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DEPARTAMENTUL
ELTH
ELECTROTEHNICA

International Symposium on Fundamentals of Electrical Engineering

University POLITEHNICA of Bucharest, Romania, November 28-29, 2014



BRIEF PROGRAMME

Thursday, November 27, 2014

18⁰⁰ - 19⁰⁰ **Welcome Party** (UPB Library, 2nd floor)

Friday, November 28, 2014

8⁰⁰ - 9³⁰ **Registration** (UPB Library, 2nd floor)

9³⁰ - 10¹⁵ **Opening Session** (UPB Library, ROOM A (2nd floor)) – welcome address and plenary presentations dedicated to the remembering of the birth of **Prof. Remus RĂDULEȚ**, 110 years ago, and the celebration of **Prof. Andrei ȚUGULEA**, member of Romanian Academy

10¹⁵ - 10³⁰ **Coffee Break** (UPB Library, 2nd floor)

10³⁰ - 13³⁰ **Presentations** (UPB Library)

 | 10³⁰ - 12⁰⁰ **Oral Sessions** (Rooms A, B, C (2nd floor), D (3rd floor))

 | 12⁰⁰ - 13³⁰ **Oral Sessions** (Rooms A, B, C (2nd floor), D (3rd floor))

13³⁰ - 14³⁰ **Lunch** (UPB Library, 4th floor)

14³⁰ - 18⁰⁰ **Presentations** (UPB Library)

 | 14³⁰ - 16⁰⁰ **Oral Sessions** (Rooms A, B, C (2nd floor), D (3rd floor), E (4th floor))

 | 16⁰⁰ - 18⁰⁰ **Poster Session** (2nd floor)

18⁰⁰ - 21³⁰ **Gala dinner** (UPB Library, 4th floor)

Saturday, November 29, 2014

9⁰⁰ - 10⁰⁰ **Registration** (UPB Library, 2nd floor)

10⁰⁰ - 13³⁰ **Presentations**

 | 10⁰⁰ - 11³⁰ **Oral Sessions** (UPB Library, Rooms A, B, C (2nd floor), D (3rd floor))

 | 11³⁰ - 11⁴⁵ **Coffee Break** (UPB Library, 2nd floor)

 | 11⁴⁵ - 13³⁰ **Poster Session** (UPB Library, 2nd floor)

13³⁰ - 14³⁰ **Lunch** (UPB Library, 4th floor)

Closing Session and Concluding Remarks



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PROGRAMME TIMELINE

FRIDAY, NOVEMBER 28, 2014

8⁰⁰ - 9³⁰ REGISTRATION (UPB LIBRARY, 2ND FLOOR)

9³⁰ - 10¹⁵ OPENING SESSION (UPB LIBRARY, ROOM A) – WELCOME ADDRESS AND PLENARY PRESENTATIONS DEDICATED TO THE REMEMBERING OF THE BIRTH OF **PROF. REMUS RĂDULEȚ**, 110 YEARS AGO, AND THE CELEBRATION OF **PROF. ANDREI ȚUGULEA**, MEMBER OF ROMANIAN ACADEMY

10¹⁵ - 10³⁰ COFFEE BREAK (UPB LIBRARY, 2ND FLOOR)

10³⁰ - 13³⁰ PRESENTATIONS

10³⁰ - 12⁰⁰ ORAL SESSIONS (UPB LIBRARY, ROOMS A, B, C (2ND FLOOR), D (3RD FLOOR))

Session CIRC1 – ROOM A (Friday, November 28, 2014, 10³⁰ - 12⁰⁰)

Oral presentations: **Circuit and Systems 1**

Chairs: **Angelo Brambilla, Radu Dogaru**

ID	Schedule	Author(s)	Paper Title
38	10:30-11:00 invited	Federico Bizzarri, Elena Blokhina, Angelo Brambilla, Dimitri Galayko	Reliable AMS Simulation of Electrostatic Vibration Energy Harvesters: a Case Study
65	11:00-11:20	Ioana Dogaru, Radu Dogaru	A Comparative Study of several 2D Cellular Automata Implementations in FPGA
68	11:20-11:40	M. Bucurica, R. Dogaru	Virtual environment using cellular automata for experimental studies of sound propagation and echo classification with artificial neural networks
138	11:40-12:00	H. Andrei, P.C. Andrei, G. Oprea, B. Botea	Basic Equations of Linear Electric and Magnetic Circuits in Quasi-stationary State Based on Principle of Minimum Absorbed Power and Energy



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Session ELMG1 – ROOM B (Friday, November 28, 2014, 10³⁰ - 11⁴⁰)

Oral presentations: **Inverse and coupled problems**

Chairs: **S. Ratnajeevan H. Hoole, Mihai Rebican**

ID	Schedule	Author(s)	Paper Title
214	10:30-11:00 invited	S. Ratnajeevan H. Hoole, Sivamayam Sivasuthan	GPU Computations for Finite Element Optimization: A Review of the Methodology and Problems for Study
125	11:00-11:20	Anton Duca, Mihai Iulian Rebican, Laurentiu Duca, Ladislav Janousek, Tolga Altinoz	Advanced PSO Algorithms and Local Search Strategies for NDT-ECT Inverse Problems
99	11:20-11:40	Aurel-Sorin Lup, Gabriela Ciuprina	Extraction of Effective Elastic Coefficient from a Coupled Structural Electrostatic Simulation of a MEMS Switch

Session EMERG1 – ROOM C (Friday, November 28, 2014, 10³⁰ - 12⁰⁰)

Oral presentations: **Renewable energy & Power engineering**

Chairs: **Mircea Eremia, Okan Ozgonenel**

ID	Schedule	Author(s)	Paper Title
123	10:30-11:00 invited	Okan Ozgonenel	Islanding Detection in PV Systems Based on Instantaneous Power Measurements
16	11:00-11:20	Mircea Eremia, Al-Bahrani Layth Tawfeeq	Reactive Power Optimization Based on Genetic Algorithm with New Technique of Mutation
135	11:20-11:40	Gabriela Nicoleta Sava, Minh Quan Duong, Sonia Leva, Marco Mussetta, Sorina Costinas, Nicolae Golovanov	Coordination Control of Active Crowbar for Doubly Fed Induction Generators
110	11:40-12:00	Ioan Felea, Vasile Moldovan, Daniel Albut-Dana	Stochastic Approach in Study of The Effects of Photovoltaic Sources Upon Power Distribution Networks

Session DRIVES1 – ROOM D (Friday, November 28, 2014, 10³⁰ - 11⁴⁰)

Oral presentations: **Electrical machines and drives**

Chairs: **Dan Zlatanovici, Vasile Manoliu**

ID	Schedule	Author(s)	Paper Title
159	10:30-11:00 invited	Dan Zlatanovici, Florin Ionescu, Adrian Herisanu, C. Cicirone	Mathematical Model and Software for the Simulation of a Hydro Generator Behavior at the Full Load Sudden Disconnection
115	11:00-11:20	Vasile Manoliu	Mathematical Modeling of an Induction Motor with Chopper-Controlled Rotor Resistance
39	11:20-11:40	Ioan Ducar, Corneliu Marinescu	Increasing the Efficiency of Motor-Pump Systems Using a Vector Controlled Drive for PMSM Application



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12⁰⁰ - 13³⁰ **ORAL SESSIONS** (UPB LIBRARY, ROOMS A, B, C (2ND FLOOR), D(3RD FLOOR))

Session CIRC2 – ROOM A (Friday, November 28, 2014, 12⁰⁰ - 13³⁰)

Oral presentations: **Circuits and Systems 2**

Chairs: **Antonio Luchetta, Gheorghe Brezeanu**

ID	Schedule	Author(s)	Paper Title
166	12:00-12:30 invited	F. Grasso, A. Luchetta, S. Manetti, M.C. Piccirilli, A. Reatti	SapWin 4.0 – An Enhanced Tool for Analysis and Design of Analog Circuits
171	12:30-12:50	Laurențiu Teodorescu, Gheorghe Brezeanu	High Efficiency Low Noise Linear Power Supply for High Power Measurement Systems
228	12:50-13:10	Doinita Chirita, Valentin Stefanescu, Dan Alexandru Stoichescu, Bogdan Cristian Florea	Influence of Control Type on Chaotic Behavior of the Alpazur Oscillator
211	13:10-13:30	R.M. Aileni, L. Surdu	Parameters Modeling for Obtaining the Optimal Surface for Electronic Device Submission by using Nanotechnologies

Session ELMG2 – ROOM B (Friday, November 28, 2014, 12⁰⁰ - 13¹⁰)

Oral presentations: **Electromagnetic field analysis**

Chairs: **Catalin Atanasiu, Sultan Can**

ID	Schedule	Author(s)	Paper Title
178	12:00-12:30 invited	C.V. Atanasiu, L.E. Zakharov	Calculation of Eddy Currents in 3D Thin Multiply Connected Wall Structures Induced by a Rotating Plasma Perturbation
81	12:30-12:50	Sultan Can, Fulya Bagci, Asim Egemen Yilmaz, Baris Akaoglu	A Novel Tunable Metasurface for Filtering the Electromagnetic Waves
94	12:50-13:10	Fulya Bagci, Sultan Can, Baris Akaoglu, Asim Egemen Yilmaz	Parametric Analysis of Different Radii of Concentric Rings and Substrates in Frequency Selective Surfaces

Session EMERG2 – ROOM C (Friday, November 28, 2014, 12⁰⁰ - 13³⁰)

Oral presentations: **Power engineering**

Chairs: **Florin Th. Munteanu, Rade Ciric**

ID	Schedule	Author(s)	Paper Title
56	12:00-12:30 invited	F. Munteanu, C. Nemes, D. Astanei	Power Quality Indices Proposal for Networks Operating in Sinusoidal and Unbalanced Conditions
89	12:30-12:50	Lucian Ioan Dulău	Economic Analysis of a Microgrid
224	12:50-13:10	Rade Ciric, Srdjan Surutka	Application of Remote Controllable Reclosers in Distribution Network
69	13:10-13:30	Ali Abdulwahhab Abdulrazzaq, Mircea Eremia, Lucian Toma	Power System Performance Improvement by using an SVC Device



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Session DRIVES2 – ROOM D (Friday, November 28, 2014, 12⁰⁰ - 13³⁰)

Oral presentations: Electrical machines and drives

Chairs: Adrian Graur, Paul Minciunescu

ID	Schedule	Author(s)	Paper Title
201	12:00-12:30 invited	Bogdan D. Varaticeanu, Paul Minciunescu	Design of Permanent Magnet Assisted Synchronous Reluctance Motor for Light Urban Electric Vehicle
176	12:30-12:50	C. Ungureanu, A. Graur	A Novel Design of a Rolling Rotor Actuator with Axial Air Gap
75	12:50-13:10	Zhao Fuping, Liu Rongmei, He Bei, Hui Yan	An Electrical Energy Meter for Electric Vehicle Charging Machines based on FFT and Wavelet Analysis
76	13:10-13:30	Zheng Ke, Hu Xiaorui, Ji Jing, Liu Kai	Research about the Power Consumption Detection Technology of Charger Considering the Harmonic and Unbalanced Current

Session VIDEOCONFERENCES – SPECIAL CONFERENCE ROOM (Friday, November 28, 2014, 12⁰⁰ - 13¹⁰)

Oral presentations: Electromagnetic devices

Chair: Florin Constantinescu

ID	Schedule	Author(s)	Paper Title
74	12:00-12:20	P. M. Arulanantha Prabu	An Inverse Problem Approach to Modeling of Circuit Breaker Arc Voltage
13	12:20-12:40	Premkumar Ayyadurai, Swati Padmanabhan, PM Arulanantha Prabu	Modeling Current Transformer Behavior using Curve-Fitting via Optimization
70	12:40-13:10	Shimeng Li, Adib Samin, Yuan. F. Zheng, Lei (Raymond) Cao	The Effects of Radiation-induced Demagnetization on the Performance of the Brushless DC Motor in Robot Servo Systems

13³⁰ - 14³⁰ LUNCH (UPB LIBRARY, 4TH FLOOR)



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14³⁰ - 18⁰⁰ PRESENTATIONS

14³⁰ - 16⁰⁰ Oral Sessions (UPB Library, Rooms A, B, C (2nd floor), D (3rd floor), E (4th floor))

Session CIRC2 – ROOM A (Friday, November 28, 2014, 14³⁰ - 16⁰⁰)

Oral presentations: **Circuit Design**

Chairs: **Antoine Frappé, Miruna Nitescu**

ID	Schedule	Author(s)	Paper Title
219	14:30-15:00 invited	Antoine M. Frappé	Digital Radio Frequency Signal Generation towards Ultimate Transmitter
223	15:00 -15:20	Răzvan-Cristian Marin, Antoine Frappé	An Adaptive Synchronization Scheme for 60 GHz Subsampling Receivers
240	15:20-15:40	Mihai-Eugen Marin, Cătălin Brînzei, Florin Constantinescu, Alexandru Gheorghe, Iulian Ursac	Design of an 8 bit current-steering DAC for a GSM transmitter
65	15:40-16:00	S.V. Srinivasan, Abdul Razak	Physical Level Design and Analysis of Fast Fourier Transforms using Vedic Mathematics

Session ELMG3 – ROOM B (Friday, November 28, 2014, 14³⁰ - 16⁰⁰)

Oral presentations: **Electromagnetic field analysis & Electromagnetic compatibility**

Chairs: **Gabriela Ciuprina, Olli A. Väänänen**

ID	Schedule	Author(s)	Paper Title
84	14:30-15:00 invited	Olli Väänänen	Do-It-Yourself Current Probe Characterization for EMC Troubleshooting
43	15:00-15:20	Wenzuo Ma, Tiebing Lu, Donglai Wang, Lu Wang, Xin Qi, Shuai Sun	Experimental Study on Surface Charge Distribution of Insulating Film under the HVDC Test Wire
157	15:20-15:40	Larisa Mariut, Elena Helerea	Electromagnetic Analysis – Application to Lightning Surge Phenomena on Power Lines
175	15:40-16:00	Laura Andrei, Irina Vlad, and Florin Ciuprina	Electric field distribution in power cable insulation affected by various defects

Session EMERG3 – ROOM C (Friday, November 28, 2014, 14³⁰ - 16⁰⁰)

Oral presentations: **Renewable energy**

Chairs: **Mihai O. Popescu, Daniel Trip**

ID	Schedule	Author(s)	Paper Title
130	14:30-15:00 invited	Ovidiu Cristea, Mihai-Octavian Popescu, Aurelian Sorinel Calinciuc	A Correlation Between Simulated and Real PV System in Naval Conditions
153	15:00-15:20	O. Neamțu, M. Roșca, C. Bendea, D. Trip	Monitoring and Data Acquisition System for a Geothermal Heat Pump
162	15:20-15:40	O. Neamțu, M. Gordan, D. Trip	A Geothermal Thermo-Electric Energy Converter for Charging Lithium-Ion Battery
199	15:40-16:00	Andreea Busca-Forcus, Corneliu Marinescu	Pumped Storage System for Wind Energy in Variable Operating Conditions



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Session POWEL1 – Room D (Friday, November 28, 2014, 14³⁰ - 16⁰⁰)

Oral presentations: **Power electronics**

Chairs: **Dan Alexandru Stoichescu, Adriana Florescu**

ID	Schedule	Author(s)	Paper Title
147	14:30-15:00 invited	Andrei Costin Cocor, Adriana Florescu, Ana-Maria Popescu	Power Supply Blocks with Cúk and Self-Lift Cúk Converters for Telecommunication Sites
62	15:00-15:20	S. Zengin, M. Boztepe	Bi-directional DCM DAB Inverter for SST Applications
155	15:20-15:40	Florescu Adriana, Baescu Andrei Dan, Popescu Ana-Maria, Stoichescu Dan	PV Charging Systems for Remote Rural Areas with Elementary and Self-Lift SEPIC Converters
96	15:40-16:00	Adrian Burca, Nistor Daniel Trip, Teodor Leuca	Considerations on the Design of a Low Power Induction Heating System

Session SRS – Room E (Friday, November 28, 2014, 14³⁰ - 16⁵⁰)

Oral presentations: **Special Session - Safety, Reliability & Standardization**

Chairs: **Josef Börcsök, Michael Schwarz**

ID	Schedule	Author(s)	Paper Title
61	14:30-14:50	A. Hayek, J. Börcsök	Safety Chips in light of the Standard IEC 61508: Survey and Analysis
20	14:50-15:10	Michael Schreiber, Emil Delic, Ali Hayek, Josef Börcsök	RAM Tests for Safety-related Architectures: A First Approach
95	15:30-15:50	İlker Üstoğlu, Özgür T. Kaymakçı, Josef Börcsök	Effects of Varying Diagnostic Coverage on Functional Safety
23	15:50-16:10	A. Ugljesa, J. Börcsök, M. Schwarz	Validation and verification a impulse coupling for safe energy generation by rotation
247	16:10-16:30	R. Thum, M. Bichuniak, J. Börcsök	Laser Scanner Based Position Detection for Safety Related Applications
35	16:30-16:50	Karolin Löser, Emil Delic, Michael Schreiber, Ali Hayek, and Josef Börcsök	The Benefits of Middleware for Safety-Related Systems-on-Chip

16⁰⁰ - 18⁰⁰ POSTER SESSION (UPB LIBRARY, 2ND FLOOR)

Chairs: **Dan Ovidiu Micu, Lucian Mandache**

ID	Topic	Author(s)	Paper Title
179	CIRCTh	Ioana Gabriela Sirbu, Lucian Mandache, Amintore - Claudiu Smaranda	Analysis of the Misalignment in a Capacitively Coupled Contactless Power Transfer System
217	CIRCTh	R.M. Aileni, P.Bruniaux, R.Strungaru	Wearable Sensors Modeling for Healthcare
66	EFAAn	Simina Coman, Ovidiu Coman, Teodor Leuca, Marcela Laza, Francisc Slovac	The Use of Experimental Design in Order to Optimize the Heating Parameters of Wood Material Inside a Microwave Applicator. Experimental Results
72	EFAAn	Yao Degui, Kou Xiaokuo, Zhu Guangjie, Yang Fan, Dai Feng, Liu Kai, Hu Jiajia	A new Fault Diagnosis Method Based on Damped Least Square QR-factorization Algorithm in Grounding Grid
102	EFAAn	Adelina Bordianu, Steliana - Valentina Puşcaşu	Analysis of Magnetic Fields Generated by Conical Coils



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ID	Topic	Author(s)	Paper Title
108	EFTh	Ertugrul Aksoy	Harmonic Beam Steering in Time-Modulated Arrays with Simultaneous Sidelobe Control
139	EFAAn	F. I. Hathazi, V. D. Soproni, M. N. Arion, C. O. Molnar	About the Use of the High Frequency Electromagnetic Field in Order to Improve the Quality of the Agricultural Seeds
161	EFAAn	P. C. Andrei, I. Caciula, Marilena Stanculescu, M. Vasilescu	FEM Analysis of the Magnetic Field for B-H Relationship Evaluation
186	EFAAn	Tudor Micu, Dan Micu, Denisa Stet	A geometrical method for finding the image charges for two orthogonally conducting spheres
106	Inf&Mathem	E. Maravelakis, A. Konstantaras, J. Kilty, E. Karapidakis, E. Katsifarakis	Automatic Building Identification and Features Extraction from Aerial Images: Application on the Historic 1866 Square of Chania Greece
213	Coupled	Atabak Najafi, Ires Iskender	Thermal Modeling and Electromagnetic Analysis of 1000 kVA Distribution Transformer Based on Electric Thermal Equivalent Circuit and TSFEM
243	Coupled	George-Marian Vasilescu, Viorel Stanciu, Mihai Maricar, Ioan Barsan, Ioan Florea Hantila	Steady State Analysis of a Switch Operated Thermoelectric Generator
54	EMD	Helga Silaghi, Ulrich Rohde, Viorica Spoială, Andrei Silaghi, Eugen Gergely, Zoltan Nagy	Voice Command of an Industrial Robot in a Noisy Environment
187	PowerEL	Ioan-Alex Alexa, Alexandru Onea	A Complete Class of PWM Techniques for Voltage Source Inverter
190	PowerEL	Razvan Mocanu, Alexandru Onea	Temperature Estimation for Condition Monitoring of PMSM Used in Electric Vehicles
192	PowerEL	Luminita Roxana Clotea, Petre Scortaru	Soft-Switched ZVT DC-DC Boost Converter with Auxiliary Transistor and Optimized Gate Drive Circuit
112	RenewEn	E.S. Karapidakis, Y. Katsigiannis, A. Tsikalakis and E. Maravelakis	Current Status and Future Prospects of Crete's Power System
88	PowerEng	Lucian Ioan Dulău, Mihail Abrudean, Dorin Bică	Impact of Distributed Generation Upon Reghin – Lăpușna Medium Voltage Line
160	PowerEng	Ramona Vătu, Oana Ceaki, Nicolae Golovanov, Radu Porumb, George Seritan	Competitive Electricity Market Schemes within Smart Grids Framework
164	PowerEng	A. G. Ștefana Neagoe, A. C. Neagoe, Al. C. Mandiș	Impact of Charging Electric Vehicles in Residential Grid on the Power Losses and Voltage Plan
165	PowerEng	Oana Ceaki, Ramona Vătu, Nicolae Golovanov, Radu Porumb, George Seritan	Analysis of SVC Influence on the Power Quality for Grid-Connected PV Plants
191	PowerEng	Al. C. Mandiș, A. Manoloiu, A. G. Ștefana Neagoe, T. Leonida, A. C. Neagoe	Impact of Distributed Generation on Steady State of Distribution Networks
200	PowerEng	Benchea Mihai, Baraboi Adrian, Puiu Gabriel	System on-line for monitoring and diagnostic of power transformers
194	PowerEng	Luminita Roxana Clotea, Petre Scortaru	Current-Fed Isolated Boost DC-DC Converter for PV Applications
140	Inf&Mathem	C.R. Costea, H. Silaghi, E.I. Gergely, G. Husi, L. Coroiu, Z. Nagy	Approach of PID Controller Tuning for Ball Mill
141	Inf&Mathem	E.I. Gergely, C.R. Costea, L. Coroiu, G. Husi, H. Silaghi, Z. Nagy	Method for Estimation of City Environmental Noise

18⁰⁰ - 21³⁰ GALA DINNER (UPB LIBRARY, 4TH FLOOR)



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SATURDAY, NOVEMBER 29, 2014

9⁰⁰ - 10⁰⁰ REGISTRATION (UPB LIBRARY, 2ND FLOOR)

10⁰⁰ - 13³⁰ PRESENTATIONS

10⁰⁰ - 11³⁰ **ORAL SESSIONS** (UPB LIBRARY, ROOMS A, B, C (2ND FLOOR), D(3RD FLOOR))

Session INF1 – ROOM A (Saturday, November 29, 2014, 10⁰⁰ - 11¹⁰)

Oral presentations: **Informatics and applied mathematics**

Chairs: **Daniel Ioan, Anca Ioniță**

ID	Schedule	Author(s)	Paper Title
101	10:00-10:30 invited	Ruxandra Bărbulescu, Aurel-Sorin Lup, Gabriela Ciuprina, Daniel Ioan, A. Egemen Yilmaz	Intelligent Particle Swarm Optimization of Superconducting Magnetic Energy Storage Devices
103	10:30-10:50	Anca Daniela Ionita, Adriana Olteanu	Data Acquisition, Processing and Visualization for Early Warning Information Systems
87	10:50-11:10	Ioan Buciu	Image denoising via sparse data representation: A comparative study

Session MAT1 – ROOM B (Saturday, November 29, 2014, 10⁰⁰ - 11³⁰)

Oral presentations: **Materials in electrical engineering**

Chairs: **Horia Gavrilă, Valentin Ioniță**

ID	Schedule	Author(s)	Paper Title
137	10:00-10:30 invited	Valentin Ioniță	Computation of Non-Sinusoidal Hysteresis Losses using Standardized Measured Data
51	10:30-10:50	Veronica Manescu (Paltanea), Gheorghe Paltanea, Horia Gavrilă, Ioan Peter	The Influence of Punching and Laser Cutting Technologies on the Magnetic Properties of Non-oriented Silicon Iron Steels
134	10:50-11:10	Vitalii Ivanov, Klaus-Juergen Wolter	Degradations in the Silver-Filled Electrically Conductive Adhesive Joints to a Molybdenum Electrode after Environmental Ageing
64	11:10-11:30	S. Zengin, M. Boztepe	Modified Dual Active Bridge Photovoltaic Inverter for Solid State Transformer Applications



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Session BIO – ROOM C (Saturday, November 29, 2014, 10⁰⁰ - 11³⁰)

Oral presentations: **Bioengineering**

Chairs: **Alexandru M. Morega, Dan Custura-Craciun**

ID	Schedule	Author(s)	Paper Title
202	10:00-10:30 invited	Gabriel Kacso, Ioan Florea Hantila, George-Marian Vasilescu, Oana Drosu, Mihai Maricaru, Marilena Stănculescu	The Thermal Field of an Early Breast Cancer Reflected on the Breast Surface
188	10:30-10:50	Loredana Manea, Alexandru M. Morega, Mihaela Morega	Numerical Simulation of Magnetic Drug Localization in the Knee Joint Medication
209	10:50-11:10	Dan Custură-Crăciun, Daniel Cochior, Paul Pencioiu	Double Octree - A Modern Way to Improve the Realism in Virtual Reality
126	11:10-11:30	Ionel-Bujorel Pavaloiu, Andrei Vasilateanu, Nicolae Goga, Iuliana Marin, Cătălin Ilie, Andrei Ungar, Ion Pătrascu	3D Dental Reconstruction from CBCT Data

Session EDU – ROOM D (Saturday, November 29, 2014, 10⁰⁰ - 11⁵⁰)

Oral presentations: **Education and management**

Chairs: **Dorin Isoc, Lidia Dobrescu**

ID	Schedule	Author(s)	Paper Title
86	10:00-10:30 invited	Dorin Isoc	Preventing Plagiarism in Engineering Education and Research
173	10:30-10:50	Dorin Isoc, Teodora Isoc	The innovative enterprise - a new, complex, multivalent solution
142	10:50-11:10	Mircea -Emilian Ardeleanu	Professional Communication - support in guiding young people toward a higher technical education
12	11:10-11:30	Lidia Dobrescu	Replacing ANSI C with other modern programming languages
131	11:30- 11:50	Dan-Gabriel I. Stănescu, Petre- Marian T. Nicolae, Alexandru- George I. Dobroiu, Lucian-Dinuț D. Popa	Designing and Testing of a Second Order Active RC Low-pass Filter with Different Quality Factors

11³⁰ - 11⁴⁵ **COFFEE BREAK** (UPB LIBRARY, 2ND FLOOR)



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11⁴⁵ - 13³⁰ **POSTER SESSION** (UPB LIBRARY, 2ND FLOOR)

Chairs: **Petre-Marian T. Nicolae, Mihai Maricaru**

ID	Topic	Author(s)	Paper Title
15	Coupled	Michail G. Papoutsidakis, Dimitrios Piromalis, George E. Chamilothoris	Modern Control Interface for Scorbot ER-III Robot
21	BioEng	Gayatri Malhotra, A M Nagalakshmi, S Sudhakar, Subramanya Udupa	An Architecture of Sequential Embryonic Cell for Counter Design
105	BioEng	Iuliana Chiuchisan, Oana Geman, Andrei Tomegea	Acquisition and Management of Biomedical Data using Internet of Things Concepts
189	BioEng	Ionel-Bujorel Pavaloiu, Nicolae Goga, Andrei Vasilateanu, Andrei Ungar, Ion Pătrascu	Automatic Labeling of Teeth in CT Data
236	BioEng	Vasile Manoliu, Cristina Maria Stanescu	The left ventricular wall stress and diastolic elastance index in obese women assessed by echocardiography
158	Edu&Manag	G.E.Badea, D.Ionita, D.C. Secui, P.Cret	Reliability Evaluation of Heat Distribution Pipelines Using Corrosion Data
197	Sensor	Ezzaldeen Edwan, Mohamed Bourimi, Niko Joram, Belal Al-Qudsi, Frank Ellinger	NFC/INS Integrated Navigation System: The Promising Combination for Pedestrians' Indoor Navigation
60	Sensor	Sorin Adrian Ciureanu, Bogdan Dumitrescu	The Structure Constant in the Nanomagnetism
225	MATEE	A. R. Caramitu, T. Zaharescu, S. Mitrea, V. Tsakiris, G. Sbarcea, D. Patroi, L. Avadanei	Study regarding mechanical, thermal and structural properties of some elastomeric polyamide blends for cable insulating
26	MATEE	Lucian Petrescu, Emil Cazacu, Valentin Ioniță, Cătălina Petrescu	Characterization of Soft Magnetic Materials in a Wide Range of Frequencies
133	DProc	V. Pricop, E. Helerea, Gh. Scutaru	Fitting Magnetic Hysteresis Curves by Using Polynomials
129	Inf&Mathem	A. Tahir, J. Yasin, M. Daneshtalab, J. Plosila	Active Suspension System for Heavy Vehicles
163	DProc	Sorin Laurențiu Stănescu, Omonigho Benedict Otanocha	Phase-Based Neuron Training using Evolutionary Algorithms
238	DProc	S. Motoasca, C. Lungoci, D. Sorea	LabVIEW Modeling of Power Losses in Soft Magnetic Materials
77	PowerEng	Hu Xiaorui, Qiao Yanlong, Chen Wei, Yang Fan	Anti-Theft and Location MethodBased on Pulse Transmission Attribute for Power Cables
152	RenewEn	Ovidiu Cristea, Mihai-Octavian Popescu, Aurelian Sorinel Calinciuc	Dynamic Performances of the Wind Power System
229	RenewEn	Bogdan-Adrian Enache, Eugen Diaconescu	Estimating a battery State of Charge using neural networks
183	EFAn	Georgiana Rosu (Marin), Gheorghe Samoilescu, Octavian Baltag, Serghei Radu, and Dumitru Iorgulescu	The Effect of a Magnetic Treatment on Ship Magnetic Signature
185	EFAn	Georgiana Rosu (Marin), Gheorghe Samoilescu, Octavian Baltag, Serghei Radu, Dumitru Iorgulescu	Evaluation of a Numerical Model for Ship Magnetic Signature Induced by an External Field

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CLOSING SESSION AND CONCLUDING REMARKS