fuzzy Logic to Control an Innovative Active Vehicle Suspension System	K. Hyniova, L. Smitkova-Janku	4858011
Control of Direct-Driven PMSG for Wind Energy System	F. Khater, A. Shaltout, A. Omar	5076003
<i>Cluster Head Influence based cooperative Caching in Wireless Sensor Networks</i>	<i>Ashok Kumar</i>	<i>4989015</i>

## EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014

**CONFERENCE ROOM C': 18:00-20:30**

**PMAMCM Session: Mathematical Methods and Computational Techniques II**

**Chair: Eckhard Hitzer, Luis Gabriel Moreno Sandoval**

Complex Probability and Markov Stochastic Process	Bijan Bidabad, Behrouz Bidabad, Nikos Mastorakis	5154003
Fundamentals of a Fuzzy Inference System for Educational Evaluation	M. A. Luis Gabriel Moreno Sandoval, William David Peña Peña	4969007
<i>Degrees of Freedom and Advantages of Different Rule-Based Fuzzy Systems</i>	<i>Marco Pota, Massimo Esposito</i>	<i>5175039</i>
Robust Adaptive Control with Disturbance Rejection for Symmetric Hyperbolic Systems of Partial Differential Equations	Mark J. Balas, Susan A. Frost	4928011
Efficient Numerical Method in the High-Frequency Anti-Plane Diffraction by an Interface Crack	Michael Remizov, Mezhlum Sumbatyan	5089003
Timed Ignition of Separated Charge	Michal Kovarik	4980003
<i>Permutation Codes: A Branch and Bound Approach</i>	<i>Roberto Montemanni, Janos Barta, Derek H. Smith</i>	<i>5132003</i>
<i>Unary Operators</i>	<i>József Dombi</i>	<i>5177007</i>

**Conference Banquet: 21:00**

## EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014

### POSTER PRESENTATIONS

Oxidation of 2-Propanol at Low Temperature over Pt/ $\gamma$ -Al <sub>2</sub> O <sub>3</sub> Catalyst	F. Aghazadeh, D. Omidifar, A. Niaei, D. Salari	4976007
Novel Data-Mining Methodologies for Detecting Drug-Drug Interactions: A Review of Pharmacovigilance Literature	I. Heba, A. Amany, S. E. Ahmed, S. Amr	5082019
Analyzing Emission Sounds: A Way for Early Detection of Bearing Faults in Rotating Machines	Mohamed Fezari, Zahra Taif	5009003
Efficient Management Methods of Project Transfers	Florina-Cristina Filip, Vladimir Mărăscu-Klein	5010003
A Novel Meta Heuristic Inspired of the Biologic Nephron Performance	Reza Behmanesh, Fatemeh Rokni	5086099
Estimation of Failure Probability of B737 Pneumatics System by Fault Tree Analysis	H. Mahfoud, A. Elbarkany, A. Elbiyaali	5088015
Profile of Heat Transfer between Two Different Materials	K. Gherfi, S. Boulkroune, H. Bendjama, D. Idiou	5066003
Magnetic Hysteresis under an Applied Continuous External Magnetic Field	Hamza Houassine, Djelloul Moussaoui, Samir Moulahoum	5073003
Visual Attention Based Extraction of Semantic Keyframes	Irfan Mehmood, Muhammad Sajjad, Sung Wook Baik	4864003
Categorization of ITIL <sup>®</sup> Tools	Kralik Lukas, Lukas Ludek	4931003
Two Stage Strategy of Job Scheduling in Grid Environment Based on the Dynamic Programming Method	Volodymyr V. Kazymyr, Olga A. Prila	4955011
A Stateless Variable Bandwidth Queuing Algorithm for Enhancing Quality of Service	C. Satheesh Pandian	4986003
Detection and Prevention from Denial of Service Attacks (DoS) and Distributed Denial of Service Attacks (DDoS)	Nozar Kiani, Ebrahim Behrozian Nejad	5078007
Implementing Hierarchical Access Control in Organizations using Symmetric Polynomials and Tree Based Group Diffie Hellman Scheme	Jeddy Nafeesa Begum, Krishnan Kumar, Vembu Sumathy	5082003
An Intrusion Detection Approach Using Fuzzy Logic for RFID System	Ali Razm, Seyed Enayatallah Alavi	5083035

## EUROPMENT CONFERENCES: Saturday July 19<sup>th</sup> 2014

### POSTER PRESENTATIONS

Improvement of QoS in Grid Computing by Combination Heuristic Algorithms	E. Tavakol, M. Fathi, S. Navaezadeh	5085019
Endoscopic Procedures Control Using Speech Recognition	Simão Afonso, Isabel Laranjo, Joel Braga, Victor Alves, José Neves	5086091
Fusion of Visual and Acoustic for Active Acoustic Source Detection with Spatially Global GMM	R. Azzam, N. Aouf	5089007
Mathematical Model for Object Oriented Class Cohesion Metric -MCCM	Omer Saleh, Tejdeda Alhussen Alhadi, Xavier Patrick Kishore, Sagaya Aurelia	5090007
Integrated Development Environment for Remote Application Platform Eclipse Rap – A Case Study	Sagaya Aurelia, Xavier Patrick Kishore, Omer Saleh	5090011
A Survey on Mobile Augmented Reality Based Interactive Storytelling	Sagaya Aurelia, M. Durai Raj, Omer Saleh	5090015
Mobile Augmented Reality and Location Based Service	Sagaya Aurelia, M. Durai Raj, Omer Saleh	5090019
Social Relevance Feedback: An Innovative Scheme Based on Multimedia Content Power	Klimis S. Ntalianis, Anastasios D. Doulamis	5100031

**EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014**

**CONFERENCE ROOM A': 09:00-11:00**

**CIVILENG Session: Advances in Civil Engineering II**

**Chair: Jaroslav Klokočník, Jiri Vala**

Mathematical Modelling of Orbits for Geodetic Satellites	Jaroslav Klokočník, Aleš Bezděk, Jan Kostelecký	4940007
<i>Non-Destructive Detection of Metal Fibres in Cementitious Composites</i>	<i>Jiri Vala, Leonard Hobst, Vladislav Kozak</i>	<i>5082007</i>
Numerical Prediction of the Fracture Performance of Wires for CIVILENG Applications with Longitudinal Crack-Like Laminations at Varying Locations	Kazeem K. Adewole, Nikos E. Mastorakis	5063003
Diagnostics of Existing Steel Roof Structure of Winter Sports Stadium	Marcela Karmazínová, Jindrich Melcher, Lubomír Vítek, Petr Cikrle, Jaromír Láník	7777771
Factors affecting Productivity of Infrastructure Development Project attributable to Insecurity due to Terrorism	Muhammad Sohail Anwar Malik, Shazia Nauman	5122011
Mechanical Properties of Composite Hydrogel MATERIALS based on Poly(Acrylamide) and Clay Minerals and their Potential Application for Cleaning of the Internal Surface of Pipes	Zhanar Ibrayeva, Evgeniy Blagikh, Sarkyt Kudaibergenov	4963005

EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014

**CONFERENCE ROOM B': 09:00-11:00**

**MATERIALS-CCE Session: Chemistry and Materials Science**

**Chair: Emmanuel Paspalakis, Kunihiko Goto**

AQPO as an atomic machine	Kunihiko Goto, Atsushi Suenaga, Takehiko Ogura, Makoto Taiji, Akira Toyama, Hideo Takeuchi, Mingyu Son, Kazuyoshi Takayama, Masatoshi Iwamoto, Ikuro Sato, Jay Z Yeh, Toshio Narahashi, Haruaki Nakaya, Akihiko Konagaya	5150003
A Computational Study of a Prebiotic Synthesis of L-Leucine and L-Isoleucine	N. Aylward	4919003
Activation Energies for Initial and Intermediate Stage Sintering of Li <sub>2</sub> TiO <sub>3</sub> Determined by a Two-Stage Master Sintering Curve Approach	Ahmad Reza Abbasian, Mohammad Reza Rahimipour, Zohreh Hamnabard	4913003
Nonlinear Optical Response of a Coupled Quantum Dot - Metal Nanoparticle System	Spyridon G. Kosionis, Andreas F. Terzis, John Boviatsis, Emmanuel Paspalakis	4995003
Effect of Carburizing on Fatigue Life of Highstrength Steel Specimen under Push-Pull Loading	Štěpán Major, Vladimír Jakl, Štěpán Hubálovský	5078031
Thermochemical Characteristics of the Modern Gearboxes Housing Material	Ion Silviu Borozan, Veronica Argeşanu, Inocenţiu Maniu, Raul Miklos Kulcsar, Mihaela Jula	4953019
PE and PP Clay Nanocomposite Films – The Comparison of the Influence of a Clay Type and a Compatibilizer Concentration	D. Merinska, A.Tesarikova, M. Pospisil	4959007
(Bio) Polymer Packaging Films and their Properties	A. Tesarikova, A. Kalendova, D. Merinska	4959011

**EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014**

**CONFERENCE ROOM C': 09:00-11:00**

**CSCC Session: Microelectronics, Nanoelectronics, Optoelectronics I**

**Chair: Dalibor Bialek, Khuan Y. Lee**

<i>Design Optimization of a TIA for High Speed Data Applications using gm/ID Based Methodology</i>	<i>Claudio Talarico, Gaurav Agrawal, Janet Wang-Roveda</i>	4832003
Effect of Field Plate Length on Power Performance of GaN Based HEMTs	Gokhan Kurt, Ahmet Toprak, Ozlem A. Sen, Ekmel Ozbay	4862007
Concepts for an AC-Battery with Active Harmonics Compensation	K. H. Edelmoser, F. A. Himmelstoss	70301-106
A 21.5mW 3 Gbps CMOS OOK Receiver for the Next Generation Device to Device Communications	Ki-Jin Kim, Sanghoon Park, Suk-hui Lee, K. H. Ahn	5041003
Effect of Deposition Volume on PVC-based Mn(TPP)Cl Membrane for FET Sensitive to Histamine	S. F. Mohammed Esa, Khuan Y. Lee, R. Jarmin	5078003
A 5-Tap Half-Rate DFE Receiver for Data-Edge Simultaneous Equalization	Sung-Won Choi, Hyun-Wook Lim, Bai-Sun Kong	5073011
Network-on-Chip Application Mapping based on Domain Knowledge Genetic Algorithm	Yin Zhen Tei, N. Shaikh-Husin, Yuan Wen Hau, Eko Supriyanto , M. N. Marsono	4952063

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

**CONFERENCE ROOM A': 11:30-14:00**

**CSCC Session: Systems Theory and Scientific Computation II**

**Chair: Radu Dobrescu, Ilmars Iltins**

Combined Effect of Small Curvature and Variable Friction on Temporal Instability of Shallow Mixing Layers	Ilmars Iltins, Marija Iltina, Andrei Kolyshkin	4856003
Developing a Query Interface for Biomedical Questions Answering	Ioana Branescu-Raspop, Victor Lorin Purcarea, Radu Dobrescu	4857003
The Representativeness Reliability Importance Measure	Josep Freixas, Montserrat Pons	4824003
Microwave Pulse Generator	R. Krizan, L. Drazan	4859007
Testing Thermal Images Characteristics for Thermal Images Quality Estimation	Sn. Pleshkova, Al. Bekyarski, K.Peeva	4943003
Big Data Processing for E-Health Applications using a Decentralized Cloud M2M System	George Suciu, Victor Suciu, Octavian Fratu	5179007

**EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014**

**CONFERENCE ROOM B': 11:30-14:00**

**CSCC Session: Software Engineering and Development**

**Chair: Agostino Poggi, Angela Repanovici**

Developing Flexible Applications with Actors	Agostino Poggi	4863003
Open Sources Information Systems Used in Risk Management for Healthcare	Daniela Drugus, Doina Azoicai, Angela Repanovici	4862027
The Performance of the MATLAB Parallel Computing Toolbox in Specific Problems	Dimitris N. Varsamis, Christos Talagkozis, Paris A. Mastorocostas, Evangelos Outsios, Nicholas P. Karampetakis	4860019
Accounting IT Systems and Requirements of Polish Law	Elzbieta Wyslocka, Dorota Jelonek	4861003
Integration of Open Source Systems for Visibility of Scientific Production of Universities	Ionela Birsan, Daniela Drugus, Marius Stoianovici, Angela Repanovici	4862019
<i>An Engine Oil Replacement Timeline</i>	<i>José Neves, Filipa Ferraz, Henrique Vicente, Paulo Novais</i>	<i>5182011</i>
Software Architecture for a System Combining Artificial Intelligence Approaches for Ground Station Scheduling	Michele M. Van Dyne, Costas Tsatsoulis	4951003
<i>Architecture of a Multi Agent Intelligent Decision Support System for Intensive Care</i>	<i>Pedro Gago, Manuel Filipe Santos</i>	<i>5175067</i>
Energy-Efficient Computation of L1 and L2 Norms on a FPGA SIMD Accelerator, with Applications to Visual Search	Calin Bira, Radu Hobincu, Lucian Petrica, Valeriu Codreanu, Sorin Cotofana	5182037



**EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014**

**CONFERENCE ROOM C': 11:30-14:00**

**WHH Session: Water Resources, Hydraulics & Hydrology**

**Chair: Carlos Peña, Dongkyun Kim**

Svedberg's Number in Diffusion Processes	Alfredo Constaín, Duvan Mesa, Carlos Peña-Guzmán, Paola Acevedo	4924003
The Ability of Water Reservoir to Assure Required Water Supply under Changed Climate Conditions	D. Halmova, M. Melo, P. Pekarova	5080007
Long-Term Water Balance Changes of the Pristine Bela River Basin	D. Halmova, P. Miklanek, P. Pekarova	5081011
Log-Normality of the Tsunami Run-up Heights along the Eastern Coastal Line of Korean Peninsula	Kim D., Cho H., Cho Y.-S.	4937003
Statistical Analysis of Low Flows in Eastern Slovakia	M. Zeleňáková, P. Purcz, T. Soľáková, D. Simonová	4963003
The Effect of Roof Material on Rain Water Quality Parameters in Conditions of Slovak Republic	Mohamed Ahmidat, Daniela Kaposztasova, Gabriel Markovic, Zuzana Vranayova	4958003
Analysis of Multiannual Fluctuations and Long Term Trends of Hydrological Time Series	O. Marusiak, J. Pekar	5086007
Assessment of Surface Water Quality for Sustainable Water Management in Samut Songkram Province, Thailand	Tatsanawalai Utarasakul, Sivapan Choo-In, Chaisri Tharasawatpipat, Srisuwan Kasemsawat, Sathaporn Monprapussorn	5138003

**EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014**

**CONFERENCE ROOM A': 14:00-16:30**

**CSCC Special Session: The Future Internet and its Applications**

**Chair: Luca De Cicco, Antonio Pietrabissa**

Control Architecture to Provide E2E Security in Interconnected Systems: The (New) SHIELD Approach	Andrea Fiaschetti, Andrea Morgagni, Andrea Lanna, Martina Panfili, Silvano Mignanti, Roberto Cusani, Gaetano Scarano, Antonio Pietrabissa, Vincenzo Suraci, Francesco Delli Priscoli	5089008
An Approach Based on Reinforcement Learning for Quality of Experience (QoE) Control	F. Cimorelli, M. Panfili, S. Battilotti, F. Delli Priscoli, C. Gori Giorgi, S. Monaco	5089004
Future Satellite Systems for Emergency Communications Situations	Haitham Cruickshank, Egil Bovim, Anton Donner, Julian Sesena, Robert Mort	5178014
Future Internet Architecture: The Connected Device Interface	Pierangelo Garino, Letterio Zuccaro, Guido Oddi, Andi Palo, Andrea Simeoni	5109002
User Profile Based Quality of Experience	Silvia Canale, Francisco Facchinei, Raffaele Gambuti, Laura Palagi, Vincenzo Suraci	5089006
Security Architecture for Satellite Services over Future Heterogeneous Networks	Vahid Heydari Fami, Haitham Cruickshank, Martin Moseley	5151002
Dynamic Adaptive Streaming over HTTP (DASH) Using Feedback Linearization: A Comparison with a Leading Italian TV Operator	Vito Caldaralo, Luca De Cicco, Saverio Mascolo, Vittorio Palmisano	5089005

**EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014**

**CONFERENCE ROOM B': 14:00-16:30**

**CSCC Session: Wireless and Mobile Communications**

**Chair: Vyacheslav Tuzlukov, Zdenek Kolka**

A Study on Behavior Patternize in BYOD Environment Using Bayesian Theory	Dongwan Kang, Myoungsun Noh, Chaetae Im	5081003
Dual Band Rat Race Coupler for 4G Applications using CRLH and D-CRLH Transmission Lines	Iulia Andreea Mocanu	5082015
Non-Blind Beamforming and DOA Estimation by Generalized Receiver in MIMO Wireless Communication Systems	Jin Gui Liu, Vyacheslav Tuzlukov	4920007
A Circularly Polarized Half-Wave Voltage Doubling Rectenna	Jwo-Shiun Sun, Si-Jyun Hung, Guan-Pu Pan, Tsung-Lin Li	4784007
Frequency-Domain Equalization for SC-FDE in HF Channel	Qingyun Zhu, Xu He, Shaoqian Li	5039015
Wireless Mesh Telemedicine Simulation on NS3	Muhammad Haikal Satria, Muhammad Akmal Ayob, Eko Supriyanto, Jasmy Yunus	4952019
Multiple Bands Antenna with Slots for Wireless Communication System	Evizal Abdulkadir, Eko Supriyanto, T. A. Rahman, S. K. A. Rahim, S. L. Rosa	4952043
Bio-Inspired QoS Routing Approach for Mobile Data Collection in VANETs	Abubakar Aminu Mu'azu, Low Jung Tang, Ibrahim A. Lawal	4949003

## EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014

**CONFERENCE ROOM C': 14:00-16:30**

**EMET Session: Educational Technologies**

**Chair: Ana Elías, Margarida Figueiredo**

Planning New Teaching Experiences in Collaboration with Relief Generations	A. Elías, R. Fernández, E. Acha, M. Corcuera, N. Rojo, A. Barona, A. Eceiza, A. Lopez-Urionabarrenechea	4962003
Indirect Identification of Transfer Function Specific to Cell Line Dynamics	Corina C. Brîndușa, Philippe Dondon, Cornelia A. Bulucea	4849003
New Features of Advanced Learning Space	K. Cisarova, I. Kopetschke, J. Vraný	5078035
School Dropout Screening through Artificial Neural Networks Based Systems	Margarida Figueiredo, Lídia Vicente, Henrique Vicente, José Neves	5095003
Modern Educational Technologies in Scientific Information Evaluation	Mihaela Monica Scutariu, Isabella Cristina Brujbu, Ionela Birsan, Angela Repanovici	4862039
<i>Software Architecture for Support of Programming Courses in University</i>	<i>Milen Y. Petrov, Dinio I. Dinev, Adelina P. Aleksieva-Petrova</i>	<i>5174035</i>
An Empirical Study about the Influence of Moodle on the Teaching – Learning Process at Higher Institutions	Said T. EL Hajjar	4888003
The Development of Forecasting Technique in Business by Using R - Programming	Somruay Apichatibutarapong	5075003
Interdisciplinary Approach to the Design of a Quality Assurance System of Higher Education on the Basis of the EFQM Model	Yskak A. Nabi	5033003
Modelling Student Evaluation in the LMS Using Petri Nets	Zoltán Balogh, Martin Magdin, Milan Turčáni	4952083
Engineering Students' Acceptance of mLearning in Formal English Language Learning: Application of UTAUT Model	F. A. Muhammad Ridhuan Tony Lim Abdullah, S. A. Saedah Siraj, T. A. Lim Li Yean	5056003
Knowledge Sharing Management in Political Organization: ICT Roadmap Model	Raja Ahmad Iskandar Raja Yaacob, Muhammad Ridhuan Tony Lim Abdullah	5080063
Undergraduate L2 Learners' Perception and Preferences towards Error Correction Type on Pronunciation Errors: An Exploratory Study	Zulqarnain Abu Bakar, Muhammad Ridhuan Tony Lim Abdullah	5087003
Exploring the Technological Factors in SMART Learning Affecting Creativity	Soon-Hwa Kim, Ki-Sang, Song, Se-Young Park	5176011

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

**EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014**

**CONFERENCE ROOM A': 17:00-19:30**

**CSCC Special Session: Knowledge Computing in the Health Informatics**

**Chair: Abdel-Badeeh M. Salem**

Medical Images Understanding Based on Computational Intelligent Techniques	Abdalslam Al-Romimah, Amr Badr, Ibrahim Farag	4873003
National Quality Registries as a Swedish e-Health System	Amra Halilovic	5175071
Virtual Reality Technologies in Handicapped Persons Education	Branislav Sobota, Štefan Korečko	4968007
Artificial Intelligence Systems for Knowledge Management in e-Health: The Study of Intelligent Software Agents	M. Furmankiewicz, A. Sołtysik-Piorunkiewicz, P. Ziuziański	5169027
ENAMS: Energy Optimization Algorithm for Mobile Sensor Networks	Mohaned Al Obaidy	4966011
Knowledge Management Approaches for Business Intelligence in Healthcare	Nadia Baeshen	4911003
A New Approach for Color Image Segmentation with Hierarchical Adaptive Kernel PCA	R. Kountchev, Noha A. Hikal, R. Kountcheva	4876003
The Potential Role of Case-Based Reasoning in Myocardial SPECT Perfusion	Shymaa H. El Refaie, Abdel-Badeeh M. Salem	4875003

**EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014**

**CONFERENCE ROOM B': 17:00-19:30**

**CSCC Special Session: Track and Trace, Mobility and Smart Cities**

**Chair: Eduardo Mario Dias**

ITS Components in Risk Management in the Port of Santos	Alexsandro S. de Lima, Melissa S. Pokorny, Eduardo M. Dias	5086047
ITS to Monitor Small Vessels Movements within Port Area - A Study at Santos Estuary	Aureo E. P. Figueiredo, Sérgio L. Hoeflich, Maria L. R. P. Dias, Sergio L. Pereira, Luiz N. Rossi, Eduardo M. Dias	5086087
Traffic Management Solutions in Large Cities – the Integrated Centre of Urban Mobility (CIMU) in São Paulo	Dariusz Swiatek, Melissa S. Pokorny, Jilmar A. Tatto, José E. Gonçalo, Vidal A. Z. C. Melo, Eduardo M. Dias	5079055
Criteria for Efficiency Determination of Inspection Maintenance Programs	Gabriel M. Branco, Fábio C. Branco, Marcelo C. Branco, Eduardo M. Dias, José M. Napoleone, Alfred Szwarc	5086011
The Role of Traceability in the Pharmaceutical Safety Supply Chain	Jair Calixto, Maria L. R. P. Dias, Melissa S. Pokorny, Eduardo M. Dias	5086043
An Operational Model of Bus Terminal Management based on Daily Passengers Demands	José A. M. de Gouveia, Maurício L. Ferreira, Maria L. R. P. Dias, Melissa S. Porkorny, Eduardo M. Dias	5086063
Power Spectral Density in the RFID Systems its Impacts in Celular Systems	Leandro R. Sergio, Maria L. R. P. Dias, Sergio L. Pereira, Eduardo M. Dias	5086051
Automation of the Control of Street Furniture using Mobility Technologies	Luis Eduardo Surian Brettas, Vidal Augusto Zapparoli Castro Melo, Eduardo Mario Dias, Maria Lídia Rebello Pinho Dias, Melissa Seriamia Pokorny	4933003
Vehicle Inspection & Maintenance Program in São Paulo - Results and Environmental Benefits	Marcelo C. Branco, Fábio C. Branco, Gabriel M. Branco, Eduardo M. Dias, Alfred Szwarc	5086039
Real Time Monitoring of Public Transit Passenger Flows through Radio Frequency Identification - RFID Technology Embedded in Fare Smart Cards	Maurício L. Ferreira, José A. M. de Gouveia, Eduardo Facchini, Melissa S. Pokorny, Eduardo M. Dias	5086067
The ITS Components in the Optimization Control of People Vehicles Circulation at the Brazilian Ports	Vander S. de Abreu, Luiz N. Rossi, Eduardo M. Dias	5086059

**EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014****CONFERENCE ROOM C': 17:00-19:00****CSCC Session: Microelectronics, Nanoelectronics, Optoelectronics II****Chair: Stoyan Kirilov, Jiri Svarny**

Bias Driver of the Mach-Zehnder Intensity Electro-Optic Modulator, based on Harmonic Analysis	J. Svarny	4824015
CMOS 60 GHz Power Amplifier Using Simple Open Drain and Source Architecture	Ki-Jin Kim, Sanghoon Park, Suk-Hui Lee, K. H. Ahn	5041007
A Novel Delay and Overshoot Estimation Model for VLSI Global Interconnects	M. Kavicharan, N. S. Murthy, N. Bheema Rao	4835003
An Efficient Hybrid Voltage/Current Mode Signaling Scheme for On-Chip Interconnects	M. Kavicharan, N. S. Murthy, N. Bheema Rao	4934003
Synthesis and Analysis of a Memristor Frequency Converter for Radio-Receiver	Valeri Mladenov, Stoyan Kirilov	5175003
Emulators of Two-State Memcapacitor	Dalibor Bialek, Viera Biolkova, Zdenek Kolka	4839003

## EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014

### POSTER PRESENTATIONS

Implementation for Model of Object Oriented Class Cohesion Metric -MCCM	Tejdeda Alhussen Alhadi, Omer Saleh, Xavier Patrick Kishore, Sagaya Aurelia	5105003
Personalization of Student in Course Management Systems on the Basis Using Method of Data Mining	Martin Magdin, Milan Turčáni	5119003
Cloud-based Tele-Monitoring System for Water and Underwater Environments	Georgiana Raluca Tecu, George Suciu, Adelina Ochian, Simona Halunga	5178059
The Influence of the Parameter h in Homotopy Analysis Method for Boundary Value Problems	Wang Zhen, Qin Yu Peng, Zou Li	5185099
AUV Localization Using a Single Transponder Acoustic Positioning System	Igor N. Burdinsky, Semen A. Otcheskiy	5135003
Economic Analysis of a Pumped Storage Project for Iran Generating System Based on a Dynamic Modeling	A. R. Sohrabi	4805015
Improvement of Power Management System in Electro-Solar Vehicle	Hemza Saidi, Abdelhamid Mudoun	4880007
Decrease the Scourge of Malnutrition in Sub-Saharan Africa through the Implementation of EU Financial Instruments	Ionel Bostan, Carmen Năstase, Dana Drugus, Alunica Morariu, Ovidiu Bunget	4907003
Socio-Hydrological Vulnerability: A New Science through Remote Sensing and GIS	Mukesh Singh Boori, Vit Voženílek	4970003
Backstepping Control Based Three Phase Shunt Active Power Filter	I. Ghadbane, M. T. Benchouia	4972003
Fuel Consumption at Conditions of the Israel's Highways Driving Cycle	M. Ben Chaim, E. Leybovitch	5175007
HVDC Transmission Corridor - Cost Benefit Analysis	Udrea Oana, Gheorghe Lazaroiu, Ungureanu Gabriela	5182027
Managing Value Chain Relationships in Cross-Level Organizations - Compare Cellar-Phone Manufacturing and Sport Shoemaking Supply Chain	Chang Jang-Li, Lin Yu-Chuan	5183027
New Land Use in Rural Marginal Areas. Renewable Energy vs Landscape Preservation	Donatella Cialdea, Luigi Mastronardi	5184019
Prosthesis Design for Bilateral Hip Disarticulation Management	Mauricio Plaza Torres, William Aperador	4683007
Simulation of Robot Workcell Operation by Augmented Reality Technology Application	Jozef Novak-Marcincin, Miroslav Janak, Ludmila Novakova-Marcincinova	4696035
Second-Order Sliding Mode Control Applied to an Inverted Pendulum	Sonia Mahjoub, Faical Mnif, Nabil Derbel	4928003



## EUROPMENT CONFERENCES: Sunday July 20<sup>th</sup> 2014

### POSTER PRESENTATIONS

Haptics based Robotic Prosthetic Leg	Y. Kalyan Chakravarthy, R. Harish Kumar, B. Deepika, A. Srinath	4958007
Turning Control for Quadruped Robots in Trotting on Irregular Terrain	Jeong Hoon Lee, Jong Hyeon Park	4961003
RGBD Sensors Correction with Gaussian Process Regression	Abdenour Amamra, Nabil Aouf	5083031
Manipulator Development for Telediagnosics	Adam Kurnicki, Bartłomiej Stanczyk, Bartosz Kania	5083043
Real-Time Background/foreground Segmentation of RGBD Data	Abdenour Amamra, Tarek Mouats, Nabil Aouf	5083067
Diagnostics and Evaluation of Limit Strain States from Digital Image	J. Kmec, E. Fechová, S, Hrehová	4860011

## EUROPMENT CONFERENCES: Monday July 21<sup>st</sup> 2014

### CONFERENCE ROOM A': 09:00-11:00

#### CSCC Special Session: Monitoring and Security Issues in Complex Network

Chair: Miroslav Voznak

Application of Artificial Intelligence on Classification of Attacks in IP Telephony	J. Safarik, M. Voznak, F. Rezac, J. Slachta	5079047
Automation Techniques of Building Custom Firmwares for Managed and Monitored Multimedia Embedded Systems	J. Slachta, J. Rozhon, F. Rezac, M. Voznak	5079051
New Robust Video Watermarking Techniques Based on Enhanced 3D Hadamard Error Correcting Code and Discrete Wavelet Transform	Jakob Wassermann, Andrzej Dziech	4856019
Liability for Own Device and Data and Applications Stored therein	Jan Kolouch, Andrea Kropáčová	4855027
Procedural Aspects of Data Seizure	Jan Kolouch, Andrea Kropáčová	4855023
IDEA: Security Event Taxonomy Mapping	Pavel Kácha	4853007

### CONFERENCE ROOM B': 09:00-11:00

#### CSCC Session: Computer Multimedia Design and Applications

Chair: Luminita Popa, Pavel Pokorný

Methodology for the Modeling of Multi-Player Games	Arturo Yee, Matías Alvarado	5082055
Collaborative and Integrated Designing of Intelligent Sustainable Buildings	Luminita Popa, Simona Sofia Duicu	5175063
A 3D Visualization of the Baťa Company's Factory Premises in Zlín in 1938	P. Pokorný, M. Vondráková	4922003
A 3D Visualization of the Tomas Bata Regional Hospital Grounds	P. Pokorný, P. Macht	4922007
Graph Traversal on One-Chip MapReduce Architecture	Voichita Dragomir	5182035

## EUROPMENT CONFERENCES: Monday July 21<sup>st</sup> 2014

**CONFERENCE ROOM C': 09:00-11:00**

**CSCC Session: Modelling and Simulation**

**Chair: Anand Kumar, Kamil Zidek**

Comparison of Acoustic Barriers Noise Reductions Evaluated by Different Calculation Methods	Claudio Guarnaccia, Joseph Quartieri, Nikos E. Mastorakis	5174011
Time Series Predictive Model Application to Air Pollution Assessment	Claudio Guarnaccia, Julia Griselda Cerón Bretón, Joseph Quartieri, Carmine Tepedino, Rosa Maria Cerón Bretón	5174007
Application of the Static and Dynamic Models in Predicting the Future Strength of Pozzolanic Cements	Dimitris C. Tsamatsoulis	4789003
<i>Building a Model of Family House Heating System using 1-Wire Sensor Network Protocol</i>	<i>Dominik Kujawa</i>	<i>5079027</i>
Visual Information Processing Routines for Intelligent Vehicles	Jarnea Alexandru Daniel, Florea Gheorghe, Dobrescu Radu	4856007
New Approach to Thresholding and Contour Detection for Object Surface Inspection in Machine Vision	K. Židek, A. Hošovský, J. Dubják	4864015
Analytical Modeling of Pneumatic Muscle Actuator Torque Characteristics	Mária Tóthová, Ján Pitel'	4864011
Obstacle Avoidance by Unmanned Aerial Vehicles using Image Recognition Techniques	Priya Bajju Parappat, Anand Kumar, R. K. Mittal, Suhel Ahmad Khan	4626027

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

**EUROPMENT CONFERENCES: Monday July 21<sup>st</sup> 2014**

**CONFERENCE ROOM A': 11:30-13:30**

**CSCC Special Session: Modeling and Analysis of Processes and Systems: Methods and Software Tools**

**Chair: Elena Zamiatina**

Towards the Flexibility of Software for Computer Network Simulation	Alexander I. Mikov, Elena B. Zamyatina, Roman A. Mikheev	5083039
An Approach to Development of Visual Modeling Toolkits	Alexander O. Sukhov, Lyudmila N. Lyadova	4956003
Visual Models Transformation in MetaLanguage System	Alexander O. Sukhov, Lyudmila N. Lyadova	5086071
An Integration of Modeling Systems Based on DSM-Platform	Lyudmila N. Lyadova, Alexander O. Sukhov, Elena B. Zamyatina	5076023
Document Analysis Based on Multidimensional Ontology of Electronic Documents	Viacheslav Lanin	5091003

**CONFERENCE ROOM B': 11:30-13:30**

**CSCC Session: Web-based and Remote Access Applications**

**Chair: Dorota Jelonek, Giovanna Morgavi**

An Improved On-The-Fly Web Map Generalization Process	Brahim Lejdel, Okba Kazar	4975003
<i>Barriers to the Development of Cloud Computing Adoption and Usage in SMEs in Poland</i>	<i>Dorota Jelonek, Elżbieta Wysłocka</i>	<i>4856015</i>
A Real-Time Web-Based Graphic Display System Using Java™ LiveConnect Technology for the Laguna Verde Nuclear Power Plant	Efren Ruben Coronel Flores, Ilse Leal Aulenbacher	4862043
Analysis of New Collaborative Writing within Web 2.0	P. Cutugno, L. Marconi, G. Morgavi, D. Chiarella, M. Morando	4818003
Remote Access to RTAI-Lab Using SOAP	Zoltán Janík, Katarína Žáková	4844003

## EUROPMENT CONFERENCES: Monday July 21<sup>st</sup> 2014

### CONFERENCE ROOM C': 11:30-13:30

#### CSCC Session: Signal Processing in Telecommunications

Chair: Dina Satybaldina, Sunghwan Kim

Novel Decoding of Run-Length Limited Codes for Visible Light Communication	He Wang, Sunghwan Kim	5077003
Symbol Coding Customization for BER Reduction in Duty-Cycle Division Multiplexing Systems	M. N. Derahman, M. K. Abdullah, K. Dimiyati, K. A. Noordin, A. Malekmohammadi	4936011
Lee Microcell Propagation Model Applied to University Campus Environment	R. Angelo Vera, U. Alfredo Núñez, S. Boris Ramos	5087035
Cellular Automaton pRNG with a Global Loop for Non-Uniform Rule Control	Alexandru Gheolbanoiu, Dan Mocanu, Radu Hobincu, Lucian Petrica	5182036
Comparison between Measurement Events for LTE Handover in Rural and Urban Scenarios Involving Femto-Cell Deployment	Juan Camilo Chaparro-Marroquín	4953007

### CONFERENCE ROOM A': 14:00-15:30

#### CSCC Special Session: Internet Computing and Security

Chair: Antoanela Naaji

Aspects Regarding the Relevant Components of Online and Blended Courses	A. Naaji, A. Mustea, C. Holotescu, C. Herman	5115003
A Numerical Method for Solving Linear Differential Equations via Walsh Functions	Gyorgy Gat, Rodolfo Toledo	5131003
A Platform for Managing and Forecasting Certain Aspects of the Labor Markets in Western Romania	K. B. Schebesch, C. Herman, A. Naaji	5175015
Adaptive Design Process for Responsive Web Development	Zsolt Nagy	5116003

## EUROPMENT CONFERENCES: Monday July 21<sup>st</sup> 2014

### CONFERENCE ROOM B': 13:30-15:30

#### INDE Session: Advances in Industrial Engineering II

Chair: Dimitar Karastoyanov, Dimitar Karastoyanov

Shafts Renovation using Coatings with Nano Elements	Dimitar N. Karastoyanov, Mara K. Kandeve, Kostadin G. Kostadinov	4855011
Forging by Rocket Driven Hammer: Dynamics and Experiments	Dimitar N. Karastoyanov, Vladimir K. Kotev, Todor N. Penchev	4858003
<i>A Branching Variables Rule for the B &amp; B Algorithm based on the Flattnes of the Polyhedron</i>	<i>Iván Sergio Derpich Contreras, Claudio Javier Macuada Silva</i>	<i>7777708</i>
Shape Optimization of Composite Structure under Uncertainty	J. Auzins, A. Janushevskis, A. Melnikovs, J. Janushevskis	4962007
Fuzzy MCDM Approach to Evaluate Wastewater Treatment Alternatives	Mehtap Dursun	4953015
Performance Analysis of a Self Driven Phase Shifted Full Bridge Converter for Data Center Applications	Sevilay Cetin	5084003

### CONFERENCE ROOM C': 13:30-15:30

#### CSCC Session: Neural Networks and Fuzzy Systems

Chair: Katerina Hyniova, Ieroham Baruch

Fuzzy Control of the Position Servo Motor Drives with Elasticity and Friction	Dmitry V. Lukichev, Galina L. Demidova	4803003
Identification Control of Oscillatory Dynamical Systems using Recurrent Complex-Valued Neural Networks	Ieroham S. Baruch, Víctor M. Arellano-Quintana	5029027
Unsupervised Robot System using Computational Geometry and Neural Network	Marios Poulos	4966003
Fuzzy Logic Controller in Servo Drive Control System with Speed Limitation	Nikita Smirnov, Dmitry Lukichev	5083023
<i>Using Neural Networks to Design Predictive Model of Creation of Aluminium Oxide Layer</i>	<i>P. Michal, A. Vagaská, M. Gombár, J. Kmec, E. Spišák, D. Kučerka</i>	<i>4861011</i>
Identification of Dynamical Systems using Recurrent Complex-Valued Neural Networks	VíctorM. Arellano-Quintana, Ieroham S. Baruch	4912011

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

## EUROPMENT CONFERENCES: Monday July 21<sup>st</sup> 2014

### CONFERENCE ROOM A': 16:00-18:30

#### CSCC Session: Advances in Telecommunications

Chair: Pierre Degauque, Steven Lee

Impact Duration Time Session over The Handover Delay in Broadband Network	E. Elgembari, K. Seman	4996003
The Predicted Energy Efficient Bee-inspired Routing (PEEBR) Improvement and Performance Evaluation	Imane M. A. Fahmy, Laila Nassef, Hesham A. Hefny	4900003
Impact of Spacing between Array Elements on the Performances of Diversity Schemes in Tunnels	M. Lienard, J. M. Molina-Garcia-Pardo, C. Sanchis-Borras, P. Degauque	4793003
High Bit Rate UWB Communication in Dense Multipath Channels	Said Ghendir, Salim Sbaa, Riadh Ajjou, Abdelmalik Taleb-Ahmed, Ali Chemsas	4960015
Multi-VLAN Provisioning for Fast Protection and Traffic Engineering in Ethernet Networks	Steven S. W. Lee, Kuang-Yi Li, Chieh-Ching Lin, Cheng-Shong Wu	5078023
Analysis of Non-Ionizing Radiations at ESPOL Campus based on CENELEC and ITU Recommendations	Verónica A. García, Byron Floreano, Boris Ramos	5085003
Probabilistic Experiment Interpreting Shannon Entropy of Information Transfer	Mustapha Y. Abubakar, Low T. Jung, Nordin M. Zakaria	4860003

### CONFERENCE ROOM B': 16:00-18:30

#### CSCC Session: Image Processing Software and Algorithms

Chair: Marcos Rodrigues, Sorin Soviany

GPIP: A New Graphical Password Based on Image Portions	Arash Habibi Lashkari	4899011
A New 2D Image Compression Technique for 3D Surface Reconstruction	M. M. Siddeq, M. Rodrigues	5000003
A Comparative Analysis of Binary Patterns with Discrete Cosine Transform for Gender Classification	Marcos A Rodrigues, Mariza Kormann, Peter Tomek	4901003
ROI Sensitive Analysis for Real Time Gender Classification	Marcos A. Rodrigues, Mariza Kormann, Peter Tomek	4854023
A New Image Encryption Scheme Based on Multiple Chaotic Systems in Different Modes of Operation	Mona F. M. Mursi, Hossam Eldin H. Ahmed, Fathi E. Abd El-Samie, Ayman H. Abd El-Aziem	5051007
The Target vs. Non-Target Classification Approach for Biometric Recognition Applications	Sorin R. Soviany, Sorin Puşcoci, Cristina Soviany	5180003
Possibility of Chest X-Ray Images for Image Guided Lung Biopsy System	Q. Rizqie, D. E. O. Dewi, M. A. Ayob, I. Maolana, R. Hermawan, R. D. Soetikno, E. Supriyanto	4952055

## EUROPMENT CONFERENCES: Monday July 21<sup>st</sup> 2014

**CONFERENCE ROOM C': 16:00-18:30**

**CSCC Session: Information Science and Applications**

**Chair: Narottam Chand, Ivan Mustakerov**

One-Dimensional Cutting Stock Model for Joinery Manufacturing	Ivan C. Mustakerov, Daniela I. Borissova	4845003
Implications of Modern Communication Technologies on Workforce Commitment	Marcus Scholz, Marián Zajko	4857007
A Genetic Algorithm for Shuttering Underperforming Stores	Rong-Chang Chen, Mei-Hui Wu, Shao-Wen Lien, Yi-Chen Tsai	4862055
A Method for Optimization of Plate Heat Exchanger	Václav Dvořák	4858019
Pipeline Template and Scheduling Algorithm for Mapping Multiple Loop Nests on FPGA with Limited Resources	Yazhuo Dong, Ge Change	71101-103
DNA Microarray: Identification of Biomarkers to Detect HCV Infected with Hepatocellular Carcinoma by the Analysis Of Integrated Data	Salwa Eid, Aliaa Youssif, Samar Kassim	5064003



## EUROPMENT CONFERENCES: Monday July 21<sup>st</sup> 2014

### POSTER PRESENTATIONS

A Comparative Study on Principal Component Analysis and Factor Analysis for the Formation of Association Rule in Data Mining Domain	Dharmpal Singh, J. Pal Choudhary, Malika De	4809023
Research Method of Energy-Optimal Spacecraft Control during Interorbital Maneuvers	N. L. Sokolov	4942003
Keywords Extraction from Articles' Title for Ontological Purposes	Sylvia Poulimenou, Sofia Stamou, Sozon Papavlasopoulos, Marios Poulos	4957007
Gaussian Mixture Models Approach for Multiple Fault Detection - DAMADICS Benchmark	Erika Torres, Edwin Villareal	5060011
Computing the Distribution Function via Adaptive Multilevel Splitting	Ioannis Phinikettos, Ioannis Demetriou, Axel Gandy	5174019
Mathematical Modeling of Crown Forest Fires Spread Taking Account Firebreaks	Valeriy Perminov	5174047
OWA – Type Possibilistic Aggregations in a Decision Making Regarding Selection of Investments	Gia Sirbiladze, Gvantsa Tsulaia	4856011
Applying “ABCD Rule of Dermatoscopy” using Cognitive Systems	Ionut Taranu, Iunia Iacovici	4858027
New Approach to Building Hierarchy for Patients Attendance in Intensive Care Unit with Use of Fuzzy Information and Dynamic Modeling	Maria Milanova, Mikhail Matveev	4906003
MAP and MMSE Estimation of HEV State of Charge	Nazha Abed, Hatem Boujemaa, Sami Touati, Ramdane Hedjar	4932007
Implementation of Direction Cosine Matrix on a PSOC-5 Microcontroller for Robot Localization on Inclined Terrains	Garth Herman, Aleksander Milshteyn, Airs Lin, Manuel Garcia, Charles Liu, Khosrow Rad, Darrel Guillaume, Helen Boussalis	4938003
A Study of Pressure Distribution Droplets Motion in Convergence-Divergence Shape Microchannel	Maryam Ghelichkhani	4940003
Statistical Wound-Rotor IM Diagnosis Method Based on Standard Deviation using NVSA	Khalid Dahi, Soumia Elhani, Said Guedira	4941015
Pyramid Method for Reversible Discrete Wavelet Transformation of 3D Image	Eustache Muteba Ayumba	4970007
Feature Level Compensation for Robust Speaker Identification in Mismatched Conditions	Sharada V. Chougule, Mahesh S. Chavan	4977003
CDM Controller Order and Disturbance Rejection Ability	Joao Paulo Coelho, Wojciech Giernacki, Jose Boaventura-Cunha	5006003
Conversion of the METCM into the METEO-11	Karel Šilinger, Ladislav Potužák, Jiří Šotnar	5074003
Modelling and Analysis of Neural Network and Perturb and Observe MPPT Algorithm for PV Array Using Boost Converter	Naoufel Khaldi, Hassan Mahmoudi, Malika Zazi, Youssef Barradi	5079067

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### POSTER PRESENTATIONS

Automatic Recognition and Synthesis System of Arabic Digit	H. Tebbi, M. Hamadouche, H. Azzoune	5085007
Robust Feature Matching for Aerial Visual Odometry	Tarek Mouats, Nabil Aouf	5088011
Performance Evaluation of Two Radial Basis Function Neural Network Models	Nikolinka G. Christova, Gancho L. Vachkov	5185102
Improving Performance of Non-Binary Multithreshold Decoder's Work Due to Concatenation	Gennady Ovechkin, Pavel Ovechkin, Dina Satybaldina, Alina Beisebekova, Nurlan Tashatov	5080051
Effective Multithreshold Decoder for Optical and Other Data Transmission Systems	Valery Zolotarev, Gennady Ovechkin, Dina Satybaldina, Nurlan Tashatov, Aigul Adamova, Vitaly Mishin	5082047
Quality of Experience of Video in Transmedia Interactive Application of Digital Terrestrial Television	Cristiane Zakimi Correia Pinto, Wagner Luiz Zucchi	5179067