

CONFERENCE PROGRAM

Registration: **Thursday**, October 11, 2012 (15.00 - 19.00)
Friday, October 12, 2012 (8.30 - 16.30)

Friday - October 12, 2012				
9.15	Open Ceremony (9.15 - 9.30)			
9.30	FrPl1 Plenary Session - Frank LEWIS Room A <i>"Adaptive Learning Structures for Real-Time Optimal Control and Differential Games"</i> (9.30 - 10.20)			
10.20	FrPl2 Plenary Session - Andreas VARGA Room A <i>"Model-Based Robust Fault Diagnosis: Are Linear Systems Techniques Timely?"</i> (10.20 - 11.10)			
11.10	Coffee Break (11.10 - 11.30)			
11.30	FrRe1 Scientific Session "Control Systems I" Room A (11.30 - 13.30)	FrRe2 Scientific Session "System Theory" Room B (11.30 - 13.30)	FrRe3 Scientific Session "Electrical Drives Control" Room C (11.30 - 13.30)	FrRe4 Invited Session "Control in Renewable Energy Conversion Systems" Room D (11.30 - 13.30)
13.30	Lunch (13.30 - 14.30)			
14.30	FrPl3 Plenary Session - Denis DOCHAIN Room A <i>"Automatic Control And Biological Systems: A Long Quiet River?"</i> (14.30 - 15.20)			
15.20	FrRe5 Invited Session "Bioprocess modeling, state estimation and control I" Room A (15.20 - 16.40)	FrRe6 Scientific Session "Predictive Control" Room B (15.20 - 16.40)	FrRe7 Scientific Session "Monitoring Systems" Room C (15.20 - 16.40)	FrRe8 Scientific Session "Identification" Room D (15.20 - 16.40)
16.40	Coffee Break (16.40 - 17.00)			
17.00	FrRe9 Invited Session "Bioprocess modelling, state estimation and control II" Room A (17.00 - 19.00)	FrRe10 Scientific Session "Image Processing" Room B (17.00 - 19.00)	FrRe11 Scientific Session "Control Systems II" Room C (17.00 - 19.00)	FrRe12 Scientific Session "Industrial Control Applications I" Room D (17.00 - 19.00)
19.00				
20.00	Welcome Party (20.00 - 22.30)			



Registration: Saturday, October 13, 2012 (9.00 - 16.00)

Saturday - October 13, 2012				
9.00	SaPI1 Plenary Session - Mircea LAZAR Room A <i>"Minkowski Functions of Proper C-Polytopic Sets as Lyapunov Functions"</i> (9.00 - 9.50)			
9.50	SaPI2 Plenary Session - Seddik BACHA Room A <i>"Vehicle To Grid Problems and Control Solutions"</i> (9.50 - 10.40)			
10.40	Coffee Break (10.40 - 11.00)			
11.00	SaRe1 Invited Session "Sustainable Energy" Room A (11.00 - 13.00)	SaRe2 Scientific Session "Robotics I" Room B (11.00 - 13.00)	SaRe3 Scientific Session "Industrial Control Applications II" Room C (11.00 - 13.00)	SaRe4 Scientific Session "Diagnosis Techniques" Room D (11.00 - 13.00)
13.00	Lunch (13.00 - 14.00)			
14.00	SaPI3 Plenary Session - Florin FILIP Room A <i>"Green Manufacturing and the Design of Information Systems"</i> (14.00 - 14.50)			
14.50	SaPI4 Plenary Session - Ioan DUMITRACHE Room A <i>"Some Modeling and Design Challenges in Cyber-Physical Systems"</i> (14.50 - 15.40)			
15.40	Coffee Break (15.40 - 16.00)			
16.00	SaRe5 Invited Session "Nonlinear, Fuzzy, Bio-Inspired and Heuristic Methods in Modeling, Control and Classification" Room A (16.00 - 18.00)	SaRe6 Scientific Session "Robotics II" Room B (16.00 - 18.00)	SaRe7 Scientific Session "Artificial Intelligence Applications" Room C (16.00 - 18.00)	SaRe8 Scientific Session "Optimization and Computing" Room D (16.00 - 18.00)
20.00	Gala Dinner (20.00 - 24.00)			

Registration: Sunday, October 14, 2012 (9.00 - 10.00)

Sunday - October 14, 2012				
9.30	SuPo1 Scientific Session "Automation and Computing" (9.30 - 10.10) (Poster Session) Room A			
10.10	SuRe1 Scientific Session "Modeling and Simulation" Room A (10.10 - 11.50)	SuRe2 Scientific Session "Software Systems" Room B (10.10 - 11.50)	SuRe3 Invited Session "Industrial Process Control" Room C (10.10 - 11.50)	
11.50	Coffee Break (11.50 - 12.20)			
12.20	Closing Ceremony (12.20 - 12.45)			
13.00	Lunch (13.00 - 14.00)			



FrPI1 Room A	Friday October 12	Plenary Session	09.30 - 10.20
Chairperson: Viorel MÎNZU			
Order	Authors	Country	Title
1	Frank LEWIS	USA	Adaptive Learning Structures for Real-Time Optimal Control and Differential Games

FrPI2 Room A	Friday October 12	Plenary Session	10.20 - 11.10
Chairperson: Vasile SIMA			
Order	Authors	Country	Title
1	Andreas VARGA	Germany	Model-Based Robust Fault Diagnosis: Are Linear Systems Techniques Timely?

FrRe1 Room A	"Control Systems I"	Friday October 12	Scientific Session	11.30 - 13.30	
Chairpersons: Andrzej BARTOSZEWICZ and Ramon VILANOVA					
Order	Authors	Title of paper		Paper ID	Page
1	Andrzej Bartoszewicz and Michał Maciejewski	Discrete-Time Sliding Mode Control of Perishable Inventories with Transportation Losses		12	1
2	Victor Alfaro and Ramon Vilanova	Two-Degree-of-Freedom Proportional Integral Control of Inverse Response Second-Order Processes		88	1
3	Victor Alfaro and Ramon Vilanova	Robustness-Based Tuning of Two-Degree-of-Freedom Proportional Integral Controllers for Unstable Processes		89	1
4	Pierre Apkarian	Tuning Controllers Against Multiple Design Requirements		5	2
5	Viorel Dugan, Robinson Medina, Clara Ionescu and Robain De Keyser	On the Application of Model-Order Reduction Algorithms		110	2
6	Jesús Ulises Liceaga-Castro, Eduardo Liceaga-Castro and Irma Irasema Siller Alcalá	Phase and Gain Margins for MIMO Linear Control Systems		15	2

FrRe2 Room B	"System Theory"	Friday October 12	Scientific Session	11.30 - 13.30	
Chairpersons: Octavian PĂSTRĂVANU and Dan POPESCU					
Order	Authors	Title of paper		Paper ID	Page
1	Vasile Sima	Numerically Testing Properness of Descriptor Systems		62	3
2	Octavian Pastravanu and Mihaela-Hanako Matcovschi	P0-Property and Linear Inequalities in Positive Systems Analysis		158	3
3	Nikolaos Athanasopoulos, Mircea Lazar and George Bitsoris	On the Construction of Invariant Proper C-polytopic Sets for Continuous-time Linear Systems		90	3
4	Vladimir Rasvan and Dan Popescu	On the Problem of Aizerman		151	3
5	Octavian Pastravanu, Cristina Budaciu and Mihail Voicu	Fragility Analysis for CWEAS State Feedback Control		156	4
6	Nastaran Vasegh and Ali Ghaderi	Stabilizing a Class of Nonlinear Systems by Applying Large Gain Theorem		132	4

FrRe3 Room C	"Electrical Drives Control"	Friday October 12	Scientific Session	11.30- 13.30	
Chairpersons: Seddik BACHA and Mircea LAZĂR					
Order	Authors	Title of paper		Paper ID	Page
1	Sabin Constantin Carpiuc and Mircea Lazar	Efficient State Reference Generation for Torque Control in Externally Excited Synchronous Machines		52	4
2	Radu Duma, Petru Dobra, Mirela Trusca, Bogdan Betaea and Ioan Valentin Sita	Embedded Control of Electrical Motors		100	5
3	Mihai Radu Mera and Radu Mihai Campeanu	Test Bench for Fractional Horse Power Single Phase Induction Motors Using Virtual Instrumentation		147	5
4	Adrian Florescu, Seddik Bacha, Iulian Munteanu, Antoneta Iuliana Bratcu and Axel Rumeau	Results Concerning Ultracapacitor-based Energy Management Strategy within Electric Vehicles		92	5
5	Romeo Paduraru, Traian Munteanu, Cristinel Dache, Emil Rosu and Marian Gaiceanu	Energy Efficient Control of DC Electric Drives in Stationary Regimes		165	6
6	Mihail Teodorescu, Dumitru Stanciu, Constantin Rădoi and Stefan George Roșu	A Simple Solution for Single-Phase Shunt Active Power Filter with Improved Sliding Mode Control		64	6

FrRe4 Room D	"Control in Renewable Energy Conversion Systems"	Friday October 12	Invited Session	11.30 - 13.30	
Chairpersons: Ciprian VLAD and Remus TEODORESCU					
Order	Authors	Title of paper		Paper ID	Page
1	Adriana Burlibaşa Scarlat	Wind Speed Modelling for Large Wind Turbines: Interacting with Tower And Blades Dynamics		26	6
2	Adriana Burlibaşa Scarlat	Large Band Modelling of Multi Megawatt Wind Systems for Dynamics Analysis and Control		27	6
3	Stephane Kreckelbergh and Ionel Vechiu	Sizing and Dynamic Analyses of a Micro-Grid Supplying a Harbor Industrial Area		168	7
4	Ciprian Vlad, Viorel Minzu and Marian Barbu	Gain Scheduling Control for Wind Energy Conversion Optimization		67	7
5	Raluca Mateescu, Nicolai Christov and Dan Stefanioiu	Discrete-time Predictive Control for Variable Speed Wind Turbines		81	7
6	Giacomo Casadei, Remus Teodorescu, Ciprian Vlad, Luca Zarri	Analysis of Dynamic Behavior of Modular Multilevel Converter: Modeling and Control		104	7

FrPI3 Room A	Friday October 12	Plenary Session	14.30 - 15.20		
Chairperson: Sergiu CARAMAN					
Order	Authors	Country	Title		
1	Denis DOCHAIN	Belgium	Automatic Control and Biological Systems: A Long Quiet River?		

FrRe5 Room A	"Bioprocess Modelling, State Estimation and Control I"	Friday October 12	Invited Session	15.20 - 16.40	
Chairpersons: Denis DOCHAIN and Mariana TITICĂ					
Order	Authors	Title of paper		Paper ID	Page
1	Mihaela Sbarciog, Jaime A. Moreno and Alain Vande Wouwer	Simple Approaches to Start-Up Anaerobic Digestion Systems for Biogas Production		63	8
2	Anamaria Ordace, Clara Mihaela Ionescu, Thomas Vannecke, Eveline Volcke Ioan Nascu and Robin De Keyser	Predictive Control of Anaerobic Digestion of Wastewater Sludge - A Feasibility Study		69	8
3	Monica Roman	Modeling of Interconnected Bioreactors: An Activated Sludge Bioprocess Case Study		99	9
4	Moemen Daboussy, Mariana Titica and Lionel Boillereaux	On the Sensitivity Analysis for Parameter Identification of a Microalgae Dynamical Model in Sulfur Deprived Conditions		135	9



FrRe6 Room B	"Predictive Control"	Friday October 12	Scientific Session	15.20 - 16.40	
Chairpersons: Corneliu LAZĂR and Jaroslav HLAVA					
Order	Authors	Title of paper		Paper ID	Page
1	Gu Jiali and Chen Wanchun	Optimal Proportional Navigation Guidance Based on Generalized Predictive Control		45	9
2	Adrian Burlacu and Corneliu Lazar	Constraint-Based Design and Simulation of Visual Predictive Architectures		82	9
3	Jaroslav Hlava, Lukas Hubka and Libor Tuma	Multi Model Predictive Control of a Power Plant Heat Exchanger Network Based on Gap Metric		125	10
4	Constantin - Florin Caruntu and Corneliu Lazar	Predictive Compensation for Network-induced Time-varying Delays		166	10

FrRe7 Room C	"Monitoring Systems"	Friday October 12	Scientific Session	15.20 - 16.40	
Chairpersons: Eugen BOBAȘU and Christoforos ECONOMAKOS					
Order	Authors	Title of paper		Paper ID	Page
1	Dorin Bibicu, Luminita Moraru and Simona Moldovanu	An Approach Based on Integrated Solution for Semi-automatic Breast Diseases Investigation		56	10
2	Karol Waga, Andrei Tabarcea, Radu Mariescu-Istodor and Pasi Franti	System for Real Time Storage, Retrieval and Visualization of GPS Tracks		107	11
3	Ileana Vladu, Daniel Strimbeanu, Mircea Ivanescu, Ionel Cristian Vladu and Elvira Nicoleta Bizdoaca	Experimental Results for Magneto-Rheological Stop Valve		116	11
4	Christoforos Economakos and George Economakos	C-Based PLC to FPGA Translation and Implementation: The Effects of Coding Styles		131	11

FrRe8 Room D	"Identification"	Friday October 12	Scientific Session	15.20 - 16.40	
Chairpersons: Ramon VILANOVA and Mihaela-Hanako MATCOVSCHI					
Order	Authors	Title of paper		Paper ID	Page
1	Bogdan-Florin Florea and Jean-Pierre Barbot	System Identification Using Experimental Data Acquired for a Few Values of Inertia And Approximating the Influence of Inertia Using Interpolation		38	12
2	Adrian Danila	Experimental Identification and Accurate Model Validation of the Thermal Model of an Electric Machine Based on the Finite Elements Method		95	12
3	Timotei Asaftei and Mihaela-Hanako Matcovschi	Boundedness Properties of Timed Continuous Petri Nets with Interval Firing Rates		153	12
4	Codres Bogdan, Puscasu Gheorghe and Murariu Gabriel	Modular Identification of the Dynamical Model of Friction Force		155	13

FrRe9 Room A	"Bioprocess Modelling, State Estimation and Control II"	Friday October 12	Invited Session	17.00 - 19.00	
Chairpersons: Sergiu CARAMAN and Mariana TITICĂ					
Order	Authors	Title of paper		Paper ID	Page
1	Maria Angelova, Krassimir Atanassov and Tania Pencheva	Intuitionistic Fuzzy Logic based Quality Assessment of Simple Genetic Algorithm		115	13
2	Daniela Carp, Marian Barbu and Sergiu Caraman	Robust State Observers for Biological Wastewater Treatment Processes with Activated Sludge		49	13
3	Dorin Sendrescu	Parameter Identification of Bacterial Growth Bioprocesses		86	14
4	George S. Ostace, Vasile M. Cristea and Paul S. Agachi	Improving the Performance of a 4- Stage Bardenpho WWTP by Means of Decentralized Automatic Control		172	14
5	Florin Stinga and Elena Bunciu Stanciu	Robust Interval Observer and Nonlinear Predictive Control of an Active Sludge Process		126	14
6	Alina Chiroasca, George Dumitrascu, George Ibrim, Mariana Titica and Sergiu Caraman	An Analysis Concerning the Robust Control of the Biological Wastewater Treatment Processes Using Fuzzy Techniques		120	15

FrRe10 Room B	"Image Processing"	Friday October 12	Scientific Session	17.00 - 19.00	
Chairpersons: Rogelio LOZANO and Vasile MANTA					
Order	Authors	Title of paper		Paper ID	Page
1	Bogdan Apostol and Vasile Manta	Mesh Simplification Based on Willmore Energy Weighted Quadric Error Metric		124	15
2	Mihai Dragusu, Anca Nicoleta Mihalache and Razvan Solea	Practical Applications for Robotic Arms Using Image Processing		65	15
3	Zizilia Zamudio, Rogelio Lozano, Jorge Torres and Victor Rosas	Stereo Vision for the Stabilization of a Quadrotor		94	16
4	Gabriel Mihail Danciu, Simona Maria Banu and Alexandru Caliman	Shadow Removal In Depth Images Morphology-Based for Kinect cameras		109	16
5	Silviu Bejinariu, Florin Rotaru and Cristina Nita	Post-processing Enhancement for Multifocus Image Fusion		119	16
6	Simona Caraiman and Vasile Manta	Image Processing Using Quantum Computing		160	16

FrRe11 Room C	"Control Systems II"	Friday October 12	Scientific Session	17.00 - 19.00	
Chairpersons: Guido IZUTA and Corneliu BOȚAN					
Order	Authors	Title of paper		Paper ID	Page
1	Guido Izuta	Design of an Asymptotically Stabilizing Controller for Networked 2-Dimensional Linear Discrete Feedback Control Systems		39	17
2	Guido Izuta	Networked 2-D Linear Discrete Feedback Control Systems Design on the Basis of Observer Controller		102	17
3	Luis Alberto Torres Salomao and Hugo Gámez Cuatzin	Fuzzy Logic Control and PI Control Comparison for a 1.5 MW Horizontal Axis Wind Turbine		34	17
4	Corneliu Botan and Florin Ostafi	Optimal Control of Perturbed Linear Systems		47	18
5	Doru Panescu and Carlos Pascal	On the Staff Holon Operation in a Holonic Manufacturing System Architecture		164	18
6	Andreea Maria Neaca	Comparison Between Different Techniques of Controlling the Temperature Inside a Resistive Oven		133	18

FrRe12 Room D	"Industrial Control Applications I"	Friday October 12	Scientific Session	17.00 - 19.00	
Chairpersons: Przemyslaw IGNACIUK and Daniela-Cristina CERNEGA					
Order	Authors	Title of paper		Paper ID	Page
1	Alexandru Barleanu, Vadim Baitoiu and Andrei Stan	Solenoid-Operated Valve Control under Adverse Mechanical Conditions such as Vibrations or Shocks		19	18
2	Przemyslaw Ignaciuk	Switching DSM Control of Perishable Inventory Systems with Multiple Supply Options and Uncertain Demand		40	19
3	Han Ying-Hong, Chen Feng and Wanchun Chen	Ballistic Boost Phase Guidance Using Nominal Effort Miss Steering		46	19
4	Sorin Tarnovean, Radu-Eugen Breaz, Cristina Biris and Octavian Constantin Bologa	Simulation Tools for Studying the Behavior of CNC Laser Cutting Machines in Different Working Regimes		91	19
5	Cezar Babici and Alexandru Onea	A Distributed Control Strategy for a Hybrid Electric Vehicle		98	19
6	Ana-Maria Dan and Toma-Leonida Dragomir	Control Function Modeling for the Cardiovascular System at Constant Effort using a Pole Allocation Method		142	20

SaPl1 Room A	Saturday October 13	Plenary Session	09.00 - 09.50		
Chairperson: Rogelio LOZANO					
Order	Authors	Country	Title		
1	Mircea LAZĂR	Netherlands	Minkowski Functions of Proper C-Polytopic Sets as Lyapunov Functions		

SaPl2 Room A	Saturday October 13	Plenary Session	09.50 - 10.40		
Chairperson: Viorel MÎNZU					
Order	Authors	Country	Title		
1	Seddik BACHA	France	Vehicle to Grid Problems and Control Solutions		

SaRe1 Room A	"Sustainable Energy"	Saturday October 13	Invited Session	11.00 - 13.00	
Chairpersons: Gelu GURGUIATU and Ionel VECHIU					
Order	Authors	Title of paper		Paper ID	Page
1	Ciprian Balanuta, Ionel Vechiu and Gelu Gurguiatu	Improving Micro-Grid Power Quality Using Three-Phase Four-Wire Active Power Conditioners		24	20
2	Fabrice Tsegaing Tchatchueng, Martin Kamta, Tchatchueng J.B., Ion Voncila and Dzudie Tenin	Improving The Performance Of A Traditional Dryer Functioning On Renewable Energy Sources (Part I)*		101	20
3	Silviu Epure and Razvan Solea	Low Power Battery Charger with Solar Panel Input -The M.P.P.T. Algorithms-		152	21
4	Sylvain Baudoin, Ionel Vechiu and Haritza Camblong	A Review of Voltage and Frequency Control Strategies for Islanded Microgrid		169	21
5	Gelu Gurguiatu, Ciprian Balanuta and Toader Munteanu	Reducing the Voltage Sags by Using Short-Term Storage Systems		171	21

SaRe2 Room B	"Robotics I"	Saturday October 13	Scientific Session	11.00 - 13.00	
Chairpersons: Radu-Emil PRECUP and Corneliu LAZĂR					
Order	Authors	Title of paper		Paper ID	Page
1	Sándor Tihamér Brassai, Călin Enăchescu, Lajos Losonczy and László Ferenc Márton	FPGA Based Embedded Support for Mobile Robot Sonar Based Navigation		59	22
2	Constantin Purcaru, Daniel Iercan, Radu-Emil Precup, Sergiu Enache, Bogdan Dohangie and Lucian-Ovidiu Fedorovici	nRobotic Applications to Path Planning for Mobile Robots in Missions		43	22
3	Anca Maxim, Corneliu Lazar, Adrian Burlacu and Cosmin Copot	Robotic Visual Servoing System Based on SIFT Features		150	22
4	Andres Puusepp, Tanel Tammet, Madis Puju and Enar Reilent	Robot Movement Strategies in the Environment Enriched With RFID Tags		57	23
5	Marius Kloetzer, Silvia Magdici and Adrian Burlacu	Experimental Platform and Matlab Toolbox for Planning Mobile Robots		50	23
6	Achim Wagner, Eugen Nordheimer and Essameddin Badreddin	Hierarchical Constraint-Based Singularity Avoidance		71	23

SaRe3 Room C	"Industrial Control Applications II"	Saturday October 13	Scientific Session	11.00 - 13.00	
Chairpersons: Rogelio LOZANO and Pierre APKARIAN					
Order	Authors	Title of paper		Paper ID	Page
1	Cristina Ioana Pop, Roxana Both, Clara Ionescu and Eva Henrietta Dulf	Fractional Order Control for the Temperature Loop in a Chemical Reactor		85	24
2	Marian Barbu, Sergiu Caraman, Ciprian Vlad, Tiberiu Nicolau and Emil Ceanga	Hierarchical Control System for Recirculating Aquaculture Processes		96	24
3	Víctor Rosas, Rogelio Lozano, Jorge Torres and Zizilia Zamudio	Modeling and Control of a Convertible Airplane		118	24
4	Gabriel Vladut, Liana Simona Sbirna, Sebastian Sbirna, Clement Ionescu and Clementina Sabina Moldovan	CFD Simulation of Controlling Nitrogen Oxides Emissions Reduction And Loss-On-Ignition for a Corner-Fired Pulverized-Coal Furnace		140	25
5	Eugen Horatiu Gurban and Gheorghe-Daniel Andreescu	Comparison Study of PID Controller Tuning for Greenhouse Climate with Feedback-Feedforward Linearization and Decoupling		149	25

SaRe4 Room D	"Diagnosis Techniques"	Saturday October 13	Scientific Session	11.00 - 13.00	
Chairpersons: Mirela PRAISLER and Oana STAN					
Order	Authors	Title of paper		Paper ID	Page
1	Oana Stan, Renaud Sirdey, Jacques Carlier and Dritan Nace	A Heuristic Algorithm for Stochastic Partitioning of Process Networks		87	25
2	Bogdan Betaea, Petru Dobra and Mirela Trusca	Simplified Mathematical Model of the Bearings With Defects		122	26
3	Mirela Praisler and Laurentiu Frangu	Exploratory Analysis for the Automated Detection of Amphetamines and of Their Main Precursors		123	26
4	Recep Demirci, Huseyin Guclu Yavuzcan, Mursel Ozan Incetas and Ufuk Tanyeri	Automatic Background Extraction for Prostate Biopsy Images		31	26
5	Mihai Postolache	Probe-Based Distributed Algorithms for Deadlock Detection		159	27
6	Cosmin Popa and Andrei Stan	A Self-Healing Single Core Architecture Using Dynamically Reconfigurable Devices		145	27

SaPI3 Room A	Saturday October 13	Plenary Session	14.00 - 14.50
Chairperson: Mihail VOICU			
Order	Authors	Country	Title
1	Florin FILIP	Romania	Green Manufacturing and the Design of Information Systems

SaPI4 Room A	Saturday October 13	Plenary Session	14.50 - 15.40
Chairperson: Vladimir RĂSVAN			
Order	Authors	Country	Title
1	Ioan DUMITRACHE	Romania	Some Modeling and Design Challenges in Cyber-Physical Systems

SaRe5 Room A	"Nonlinear, Fuzzy, Bio-Inspired and Heuristic Methods in Modeling, Control and Classification"	Saturday October 13	Invited Session	16.00 - 18.00
Chairpersons: Horia-Nicolai TEODORESCU and Abraham KANDEL				
Order	Authors	Title of paper	Paper ID	Page
1	Radu-Codrut David, Radu-Emil Precup, Emil Petriu, Constantin Purcaru and Stefan Preitl	PSO and GSA Algorithms for Fuzzy Controller Tuning with Reduced Process Small Time Constant Sensitivity	20	27
2	Alina Hulea and Horia-Nicolai Teodorescu	Using Quartiles Of F1 in the Identification of Variants Of /V/ in Romanian and French	22	28
3	Dorel Aiordachioaie, Laurentiu Frangu	On Uncertainty Sources and Artifacts Compensation of Airborne Ultrasonic Images	33	28
4	Horia Nicolai Teodorescu and Mircea Hulea	Optical Sensors based on Chaotic Systems	37	28
5	Constantina Raluca Mihalache and Mitica Craus	Neural Network and Fuzzy Membership Functions Based Edge Detection for Digital Images	129	28
6	Adrian Alexandrescu, Ioan Agavriiloaei and Mitica Craus	A Task Mapping Simulation Framework for Comparing the Performance of Mapping Heuristics in Various Scenarios	161	29

SaRe6 Room B	"Robotics II"	Saturday October 13	Scientific Session	16.00- 18.00	
Chairpersons: Adrian FILIPESCU and Sorin-Manoiu OLARU					
Order	Authors	Title of paper		Paper ID	Page
1	Hossein Jahandideh, Mohammad Nooranidoost, Behnam Enghiad and Armin Hajimirzakhani	Ball Striking Algorithm for a 3 DOF Ping-Pong Playing Robot Based on Particle Swarm Optimization		32	29
2	Eugenia Minca, Veronica Stefan, Adrian Filipescu, Adriana Serbencu and Adriana Filipescu Jr.	Two Approaches in Modeling of Assembly/Disassembly Line with Integrated Manipulator Mounted on Mobile Platform		55	30
3	Alina Voda, Adrian Radaschin, Eugenia Minca and Adrian Filipescu	Control of Automatic Robot with Guided Manipulator Integrated into Flexible Manufacturing System Using Hybrid Petri Nets		58	30
4	Sorin Manoiu Olaru and Mircea Nitulescu	Matlab Simulation Interface for Locomotion Analysis of a Hexapod Robot Structure		137	30
5	Hossein Jahandideh and Mehrزد Namvar	Use of PSO in Parameter Estimation of Robot Dynamics; Part One: No Need for Parameterization		6	31
6	Hossein Jahandideh and Mehrزد Namvar	Use of PSO in Parameter Estimation of Robot Dynamics; Part Two: Robustness		7	31

SaRe7 Room C	"Artificial Intelligence Applications"	Saturday October 13	Scientific Session	16.00 - 18.00	
Chairpersons: Radu-Emil PRECUP and Letitia MIREA					
Order	Authors	Title of paper		Paper ID	Page
1	Florin Leon	A Quantum-Inspired Evolutionary Algorithm for Multi-Attribute Combinatorial Auctions		60	31
2	Mihaela Oprea and Daniela Schiopu	An Artificial Neural Network- Based Isolated Word Speech Recognition System for the Romanian Language		84	31
3	Letitia Mirea	Development of a New Type of Recurrent Co-Active Neuro-Fuzzy System for System Identification		163	32
4	Marius-Cristian Costache and Viorel Minzu	Multi-Agent Systems in Industrial Fault Diagnosis		174	32
5	Cornelia Tudorie, Mihai Vlase, Cristina Nica and Dan Munteanu	Modeling Fuzzy Temporal Criteria in Database Querying		112	32

SaRe8 Room D	"Optimization and Computing"	Saturday October 13	Scientific Session	16.00- 18.00	
Chairpersons: Vasile MANTA and Elvira POPESCU					
Order	Authors	Title of paper		Paper ID	Page
1	Tarabuta Oleg	Workflow Optimization and Advanced Control of Systems Based on Petri Nets		18	32
2	Adrian Emanoil Serbencu and Adriana Serbencu	A Comparison of Particle Swarm Optimization and Differential Ant Stigmergy Algorithm		176	33
3	Cosmin Adomnicai and Viorel Mînză	Method for Adjacency Information Updating in Ipv6 Networks		48	33
4	Stefan Szalai Dragos, Mircea-Florin Vaida, Loreta-Adriana Suta, Marius-Cristian Ureche and Alin Voina	SYNCY: A Software Engine for Data Stream Event Synchronization		141	33
5	Calin Constantinov, Andrei Mocanu and Elvira Popescu	Online Auctioning and Recommendations: The eBidLand Platform		173	34
6	Fei Cai, Deke Guo, Honghui Chen and Zhen Shu	Enhancing Learning to Rank Using the Visual Feature Logistic Regression with Relevance Feedback		42	34

POSTER SESSION		Sunday October 14	"Automation and Computing"	09.30- 10.10	
Chairpersons: Aurelian Mihai STĂNESCU and Răzvan ȘOLEA					
Order	Authors	Title of paper		Paper ID	
1	Stelian Ciurea	An Improved Parallel Genetic Algorithm for the Optimization of a Fuzzy Controller		16	
2	Ioan Susnea, Grigore Vasiliu and Simona Mirela Spiridon	A Discussion Paper on Designing Ambient Assisted Living Systems		74	
3	Mihai Crenganis	Contributions Regarding the Inverse Kinematics of a 7 DOF Redundant Robotic Arm Using ANFIS		77	
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2	Dan Marghitu, Dorian Cojocaru and Sorin Dumitru	The Variation of the Coefficient of Restitution with the Impact Angle		177	35
3	Sorin Manoiu Olaru and Mircea Nitulescu	The Modeling of the Hexapod Mobile Robot Leg and Associated Interpolated Movements While Stepping		138	35
4	George Burlacu, Aurelian Mihai Stănescu, Mihnea Alexandru Moiescu, Ioan Ștefan Sacală and Luiza-Elena Cojocaru	Development of a Modeling Framework for Future Internet Enterprise Systems		178	35
5	Florin Catalin Braescu, Lavinia Ferariu, Radu Gilca and Vlad Bordianu	Ball on Plate Balancing System for Multi-Discipline Educational Purposes		170	35

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2	Lucian-Florentin Barbulescu	The Abstract Elementary Simulator – the Base Component of a Modular Simulator		117	36
4	Marian V. Crăciun, Adina Cocu and Luminița Dumitriu	Predictability-based Feature Selection		73	36
5	Recep Demirci and Ufuk Tanyeri	Anisotropic Diffusion Filter Using Haar Wavelet		29	37
6	Recep Demirci, Ugur Guvenc and Ufuk Tanyeri	Anisotropic Diffusion Filter Without Conductivity Parameters		30	37

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2	Ciprian Lupu, Catalin Petrescu and Gabriel Florea	Solutions for Ratio Control of Nonlinear Blend Processes		97	38
3	Catalin Bara and Dumitru Popescu	Expert System for Generating SCADA Configurations		105	38
4	Ciprian Marian Chipaila, Daniel Grigore, Gheorghita Marin, Razvan Solea and Daniela Cernega	Hardware and Software Solutions for a Conventional Electric-powered Wheelchair		148	38
5	Octavian Dinu, Petru Junie, Dragomir Orhei, Adrian-Bogdan Hanchevici and Dan Stefanoiu	Mobile Unit for Signals Acquisition, Process, Identification and Diagnosis Applications		10	39