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ELECTROTEHNICA

International Symposium on Fundamentals of Electrical Engineering

University POLITEHNICA of Bucharest, Romania, November 1–2, 2018

*Dedicated to the 200th anniversary of University Politehnica of Bucharest
and the Great Union of Romanians, 100 years ago*



BRIEF PROGRAMME

Thursday, November 1, 2018

- 8⁰⁰ - 9³⁰ **Registration** (UPB Library, 2nd floor)
- 9³⁰ - 10⁰⁰ **Opening Session** (UPB Library, ROOM A, 2nd floor)
- 10⁰⁰ - 11³⁰ **ASTR Round Table** (UPB Library, ROOM A, 2nd floor)
- 10⁰⁰ - 11³⁰ **ANSYS presentation** (UPB Library, ROOM B, 2nd floor)
- 11³⁰ - 11⁴⁵ **Coffee Break** (UPB Library, 2nd floor)
- 11⁴⁵ - 13¹⁵ **Oral Sessions** (UPB Library, ROOMS A, B, C, and D, 2nd and 3rd floor)
- 13¹⁵ - 14³⁰ **Lunch** (UPB Library, 2nd floor)
- 14³⁰ - 16⁰⁰ **Oral Sessions** (UPB Library, ROOMS A, B, C, and D, 2nd and 3rd floor)
- 16⁰⁰ - 16¹⁵ **Coffee Break** (UPB Library, 2nd floor)
- 16¹⁵ - 18⁰⁰ **Poster Session** (UPB Library, 2nd floor)
- 16¹⁵ - 18⁰⁰ **Tutorials** (UPB Library, ROOM A, 2nd floor)
- 18⁰⁰ - 21⁰⁰ **Gala dinner** (UPB Library, 2nd floor)

Friday, November 2, 2018

- 9⁰⁰ - 9⁴⁵ **Registration** (UPB Library, 2nd floor)
- 9⁴⁵ - 10⁰⁰ **Coffee Break** (UPB Library, 2nd floor)
- 10⁰⁰ - 11³⁰ **Oral Sessions** (UPB Library, ROOMS A, B, C, and D, 2nd and 3rd floor)
- 11³⁰ - 12⁰⁰ **Coffee Break** (UPB Library, 2nd floor)
- 12⁰⁰ - 13³⁰ **Oral Sessions** (UPB Library, ROOMS A, B, C, and D, 2nd and 3rd floor)
- 13³⁰ - 15⁰⁰ **Lunch** (UPB Library, 2nd floor)
- Closing Session and Concluding Remarks**



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PROGRAMME TIMELINE

Thursday, November 1, 2018

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

9³⁰ - 10⁰⁰ **OPENING SESSION** (UPB Library, ROOM A, 2nd floor) – welcome address.

Ecaterina Andronescu, President of the Senate, University POLITEHNICA of Bucharest

Mihnea Costoiu, Rector, UPB, University POLITEHNICA of Bucharest

Mihai Octavian Popescu, former dean of Faculty of Electrical Engineering and UPB vicerector

Nicolae Vasile, The General Association of Engineers in Romania (A.G.I.R.)

10⁰⁰ - 11³⁰ **ROUND TABLE** "*Trends in the development of Electrical Engineering*",
organized in cooperation with the ROMANIAN ACADEMY OF TECHNICAL SCIENCES
(UPB Library, ROOM A, 2nd floor)

Chairs: **Nicolae Golovanov, Ioan Florea Hăntîlă**

10⁰⁰ - 11³⁰ **ANSYS software presentation** (UPB Library, ROOM B, 2nd floor)

Nicolae Bădulescu, TENSOR (ANSYS Channel Partner)

1. A modern approach to design & optimization of electromechanical machinery
2. Live demos:
 - Thermo-electric analysis of a 55/220 V transformer (Steady State & Transient)
 - Thermo-analysis of a coil (DC & AC)
 - Thermo-analysis of an induced heating element (AC)
 - Electromagnetic analysis of a 20 kW adjustable speed synchronous motor
 - Electromagnetic analysis of a 3 phase cable
 - Circuit simulation of a AC/DC converter for a DC motor

11³⁰ - 11⁴⁵ **COFFEE BREAK** (UPB Library, 2nd floor)

11⁴⁵ - 13¹⁵ **Oral Sessions** (UPB Library, ROOMS A, B, C, and D, 2nd and 3rd floor)



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Antennas – ROOM A (THURSDAY, NOVEMBER 1, 2018, 11⁴⁵ - 13¹⁵)

Chairs: **Marian Gabriel Banciu, Nicolae Militaru**

ID	Schedule	Author(s)	Paper Title
489	11 ⁴⁵ - 12 ¹⁵ (invited paper)	Marian Gabriel Banciu, Nicolae Militaru, Liviu Nedelcu, Cezar Dragos Geambasu, Lucian Trupina, Ovidiu Avadanei	Half-split Dielectric Resonator Antennas Using High-Dielectric Permittivity Barium Neodymium Titanate
474	12 ¹⁵ - 12 ³⁵	Ugur Yesilyurt, Ihsan Kanbaz, Ertugrul Aksoy	A Two-Stage Optimization Approach to Suppression of Side Lobe and Sideband Levels in Time-Modulated Linear Arrays
445	12 ³⁵ - 12 ⁵⁵	A. Heiman, A. Badescu, A. Saftoiu	A new Multiple Input Multiple Output V2V automotive antenna for Long Term Evolution band applications
478	12 ⁵⁵ - 13 ¹⁵	Marian Gabriel Banciu, Valentin Ion, Liviu Nedelcu, Cezar Dragos Geambasu, Lucian Trupina, Cristina Besleaga-Stan, Nicu Scarisoreanu	Printed Monopole Arrowhead Antenna Compared to Microstrip Rectangular Antenna on High Dielectric Constant Substrate

Sensors 1 – ROOM B (THURSDAY, NOVEMBER 1, 2018, 11⁴⁵ - 13¹⁵)

Chairs: **George-Calin Seritan, Constantin Grumazescu**

ID	Schedule	Author(s)	Paper Title
511	11 ⁴⁵ - 12 ¹⁵ (invited paper)	Iulian-Dan Stanescu, Bogdan- Adrian Enache, George-Calin Seritan, Sorin-Dan Grigorescu, Florin-Ciprian Argatu, Felix-Constantin Adochiei	Automatic control system for stage lights
543	12 ¹⁵ - 12 ³⁵	Alina Elena Marcu, Robert Alexandru Dobre, Marian Vlădescu	Flicker Free Visible Light Communication Using Low Frame Rate Camera
510	12 ³⁵ - 12 ⁵⁵	George Suci, Teodora Usurelu, Cristian Beceanu, Marius Alexandru Dobra	IoT and Energy Efficiency for Smart Agriculture using Adcon Telemetry Devices
500	12 ⁵⁵ - 13 ¹⁵	Constantin Grumazescu, Valentin Alexandru Vladuta, Damian Gorgoteanu	Enabling smart monitoring applications for mobile military hospital using wireless sensor networks

Bioengineering (BIOENG) – ROOM C (THURSDAY, NOVEMBER 1, 2018, 11⁴⁵ - 13¹⁵)

Chairs: **Alexandru Mihail Morega, Mahmut Emin Celik**

ID	Schedule	Author(s)	Paper Title
	11 ⁴⁵ - 12 ¹⁵ (invited paper)	Alexandru Mihail Morega	Interstitial Microwaves Ablation and Hyperthermia
480	12 ¹⁵ - 12 ³⁵	Mahmut Emin Celik, Archana Jalligampala, Daniel Rathbun	Clustering Electrical Retinal Responses Based on Averaged Peri-stimulus Time Histograms



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ID	Schedule	Author(s)	Paper Title
479	12 ³⁵ - 13 ⁵⁵	Plamen Kirilov Manoilov, Adriana Naydenova Borodzhieva	Device for Noninvasive Treatment of Pain in Hip Joint Osteoarthritis
455	12 ⁵⁵ - 13 ¹⁰	Oana Mihaela Drosu, Alexandru Ioan Drosu	Non-invasive Acquisition of Bio-potentials for ECG
470	13 ¹⁰ - 13 ²⁰	Şaban Öztürk, Umut Özkaya, Bayram Akdemir, Levent Seyfi	Convolution Kernel Size Effect on Convolutional Neural Network in Histopathological Image Processing Applications

Power Engineering 1 – ROOM D (THURSDAY, NOVEMBER 1, 2018, 11⁴⁵ - 13¹⁵)

Chairs: Ovidiu Ivanov, Ion Triştiu

ID	Schedule	Author(s)	Paper Title
534	11 ⁴⁵ - 12 ¹⁵ (invited paper)	Madalina Calin-Arhip, Ion Triştiu, Stavros Ganatsios	Analysis of energy efficient solutions for electric transportation of smart cities
453	12 ¹⁵ - 12 ³⁵	Gheorghe Grigoras, Bogdan- Constantin Neagu	Energy Consumption Forecasting to Small and Medium Enterprises Using a Hybrid Method
459	12 ³⁵ - 12 ⁵⁵	Sara Garcia-Rios, Jose Antonio Barrado-Rodrigo, Francisco Gonzalez-Molina, Luis Guasch-Pesquer	Voltage and current performance of a three-phase transformer under unbalanced voltage supply
454	12 ⁵⁵ - 13 ¹⁵	Ovidiu Ivanov, Gheorghe Grigoras, Bogdan-Constantin Neagu	Smart Metering based Approaches to Solve the Load Phase Balancing Problem in LV Distribution Networks

13¹⁵ - 14³⁰ LUNCH (UPB Library, 2th floor)

14³⁰ – 16⁰⁰ Oral Sessions (UPB Library, ROOMS A, B, C, and D, 2nd and 3rd floor)

Education 1 – ROOM A (THURSDAY, NOVEMBER 1, 2018, 14³⁰ - 16⁰⁰)

Chairs: Mihai Octavian Popescu, Cosmin Karl Bănică

ID	Schedule	Author(s)	Paper Title
583	14 ³⁰ - 15 ⁰⁰ (invited paper)	Claudia Laurentia Popescu, Mihai Octavian Popescu	100 Years - Evolution of Electrical Engineering Curriculum
503	15 ⁰⁰ - 15 ²⁰	Sanda Victorinne Paturca, Sorin Dan Grigorescu, Cosmin Karl Banica, Stefan Gheorghe, Cristina Danescu	A Project Oriented Laboratory of Embedded Control Systems
504	15 ²⁰ - 15 ⁴⁰	Mircea-Emilian Ardeleanu, Dan-Gabriel Stănescu, Mădălin Drăghici, Victor Andrei Preoteasa	A Compact Experimental Device for the Study of Transient Mode in Electrical Circuits
547	15 ⁴⁰ - 16 ⁰⁰	Aurel Ionut Chirila, Ioan Dragos Deaconu, Andrei Cosmin Balasa, Cristina Mihaela Gheorghe, Valentin Navrapescu	Secured Monitoring of an Automated Parking Building System



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Sensors 2 – ROOM B (THURSDAY, NOVEMBER 1, 2018, 14³⁰ - 16⁰⁰)

Chairs: **Sorin-Dan Grigorescu, Elena Helerea**

ID	Schedule	Author(s)	Paper Title
	14 ³⁰ - 15 ⁰⁰ (invited paper)	Sorin-Dan Grigorescu	Symmetry in measurements
472	15 ⁰⁰ - 15 ²⁰	Valentin Alexandru Vladuta, Constantin Grumazescu, Ana Maria Ghimes	Use Cases and Designs for a Brain-Computer Interface using EEG Wireless Sensors
467	15 ²⁰ - 15 ⁴⁰	Elena Helerea, Aurelian Moraru, Corneliu Ursachi	Passive RFID Tags for Textile Items – Requirements and Solutions
499	15 ⁴⁰ - 16 ⁰⁰	Otilia Bularca, Monica Florea, Ana-Maria Dumitrescu	Smart metering deployment status across EU-28

Magnetic field applications – ROOM C (THURSDAY, NOVEMBER 1, 2018, 14³⁰ - 16⁰⁰)

Chairs: **Iosko Balabozov, Gheorghe Paltanea**

ID	Schedule	Author(s)	Paper Title
496	14 ³⁰ - 15 ⁰⁰ (invited paper)	Iosko Balabozov, Ivan Yatchev, Krastyo Hinov, Ivan Hadzhiev	Influence of the air gap of Hybrid Systems with Magnetic Flux Modulation
484	15 ⁰⁰ - 15 ²⁰	Valentin Ionita, Lucian Petrescu, Emil Cazacu	Impact of Steinmetz Coefficients Variance for FeSi Laminate Magnetic Cores
448	15 ²⁰ - 15 ⁴⁰	Veronica Paltanea, Gheorghe Paltanea, Horia Gavrila, Iosif Vasile Nemoianu	Estimation of the Damaged Zone Width due to Mechanical Cutting on High Quality Non-Oriented Steels
585	15 ⁴⁰ - 16 ⁰⁰	S. Degeratu, Member, IEEE, P. Rotaru, I. Boncea, D. Tarnita, L. Alboteanu	An Overview of the Properties and Industrial Applications of Shape Memory Alloys

Power Engineering 2 – ROOM D (THURSDAY, NOVEMBER 1, 2018, 14³⁰ - 16⁰⁰)

Chairs: **Mircea Eremia, Marian Gaiceanu**

ID	Schedule	Author(s)	Paper Title
482	14 ³⁰ - 15 ⁰⁰ (invited paper)	Mihai Sanduleac, Mircea Eremia, Irina Picioroaga	Resilience through Self-Sufficiency in Smart Cities. – A Preliminary Bucharest Use Case
466	15 ⁰⁰ - 15 ²⁰	Dana-Alexandra Ciupageanu, Gheorghe Lazaroiu	Dynamic Simulation of a Stand-Alone Photovoltaic/Battery Energy Storage System
440	15 ²⁰ - 15 ⁴⁰	Iulian Nicusor Arama, Marian Gaiceanu, Florin Grosu	Reduction of the Distributed Electric Energy - A Challenge for the Distribution Operators
439	15 ⁴⁰ - 16 ⁰⁰	Mircea Taciuc	A new method of estimating the maximum power point coordinates for PV cells, the intersection method.

16⁰⁰ - 16¹⁵ COFFEE BREAK (UPB Library, 2nd floor)



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16¹⁵ - 18⁰⁰ POSTER SESSION (UPB Library, 2nd floor)

Chairs: **Aurelian Crăciunescu, Emil Cazacu**

ID	Author(s)	Paper Title
446	Sebastian Kula	Magnetostatic Analysis of SRM Supported by Hybrid FEM-ANN Method
471	Şaban Öztürk, Umut Özkaya, Bayram Akdemir, Levent Seyfi	Weighting and Classification of Image Features using Optimization Algorithms
469	Etki Gür, Zekiye Eda Sataner, Yusuf Durkaya, Salih Bayar	FPGA Implementation of 32-bit RISC-V Processor with Web-Based Assembler-Disassembler
512	Iuliana Marin, Zainab Abbas Jabber	Wireless Sensors Network based on Real-time Healthcare Monitoring
514	Teodor Cazangiu, Florin-Ciprian Argatu, Bogdan-Adrian Enache, Vasiliki Vita, Ganatsios Stavros	Device for monitoring people with Alzheimer's disease
516	Iuliana Marin, Nicolae Goga	Healthcare System Based on the Smart Monitoring Bracelets and Sentiment Analysis
476	Ihsan Kanbaz, Uğur Yesilyurt, Ertuğrul Aksoy	A New Approach for Harmonic Power Calculation of Nonuniform Time Modulated Arrays
550	Victorita Radulescu	Selection of Main Parameters for Long Term Prediction of Atmospheric Boundary Layer in Romanian Wind Farms
449	Cornel Mihalcea, Florin Theodor Munteanu, Florin Baiceanu	An Integrated Probabilistic Approach for Power Transformers Availability
456	Horia Andrei, Paul Cristian Andrei, Emil Cazacu, Marilena Stanculescu, S. Orboiu	Power quality analysis based on a novel nonlinear dependence between parameters of nonsinusoidal regime
460	Anca Iulia Nicu, Anca Constantinescu - Dobra, Andrei Cziker	Propensity of enrolling in Electrical and Power Engineering. Case study of Technical University of Cluj-Napoca
486	Ahmet Aydoğan, Serkan Sağlam, Funda Akleman	Dielectric Measurement via Partially Filled and Short-Circuited Circular Waveguides
493	Radu Plamanescu, Valentin Adrian Boicea, Ana-Maria Dumitrescu, Mihai Sanduleac, Dorian Octavian Sidea	Voltage control in low voltage campus distribution grid with high PV penetration
506	Andrei Vulpe, Ciprian Lupu, Cosmin Mihai, Dan Secuianu	Algorithms and Control Structures for Photovoltaic Modules Installed on Large Transportation Vehicles
522	Mohammed Al-Saadi, Mustafa Al-Qaisi, Layth Al-Bahrani, Ali Al-Omari, Aurelian Crăciunescu	A Comparative Study of Capacitive Couplers in Wireless Power Transfer
525	Cristian Paul Chioncel	Prescribing the electric power at wind power systems, based on wind speed
526	Boubakar Faradji, Aissa Ameer	Study of High Speed Synchronous Reluctance Generator Associate with Multi Level Inverter
562	Victorita Radulescu	Optimization of Storing the Environmental Databases for Future Modeling of Power Plant
564	Victorita Radulescu	Numerical Modeling of the Effect produced by repeated floods and the risk zones



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ID	Author(s)	Paper Title
531	Olli Antero Väänänen	Using Real-Time Spectrum Analyzer for EMC Near-Field Measurements and EMC Education
574	Andrei-Gabriel Munteanu, Ștefan George Roșu, Adriana Florescu	Power Loss Reduction of Discontinuous PWM in Two-Level Voltage Source Converters
502	Filip Niculescu, Constantin Valcu, Mirela Vasile	Calculating the power of the electric motor for a single stage turbo blower
586	Alina Orasanu, A. Dragomir, Lavinia Bobaru, M. Iordache, S. Deleanu	On Optimization of Wireless Power Transfer Systems
588	Steliana Puscasu, Simona Bibic, Mihai Rebenciuc, Antonela Toma, Dragos Nicolescu	Aspects of fractional calculus in RLC circuits

TUTORIALS – ROOM A (THURSDAY, NOVEMBER 1, 2018, 16¹⁵ - 18⁰⁰)

16¹⁵ - 17¹⁰ **Prof. Khaled Nabil Salama, “Energy-Efficient Capacitance-to-Digital Converters for Low-Energy Sensors Nodes”**

17¹⁰ - 18⁰⁰ **Prof. Khaled Nabil Salama, “On-Chip RF Power Harvesting for Biomedical Implantable Wireless Sensors”**

18⁰⁰ - 21⁰⁰ **GALA DINNER** (UPB Library, 2nd floor)

Friday, November 2, 2018

9⁰⁰ - 9⁴⁵ **REGISTRATION** (UPB Library, 2nd floor)

9⁴⁵ - 10⁰⁰ **COFFEE BREAK** (UPB Library, 2nd floor)

10⁰⁰ - 11³⁰ **ORAL SESSIONS** (UPB Library, ROOMS A, B, C, and D, 2nd and 3rd floor)

Circuits and Systems – ROOM A (FRIDAY, NOVEMBER 2, 2018, 10⁰⁰ - 11³⁰)

Chairs: **Daniel Ioan, Alexander Korotkov**

ID	Schedule	Author(s)	Paper Title
450	10 ⁰⁰ - 10 ³⁰ (invited paper)	Alexander Korotkov, Vera Loboda	Simulation and Design of Thin-Film Thermoelectric Generators
501	10 ³⁰ - 10 ⁵⁰	Laurentiu Teodorescu	Ultra low current measurement system for nuclear applications



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541	$10^{50} - 11^{10}$	Aurel-Sorin Lup, Gabriela Ciuprina, Daniel Ioan, Ruxandra Barbulescu, Anton Duca, Mihai Popescu	Parametric macromodels for the RF behaviour of capacitive switches
	$11^{10} - 11^{30}$	Iulian Ursac, Florin Constantinescu, Mihai Marin	A Frequency Reference for Carrier Synthesis in Wireless Standard 802.11g

Digital Processing – ROOM B (FRIDAY, NOVEMBER 2, 2018, $10^{00} - 11^{30}$)

Chairs: **Valentin Năvrăpescu, Radu Rădescu**

ID	Schedule	Author(s)	Paper Title
517	$10^{00} - 10^{30}$ (invited paper)	C.A. Drugărin, E. Spunei, C. Muscai, B. Protea, V. Navrapescu, I. Piroi	Records of Failures to Railroad Safety Installation
519	$10^{30} - 10^{50}$	Ingrid Kovacs, Marina Țopa, Emilian David, Andi Buzo, Georg Pelz	Improved Pareto Chart Analysis for Yield Detractors' Identification
477	$10^{50} - 11^{10}$	Radu Rădescu	Comparative Study of Performances in Lossless Data Compression for English and Romanian Text Files Using the Q-Coder
483	$11^{10} - 11^{30}$	Radu Rădescu	An Efficient Solution for Video Compression Using an Original Modified Algorithm Applied to Improve the 3D Discrete Cosine Transform

Electrical materials – ROOM C (FRIDAY, NOVEMBER 2, 2018, $10^{00} - 11^{30}$)

Chairs: **Petru Noșingher, Florin Ciuprina**

ID	Schedule	Author(s)	Paper Title
584	$10^{00} - 10^{20}$	Doina Elena Gavrilă, Alina Caramitu, Sorina Mitrea, Costel Păun, Mihai Zburlea	Effect of Iron and Aluminium Powders on the Properties of Composites with Isotactic Polypropylene
533	$10^{20} - 10^{50}$ (invited paper)	Lucian Viorel Taranu, Petru Notingher, Cristina Stancu	Concerning the separation of space charge at the DC cable joints interfaces
551	$10^{50} - 11^{10}$	Romeo Cristian Ciobanu, Marius Andrei Olariu, George-Andrei Ursan, Mihaela Aradoaei, Olga Plopa	Modeling and Simulation of Nanoparticles Dispersion for the Realization of ACFs
577	$11^{10} - 11^{30}$	Florin Ciuprina, Laura Andrei	Water and Heat Exposure Influence on Dielectric Response of LDPE-Al ₂ O ₃ Nanocomposites

Power Engineering 3 – ROOM D (FRIDAY, NOVEMBER 2, 2018, $10^{00} - 11^{30}$)

Chairs: **Dumitru Toader, Ioan Serban**

ID	Schedule	Author(s)	Paper Title
461	$10^{00} - 10^{30}$ (invited paper)	Andrei Marinescu, Ioan Serban	A Smart Residential Microgrid Based on Renewable Energy Sources with Integrated Electric Vehicle Charging Station



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508	$10^{30} - 10^{50}$	Ha Thi Nguyen, Le Thanh Bac, and Phan Van Hien	Impact of Governor Gains and High Wind Penetration on Frequency Stability
442	$10^{50} - 11^{10}$	A. Maghet, S. Ilie, I. Luminosu, A De Sabata, D. Toader	Experimental model of thermo-solar power plant with beta Stirling engine and Fresnel lens
	$11^{10} - 11^{30}$	Alexandru Gabriel Gheorghe, Florin Constantinescu, Mihai Eugen Marin, Valentin Ștefănescu, Gabriel Vătășelu	Frequency Domain Models for Nonlinear Home Appliance Devices

$11^{30} - 12^{00}$ COFFEE BREAK (UPB Library, 2nd floor)

$12^{00} - 13^{30}$ ORAL SESSIONS (UPB Library, ROOMS A, B, C, and D, 2nd and 3rd floor)

Electrical machines – ROOM A (FRIDAY, NOVEMBER 2, 2018, $12^{00} - 13^{30}$)

Chairs: **Aurel Câmpeanu, Răzvan Mocanu**

ID	Schedule	Author(s)	Paper Title
	$12^{00} - 12^{30}$ (invited paper)	A. Câmpeanu, I. Vlad, S. Enache, T. Cîmpeanu	Back-toback operation of synchronous machines
515	$12^{30} - 12^{50}$	Liliana Brana Samoila, Marius Daniel Marcu, Ioan Razvan Slusariuc, Florin Gabriel Popescu	Universal DC Motor Protection System Based on Microcontroller Embedded Algorithm
545	$12^{50} - 13^{10}$	Razvan Mocanu, Alexandru Onea	An Adaptive Control Strategy for Permanent Magnet Synchronous Machines
463	$13^{10} - 13^{30}$	Ioana Nasui-Zah, Arkadiusz Dziechciarz, Claudia Steluta Martis	Synchronous Reluctance Machine modeling for accurate performances evaluation

Electronics – ROOM B (FRIDAY, NOVEMBER 2, 2018, $12^{00} - 13^{30}$)

Chairs: **Marian Vlădescu, Mihai Marin**

ID	Schedule	Author(s)	Paper Title
553	$12^{00} - 12^{30}$ (invited paper)	Ciprian Mihai Coman, Adriana Florescu	New electric grid monitoring and control architecture integrated into industry 4.0 system
582	$12^{30} - 12^{50}$	M. E. Marin, G. M. Vasilescu, I. Bârsan, G. Kacso, G. V. Rasnoveanu, M. G. Neacsu, M. Maricar, L. N. Demeter	Testing of two Thermographic Devices with two types of Temperature Sensors for Detecting and Locating of Incipient Breast Tumors
549	$12^{50} - 13^{10}$	Aurelian Costea, Paul Șchiopu, Marian Vlădescu	Microparticle light scattering detection device
579	$13^{10} - 13^{30}$	Aurelian Costea, Paul Șchiopu, Marian Vlădescu	Velocity and position assessment for robotic arms



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Education 2 – ROOM C (FRIDAY, NOVEMBER 2, 2018, 12⁰⁰ - 13³⁰)

Chairs: **Adriana Naydenova Borodzhieva, Maria Iuliana Dascalu**

ID	Schedule	Author(s)	Paper Title
555	12 ⁰⁰ - 12 ³⁰ (invited paper)	Iulia Stanica, Alin Moldoveanu, Maria Iuliana Dascalu, Florica Moldoveanu	A review of methods used for revitalizing books and reading experience
495	12 ³⁰ - 12 ⁵⁰	Dan Gabriel Stănescu, Mircea Emilian Ardeleanu, Ioana Gabriela Sîrbu, Cătalin Marius Stănoiu	Designing and Testing of a Low Current Active Band Stop Filter
481	12 ⁵⁰ - 13 ¹⁰	Yuksel Ilhanov Aliev, Adriana Naydenova Borodzhieva, Galina Ivanova	An Interactive Simulation Model of Convolutional Encoders Applied in the Educational Process
505	13 ¹⁰ - 13 ³⁰	Brana Liliana Samoila, Letitia Susana Arad, Marius Daniel Marcu, Florin Gabriel Popescu, Ilie Utu	Contributions in Modern Electrical Engineering Higher Education Using Dedicated Applications

Power Engineering 4 – ROOM D (FRIDAY, NOVEMBER 2, 2018, 12⁰⁰ - 13³⁰)

Chairs: **Ion Bivol, Sara Garcia-Rios**

ID	Schedule	Author(s)	Paper Title
559	12 ⁰⁰ - 12 ³⁰ (invited paper)	Jose Antonio Barrado-Rodrigo, Mohamed Ayad, Hugo Valderrama-Blavi, Sara Garcia-Rios	Improved Fault Ride-Through Strategy for DWIG in Wind Power Systems
475	12 ³⁰ - 12 ⁵⁰	Adrienn Dineva, Krisztian Ferko, Miklos Szekely, Gyula Gyoker, Istvan Vajda	High Precision Test System for the Investigation of the Condition of Lithium-ion Batteries
542	12 ⁵⁰ - 13 ¹⁰	Madalin Costin, Ion Bivol, Ion Voncila	Evaluation of PV panels by a Spline - Fuzzy Approximation and Classification Method
572	13 ¹⁰ - 13 ³⁰	Mihai Sanduleac, Dorel Stanescu, Carmen Stanescu, Antonello Corsi	Using Frequency measurements for data consistency assessment related to malicious data injection in distribution related ICT systems

13³⁰ - 15⁰⁰ LUNCH (UPB Library, 2nd floor)

CLOSING SESSION AND CONCLUDING REMARKS