

Conference Program



Rome, Italy
November 5-7, 2016

Conference Location:

**The Church Palace
Via Aurelia 481,
0016 Rome, Italy**

<http://www.thechurchresort.com/thechurchpalace/en/>

Saturday 5th November 2016

Conference Room: A

Time: 08:15-09:00

Plenary Lecture 1:



**Anisotropic Versus Isotropic Phenomena in Elliptic Problems:
A Geometric Approach**

by Prof. Imre J. Rudas, President of Obuda University,
HUNGARY

and by Prof. Alexandru Kristály, Research Professor of the
Óbuda University, HUNGARY.



Conference Room: A

Time: 09:00-09:45

Plenary Lecture 2:



Does Nature Use Mathematics?

by Prof. Ivan Zelinka, Faculty of Electrical Engineering and
Computer Science, VŠB-TUO Ostrava, CZECH REPUBLIC.

Saturday 5th November 2016

Conference Room: B

Time: 09:00-09:45

Plenary Lecture 3:



Big Data and Video Surveillance

by Prof. Zoran Bojkovic, Full Professor of Electrical Engineering,
University of Belgrade, SERBIA.

Conference Room: A

Time: 09:45-10:30

Plenary Lecture 4:



**Progress in the Perturbative Approach to Fractional
Differential Equation Problems**

by Prof. Renato Spigler, University "Roma TRE", Rome, ITALY.

Conference Room: B

Time: 09:45-10:30

Plenary Lecture 5:



Lean IoT Framework for Urban Sustainable Development

by Prof. Calin I. Ciufudean, "Stefan Cel Mare" University of
Suceava, Faculty of Electrical Engineering and Computer
Science, Department of Computers, Automatics and
Electronics, ROMANIA.

10:30-11:00: Coffee Break

Saturday 5th November 2016

Conference Room: A

Time: 11:00-13:00

AMCSE 2016: Applications of Computers in Simulation of Problems' Engineering

Chair: Dimitrios A. Karras, Marina Shitikova

The Application of an Artificial Immune System for Solving the Identification Problem	Irina Astachova, Stanislav Ushakov, Andrei Selemenev, Juliya Hitskova	138
On Secure Interface Between Transmission and Distribution Power Networks	Pavel Hering, Přemysl Voráč, Petr Janeček	150
On Scalable and Efficient Security Risk Modelling of Cloud Computing Infrastructure Based on Markov Processes	D. A. Karras	152
Correlation Study Between Transit Accident and Routes with Traffic Light Crossings in Rio De Janeiro City	Jaqueline M. R. Vieira, Gisele M. R. Vieira	153
Evaluation of an Aeration System, Bojórquez Lagoon, Cancun, Mexico	Robles Isidro, Gonzalez Jose Alfredo	160
Low-Velocity Impact Response of a Pre-Stressed Isotropic Uflyand-Mindlin Plate	Yury Rossikhin, Marina Shitikova, Phan Thanh Trung	148
A Ternary Relation for Structuring the Digital Plane	Josef Slapal	163
Research Optimization for the Utilization-Exploitation of Hellenic Army Vacant Warehouses	Theodoros Zikos, Dimitrios Zaires, Nikolaos V. Karadimas	182
Relationship among Resonant Frequencies of Sierpinski Multiband Fractal Antennas	Ivan R. Gonzalez-Rangel, Genaro Hernandez-Valdez, Edgar A. Andrade-Gonzalez, Mario Reyes-Ayala, J. R. Miranda-Tello, Jose Serrano-Chavez	167

Saturday 5th November 2016

Conference Room: B

Time: 11:00-13:00

CC '16: Communications and Computers

Chair: Zoran Bojkovic, Raffaele D'Ambrosio

High Efficient Video Coding (HEVC) Performance Analysis for Different Configurations in Main Profile	Zoran M. Milicevic, Zoran S. Bojkovic	6608011
Transfer and Validation of Adaptive Method for Assessing the Life Expectancy of a Wireless Sensor Network in Smart Environments Applications	Aleksejs Jurenoks, Viktorija Ponomarenko, Leonids Novickis	6691003
Numerical Modeling of T-Cell Dynamics by Reaction-Diffusion Problems	Raffaele D'Ambrosio, Beatrice Paternoster, Carmela Scalone	6601003
Software System for Automatic Reaction to Network Anomalies and Real Time Data Capturing	Mladen Vukašinović	6664007
Load Balancing and QOS in AODV	Guidoum Amina, Aoued Boukelif	6664003
Visual Computing and Platform Services in Multimedia Clouds: Challenges and Solutions	D. A. Milovanovic, Z. S. Bojkovic	6628003
Modified Collocation Techniques for Evolutionary Problems	Angelamaria Cardone, Dajana Conte, Raffaele D'Ambrosio, Beatrice Paternoster	6602003

Saturday 5th November 2016

Conference Room: A

Time: 13:00-15:00

MMMAS '16: Applications of Mathematical Methods in Applied Sciences

Chair: Paolo F. Frutuoso e Melo, Canan Bozkaya

Simulations for Efficient Combination of Two Lower Bound Functions in Univariate Global Optimization	Ouanes Mohand, Chebbah Mohammed, Zidna Ahmed	6657007
Sensitivity Analysis of the Accident Rate of a Plant by the Generalized Perturbation Theory	E. F. Lima, D. G. Teixeira, P. F. Frutuoso e Melo, F. C. Silva, A. C. M. Alvim	6621003
Magnetohydrodynamic Convection of Cu-Water Nanofluid in a Square Cavity with a Circular Cylinder	Canan Bozkaya	6627003
The Effects of Approximating a Probabilistic Process Using the Renewal Reward Theorem and the Optimal Solution of an EOQ Model with Quality	Noura Yassine	6625007
Multi-Step Preconditioned Newton Methods for Solving Systems of Nonlinear Equations	Fayyaz Ahmad, Malik Zaka Ullah, Ali Saleh Alshomrani, Shahid Ahmad, Shamshad Ahmad	6654007
Simulations for Efficient Combination of Two Lower Bound Functions in Univariate Global Optimization	Ouanes Mohand, Chebbah Mohammed, Zidna Ahmed	6663007
On Dimension of the Set of Solutions of a Fractional Differential Inclusion via the Caputo-Hadamard Derivative	Melike Aydogan, Vahid Hedayati, Shahram Rezapour	6638003
Blowup of Solutions to a Class of Kirchho Equations with Strong Damping and Nonlinear Dissipation	Qingying Hu, Jian Dang, Hongwei Zhang	6695023
Distributed Model and Experimental Validation of a Four-Bar Mechanism with a Flexible Coupler Link	Héctor Cervantes-Culebro, Carlos A. Cruz-Villar	6695019
Modelling of Resonance Regimes of Drill String Nonlinear Dynamics	Askat K. Kudaibergenov, Askar K. Kudaibergenov, Lelya A. Khajiyeva	6694007

Saturday 5th November 2016

Conference Room: B

Time: 13:00-15:00

CSSP '16: Circuits, Systems and Signal Processing

Chair: Ryszard S. Choras, Diego Bellan

CFAR Detectors for DVB-T Passive Radar in Non-Homogeneous Scenarios	N. del-Rey-Maestre, D. Mata-Moya, J. Rosado-Sanz, P. Gomez-del-Hoyo, M. P. Jarabo-Amores	6680007
Comparison of Two Methods for Determination of Instantaneous State of Dynamical System with LCLC Circuit	B. Dobrucký	6682003
Impact of MOSFET's Structure Parameters on its Overall Performance Depending to the Mode Operation	Milaim Zabeli, Nebi Caka, Myzafere Limani, Qamil Kabashi	6677007
Identification of Nonlinear Systems with Hard Nonlinearity	A. Brouri, S. Ziani	6667003
Impact of Windowing on the Detection Probability of Weak Sine Waves Affected by Frequency Fluctuation	Diego Bellan	6647003
A Review of Image Processing Methods and Biometric Trends for Personal Authentication and Identification	Ryszard S. Choras	6629003
Data Modulation for Image Watermarking	Mourad Talbi	6693003
Analytical Characterization of Unipolar Diode Based on Transistor Channels Model	Mahi Fatima Zohra, Abdel Majid Meaameri, Luca Varani, Hugues Marinchio, Cristophe Palermo	6695007

15:00-15:30: Coffee Break

Saturday 5th November 2016

Conference Room: A

Time: 15:30-16:15

Plenary Lecture 6:



Modelling in Thermoelectricity

by Prof. Myriam Lazard, Institut Prime UPR 3346, Departement
Fluide Thermique et Combustion, FRANCE.

Conference Room: B

Time: 15:30-16:15

Plenary Lecture 7:



**Dynamics and Fine Structure of Flows: Observation,
Laboratory Modelling and Calculation**

by Prof. Yuli D Chashechkin Laboratory of Fluid Mechanics
A.Yu. Ishlinskiy Institute for Problems in Mechanics of the RAS,
RUSSIAN FEDERATION.

Saturday 5th November 2016

Conference Room: A

Time: 16:15-17:00

Plenary Lecture 8:



Some Complexity Classes of the Combinatorial Optimization Problems

by Prof. Nodari Vakhania, Centro de Investigacion en Ciencias, UAEMor, MEXICO.

Conference Room: B

Time: 16:15-17:00

Plenary Lecture 9:



Dynamics Between Biology and Mathematics: Past, Present, and Future

by Prof. Matthew He, Halmos College of Natural Sciences and Oceanography, Nova Southeastern University, USA.

Saturday 5th November 2016

Conference Room: A

Time: 17:00-17:45

Plenary Lecture 10:



Surface Dynamics of Nanopattern Formations

by Prof. Gabriella Bognar, University of Miskolc, HUNGARY.

Conference Room: B

Time: 17:00-17:45

Plenary Lecture 11:



Fractional Calculus Viscoelastic Models Considering Shear and Bulk Relaxation of Materials

by Prof. Marina V. Shitikova (co-author: Prof. Yury A. Rossikhin), Voronezh State Technical University, RUSSIAN FEDERATION.

Saturday 5th November 2016

Conference Room: A

Time: 17:45-18:30

Plenary Lecture 12:



New Large Sample Approximations for Covariance Matrices in High Dimensions

by Prof. Ansgar Steland, RWTH Aachen University, GERMANY.

Conference Room: B

Time: 17:45-18:30

Plenary Lecture 13:



Qualitative Analysis of Some Quasi-Linear Elliptic Problems

by Prof. Dumitru Motreanu, University of Perpignan,
Department of Mathematics, Perpignan, FRANCE.

Poster

Pairwise Likelihood Estimation Based on a Sample of Pairs

Ioulia Papageorgiou

6666003

Sunday 6th November 2016

Conference Room: A

Time: 08:15-09:00

Plenary Lecture 14:



Network Load Balancing Algorithms : An Overview and New Algorithms with Emphasis on Realistic NS3 Modelling of DICOM Medical Imaging Load Distribution in EHR Health Care Management

by Prof. Dimitrios A. Karras, Sterea Hellas Institute of Technology, GREECE.

Conference Room: B

Time: 08:15-09:00

Plenary Lecture 15:



Novel Regulators of Ovarian Functions

by Prof. Alexander V. Sirotkin, Constantine the Philosopher University, Nitra and Research Institute of Animal Production, Luzianky, SLOVAKIA.

Sunday 6th November 2016

Conference Room: A

Time: 09:00-09:45

Plenary Lecture 16:



Stochastic-Fuzzy Approach to Modeling Discrete-Time Dynamical Systems

by Prof. Anna Walaszek-Babiszewska Department of Control and Computer Engineering, Opole University of Technology, POLAND.

Conference Room: B

Time: 09:00-09:45

Plenary Lecture 17:



Wireless Sensor Networks Problems Optimization by Swarm Intelligence Algorithms

by Prof. Milan Tuba Faculty of Computer Science John Naisbitt University, Belgrade, SERBIA.

Sunday 6th November 2016

Conference Room: A

Time: 09:45-10:30

Plenary Lecture 18:



Dimethyl Ether (DME): A Clean Fuel/Energy for the 21st Century and the Low Carbon Society

by Prof. Kaoru Takeishi, Department of Engineering, Graduate School of Integrated Science and Technology, Shizuoka University, JAPAN.

Conference Room: B

Time: 09:45-10:30

Plenary Lecture 19:



Statistical Causality Between Flows of Information

by Prof. Ljiljana Petrovic, Department of Mathematics and Statistics, Faculty of Economics, University of Belgrade, SERBIA.

10:30-11:00: Coffee Break

Sunday 6th November 2016

Conference Room: A

Time: 11:00-13:00

AMCSE 2016: Applied Mathematics in Engineering Sciences

Chair: Andris Buikis, Alexander Kolnogorov

A Modified Version of Regularized Meshless Method for Three Dimensional Potential Problem	Cheng-Yang Lai, Kue-Hong Chen, Sheng-Wei Lin, Ren Liu	102
Minimax Normal Two-Armed Bandit with Indefinite Control Horizon	Alexander Kolnogorov	108
Intensive Wave Power and Steel Quenching 3-D Model for Cylindrical Sample. Time Direct and Reverse Formulations and Solutions	Andris Buikis, Margarita Buike	109
To the Theory of Heat Transfer and Resistance Force of the Fractal Disk	S. O. Gladkov, S. B. Bogdanova	112
Hollow System with Fin. Transient Green Function Method Combination for Two Hollow Cylinders	Andris Buikis	118
Simulations for Efficient Combination of Two Lower Bound Functions in Univariate Global Optimization	Ouanes Mohand, Chebbah Mohammed, Zidna Ahmed	120
Notes about the Linear Complexity of Ding-Helleseth Generalized Cyclotomic Sequences of Length pq over the Finite Field of Order p or q	Vladimir Edemskiy, Nikita Sokolovskiy	122
Comparison between Innovative Techniques of Photogrammetry	Vincenzo Barrile, Giuliana Bilotta, Alice Pozzoli	162
Mathematical Model of an Integrated Circuit Cooling through Cylindrical Rods	Luis Antonio Beltrán-Prieto, Juan Carlos Beltrán-Prieto, Zuzana Komínková-Oplatková	165

Sunday 6th November 2016

Conference Room: B

Time: 11:00-13:00

MMMAS '16: Mathematical Models in Fluid Mechanics and Heat Transfer

Chair: Calin Ciufudean, Satoru Ozawa

The Use of Navier-Stokes Equations in Modeling Water Quality in River-Type Systems	Galina Marusic, Calin Ciufudean	6625003
A Novel Hybrid Approach for Multiple Sequence Alignment Problem	Lamiche Chaabane	6659007
Backscattering from a Strip with One Face Electric and the Other Face Magnetic	F. Hacivelioglu, L. Sevgi, P. Ya. Ufimtsev	6677011
Microlauncher, Mathematical Model for Orbital Injection	Teodor-Viorel Chelaru, Iulian Alexandru Onel, Adrian Chelaru	6670003
Energy Sources for Future: A Green Buildings and Environment	Abdeen Mustafa Omer	6669003
Theoretical Foundation of Collective Decision Making Proccess in Society Based on Airtificial Society Model	Satoru Ozawa	6665007

Sunday 6th November 2016

Conference Room: C

Time: 11:00-13:00

EEMAS '16: Solutions of Energy Storage - Hydrogen Production and Storage

Chair: Kaoru Takeishi, Ahmad Arabkoohsar

Hydrogen Production by Steam Reforming of Methanol over Copper Catalysts Prepared by Using the Sol-Gel Method - Effect of Metal Addition	Kaoru Takeishi, Hiromitsu Suzuki	6702003
Proton Conducting Perovskites and Application to Hydrogen Production via Steam Electrolysis Proton Conducting Perovskites and Application to Hydrogen Production via Steam Electrolysis	Kwati Leonard, Young-Sung Lee, Hiroshige Matsumoto	6699003
The Efficiency of a Novel Bioreactor Employing Bacteria and Chitosan-Coated Magnetic Nanoparticles	Akbar Esmaeili, Naghmeh Tavanaye Farahi	6672003
Design and Optimization the Horizontal Axis Wind Turbine Blades (HAWTS Using Blade Element Momentum Theory BEM	Y. El Khchine, M. Sriti	6660003
Investigation Techniques in Ground Water	Ashraf Elsayed Mohamed Mohamed	6661003
System Engineering Analysis of Sandmining in Otamiri River Basin, Owerri, Imo State, Nigeria	Njoku Paul C., Njoku Isaiah Sakraant, Archana Swati Njoku	6706003
Hydrogen Production by Steam Reforming of Methanol over Copper Catalysts Prepared by Using the Sol-Gel Method	Kaoru Takeishi, Hiromitsu Suzuki	6700003
A Review of Methane Partial Oxidation in Porous Media for Hydrogen Production	Hamid Reza Lari, Mohammad Reza Shahnazari	6702007
A New Energy Storage Solution for Conventional and Renewable Energy Power Plants	Ahmad Arabkoohsar, Gorm B. Andresen	6696003

Sunday 6th November 2016

Conference Room: A

Time: 13:00-15:00

AMCSE 2016: Applied Mathematics in Electrical Engineering Science

Chair: Igor Popov, Massood Mofid

Bound State for Dielectric Waveguide with High Contrast Inset in the Core	Maria Faleeva, Igor Popov	133
Empirical Bayes Credibility Models for Economic Catastrophic Losses by Regions	Pavla Jindrová, Lucie Kopecká	123
An Exact Solution to Determine the Dynamic Response of a Beam on a Variable Elastic Foundation	Massood Mofid, Mohammad Ali Foyouzat	127
On the Discrete Spectrum of the Dirac Operator on Bent Chain Quantum Graph	Michail Belov, Igor Popov, Irina Blinova	129
Approach to Problem Solving Construction Crew Rotations	Abdelkader Lamamri, Imene Mehamdia	132
Modeling of Helix Molecules Formation on a Surface of Nanotube and Inside it	Anna Belolipetskaya, Nikita Lisitsa, Igor Popov	135
Analytical and Numerical Solution of Conjugate Heat and Mass Transfer in Falling Film Absorption Process	Vladimir E. Nakoryakov, Maria V. Bartashevich	136
Model of Tunnelling Through Periodic Array of Quantum Dots	Dmitry Meynster, Anton Popov, Igor Popov	130
Design of a Microstrip Bowtie Antenna for Indoor Radio-Communications	Hector Fraga-Rosales, Mario Reyes-Ayala, Genaro Hernandez-Valdez, Edgar Alejandro Andrade-Gonzalez, Jose Raul Miranda-Tello, Felipe Alejandro Cruz-Perez, Sandra Lirio Castellanos-Lopez	166

Sunday 6th November 2016

Conference Room: B

Time: 13:00-15:00

EEMAS '16: Clean Energy and Effects of Fossil Fuels

Chair: Kaoru Takeishi, M. Viscardi

Dimethyl Ether (DME): a Clean Fuel/energy for the 21st Century and the Low Carbon Society	Kaoru Takeishi	6676007
Study of the Lattices with CFC with Varying Temperature	Fulvio Frisone	6690015
Structural Performance Analysis of Smart Carbon Fiber Samples Supported by Experimental Investigation	M. Viscardi, M. Arena, G. Barra, L. Guadagno	6690019
Hydrogen Production by Steam Reforming of Dimethyl Ether in Single Use of Copper Alumina-Silica Catalysts Prepared by Using Sol-Gel Methods	Kaoru Takeishi	6676011
China's Energy Needs Resources, Challenges and Issues	Najib Altawell, Xiaoqian Song	6688003
Real Time Thermal Analysis of an Exterior Wall Solution Used as Envelope for an Energy Efficient Building	I. Boros, K. Schmiedt, C. Tanasa, T. Nagy-Gyorgy, D. Dan, V. Stoian	6683003
Simulation and Experimental Validation of Fatigue Endurance Limit of Copper Alloy for Aircraft Applications	M. Viscardi, P. Napolitano, M. Arena	6690023
Direct Synthesis of Dimethyl Ether from Carbon Dioxide and from Mixture of Carbon Dioxide and Carbon Monoxide over Copper Alumina Catalysts Prepared by Using the Sol-Gel Method	Kaoru Takeishi, Yutaro Wagatsuma	6676015

Sunday 6th November 2016

Conference Room: C

Time: 13:00-15:00

MMMAS '16: Mathematical Models for Non-Linear Systems

Chair: Askat K. Kudaibergenov, Héctor Cervantes-Culebro

Modeling and Simulation of Nuclear Reactors (Fission and Fusion) in Egypt	Imbaby I. Mahmoud	6690011
Modelling of Resonance Regimes of Drill String Nonlinear Dynamics	Askat K. Kudaibergenov, Askar K. Kudaibergenov, Lelya A. Khajiyeva	6694007
Blowup of Solutions to a Class of Kirchho Equations with Strong Damping and Nonlinear Dissipation	Qingying Hu, Jian Dang, Hongwei Zhang	6695023
A Novel Design Methodology for Space Frame through Parametric Study of Torsional Stiffness	Abdelrahman M. M. Youssef, Mohamed A. Elhaddad, Yehia A. Eldrainy	6710007
Distributed Model and Experimental Validation of a Four-Bar Mechanism with a Flexible Coupler Link	Héctor Cervantes-Culebro, Carlos A. Cruz-Villar	6695019

15:00-15:30: Coffee Break

Sunday 6th November 2016

Conference Room: A

Time: 15:30-17:30

AMCSE 2016: Systems Engineering

Chair: Altug Iftar, Katerina Hyniova

ERP Systems Created to Support Academic Management in Contexts of Geographic Dispersion: A Case Study in Regional Higher Education	Moreno Gabriel, Salinas Martha, Anzola Diego, López Juan	107
Robust Control of Infinite-Dimensional Systems	Altug Iftar	110
Satellite Attitude Control System Design Using H-Infinity Method with Pole Allocation Considering the Parametric Uncertainty	Alain Giacobine de Souza, Luiz Carlos Gadelha de Souza	113
Static and Dynamic Pedestrian Detection Algorithm for Visual Based Driver Assistive System	Idoko John Bush, Kamil Dimililer	124
One-Quarter-Car Active Suspension Model Verification	Katerina Hyniova	134
Maximum Power Point Tracking of Photovoltaic Modules Comparison of Neuro-Fuzzy "ANFIS" and Artificial Network Controllers Performances	Ons Zarrad, Aymen Jemaa, Mohamed Nejib Mansouri, Aurelian Crăciunescu	143
PV System Flyback Converter Controlled PI Control to Charge Battery Under Variable Temperature and Irradiance	Unal Yilmaz, Ali Kircay, Selim Borekci	145
Plasma Arc Cutting Dimensional Accuracy Optimization Employing the Parameter Design Approach	John Kechagias, Markos Petousis, Nectarios Vidakis, Nikos Mastorakis	147
Time Series Analysis of Air Pollutants for Karabük Province	Ali Can	137

Sunday 6th November 2016

Conference Room: B

Time: 15:30-17:30

EAS '16 & ABAPAN '16: Economics, Applied Statistics & Applied Analysis

Chair: Nodari Vakhania, Martin Grigoryan

Adaptive Model of Sustainable Business Development Against the Example of the Conurbation of Upper Silesia and Dąbrowa Basin	G. Sierpiński, I. Celiński, M. Staniek	6673003
A Geometric Heuristic for Uncapacitated Vehicle Routing Problem	Nodari Vakhania, Jose Alberto Hernandez, Federico Alonso-Pecina, Crispin Zavala	6653007
On the Existence of Maximum Likelihood Estimates in Modulated Gamma Process	Alicja Jokiel-Rokita, Ryszard Magiera	6676003
Economic and Social Impact of Using Virtual Currency as a New Payment Method	Julio Mendoza Tello, Higinio Mora Mora, Francisco A. Pujol	6659003
On Multi-Valued Complex Functions	Agamirza E. Bashirov, Sajedeh Norozpour	6635003
An Application of Approach Theory to the Relative Hausdorff Measure of Non-Compactness for the Wasserstein Metric	Ben Berckmoes, Tim Hellemans, Mark Sioen, Jan Van Casteren	6599003
Scheduling Jobs with Two Release Times and Tails on a Single Machine	Elisa Chinos, Nodari Vakhania	6653003
On the m-Term Best Approximation of Functions and Greedy Algorithm	Martin Grigoryan	6600003
Selecting the Most Appropriate Fuzzy Implication Based on Statistical Data	P. Pagouropoulos, C. D. Tzimopoulos, B. K. Papadopoulos	6689007
Advanced Tools with Statistic and Mathematic for Financial Ratio Analysis	Teguh Sugiarto, Ahmad Subagyo	6690039

Sunday 6th November 2016

Conference Room: C

Time: 15:30-17:30

AMCSE Special Session: Intelligent Transport Systems - ITS applied to Bus Rapid Transit - BRT

Chair: Caio Fernando Fontana, Hermes Senger

Aspects of Urban Transport in the Environment: The Case "Bus Rapid Transport" (BRT) in São José Dos Campos Municipality	Robson Barbosa, Alessandra Di Lorenzo, Érica De Rossi Ferrarezi, Vera Lúcia Alves Cordeiro Barbosa, Caio Fernando Fontana, Cledson Akio Sakurai	175
GPS to Monitor the BRT Bus	Cledson Akio Sakurai, Caio Fernando Fontana, Barbara Carvalho Negrão, Leopoldo Yoshioka, Claudio Luiz Marte, Hermes Senger	169
Analysis of Intelligent Transport System (ITS) in Brazilian Port Supply Chain	Barbara Carvalho Negrão, Caio Fernando Fontana, Cledson Akio Sakurai, Hermes Senger	181
Technological Model for Monitoring Dangerous Goods Radio Frequency (RFID)	Henrique Kopke Machado, Caio Fernando Fontana, Cledson Akio Sakurai	174
Internet of Things (IoT) in Urban Mobility: The Case of Bus Rapid Transit (BRT) of São José Dos Campos City	Mayara Marques Da Silva, Hamilton Aurélio De Lima E Dos Santos, Robson Barbosa, Caio Fernando Fontana, Cledson Akio Sakurai, Hermes Senger	179
IoT to Monitor the BRT Bus	Hermes Senger, Caio Fernando Fontana, Cledson Akio Sakurai	170
Overview of São José Dos Campos BRT and ITS Project	Caio Fernando Fontana, Cledson Akio Sakurai, Barbara Carvalho Negrão, Leopoldo Yoshioka, Claudio Luiz Marte, Hermes Senger	172
Considerations on the Quality of Life at Work of Drivers of Bus Rapid Transit (BRT)	Robson Barbosa, Kellen Martins Do Carmo, Felipe Borges, Vera Lúcia Alves Cordeiro Barbosa, Caio Fernando Fontana, Cledson Akio Sakurai, Hermes Senger	177
Power Line Communication as Alternative for Data Communication Channel for BRT	Caio Fernando Fontana, Cledson Akio Sakurai, Hermes Senger	173
Risk Analysis in Urban Transport Systems: Evaluation of the Occurrence of Criminal Possibilities in Rapid Transit Bus of São José Dos Campos	Robson Barbosa, Clovis Ferreira De Araújo, Erasmo Carlos Pereira Rocha, William Girão Barros Helfstein, Caio Fernando Fontana, Cledson Akio Sakurai	176
Logistics Monitoring Using ITS	Caio Fernando Fontana, Cledson Akio Sakurai, Leopoldo Yoshioka, Claudio Luiz Marte, Hermes Senger	171
Technological Model for Pallets Monitoring with Radio Frequency (RFID)	Henrique Kopke Machado, Caio Fernando Fontana, Cledson Akio Sakurai, Hermes Senger	180

Sunday 6th November 2016

Conference Room: A

Time: 17:30-19:30

DIFEQU '16 & FUZZY '16: Differential Equations & Fuzzy Systems

Chair: Hironobu Sasaki, Cemil Tunc

On Stability, Uniform Stability and Boundedness of Nonlinear Volterra Integro-Systems	Cemil Tunc	6678015
Remark on Small Analytic Solutions to the Schrodinger Equation with Cubic Convolution	Hironobu Sasaki	6626003
Numerical Solution of Fuzzy Control Problems Using Linear Programming	F. Nobakht, Gh. Atazandi, A. V. Kamyad, A. Zare	6664011
A New Approach to Improve Forecasting Neural Network-Based Fuzzy Time Series	Ozer Ozdemir	6630003
Design of a Fuzzy Supervisory Control System for a Binary Distillation Column	N. Sangster, T. Lalla, S. Mohammed	6634003
New Results on the Existence of Periodic Solutions Certain Retarded Differential Equations of Third Order	Cemil Tunc	6678019
Intelligent Control of Manipulator Robot	K. Behih, K. Benmahammed, Dj. Zehar	6703055

Sunday 6th November 2016

Conference Room: B

Time: 17:30-19:30

BIO '16: Biology and Biomedical Engineering

Chair: Ji-Yong Jung, Jiří Janáček

Assessment of the Trunk Motion of Scoliotic Patients During Lateral Movement Based on Ultrasound Motion Analysis System	J. Y. Jung, C. M. Yang, J. J. Kim	6652007
Estimating Volume Tensor by Fakir Probe	Jiří Janáček, Daniel Jiráček	6681003
Analysis of Pediatric Foot Disorders Using Decision Tree and Neural Networks	J. K. Choi, Y. G. Won, J. J. Kim	6654003
Impact of Climate Change on the Evolution of the Pine Processionary Moth, <i>Thaumetopoea pityocampa</i> (Lepidoptera Notodontidae) at the Aures, Algeria	Tarai Nacer, Mihi Ali, Haddad Azeddine	6678011
Advanced Signal Processing Techniques for Microwave Cardiopulmonary Signals Separation	D. Obeid, S. Samad, S. Sadek, G. Zaharia, G. El Zein	6710008

20:30: Conference Dinner

Monday 7th November 2016

Conference Room: A

Time: 09:00-09:45

Plenary Lecture 20:



A Review of Image Processing Methods and Biometric Trends for Personal Authentication and Identification

by Prof. Ryszard S. Choraś, Institute of Telecommunications and Computer Sciences, Department of Telecommunications, Computer Sciences and Electrical Engineering, UTP University of Sciences and Technology, Bydgoszcz, POLAND.

Conference Room: B

Time: 09:00-09:45

Plenary Lecture 21:



Modern Evaluation Methods Involved in the Development of All-Ceramic Dental Restorations

by Prof. Liliana Porojan, "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Dentistry, Department of Dental Prostheses Technology, ROMANIA.

Monday 7th November 2016

Conference Room: A

Time: 09:45-10:30

Plenary Lecture 22:



Generalized Mean Regression

by Prof. Nataniel Greene, Department of Mathematics and Computer Science, Kingsborough Community College, City University of New York, USA.

Conference Room: B

Time: 09:45-10:30

Plenary Lecture 23:



Deep Learning for FinTech Big Data Mining

by Prof. Sung-Bae Cho, Department of Computer Science, Yonsei University, Seoul, KOREA.

10:30-11:00: Coffee Break

Monday 7th November 2016

Conference Room: A

Time: 11:00-13:00

AMCSE 2016: Applied Mathematics in Economical and Statistical Sciences

Chair: Serg Pozdneev, Abdeen Omer

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MMMAS '16 & TOPO '16: Algorithms of Mathematical Models and Topology & Functional Analysis

Chair: Milan Tuba, Nataniel Greene

Using Fuzzy Knowledge Base to Evaluate Classical Potential Barrier of Reactions in Solutions of Hydrogen Atoms and Hydrocarbons	Vladimir E. Tumanov, Elena S. Amosova, Andrey I. Prokhorov	6675003
Two-Stage Algorithm for License Plate Extraction	Marko Lukic, Milan Tuba, Raka Jovanovic	6684007
Iterative Method with Successive over Relaxation & Statistical Method with ANOVA One to Detect the Lesion	A. K. El Kourd, B. N. Atia	6663003
Interiors and Closures of Sets and Applications	Soon-Mo Jung	6645003
Numerical Simulation of Particle Transport in Supersonic Mixing Layer	Altyn Makasheva, Altynshash Naimanova	6679007
Generalized Least-Powers Regressions I: Bivariate Regressions	Nataniel Greene	6697003
Riemann Problem	A. A. Durmagambetov	6695015
The Derivation of Projective, Kepler Matrices	Iris Pear	6695027
The Quantum Cauchy Functional and Space-Time Approach to Relativistic Quantum Mechanics	A. A. Beilinson	6707003

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Time: 13:00-15:00

AMCSE 2016: Computer Science

Chair: Mohammad Ghasemzadeh, Kamil Arslan

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EEMAS '16: Renewable Energy and Environmental Engineering

Chair: Calin Ciufudean, Marina Shitikova

Maximum Power Point Tracking of Photovoltaic Modules Comparison of Neuro-Fuzzy “ANFIS” and Artificial Network Controllers Performances	Z. Ons, J. Aymen, M. Mohamed Nejib, C. Aurelian	6672007
Role of pH, Oxidation Reduction Potential and Temperature Change in Biogas Yield During Anaerobic Digestion of Cattle Manure	Saeed Samani, Mohammad Ali Abdoli, Abdolreza Karbassi	6677003
Mathematical Modeling of Crown Fire Initiation in Three-Dimensional Setting	Valeriy Perminov, Alexander Goudov	6656003
Quantitative Formulation of Production Scheduling Problem	Kolodyazhnyi S. A., Mishchenko V. Ya., Dobrosotskikh M. G.	6657003
Roles of Riparian Vegetation on Shoreline Deposition/Erosion Relief	Jin-Hong Kim	6646007
The Use of Computational Fluid Dynamics Analysis (CFD) in Studying River-Type Systems	Galina Marusic, Calin Ciufudean, Viorel Bostan	6624003
Chemical Bath Deposition Technique (CBD) of CdS Used in CSS (Closed Space Sublimation) of CdTe Solar Cell	Z. Mahmood, F. U. Babar, S. Naz, H. Rehman	6691007

15:00-15:30: Coffee Break

Monday 7th November 2016

Conference Room: A

Time: 15:30-16:15

Plenary Lecture 24:



Connections Between Ulam Stability and Fixed Points Theory
by Prof. Janusz Brzdek, Department of Mathematics of
Pedagogical University of Cracow, POLAND.

Conference Room: B

Time: 15:30-16:15

Plenary Lecture 25:



**Computational and Analytical Results for the Behavior of the
Dynamical System Associated to Mixing Flow Model**
by Prof. Adela Ionescu, University of Craiova, Department of
Applied Mathematics, ROMANIA.

Monday 7th November 2016

Conference Room: A

Time: 16:15-17:00

Plenary Lecture 26:



Nanomechanics Modeling and its Applications

by Prof. K. M. Liew, Department of Architecture and Civil Engineering, City University of Hong Kong, Kowloon, Hong Kong, CHINA.

Conference Room: B

Time: 16:15-17:00

Plenary Lecture 27:



HPN (New Concept of Hybrid Thermophotovoltaic Industrial Prototypes)

by Prof. Giampietro Fabbri (co-author: Prof. Matteo Greppi), D.I.N., Università Degli Studi di Bologna, ITALY.