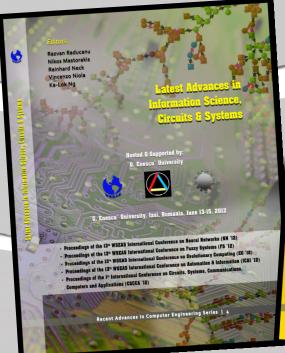
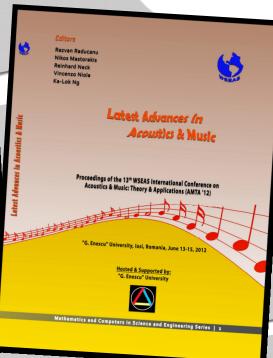
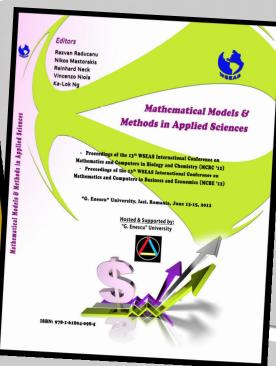
# **Conference Program**











"G. Enescu" University, Iasi, Romania June 13-15, 2012

#### **Important Notes:**

- (1) You may register at any time during the conference.
- (2) The Invoice of payment can be collected at the registration desk at any time.
- (3) The Certificate of Participation can be collected at the registration desk only after your presentation.
- (4) Session chairmen can ask for a special Certificate at the registration desk after the session
- (5) The duration of a presentation slot is 20 minutes for a regular paper and 45 minutes for a plenary speech, including questions.
- (6) All authors should give their biographies to the chairmen before the beginning of the session.
- (7) Authors can upload their presentations to the available computers 10 minutes before the beginning of their session.

13th WSEAS International Conference on Neural Networks (NN '12)

13th WSEAS International Conference on Fuzzy Systems (FS '12)

13th WSEAS International Conference on Evolutionary Computing (EC '12)

13th WSEAS International Conference on Acoustics & Music: Theory & Applications (AMTA '12)

13th WSEAS International Conference on Mathematics and Computers in Biology and Chemistry (MCBC '12)

13th WSEAS International Conference on Mathematics and Computers in Business and Economics (MCBE '12)

13th WSEAS International Conference on Automation & Information (ICAI '12)

1st International Conference on Circuits, Systems, Communications, Computers and Applications (CSCCA '12)

1st International Conference on Sustainable Development, Sustainable Chemical Industry, Pollution, Hazards and Environment (SDSCIPHE '12)

1st International Conference on Health Science and Biomedical Systems (HSBS '12)

The WSEAS staff welcome you to another prestigious event.

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

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

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

The WSEAS Team

**Registration: 08:00-09:00** 

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



Solving Initial Value Problems of Multivariable Parabolic Systems via Expectation Values: Probabilistic Evolution, Exactness and Approximants

by Prof. Metin Demiralp, Istanbul Technical University, TURKEY.

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



New Building Materials by Eco-Sustainable Recycling of Industrial Waste

by Prof. Mihai Cruceru, "Constantin Brancusi" University of Targu-Jiu, ROMANIA.

Conference Room: C Time: 09:00-09:45 Plenary Lecture 2:



Applications of Fuzzy Measures

by Prof. Anca Croitoru, "Al. I Cuza" University of Iasi, ROMANIA.

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



Enhanced Evolutionary Search Algorithms for Multiobjective Optimization in Power Systems

by Prof. Mihai Gavrilas, «Gheorghe Asachi» Technical University of Iasi, ROMANIA.

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



Integrated Methods for Road Traffic Noise Pollution by Dr. Claudio Guarnaccia, University of Salerno, ITALY.

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



**Partial Differential Equations in Biosubstance Crystalization** by Prof. Jelenka Savkovic-Stevanovic, Belgrade University, SERBIA.

Coffee Break: 10:30-11:00

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



Applications of the Concept of Virtual Organization in Military Training

by Prof. Mircea Boscoianu, "Henri Coandă" Air Force Academy Brașov, ROMANIA.

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



Advanced Integrative Strategy of Analyzing the Sound and Vibration Effects on Human Bio-Behavior and Handling by Prof. Mihaela Ioana Baritz, University Transilvania Brasov, Romania.

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



Mathematical Models for Different Chemical Processes by Prof. Alina Bărbulescu, Ovidius University of Constanta, ROMANIA.

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



Inventing the Future through Green Management and Innovation

by Assis. Prof. Davorin Kralj, Faculty of Organization Studies, Novo mesto, SLOVENIA.

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



**Network Coding: Preliminaries, Theory and Implementation** by Prof. Zoran Bojkovic, University of Belgrade, SERBIA.

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



Mathematical Studies Applied in Ball Bearings Reliability Analysis

by Prof. Constantin Buzatu, Transilvania University of Brasov, ROMANIA.

Conference Room: A Time: 12:30-14:30

**AMTA Session: Music Perception and Influence** 

Chair: Ioana Baritz, Razvan Raducanu

-		
Ambient Music Influence on Stability Evolution in Orthostatic Posture	B. Braun, M. Baritz, D. Cotoros	67904-231
Relations between Music and Poetry in the Author's		
Composition "Time of Immortality", for Soprano,		
Trombone, Piano and Percussion	Ioan Pop	67904-131
The Mozart Effect: Neurological Miracle, Artefact or		
Suggestive Influence	Irina Crumpei, Tudor-Ştefan Rotaru	67904-036
The Creative Adaptation of the Psaltic Monody in the		
Present Day Choir Creation for the Liturgy in the		
Republic of Moldova – Teodor Zgureanu – The Hymns of		
the Holy Liturgy by Saint John the Chrysostomos	Irina Zamfira Dănilă, Adrian Sîrbu	67904-176
Rhythm Analysis of the "Sonorous Continuum" and		
Conjoint Evaluation of the Musical Entropy	Michele Della Ventura	67904-001
Between Byzantium and Venice Western Music in Crete	Nicolae Gheorghiță	67904-066
Musical Performance - Mediated Interface between		
Science and Art - The Magic of Double Play	Rotaru-Constantinovici Luminița	67904-031

Conference Room: B Time: 12:30-14:30

**CSCCA Session: Systems Science, Information Science and Applications** 

Chair: Gilbert-Rainer Gillich, Maria Moise

Researches Regarding Determination of Sliding Velocity		
Between Two Xylan 1052-Coated Homologous Flanks at	Ion-Cornel Mituletu, Ion Vela, Gilbert-	
Helical Gear Wheels	Rainer Gillich, Daniel Amariei, Marius Tufoi	67908-053
Analysis of a Cylinder-Wire-Cylinder Electrode	K. Kantouna, G. P. Fotis, K. N. Kiousis, L.	
Configuration during Corona Discharge	Ekonomou, G. E. Chatzarakis	67908-021
Land Use Changes Modeling Based on Different		
Approaches: Fuzzy Cognitive Maps, Cellular Automata		
and Neural Networks	Maria Moise	67908-065
A Fuzzy Cognitive Mapping Approach for Housing		
Affordability Policy Modeling	Marilena-Aura Din, Maria Moise	67908-069
Trends in Network Coding	Zoran Miličević, Zoran Bojković	67908-017

Conference Room: C Time: 12:30-14:30

MCBC Session: Advances in Biology and Chemistry Chair: Alina Barbulescu, Jelenka Savkovic-Stevanovic

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Models for Pollutants Evolution in an Urban Area	Alina Bărbulescu, Lucica Barbes	67905-017
Biotransformation of the Toxic Chemical Substances	Jelena Djurovic	67905-041
Computing Methods for Chemical Reaction Analysis and Control	Jelenka Savkovic-Stevanovic	67905-045
Controlling Cardiac Alternans via Point Stimulation Versus Far-Field Pacing	John W. Cain	67905-029
Chemical Reaction with Diffusion	M. Stevanovic-Huffman, J. Savkovic- Stevanovic	67905-037
Biomaterials for restoration	Radmila Stevanovic	67905-033
The Chemical System Characterization	Tatjana Mošorinac	67905-049

Coffee Break: 14:30-15:00

Conference Room: A Time: 15:00-18:00

AMTA Session: Classical Composers Analysis Chair: Gheorghe Dutica, Diana Andron

Reflections of Dante Alighieri's La Divina Commedia in the Artistic Universe of Eduard Terényi	Anamaria Mădălina Hotoran	67904-076
Diatonic, Chromatic, Enharmonic; Consonance, Dissonance Historical and Cultural Space Meanings	Carmen Chelaru	67904-021
Symphonic Jazz and Syncretism Connotations in George Gershwin's "Rhapsody in Blue"	Cătălina Constantinovici, Laura Vasiliu	67904-026
Chromatic Principles in Renaissance Music	Constantin Rîpă, Oana Bălan	67904-141
Particularities of Compared Interpretation of Chopin's Studies for Piano	Cristina Andra Raducanu	67904-186
A Stylistic Approach to the History of the Musical	Dan Spînu	67904-151
Originality in The Creation of Mozart Chamber: Trio op. 14 no. 2 for Piano, Clarinet (or Violin) and Viola in Mi Bemol Major KV 498 (1786) by Wolfgang Amadeus	Felix C-Tin Goldbach	67904-071
Modern Coordinates of the Fugue Form at the End of the 20th Century and the Beginning of the 21st Century	Gabriela Vlahopol	67904-171
Analytical Remarks on Harmony in Salome Opera by Richard Strauss	Loredana lațeșen	67904-086
An Outline of Mahler's Kindertotenlieder	Oana Andreica	67904-006

Conference Room: B Time: 15:00-17:30

**SDSCIPHE Session: Green Development and Environment Friendly Solutions** 

Chair: Davorin Kralj, Corneliu Cofaru

Chair Parcini thay, Comena Corara		
		67000 004
Energy-Efficient Production Process	Anita Kovac Kralj, Davorin Kralj	67909-034
Strategies of Automotive Powertrain Development for		
Diminishing Local and Global Environmental Impacts	Corneliu Cofaru	67909-070
Inventing the Future through Green Management and		
Innovation	Davorin Kralj	67909-025
	Gilbert-Rainer Gillich, Andrea Amalia	
Robust Friction Pendulum with Parameterized Sliding	Minda, Nicoleta Gillich, Stefania Camelia	
Surfaces	Jurcau, Claudiu Mirel Iavornic	67909-064
	In Guk Jeong, Ji Hun Yun, Chung Seob Yi,	
Experimental Study on Temperature Distributions of	Chul Ki Song, Jeong Se Suh, Hyung Chun	
High Power LED Floodlight	Kim	67909-061
Possible Uses of Fossil Fuel Combustion Waste in	Mihai Cruceru, Luminita Popescu, Cristinel	
Building Materials Industry	Popescu, Cristinel Racoceanu	67909-046
Transformation, Innovation and Adaptation for		
Sustainability in Tourism – Case Study: Turinn Cluster	Mirela Mazilu	67909-037
Important Sustainability in Higher Educational	Omidreza Saadatian, Sohif Bin Mat, Ch. Lim,	
Institutions Events	K. Sopian, Saman Daneshmand	67909-016
Oportunities for Sustainable Development. The		
Vegetation in the Moldova Watershed on the Territory	Petre Spânu, Monica Flutăr, Constantin	
of the Suceava County	Cocerhan	67909-043

Conference Room: C Time: 15:00-17:30

MCBE Session: Analysis of Modern Fiscal Issues

Chair: Alina Barbulescu, Monica Pirvan

<u>,                                      </u>		
A Link between Economic Crisis and Chaos Control	Ali Sanayei, Fraydoon Rahnamay Roodposhti, Taghi Torabi, Alina Barbulescu	67906-013
Unique Links in Graphs	F. Ghionea, M. Pirvan	67906-016
A Laplace Type Problem for Delone Sessadecagonal Lattice with Obstacles	G. Caristi, M. Stoka	67906-004
Analysis of the Critical Path within a Project with WinQSB Software	Gurau Marian Andrei, Melnic Lucia Violeta	67906-007
Influence Factors of Cyclical Fluctuations: Consumption, Investment and Currency. Study Case for Romania Between 1995 and 2009	Laura Cismaş, Ruxandra Pitorac, Mihaela Neamtu	67906-031
Law as a System of Proportions and Symmetries	Massimiliano Ferrara, Angelo Roberto Gaglioti	67906-010
Deterministic and Stochastic Model for the Analysis of the Asset Price	Mihaela Neamtu, Gabriela Mircea, Dumitru Opris	67906-025
Dynamical Evolutionary Games with Delay	Nicoleta Sîrghi, Mihaela Neamtu, Dumitru Opris	67906-028

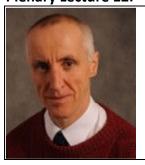
Conference Room: B Time: 17:30-19:00

**AMTA Session: Music Education Strategies and Techniques** 

Chair: Razvan Raducan, Gheorghe Dutica

Music Therapy, a Tool for the Rehabilitation and		
Education of Disabled Students. Methods and		
Techniques	Aurica Atrash-Jucan, Laura Vasiliu	67904-016
Personality Traits and Music Performance Level of		
Undergraduate Students	Dorina Iusca	67904-096
Being a Musician and Becoming a Teacher of Music: How	/	
do They Inform and Influence Each Other in Beginning		
Teachers' Understanding of their Learning Trajectories	Mihaela Mitescu Lupu	67904-106
Sensory Perception and Learning Style. The		
Implementation of the VARK Model in Musical Higher		
Education	Rosina Caterina Filimon	67904-061
Gifted Young Performers' Psychological Problems	Stela Dragulin	67904-206

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



Limiting Behaviour of a SIS Epidemic Model with Environmental Stochasticity
by Prof. David Greenhalgh, Institute of University of Strathclyde, UK.

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



Controlling Digital Ecosystems for Sustainable Development by Assoc. Prof. Calin I. Ciufudean, "Stefan Cel Mare" Universtity of Suceava, ROMANIA.

Conference Room: C Time: 09:00-09:45 Plenary Lecture 14:



Automatic Face Detection and Recognition Techniques by Dr. Tudor Barbu, Institute of Computer Science of the Romanian Academy, ROMANIA.

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



Controlling Cardiac Alternans via Point Stimulation Versus Far-Field Pacing

by Assoc. Prof. John W. Cain, University of Richmond, VA, USA.

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



**Equilibria of the Games in Choice Form**by Prof. Massimiliano Ferrara, University Mediterranea of Reggio Calabria, ITALY.

Conference Room: C Time: 09:45-10:30 Plenary Lecture 17:



**Grammar-Based System Specification for Fun and Profit** by Assoc. Prof. Stefan D. Bruda, Institute of Bishop's University, CANADA.

Coffee Break: 10:30-11:00

Conference Room: A Time: 11:00-11:45 Plenary Lecture 18:



Variational Treatment of Screened Coulomb Potentials: The Yukawa Potential

by Prof. N. A. Baykara, Marmara University, TURKEY.

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



Innovative Methods for Improving Portfolio Management based on Artificial Intelligence Instruments

by Prof. Gabriela Prelipcean, University "Stefan cel Mare" of Suceava, ROMANIA.

Conference Room: C Time: 11:00-11:45 Plenary Lecture 20:



Collaborative Engineering in Product Development of Virtual Enterprises

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

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



Deterministic and Stochastic Model for the Analysis of the Asset Price

by Prof. Mihaela Neamtu, West University of Timisoara, ROMANIA.

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



Development of Mechanical Sensor based on Flat Coil Element

by Prof. Mitra Djamal, Institut Teknologi Bandung, INDONESIA.

Conference Room: C Time: 11:45-12:30 Plenary Lecture 23:



Land Use Changes Modeling Based on Different Approaches: Fuzzy Cognitive Maps, Cellular Automata and Neural Networks

by Prof. Maria Moise, Romanian American University, ROMANIA.

Conference Room: A Time: 12:30-14:30

**HSBS Session: Health Science and Bioscience** 

**Chair: Calin Corciova, Ioana Mozos** 

Analysis of Blood Flow in Coronary Arterial Tree Using Mathematical Models	C. Corciovă, M. Turnea, F. Corciovă	67910-041
Prognostic Value of Systolic Pulmonary Artery Pressure		
Determined by Echocardiography in Patients with	Flavia Corciovă, Călin Corciovă, Cătălina	
Pulmonary Hypertension	Arsenescu Georgescu	67910-046
Signal Averaged Electrocardiography and Renal Function	Laura Marana Minana Harray Lalia Guara	67040 026
in Hypertensive Patients	Ioana Mozos, Mircea Hancu, Lelia Susan	67910-026
Helix Stability of the Double to Single Strands		
Oligonucleotides Transition	Jelenka Savkovic-Stevanovic	67910-006
	Karel Frydrýšek, Leopold Pleva, Martin	
Report About the New External Fixator for Treatment of	Janečka, Richard Klučka, Milan Sivera,	
Pelvis and Acetabulum Fractures	Jaroslav Jořenek	67910-011
	Karel Frydrýšek, Leopold Pleva, Oldřich	
Report about the New External Fixators for Treatment of	Učeň, Tomáš Kubín, Jaroslav Rojíček, Milan	
Complicated Limb Fractures	Šír, Roman Madeja	67910-016
Robust Wrist-Type Multiple Photo-Interrupter Pulse		
Sensor	Toshinori Kagawa, Nobuo Nakajima	67910-036

Conference Room: B Time: 12:30-14:30

ICAI Session: Intelligent Control Systems Chair: Calin Ciufudean, Gabriel Predusca

Theoretical and Experimental Study on Cryogenic Freezing of Berries	Cristian Iosifescu, Valeriu Damian, Calin Ciufudean	67907-031
The Automation of the Car Access System using Logical Circuits FPGA	Gabriel Predusca, Florian Ion, Emil Diaconu, Catalin Duscu	67907-001
Stock Management and Control using RFID Systems	Maria Vlad, Madalin Stefan Vlad	67907-051
A Survey of Livestock Identification Systems	Maria Vlad, Roxana Andreea Parvulet, Madalin Stefan Vlad, Carmen Ana Pivoda	67907-046
Experiments with Integration of Classical Manufacturing Devices in Intelligent Control Systems	Valentin Vlad, Corneliu Buzduga, Calin Ciufudean	67907-036

Conference Room: C Time: 12:30-14:30

NN-FS Session: Neural Networks and Fuzzy Systems

Chair: Anca Croitoru, Razidah Ismail

Properties of Measurable Multifunctions Relative to a Fuzzy Measure	Anca Croitoru	67902-025
K-Vector Fuzzy Integral	Cristina Stamate	67902-037
Applying Target Costing in Computing the Cost of Products by Using Fuzzy Quality Function Deployment (FQFD)	Fatemeh Khajehsharifi, Mohammad Taghi Taghavifard, Jahanyar Bamdad Soofi	67902-029
Fuzzy Controller to Improve Motor Pump Group Efficiency in a Wind Energy Pumped Storage System	Muhammad M. A. S. Mahmoud	67902-017
Fuzzy Algorithm for Parameter Estimation of a Superheater System	Razidah Ismail, Noor Ainy Harish	67902-021
Comparison of Drug Release Prediction from HPMC Matrices, Effects of Polymer Concentration and Physicochemical Properties of Drug by using Equation and Artificial Neural Networks	Mahshid Mohammadi, Abdolhossein Qaderi	67901-016
Kalman Filter and Recurrent Neural Network based Hybrid Approach for Space Time Block Coded-MIMO Set- up with Rayleigh Fading	Parismita Gogoi, Kandarpa Kumar Sarma	67901-021

Coffee Break: 14:30-15:00

Conference Room: A Time: 15:00-18:00

**SDSCIPHE Session: Environmental Pollution and Risks** 

Chair: Mirela Mazilu, Mihai Cruceru

Ceron-Breton J. G., Ceron-Breton R. M., Guerra-Santos J. J., Aguilar-Ucan C. A., Montalvo-Romero C., Guevara-Carrio E., Cordova-Quiroz V., Martinez-Briceño J. A., in Three Mangrove Species  Ceron-Breton J. G., Ceron-Breton R. M., Guerra-Santos J. J., Aguilar-Ucan C. A., Montalvo-Romero C., Guevara-Carrio E., Cordova-Quiroz V., Martinez-Briceño J. A., Custodio-Alvarez J. E., Carballo-Pat C. G. Ceron-Breton R. M., Guerra-Santos J. J., Aguilar-Ucan C. A., Montalvo-Romero C., Carballo-Pat C. G., Guerra-Santos J. J.,	67909-019
Effects of Controlled Exposition to Sulfur Dioxide on Photosynthetic Pigments and Soluble Proteins Content in Three Mangrove Species  Montalvo-Romero C., Guevara-Carrio E., Cordova-Quiroz V., Martinez-Briceño J. A., Custodio-Alvarez J. E., Carballo-Pat C. G.  Ceron-Breton R. M., Ceron-Breton J. G., Aguilar-Ucan C. A., Montalvo-Romero C.,	67909-019
Photosynthetic Pigments and Soluble Proteins Content in Three Mangrove Species  Cordova-Quiroz V., Martinez-Briceño J. A., Custodio-Alvarez J. E., Carballo-Pat C. G.  Ceron-Breton R. M., Ceron-Breton J. G., Aguilar-Ucan C. A., Montalvo-Romero C.,	67909-019
in Three Mangrove Species  Custodio-Alvarez J. E., Carballo-Pat C. G.  Ceron-Breton R. M., Ceron-Breton J. G.,  Aguilar-Ucan C. A., Montalvo-Romero C.,	67909-019
Ceron-Breton R. M., Ceron-Breton J. G., Aguilar-Ucan C. A., Montalvo-Romero C.,	67909-019
Aguilar-Ucan C. A., Montalvo-Romero C.,	
Carballo-Pat C. G., Guerra-Santos J. J.,	
On the Dry Deposition of Ionic Species in the Vicinity of a Cordova-Quiroz V., Alderete-Chavez A.,	
Fuel Oil-Fired Power Plant in Central Mexico Cocom-Delgado M., Carrillo-Avila, J.	67909-022
Enduro-Tourism And Its Effects On The Environment Cipriana Sava	67909-040
Aspects of Heating the Busbars Systems that Supply Cristinel Popescu, Luminița-Georgeta	
Consumers of Slag and Ash Disposal from the Flow Popescu, Mihai Cruceru, Cristinel	
Diagram of a Group Technology Power of 330 MW Racoceanu	67909-052
Research on the Environmental Risks Caused by	
Pollution with Ash and Ash Landfill Closure of Complex	
Turceni Popescu, Mihai Cruceru, Cristinel Popescu	67909-055
Facundo D. M., Ramírez-Lara E., Cerón-	
Measurement of Carbonyls and its Relation with Criteria Bretón J.G., Cerón-Bretón R. M., Gracia-	
Pollutants in an Urban Site Within the Metropolitan Area Vásquez Y., Miranda-Guardiola R., Rivera	
of Monterrey, Mexico during Spring, 2011 De La Rosa J.	67909-067
Legal Models Related to the Landslide Phenomenon Florin Fainisi	67909-028
	07303-028
Implementing the Main Directives on the Industrial	c=000 004
Pollution Sector in Romanian Legislation Florin Fainisi	67909-031
Investigation of Particulate Matter Pollutants in Parking M. Obaidullah, I. V. Dyakov, L. Peeters, S.	
Garages Bram, J. De Ruyck	67909-058
The Environmental Risks Generated by the Ash and Slag Popescu Luminita Georgeta, Cristinel	
Ceplea Valley Deposit Belonging to the Energy Complex Racoceanu, Mihai Cruceru, Cristinel	
Turceni Popescu	67909-049

Conference Room: B Time: 15:00-17:30

**AMTA Session: Contemporary Romanian Composers I** 

**Chair: Diana Andron, Ioana Baritz** 

Syntaxes and Sonorous Systems in Five Pieces for Orchestra by Sabin Pautza	Anca Leahu	67904-101
The Fibonacci Series in the Rhythmical Organisation of the Musical Form at Pascal Bentoiu	Andrei Hrubaru-Roată	67904-081
Dinu Ciocan – A Unique Case in Romanian Musicology	Antigona Rădulescu	67904-136
Ligeti's String Quartet Music: From the Published Works to the New Discoveries at the Paul Sacher Foundation	Bianca Țiplea Temeş	67904-156
Brief Insight into the Sonorous Universe of the Composer Constantin Georgescu	Ciprian Andrei Ion	67904-091
Le Ciel est Vide-Roman Vlad's Cantata at the Confluence between Music, Mathematics and Theology	Claudia Nezelschi	67904-116
Enescu's Performing Paths	Daniela Corina Ibanescu	67904-216
Symbol and Structure in the Quintet Cumpăna luminii by Doina Rotaru	Diana-Beatrice Andron	67904-011

Conference Room: C Time: 15:00-17:30

EC Session: Computational Intelligence Chair: Badea Lepadatescu, Mihai Gavrilas

Aspects Regarding the Modeling of Intelligent Manufacturing Systems by Using Grafcet	Adriana Fota, Mircea Boscoianu	67903-022
Modeling and Optimization of a Flexible Manufacturing Cell Schedule Using a Hybrid Genetic Algorithm	Daniel Bancila, Constantin Buzatu	67903-010
A Hybrid Differential Evolution – Analytic Hierarchy Process Method for Multi-objective Optimization	Iulia Coroamă, Mihai Gavrilaş, Ovidiu Ivanov	67903-007
Multiobjective Optimization of Capacitor Banks Placement in Distribution Networks	Liva Graffin Rakotoarimanana, Mihai Gavrilas, Ovidiu Ivanov	67903-004
Enhanced Evolutionary Search Algorithms for Multiobjective Optimization in Power System	Mihai Gavrilas	67903-001
Applications of the Concept of Virtual Organization in Military Training	Mircea Boşcoianu	67903-019
Intelligent Exoskeleton Structures for Military Applications	Ştefan A. Dumitru, Danut A. Bucur, Mircea Boşcoianu, Luige Vladareanu	67903-031
Using Data Mining Techniques in Macroeconomic Analysis on Romania's Case	Stelian Stancu, Mircea Boşcoianu, Alexandra Maria Constantin	67903-025

**Conference Banquet: 19:30** 

Conference Room: A Time: 09:15-10:00 Plenary Lecture 24:



The Impact of Flexicurity Policies on Romanian Employment by Prof. Daniela Zirra, Romanian-American University, ROMANIA.

Conference Room: B Time: 09:15-10:00 Plenary Lecture 25:



A Bayesian-Reliability Based Approach of Multi-Agent System in Dynamic Environments

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

Conference Room: A Time: 10:00-10:45 Plenary Lecture 26:



Transformation, Innovation and Adaptation for Sustainability in Tourism – Case Study: Turinn Cluster

by Prof. Mirela Mazilu, University of Craiova, ROMANIA.

Conference Room: B Time: 10:00-10:45 Plenary Lecture 27:



Weak-Axes Bending Vibrations of Beams with Variable Cross-Section

by Prof. Gilbert-Rainer Gillich, "Eftimie Murgu" University of Resita, ROMANIA.

Conference Room: C Time: 10:00-10:45 Plenary Lecture 28:



Strategies of Automotive Powertrain Development for Diminishing Local and Global Environmental Impacts by Prof. Corneliu Cofaru, Transilvania University of Brasov, ROMANIA.

Coffee Break: 10:45-11:15

Conference Room: A Time: 11:15-12:00 Plenary Lecture 29:



Factor Identification of Romanian Physician Migration.
Comparative Analysis

by Prof. Mihaela Hnatiuc, Maritime Constanta University, ROMANIA.

Conference Room: B Time: 11:15-12:00 Plenary Lecture 30:



Numerical Methods Applied in Electrical Circuits by Lecturer Carmen M. Lungoci, Transilvania University of Brasov, ROMANIA.

Conference Room: C Time: 11:15-12:00 Plenary Lecture 31:



Business Intelligence Approaches
by Prof. Mihaela I. Muntean, West University of Timisoara,
ROMANIA.

Conference Room: A Time: 12:00-14:30

**AMTA Session: Contemporary Romanian Composers II** 

Chair: Razvan Raducanu, Diana Andron

Archetypal Polysemies in Jocuri II by Sabin Pautza	Gheorghe Duțică	67904-051
Pascal Bentoiu – Eminesciana III. A "Concerto for Orchestra" or the Dissimulation of a Symphony?	Luminița Duțică	67904-056
		07304-030
Aurel Stroe, Personality of Modern Romanian Music in		
the Context of XXth Century	Maria Coroiu Petruța	67904-211
The Oratorio The Marvelous Seed by Constantin Rîpă		
Poetic Synaesthesiae and Algorithms of Musical		
Language	Nelida Nedelcuţ, Lucian Ghişa	67904-111
Folkloric and Modern Intonational Language in Tudor	,	
	   Petre-Marcel Vârlan	67904-166
	retre-ivialitei variali	07304-100
Orpheus for Baritone and Orchestra by Cornel Țăranu. A		
Tribute to Nichita Stănescu	Tatiana Oltean	67904-121
New Romanian Music and Mathematic Procedures	Valentina Sandu-Dediu	67904-146
Symmetry and Dissymmetry in Sonata Nr. 4 for Piano by		
Dan Dediu	Velescu Octavian Denis	67904-161

Conference Room: B Time: 12:00-14:30

**CSCCA Session: Circuits, Systems and Automatic Control** 

**Chair: Gilbert-Rainer Gillich, Martin Pies** 

,	Gilbert-Rainer Gillich, Zeno-Iosif Praisach,	
Weak-Axis Bending Vibrations of Beams with Variable	Ionica Negru, Elena Daniela Birdeanu,	
Cross-Section	Nicoleta Gillich	67908-049
Mathematical Model of Steam Injected into Steam/air		
Mixture Determined for Temperature Control of Flexible		
Energy System	Martin Pies, Stepan Ozana	67908-033
Modeling, Simulation and Design of Control Circuit for	Martin Pies, Stepan Ozana, Radovan	
Flexible Eenergy System in MATLAB & Simulink	Hajovsky	67908-037
Development of Mechanical Sensors Based on Flat Coil	Mitra Djamal, Ellys Mei Sundari, Ratih	
Element	Kumalasari, Ramli	67908-061
Embedded Systems for Monitoring of Temperatures and	Radovan Hajovsky, Martin Pies, Stepan	
Gases at Large Areas	Ozana	67908-029
Influence of Air Gap Magnetic Induction Variation, Bδ,		
on the Internal Parameters, Costs and Efficiency		
Synchronous Generator	Spunei Elisabeta, Piroi Ion	67908-041
The Influence of Variation the Inner Diameter of the		
Stator, D, upon the Internal Parameters, the Costs and		
the Efficiency Synchronous Generator	Spunei Elisabeta, Piroi Ion	67908-045
Micropower Low-Pass Filter for Medical Electronics		
Devices Application	Walter Germanovix	67908-001

Conference Room: C Time: 12:00-14:30

MCBE Session: Advances in Business Management Chair: Diana Aderina Moisuc, Giuseppe Caristi

Chair Plana / lacina moisae, Claseppe Caristi		
Stock Market Indices Prediction Using Time Series Analysis	Alina Bărbulescu, Iulia Ilie	67906-034
Expert Systems as Adjuncts in Assessing the		
Interpretation of Print Advertisements by Potential	Ciprian-Viorel Pop, Diana-Aderina Moisuc,	
Customers	Nela Steliac, Anca-Petruta Nan	67906-037
Adopting Statistical Methods for Assessing the		
Adjustment of Employees Potential to Needs Identified by Organization	D. Barilla, G. Caristi, B. Czerniachowicz, A. Puglisi	67906-001
Stages and Symptoms of Industrial Sickness - A		
Mathematical Model Applied to a Few Small Scale	Deepak Goswami, Padmalochan Hazarika,	
Industrial Units in NE Indian State of Assam	Kandarpa Kumar Sarma	67906-019
Innovative Methods for Improving Portfolio Management Based on Artificial Intelligence Instruments	Gabriela Prelipcean	67906-049
Business Intelligence Approaches	Mihaela I. Muntean	67906-040
Reliable Control of Convergence in Monte Carlo Pricing	Roberto Mosca, Lucia Cassettari, Pier	
Methods for Options based on MSPE Technique	Giuseppe Giribone	67906-043
Free Business Intelligence – An Easy and Reliable		
Alternative	Târnăveanu Diana, Muntean I. Mihaela	67906-022

Coffee Break: 14:30-15:00

Conference Room: A Time: 15:00-17:00

**AMTA Session: Acoustical Engineering and Electroacoustic Phenomena** 

Chair: Claudio Guarnaccia, Gheorghe Dutica

Singing Voice Synthesis in Spanish by Concatenation of Syllables based on the TD-PSOLA Algorithm	Alejandro Ramos-Amézquita	67904-181
New Perspectives in Road Traffic Noise Prediction	Claudio Guarnaccia	67904-236
Acoustics Experimental Activity in a Wood Manufacturing Company	Claudio Guarnaccia, Tony L. L. Lenza, Nikos E. Mastorakis, Joseph Quartieri	67904-221
An Experimental Study on the Propagation of Noise Produced by Road Traffic	Claudio Guarnaccia, Tony LL Lenza, Joseph Quartieri	67904-226
Musical Activities Intendent to Develop Harmonic Hearing	Eugenia Maria Paşca	67904-126
Pitch Perception and the Natural Scale: A Case-Study of the Logarithmic – Linear Dichotomy, in Acoustics and		
Music	Ioan Florin Diaconu	67904-046

Conference Room: B Time: 15:00-17:00

**MCBC Session: Probabilistic Evolution** 

Chair: Metin Demiralp, Nasır Abdülbaki Baykara

1, ,		
Convergence of Probabilistic Evolution Truncation Approximants via Eigenfunctions of Evolution Operator	Cosar Gozukirmizi, Metin Demiralp	67905-013
Empowering Fluctuation Free Integration via Contour Integration: Circular Contours	Ercan Gurvit, N. A. Baykara, Metin Demiralp	67905-005
Conicalization of the Probabilistic Evolutions for the		
Ordinary and Forced Van der Pol Equation under Given	Fatih Hunutlu, N. A. Baykara, Metin	
Initial Conditions	Demiralp	67905-009
Univariate Single Quantum Harmonic Oscillator from		
Probabilistic Evolution Perspective	N. A. Baykara, Ercan Gurvit, Metin Demiralp	67905-001
Probabilistic Evolution for the Most General First Order		
Single Unknown Explicit ODEs: Autonomization,		
Triangularization, and, Certain Important Aspects in the		
Analysis	Semra Bayat, Metin Demiralp	67905-021
Probabilistic Evolution in Purely Second Order One		
Unknown Autonomous Explicit ODEs under Initial		
Conditions	Tugba N. Ozturk, Metin Demiralp	67905-025

Conference Room: C Time: 15:00-17:00

ICAI Session: Automation and Information Chair: Calin Ciufudean, Badea Lepadatescu

Indoor Thermal Comfort by Controlling Heat Transfer through Building Envelope	Daniel Popescu, Calin Ciufudean	67907-026
Collaborative Engineering in Product Development of Virtual Enterprises	Luminita Popa, Badea Lepadatescu	67907-056
Kinematic Solution by MBS Method Applied to Flaps Aircraft Control	Marius Ghitescu, Ioan Enescu	67907-011
Experimental Investigation of the Capacitor Influence on the Single Phase Induction Motor: A Labview Approach	Radu Mera, Radu Câmpeanu	67907-061
Parse Trees for Context Free Parallel Communicating Grammar Systems	Stefan D. Bruda, Mary Sarah Ruth Wilkin	67907-021
Automatic Color-based Image Recognition Technique using LAB Features and a Robust Unsupervised Clustering Algorithm	Tudor Barbu, Adrian Ciobanu, Mihaela Costin	67907-016