

10th ANNIVERSARY
EPE 2018
10th INTERNATIONAL CONFERENCE AND EXPOSITION
ON ELECTRICAL AND POWER ENGINEERING
October 18-19, 2018
IASI, ROMANIA
"Gheorghe Asachi" Technical University of Iasi
Faculty of Electrical Engineering



2018 International Conference on Electrical and Power Engineering EPE 2018

Iași, October 18-19, 2018

Technical Program



EPE 2018 Technical Program

Thursday, October 18, 2018

08.00 – 09.00	Greetings and reception of participants
09.00 – 09.30	Opening ceremony
09.30 – 10.00	Plenary session I
10.00 – 10.30	Plenary session II
10.30 – 11.00	Visit of Palace of Culture
11.00 – 11.30	Coffee break
11.30 – 13.00	Oral session I
13.00 – 14.30	Lunch
14.30 – 16.00	Oral session II
16.00 – 16.30	Coffee break
16.30 – 18.00	Oral session III
19.30 – 22.30	Gala dinner

Friday, October 19, 2018

09.00 – 10.30	Poster session I
10.30 – 11.00	Plenary session III
11.00 – 11.30	Plenary session IV
11.30 – 13.00	Poster session II
13.00 – 13.30	Closing ceremony
13.30 – 14.30	Lunch

Detailed Technical Program

Thursday, October 18, 2018

08.00 – 09.00

Greetings and reception of participants

“Henri Coandă Hall”, Palace of Culture

09.00 – 09.30

Opening Ceremony

“Henri Coandă Hall”, Palace of Culture

09.30 – 10.30

Plenary sessions

“Henri Coandă Hall”, Palace of Culture

Chairman: Marinel Temneanu

Prof. Mircea Eremia	From Smart Grids to Super Grids in Europe: Concepts, technologies and perspectives
Politehnica University of Bucharest, Romania	
Prof. Gianluca Cicala	Electrical Engineering materials for additive manufacturing: from laboratory to industrial applications
University of Catania, Italy	

10.30 – 11.00

Visit of Palace of Culture

Museum of Science and Technology „Ștefan Procopiu”, Palace of Culture

11.00 – 11.30

Coffee break

Faculty of Electrical Engineering, Building E, D. Mangeron 23, Iasi.

A bus will leave from the Palace of Culture to the faculty at 11.00 o'clock.

11.30 – 13.00

Oral sessions I

Metrology and Measurement Systems I

11.30 - 13:00, “Dragomir Hurmuzescu” Conference Hall, Faculty of Electrical Engineering

Chairmen: Marcin Skoczylas, Cristian Fosalau

2522	FPGA based logic analyzer	Zet C., Fosalau C.
2476	Estimating the distance to an object based on image processing	Gafencu N., Zet C., Fosalau C.
2472	Multiple Camera Based Real-Time Locating System for Unmanned Air Vehicle	Skoczylas M., Walendziuk W.
3641	Distance Measurement for Traffic Safety Applications	Fosalau C., Zet C., Gafencu N.
2500	Electrochemical RFID Sensor for Gas Concentration Measurement	Breniuc L., Haba C. G., Plopa O., Ungureanu L.I.
2640	Multiple Gas Sensing Platform with RFID Connectivity	Haba C. G., Breniuc L., Plopa O., Ursu I.

International Workshop with Industry on Electromagnetic Properties of Materials and Dedicated Applications

11.30 - 13:00, E316 Hall, Faculty of Electrical Engineering

Chairmen: Gianluca Cicala, Angela Daniela La Rosa, Romeo Ciobanu

2636	Using the Virtual Online Laboratories for the pre-University	Donose C., Schreiner C.M., Macovei S.C.
2680	Advanced Image Processing in Support of THz Imaging for Early Detection of Gastric Cancer	Ciobanu R.C., Drug V., Ciortescu I., Mihai C., Stefanescu G., Danciu E., Schreiner O., Lucanu N.
2704	Research on Functionalized Gadolinium Oxide Nanoparticles for MRI and THz Imaging	Ciobanu R.C., Drug V., Stanciu G.D., Alexa-Stratulat T., Luca A., Mihai C.T., Tamba B.I., Ciortescu I., Schreiner T.
2708	Correlations Between Simulation and Electromagnetic Properties Testing of Hot Melt Nanostructured Adhesives	Ursan G.A., Ursan M., Contofan I.C., La Rosa A.D.
2710	Principles on Development of Experimental Models of Nanostructured Adhesives	Ursan G.A., Ursan M., Drobeta M., La Rosa A.D.

Automation and Robotics

11.30 - 13:00, E2 Hall, Faculty of Electrical Engineering

Chairmen: Irina Cojuhari, Gheorghe Livint

2507	Considerations Regarding Minimal Fuzzy Logic Algorithms	Vatavu Cristina
2533	Temperature Fuzzy Control Sytem with Mamdami Controller	Mastacan L., Dosoftei C.C.
2569	Metaheuristic Algorithms based Multi-objective Optimization for Image Segmentation	Bejinariu I.S, Luca Ramona, Costin H.
2613	Applicability of Fuel Cell in Electric Vehicles	Rusu F.A., Baci Alina Georgiana, Livint G.
3543	Synthesis of the Typical Controllers to the Model of Obiects with Advance-Delay and Time Delay for the Control System with Maximum Stability Degree	Fiodorov I., Cojuhari Irina, Izvoreanu B., Moraru D.
3633	Comparison Between Generalized Predictive Control and Nonlinear Predictive Control for Automated Ground Vehicles	Rafaila R., Livint G.

5th International Workshop on Electromagnetic Compatibility and Engineering in Medicine and Biology I

11.30 - 13:00, E3 Hall, Faculty of Electrical Engineering

Chairmen: Paul Bechet, Radu Ciorap

2437	Radiofrequency Stimuli Applied to Suspensions Containing Biogenic Magnetite Nanocrystals: Absorbed Energy Conversion	Miclaus S., Mihai G., Moiescu C., Bechet P., Ardelean I., Barbu-Tudoran L., Oancea S., Racuciu M., Radu T.M.
2523	A Neuronal Model of the 3D Head Position Based on a Wearable System	Dobrea D.M., Dobrea M.C.
2614	A Preliminary Report on the Use of Thermography as a Diagnostic Tool in Prematurity Apnea	Luca C., Andritoi D., Corciova C.
2662	Computation of the Low Frequency Magnetic Fields Generated by a 12/20 kV Underground Power Line	Vornicu S., Lunca E., Salceanu A.
2732	Smart Object for Physical Rehabilitation Assessment	Frango P.M., Postolache O., Yang Y.

Power Electronics and Electrical Drives I

11.30 - 13:00, E4 Hall, Faculty of Electrical Engineering

Chairmen: Iulian Birou, Mihai Albu

2485	Application of Stepper Motors in CNC Device	Drgona P., Stefun R.
2575	A Cost Effective Boost Converter for a Hybrid Low-Voltage Neighbourhood Network	Damian I.C., Eremia M., Sanduleac M.
2830	An Improved Control Strategy for DVR in order to Achieve both LVRT and HVRT in DFIG Wind Turbine	Liasi S.G., Afshar Z., Harandi M.J., Kojori S.
2880	Passivity Based Control of the Isolated Flyback Power Supplies Using Exact State-Space Model	Salimi M., Idrissi R.
3430	Unified Complex Vector Current Controller for AC Machine Drives	Horga V., Ratoi M., Albu M., Lucache D.

Power Systems I

11.30 - 13:00, EN212 Hall, Faculty of Electrical Engineering

Chairmen: Mircea Eremia, Călin Munteanu

2363	Primary control of inverter-based microgrids and robustness analysis	Hammer B., Konigorski U.
2479	SMART CITY: Definition and Evaluation of Key Performance Indicators	Picioaroaga I.I., Eremia M., Sanduleac M.
3391	Assessment for efficient operation of smart grids using advanced technologies	Seritan G., Tristiu I., Fierascu G., Vatu R.
2776	Optimal Demand Response Allocation in LV Distribution Networks Using the PSO Algorithm	Kar P., Chattopadhyay S., Ivanov O., Gavrilas M.
2864	An Improved Approach for Energy Losses Calculation in Low Voltage Distribution Networks based on the Smart Meter Data	Grigoras G., Gavrilas M.
2573	Modern Techniques in The Modelling of High Voltage Power Systems	Atudori M., Van de Vall P.

Electrical Apparatus I

11.30 - 13:00, EN306 Hall, Faculty of Electrical Engineering

Chairmen: Adrian Baraboi, Maricel Adam

2495	Researches on the Realization of a Electromechanical Micropump	Cernusca D., Milici L.D., Poienar M.
2520	Aspects Regarding Electrical Loads Pattern Recognition Using Artificial Neural Network	Micu M.B., Adam M., Andrusca M., Dragomir A.
2534	About Some Connection Modes of the Current Conducting Paths	Dragomir A., Adam M., Andrusca M., Astanei D., Andrusca L., Dumitrescu C.
2535	Simulating Electrical Connections in Terms of Thermal Stresses	Dragomir A., Adam M., Andrusca M., Burlica R., Micu M.B., Patrichi S.
2597	Methods for Reducing Energy Consumption, Optimization in Operational Data Centers	Dumitrescu C., Plesca A., Adam M., Nituca C., Dragomir A.
2604	Aspects Regarding the High-Current Testing of Current Paths	Deac C. N., Adam M., Pancu C., Andrusca M., Dragomir A.

Quality, Reliability and Safety

11.30 - 13:00, EN109 Hall, Faculty of Electrical Engineering

Chairmen: Andrei Dragomirescu, Florin Munteanu

2443	Method to Assess the Degradation Risk of Photovoltaic Systems	Ciocea C. A., Munteanu F., Nemes C.
2852	A Bayesian Approach of the Availability Complementarity of Renewable Resources	Munteanu F., Ciobanu Alexandra, Nemes C.
3312	Preventive Maintenance of Hydraulic Installations Based on Monitoring Cavitation-Induced Vibrations	Dragomirescu A., Safta Carmen-Anca, Mândrea L., Orășanu N., Magheți I.
3559	Novel Objective Function Involving Integral Power Quality Criterion for Distributed Generation Planning	Gusev S., Oboskalov V., Valiev R., Cherepanova M., Zicmane I., Berzina K., Kuckovskis J.
3671	Reliability Parameters Estimation for a Railway Catenary Power System	Cardasim M., Nițucă C., Pleșca A., Chiriac G., Dumitrescu C.

13.00 – 14.30

Lunch

Faculty of Electrical Engineering, Main (Entrance) Hall.

14.30 – 16.00

Oral sessions II

Metrology and Measurement Systems II

14.30 - 16:00, “Dragomir Hurmuzescu” Conference Hall, Faculty of Electrical Engineering

Chairmen: Romuald Masnicki, Cristian Zet

2870	Upon the Effect of Transposed Phasing on the Magnetic Field Produced by Overhead Power Lines	Salceanu A., Paulet M., Lunca E.
2876	Improved Technique for Measuring the Number of Defects in Automotive Agile SW Development	Sandu I. A., Salceanu A.
2462	What Should Be Measured Using Static Energy Meters	Masnicki R., Mindykowski J.
3619	Electrospinning Application on Fabrication of PMMA Nanofibers Membranes for Electrochemical Sensors	Postolache O., Macovei S., Trandabat A. F., Hogas I.
2810	Measuring skin's electrical properties with ECG electrodes	Iusan A. R., Birlea N.M.
3060	Design and Use of the Callflow Module in Executable Choreographies for IoT	Damian C., Toader S.T., Alboaie S., Panu A., Ursache C., Sava D.D.

International Workshop with Industry on Electromagnetic Properties of Materials and Dedicated Applications

14.30 - 16:00, E316 Hall, Faculty of Electrical Engineering

Chairmen: Gianluca Cicala, Angela Daniela La Rosa, Romeo Ciobanu

2714	Life Cycle Assessment of Microwave Activated Hot-Melt Adhesives	La Rosa A.D., Ursan G.A., Aradoaei M., Ursan M., Schreiner C.M.
2716	Susceptor Assisted Microwave Processing of Polymers for Adhesive Production	La Rosa A.D., Ursan G.A., Aradoaei M., Ursan M., Schreiner C.M.
3294	In House Development and Testing of Nanostructured Inks for Inkjet Printed Sensors	Macovei S.C., Schreiner C.M., Trandabat Al.F., Donose C.
3589	Specific Tests Concerning Microwave Sterilization Efficiency of Combined Plastic and Paper Waste	Ciobanu R.C., Batrinescu Gh., Banciu A.R., Ursan G.A., Aradoaei M.

3657	Limits and Particularities of the Synthesis of Ba _{1-x} CaxTiO ₃ for Piezoelectric Applications, by Topochemical Conversion from Molten Salt Solutions	Vlaicu I.D., Maček Kržmanc M., Maraloiu A.V., Ghica D., Mercioniu I.F., Ștefan M., Vlaicu A.M., Negrea R.F., Kuncser A.C., Bulat S., Ciobanu R.C., Plopa O.
	Theoretical and experimental study of BaTiO ₃ -based perovskites solid solutions and BaTiO ₃ /SrTiO ₃ heterostructures	Rusevich L., Zvejnieks G., Kotomin E.A., Marjeta Maček Kržmanc, Kunej S., Vlaicu I.

Education in Electrical and Power Engineering

14.30 - 16:00, E1 Hall, Faculty of Electrical Engineering

Chairmen: Inga Zicmane, Cristian Haba

2490	Innovative Methods of Teaching Students of Technical Universities Taking into Account the Increase in Information Flow	Zicmane I., Berzina K., Kuckovskis J.
2537	Non-Formal Practical Approaches in Electrical Engineering Education	Vatavu C.
2557	Using Petri Net Tool to Study the Dynamic Behaviour of Power Systems Protections	Beniugă O., Beniugă R., Leca M., Sârbu G.C.
3126	Modeling the Symmetrization of Single Phase Receivers Using OrCAD	Darabant L., Czumbil L.
3673	Coherence and Continuity in the Continuing Education of Electrical and Energetic Field Teachers from The Pre-University Environment	Stanciu T., Nițucă C., Chiriac G., Pleșca A.
3581	Analysis of Proposed Innovative Methods for Training Students in IoT and Computer Networks within the Frame of Current Trends in Technical and Vocational Education	Mătășaru P.D., Scripcariu L., Diaconu F.

Electrical Machines I

14.30 - 16:00, E2 Hall, Faculty of Electrical Engineering

Chairmen: Claudia Martis, Adrian Munteanu

2396	Experimental model for measuring the currents in the rotor cage bars of an induction machine	Svoboda M., Musuroi S., Ancuti M-C., Sorandaru C., Biba D.
2413	Performance Evaluation of a 7.5 kW Permanent Magnet Assisted Synchronous Reluctance Machine for Light Electric Vehicles	Nicorici A-M., Oprea C., Marțiș C.

2531	Saturation and cross-saturation in synchronous reluctance machines	Nasui-Zah I., Nicorici A-M., Marțiș C.
2856	Accurate Estimation of the Induced Currents Within the Squirrel-Cage Induction Machine With Thermovision Analysis	Danila A.
3025	Magnetic Circuit Segmentation Effect on a Permanent Magnet Fractional Slot Synchronous Generator	Munteanu A., Virilan B., Livadaru L., Simion Al., Nacu I.
3400	Thermal Analysis of a Low Speed Permanent Magnet Synchronous Generator for Wind Turbine Applications	Nacu I., Munteanu A., Virilan B. , Heireche H., Anghel B.

5th International Workshop on Electromagnetic Compatibility and Engineering in Medicine and Biology II

14.30 - 16:00, E3 Hall, Faculty of Electrical Engineering

Chairmen: Simona Miclăuș, Octavian Postolache

2440	An Analysis of the Spatial-Temporal Variability of the Near Field Components in the Proximity of a TETRA Portable Terminal	Helbet R., Bechet A.C., Stratakis D., Bechet P., Miclaus S.
2628	A Measurement System for the Automatic Survey of the Low Frequency Magnetic Field	Pavel I., David. V., Donose C.
2874	Phasing Effect on the Electric Fields Generated by High Voltage Overhead Power Lines	Salceanu A., Ursache S., Asiminicesei O.M., Lazarescu C.
3104	Monitoring System for Home-Based Hand Rehabilitation	Ciorap R., Andritoi D., Ciorap M., Munteanu M.
3306	Automated Classification of Epileptiform Discharges in EEG Signals Using the Wavelet Transform	Tautan A.M., Munteanu A.I., Taralunga D.D., Strungaru R., Ungureanu G.M.

Power Electronics and Electrical Drives II

14.30 - 16:00, E4 Hall, Faculty of Electrical Engineering

Chairmen: Iulian Birou, Mihai Rață

2387	Analysis of Electrical Energy Flow in a Battery Powered Electric Vehicle, comparing the Economical Mode and the Normal Mode under Real Conditions	Gröper M., Reiss C., Walter M., Weiherer S.
2389	Evaluation and Quantification of the Range Extension of Battery Powered Electric Vehicles in Winter by Using a Separate Powered Heating Unit	Riess C., Walter M., Weiherer S., Gröper M.

2400	Real-Time Co-simulation of Electric Power Steering System	Nemes R.O., Ruba M., Ciornei S.M., Hedesianu H., Martis C., Husar C.
2402	Real-Time Simulation of a Complete Electric Vehicle Based on NI VeriStand Integration Platform	Ciornei S.M., Nemes R.O., Ruba M., Husar C., Hedesianu H., Martis C.
2406	Improving Efficiency of an Asymmetrical Half-Bridge PWM Converter with Synchronous Rectification by a Modified Design Process	Kohlhepp B., Barwig M., Dürbaum T.

Power Systems II

14.30 - 16:00, EN212 Hall, Faculty of Electrical Engineering

Chairmen: Ion Triștiu, Marcel Istrate

2473	Virtual Synchronous Generator for Frequency Response Improving and Power Damping in Microgrids using Adaptive Sliding Mode Control	Afshar Z., Bazargani N.T., Bathae S.M.T.
2601	The Impact of 150MWp PhoAn Solar Photovoltaic Project into Vietnamese QuangNgai - Grid	Duong M.Q., Tran N.T.N., Sava G.N., Leva S., Mussetta M.
3165	Setting the Optimal Control Variables of an UPFC Device using Genetic Algorithms	Sidea D.
2480	A multi-objective approach to improve hydropower dispatching	Stoenescu I.B., Costinas S., Deaconu G.M.
2392	Overview on computational methods of Gas Insulated Substation grounding grid analysis	Muresan A., Jurj D.I., Micu D.D., Andolfato R.
2456	Management of the Electric Energy Distribution Network	Arama I.N., Gaiceanu M.

Electrical Apparatus II

14.30 - 16:00, EN306 Hall, Faculty of Electrical Engineering

Chairmen: Laurențiu Dan Milici, Radu Burlică

2615	A Possibility to Monitoring and Diagnosis of the Joint Coils from Railway Electric Traction	Munteanu A., Adam M., Andrusca M., Dragomir A., Micu M.B., Cardasim M.
2631	Ayrton Relation Applied for Medium Voltage AC Electrical Discharges	Astanei D., Burlica R., Dirlau I.D., Andrusca M.
2635	Overvoltage Differential Protection of Low Voltage Circuits	Burlica R., Astanei D., Dragomir A., Adam M.

2637	Application of Industrial PROFIBUS-DP Protocol	Gabor G., Pintilie C., Dumitrescu C., Nituca C., Plesca A.
3406	Simulating Thermal Phenomena Occurring in Fast Electric Fuses Used for Power Electronic Protection	Patrichi S., Nituca C., Chiriac G., Plesca A., Zhiyuan Liu, Yingsan Geng
3530	Short-circuit Thermal State of a Withdrawable Contact	Adam M., Andrusca M., Dragomir A., Burlica R.

International Workshop on Advances in Rehabilitation Engineering Applications

14.30 - 16:00, E303 Hall, Faculty of Electrical Engineering

Chairmen: Dorin Popescu, Marian Poboroniuc

2605	Functional Testing Procedures and Results for a Rehabilitation Robotic System	Popescu D., Roibu H., Copilusi C.P., Avramescu T.E., Zavaleanu M., Popescu L.C., Marin M.
2612	A Fuzzy Controller to Support FES-Based Sitting-Down in Paraplegia	Poboroniuc M.S., Irimia D.C., Baci A., Bondar T., Nitica I.A., Piseru A. E.
2627	On the Modeling Ion Motion in Electromagnetic Field	Uvarichev F., Ampilova N., Soloviev I.
2720	The Use of CT- Scan with 3- D Reconstruction for Planning Surgery in Children with Tibia Plateau Fractures	Filip F., Petrasuc S., Creteanu M., Craciun M.D., Filip R.

Renewable Energy I

14.30 - 16:00, EN119 Hall, Faculty of Electrical Engineering

Chairmen: Pavel Atănăsoaie, Mircea Gușă

2367	An IoT Load Management System for Residential Photovoltaic Prosumers	Nemeș C., Munteanu F.
2421	Power Management in an IoT Weather Station	Turos L.Z., Csernách G., Csenteri B.
2539	Promoting the Electricity Generation from Biomass in Romania	Atănăsoae P., Pentiu R.D., Milici M.R., Hopiulele E., Mihai I.
2602	Performance Assessment of Low-pass Filters for Standalone Solar Power System	Duong M.Q., Nguyen V.T., Tran A.T., Sava G.N., Le T.M.C.
2632	Efficiency Analysis of Solar Radiation Concentration Technique for a Low Concentration Photovoltaic System	Oprea R., Istrate M., Machidon D., Achiteni D.

2633	Experimental Evaluation of the Optimum Tilt Angle for Fixed Photovoltaic Modules	Oprea R., Istrate M., Machidon D., Beniugă R.
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International Workshop on Assets Modernization and Operation

CNTEE Transelectrica SA, CNR CIGRE, Comisia de Energetica a Sectiei de Stiinte Tehnice a Academiei Romane

14.30 - 16:00, EN109 Hall, Faculty of Electrical Engineering

Chairman: Constantin Bulac

1	Technical risks and solutions from periodic, large surpluses or deficits of variable renewable generation.	Ciprian Diaconu, CNTEE Transelectrica SA
2	The use of robotics in assessment and maintenance of overhead lines Brochure 731/2018.	Marius Oltean, SC SMART SA
3	Large Overhead Lines (OVHL) Crossings	Gheorghita Georghel, INTEC GOPA
4	Innovative ABB FACTS solutions	Angelica Angelhag and Per Halvarsson, ABB Suedia

16.00 – 16.30

Coffee break

16.30 – 18.00

Oral sessions III

Workshop on Trends and Challenges of Automotive Industry

16.30 - 18:00, “Dragomir Hurmuzescu” Conference Hall, Faculty of Electrical Engineering

Chairmen: Daniel Petrișor

2379	Diffusion Models For Predicting Electric Vehicles Market in Morocco	Ayyadi S., Maaroufi M.
2999	Highly Redundant Actuation System Concept with Dual Stator Six Phases BLDC Motor Suitable for Automotive Industry Applications	Irimia N. D., Lazar F. I., Luchian M.
2483	Safety approach in Engineering	Ardeleanu A.S., Ionescu C.S., Petrisor D., Blueher P.
3665	Advanced technologies for intelligent urban electric vehicles - URBIVEL	Martis C., Nicu A.I.

Industry Applications

16.30 - 18:00, E1 Hall, Faculty of Electrical Engineering

Chairmen: Cătălin Daniel Gălățanu, Kristina Berzina, Dorin Lucache

2425	Aspects of Voltage Distribution in Capacitor Batteries	Oancea C.D.
3324	Effect of Non-Thermal Activated Water on Lactuca Sativa L. Germination Dynamic	Padureanu S., Burlica R., Dirlau I.D., Beniuga O., Stoleru V, Patras A.
3623	Strategies for Charging Electric Vehicles in Smart Grid	Darab C.
3526	Parameters Affecting the Resistance of Earth Grounding Installation	Rusu A.V., Lucache D.D.
2521	Analysis of Light Design in Riga Technical University's Lighting Laboratory	Berzina K., Zicmane I., Zalitis K.
3707	Reduction in Light Pollution by Measurements According to EN 13201 Standard	Galațanu C.D., Lucache D.D., Canale L., Zissis G.

Electrical Machines II

16.30 - 18:00, E2 Hall, Faculty of Electrical Engineering

Chairmen: Alexandru Simion, Leonard Livadaru

2492	Apparatus for determining the clock hour figure of the vector group of the electrical transformers	Prodan C., Rata G.
2560	Design of High Speed Switched Reluctance Motor	Kocan S., Rafajdus P., Makys P., Bastovansky R.
2565	Design of High Speed Reluctance Synchronous Motor for Automotive Purposes	Skrabak J., Rafajdus P., Makys P., Bastovansky R.
3252	Study on the Autonomous Asynchronous Generator	Chiver O., Neamt L., Barz C., Pop E.
3336	Contributions to conceiving, designing, and experimenting a device for connection phase adjustment (DRFC) to a limited displacement short mobile coil motor (MBMS)	Georgescu D.S., Pentiu R.D., Nițan I., Ungureanu C.
3478	On the Main Flux of an Induction Machine Asymmetrical Supplied	Cociu V.R. , Cociu L.
3484	On the Stator Flux of an Induction Machine Asymmetrical Supplied	Cociu V.R. , Cociu L.

Electromagnetic Field and Electrical Circuits

Computer Science Applications in Electrical Engineering

16.30 - 18:00, E102 Hall, Faculty of Electrical Engineering

Chairmen: Camelia Petrescu, Radu Ursulean

2482	Influence of the Patch Antenna Feeding on their Parameters	Constantinescu C., Munteanu C., Pacurar C., Racasan A.
2510	Shielding Effectiveness Simulation for the Air Vents of an Anechoic Chamber	Dina L., Nicolae P., Smarandescu I., Aipu R., Voicu V.
2599	Study of Conducted Electromagnetic Emissions in Automotive Applications using an Artificial Network	Gliga M., Andreica S., Constantinescu C., Munteanu C.
2700	Achievements and Perspectives in Contactless Power Transmission	Marinescu A., Rosu G., Mandache L., Baltag O.
2459	Emotion Recognition Expressed Contextually for Romanian Language	Zbancioc M.D., Feraru S. M.
2589	Methods of Interconnecting Designing Programs Simulation and Optimization in Engineering	Mociran B., Oglejan R.

Power Systems III

16.30 - 18:00, EN212 Hall, Faculty of Electrical Engineering

Chairmen: Constantin Bulac, Mihai Gavrilas

2587	Wide Area Autonomous Restoration System for Medium Voltage Distribution Networks	Polat O., Hasancebi G., Gul O.
2457	Impact of staff competences on power quality – related ship accidents	Mindykowski J.
2722	Current State of Researches in the Development of Energy Systems at Stefan cel Mare University of Suceava	Gheorghiu E.M.C., Poienar M., Milici L.D.
2516	Review of Error Sources in One-End Data Impedance-Based Fault Location Algorithms	Dragomir M., Istrate M., Dragomir A.
2393	Overview of Electrical Energy Forecasting Methods and Models in Renewable Energy	Jurj D.I., Micu D.D., Muresan A.
2724	Solution to improve the quality of electricity in low voltage networks	Cenusa M., Poienar M., Milici L.D.

Renewable energy II

16.30 - 18:00, EN119 Hall, Faculty of Electrical Engineering

Chairmen: Jurij Avsec, Ciprian Nemeş

2410	Energy and Thermo-economic Analysis of Energy Devices	Avsec J., Novosel U.
2496	Establishing an Optimal Residential RES PV Source by Modelling	Barote L., Marinescu C.
3042	Optimized Implementation of Small Hydropower Plants on a River. Case Study	Moldoveanu A., Popescu D.
3159	Laboratory Off-Grid Photovoltaic System with Two Axes Orientation	Niţucă C., Chiriac G., Gatu C. I., Cuciureanu D., Murgescu I.
3454	Design and Experimental Studies on Laboratory Photovoltaic Concept for Mechatronics System of Solar Electric Application	Niţucă C., Chiriac G., Gatu C. I., Cuciureanu D., Murgescu I.
2566	Influence of Photovoltaic Power Plants on Single-Phase Faults in Medium Voltage Electrical Networks	Mihaies S., Istrate M.

19.30 – 22.30

Gala dinner

“Motel Bucium” Restaurant

Two buses will leave at 19.00 o'clock: one in front of the Faculty of Electrical Engineering and the other from Moldova Hotel.

Friday, October 19, 2018

Poster session I

09.00 – 10.30, The Hall of the Lost Steps, “Alexandru Ioan Cuza” University Building A

Chairmen: Radu Voinea Cociu, Liviu Breniuc, Adrian Pleşca, Gheorghe Grigoraş

2579	Thermal Analysis of Tankless Heating System Using PLC	Pintilie C., Plesca A., Gabor G., Nituca C., Adam M., Dragomir A.
2598	Assessment of Data Center Energy Efficiency. Methods and Metrics	Dumitrescu C., Plesca A., Dumitrescu L., Adam M., Nituca C., Dragomir A.

2617	Aspects regarding the Monitoring of Electrical Equipment from Electric Traction	Munteanu A., Adam M., Andrusca M., Dragomir A., Micu M.B.
2624	About Monitoring of Medium Voltage Circuit Breakers with SF6	Andrusca M., Adam M., Dragomir A., Astanei D., Andrusca L.
3418	Thermal Modeling and Simulations for Fast Electric Fuses	Patrichi S., Plesca A., Nituca C., Chiriac G., Jianhua Wang, Xinjian Huang
2403	The study of chaotic behaviour in the marine power system containing nonlinear varying load	Jankowski P., Pilat A., Tarasiuk T.
2814	Voltage Stability Assessment based on a Load Flow Sensitivity Method	Toma R., Gavrilas M.
3264	Considerations Regarding Implementing Wide Area Monitoring, Protection and Control in North – East of Romanian Power Grid	Miron A., Popa C., Bobric C.E., Dragomir M.
2494	Implementation and Dynamic Validation of an Adaptive Protection System during Microgrid Restoration	Valov M., Nuschke M.
3551	Modeling energy hub operating modes with demand side management usage	Veremiichuk Y., Prytyskach I., Yarmoliuk O., Opryshko V., Mahnitko A., Berzina K., Zicmane I.
2519	Improving the Fault Location for Transmission Grids using the Existing Measurements	Dragomir M., Filip B., Dragomir A.
2724	Solution to improve the quality of electricity in low voltage networks	Cenusa M., Poienar M., Milici L.D.
2498	A Mathematical Model of Optimal Modes of Operation of an Autonomous Energy Complex for a Typical Graph of Changes in the Energy Loads of a Consumer	Zicmane I., Berzina K.
2630	Analysis of the Renewable Energy Sector's Development Impact on the CO2 Emissions in Romania	Machidon D., Istrate M., Oprea R.
2580	Energy Storage Needs for Clean Power Systems and the Potential Support from Electrical Vehicles	Sanduleac M.
2502	New Techniques Used to Implement Transformation Stations and Protection Functions in Transformation Stations	Trofinov A., Istrate M.D.
2504	New Solution for Impedance Protection Inter-tripping Schemes Implementation	Trofinov A., Istrate M.D.

2621	Automatic Reconfiguration of Medium Voltage Power Distribution Networks in Emergency Mode	Stefanescu V., Antohi T., Poienar M.
2595	The Development of an Intelligent Gripper with Freely Programmable Controls	Barz C., Lung C., Chiver O., Jalba C.K.
2981	Automated PCB Component Soldering System	Hnatiuc Mihaela, Iov C.J.
2441	Dimensioning of the Vertical Earth Grounding with Rectangular Contour through Minimizing the Investments Costs	Ciorca C., Maier V., Pavel S.G., Beleiu H.G.
2499	Improving the Performance of a Vibration Electromagnetic Actuator Based on Active Magnetic Springs	Girtan N.B., Olaru R.
2544	Temperature influence in Direct Green 26 dye degradation rate with non-thermal plasma	Beniuga O., Dirlau I.D., Astanei D., Burlica R.
2635	Evaluation of Reactive Species Produced in Water by GlidArc Plasma	Astanei D., Gouillou C., Dirlau I.D., Beniuga O., Burlica R.,
2828	New Method to Assess the Energy Efficiency and Energy Effectiveness to the Industrial End-Users	Ionescu C.V., Darie G.
2933	Modeling of Photovoltaic Panels	Pica C.S., Munteanu R., Pavel S.G., Beleiu H.G.
2991	Virtual Prototyping in Telecommunications. Issues and Solutions	Iov C., Hnatiuc M.
3379	Influence of Surface Gliding Discharges on Organic Pollutants from Aqueous Solutions	Dirlau I.D., Beniuga O., Burlica R., Astanei D.
3466	Morphological, Physiological and Productive Indicators of Lettuce under Non-thermal Plasma	Stoleru V., Dirlau I.D., Burlica R., Astanei D., Beniuga O., Stratulat C., Teliban G., Patras A., Padureanu S.
3525	Economic Advantages in Proper Balancing of Phases in Street Lighting Design	Rusu A.V., Lucache D.D.
3703	Over Grid Connection of Large Photovoltaic Power Plants in Romania	Stefanescu S., Botezan A.
2380	Dynamic genetic algorithm in model for vibrations of power transformer windings	Marks J. , Vitolina S.
2399	Soft Magnetic Composites in the design of Permanent Magnet Synchronous Actuators	Ghita F., Marțiș R., Pop F., Marțiș C., Varaticeanu B., Minciunescu P.
2505	Characteristic Analysis of the USR-60 Rotary Ultrasonic Motor	Ungureanu C., Popa C.D., Pentiuc R.D.
2548	Operation Characteristics of Low Power Asynchronous Motors Supplied by Static	Vlad I., Campeanu A. , Enache S.

	Converters	
3037	Low Speed Permanent Magnet Synchronous Generator for Wind Turbines Applications	Munteanu A., Virlan B., Bobu A., Livadaru L., Nacu I.
3563	Fractional Slot Permanent Magnet Synchronous Generator for Vertical Axis Wind Turbines	Virlan B. , Simion Al., Munteanu A., Nacu I. Livadaru L.
2388	A Programmable Controller Based Condition Monitoring Method for Permanent Magnet Tidal Stream Turbine Generators	Barrett M.
3415	An Efficient Method for Fetal Heart Sounds Detection Based on Hilbert Transform	Taralunga D.D., Tautan A.M., Ungureanu G.M.
3597	Specific Absorption Rate Evaluation in Case of Exposure of the Human Body to Radiofrequency Electromagnetic Field Generated by Mobile Communications	Bejenaru O., Lazarescu C., Vornicu S., David. V.
3615	Augmented Reality and Smart Sensors for Physical Rehabilitation	Monge J., Postolache O.
3651	Emotion Analysis Architecture Based on Face and Physiological Sensing Applied with Flight Simulator	Roza V.C.C., Postolache O.
3653	Cyclist Performance Assessment based on WSN and Cloud technologies	Dias A.C., Postolache O.

10.30 – 11.30

Plenary sessions

“Carmen Sylva” Aula, “Alexandru Ioan Cuza” University Building A

Chairman: Alexandru Sălceanu

Prof. Hulusi Bülent Ertan Atılım University Ankara, Turkey	An Approach for Improving Performance of Sensorless Vector Control
Prof. Rachid Outbib University of Aix-Marseille, France	PEM Fuel Cells: from modeling to control

Poster session II

11.30 – 13.00, The Hall of the Lost Steps, “Alexandru Ioan Cuza” University Building A

Chairmen: Livia Cociu, Oana Asimincesei, Constantin Gabriel Sârbu, Bogdan Neagu

2343	Testing Equipment for DC Motor	Oancea C.D., Petre V.C., Boicea V.
2384	Design, Building and Testing of a Low Voltage - High Current Drive for SRMs Used for HVAC Applications	Cosman S.I., Boanca V.I., Oprea C., Martis C.S.
2586	An Efficient Method for Studying the Motion Graphs Optimization in Electric Drive Systems	Rata M., Rata G.
2656	FPGA Implementation of BLDC Motor Driver with Hall Sensor Feedback	Mihalache G., Aleodor D.I.
3009	98.2% Efficiency, Low Cost, 6.6-kW AC/DC Converter for HEV/EV On-board Charger	Berzan V., Ermurachi I., Lucache D., Albu M.
2551	Evaluation of the measurement uncertainty in thermoresistances calibration	Sarbu C.
2552	Evaluating measurement uncertainty of thermocouples calibration	Sarbu C., Beniuga O.
2454	Faster R-CNN: an Approach to Real-Time Object Detection	Gavrilescu R., Fosalau C., Zet C., Skoczylas M., Cotovanu D.
2608	Detection of traffic signs based on Support Vector Machines classification using HOG features	Cotovanu D., Zet C., Skoczylas M., Fosalau C.
2764	Wideband Three-axis Magnetic Field Sensor	Lunca E., David V.
3064	Using Double-Check Mechanism in IoT Software Environments	Damian C., Alboaie S., Panu A., Ursache C., Mastaleru R., Alboaie L.
2540	Sensors and Transducers Laboratory Kiosk	Brinzila M., Sarmasanu C., Ciudin D., Lacatusu D.
2541	Smart Sensors For An Alarm System Using ARM Microcontroller	Brinzila M., Sarmasanu C., Gonçalves J. M., Lacatusu D.
3585	Cloud Platform for Medical Data Acquisition and Physician-Patient Interconnection	Nita L.
2542	Driver monitoring using face recognition based systems	Leonte C., Fosalau C., Zet C., Petrisor D.
2949	OFDM Benchmark for demodulation impairments evaluation	Ghinda I., Donciu C.
3068	OFDM based on FFT decoder with non-integer argument	Ghinda I., Donciu C.

3070	Video coordination system for textile manufacturing process	Harasim E., Ghinda I., Donciu C.
3072	Mini patterns algorithm for industrial applications	Harasim E., Ghinda I., Donciu C.
2486	The Impact of Small Non-linear Load Operation on Accuracy of the Intelligent Measurement System	Belany P., Bolf A., Novak M., Roch M.
3201	A PSO Algorithm for Phase Load Balancing in Low Voltage Distribution Networks	Toma N.C., Ivanov O., Neagu B.C., Gavrilas M.
2860	Influence of Sampling Size in Profiling Process of Electricity Consumption at Small and Medium Enterprises	Grigoras G., Neagu B.C., Scarlatache F.
3699	Overview on Distributed Generation Integration in Distribution Systems	Gavrilas M., Neagu B.C., Pentiu R.D., Hopulele E.
2584	Comparison between different power supplies used for cold plasma discharge: parameters of treated distilled water	Lungu C.V., Wartel M., Hnatiuc B.
2481	Influence of a Highly Nonlinear Load on Power Quality in a Steel Factory	Baiceanu F. C., Rosu C.M.L., Munteanu F.
3150	Overview of Electrical Energy Forecasting Methods and Models in Renewable Energy	Jurj D., Micu D.D., Muresan A.
3555	Analysis of Electric Energy Supply Security Attached to Renewable Energy Sources Implementation	Veremiichuk Y., Zamulko A., Mahnitko A., Berzina K., Zicmane I.
2314	Using Continuous Education Courses to Improve Learning Experience	Haba C.G.
2320	Trends in Scientific Research Published in International Conference on Electrical and Power Engineering (EPE) Conference Series	Haba C.G., Dîrlau I.D.
2339	The Expert's Competence Evaluation in Electrical Engineering Education	Gordiyenko T., Velychko O., Salceanu A.
2351	The Group Expert Evaluation in Electrical Engineering Education	Gordiyenko T., Velychko O., Salceanu A.
2355	Educational Platform for Developing and Prototyping Electronic Assemblies	Dinu C., Petre V.C.
2373	Educational Platform for LCD Displays	Petre V., Oancea C.D.
2547	Educational Resource for Wind Turbine Behaviour Assessment	Beniugă R., Istrate M., Beniugă O., Machidon D.
2458	An Approach of FPGA Technology in Skin	Chiuchisan I., Geman O.

	Lesion Detection	
2465	Modeling the Currents Induced in the Human Body by an Overhead High Voltage Power Line	Paulet M.V., Lazarescu C., Salceanu A.
2475	Aspects Regarding Disturbances Produced by Fluorescent Tubes	Enache S., Campeanu A., Vlad I.
2616	The Quality of Electricity Assessment in Marine Power Systems	Dobref V., Popov P., Mocanu V.
2618	Determination and Comparison of Heart Rate Variability and Pulse Rate Variability	Podaru A.C., David. V., Asiminicesei O.M.
2629	A Survey of the Magnetic Field in a MRI Area	Pavel I., David. V., Podaru A.C.
2748	Future Trends in Exergaming using MS Kinect for Medical Rehabilitation	Chiuchisan I., Geman O., Postolache O.
2750	Body Sensor Networks and Internet of Things for Management and Screening of Patients with Diabetic Neuropathy	Geman O., Chiuchisan I., Hagan M.
2804	Response Surface Model Prediction of Deep Brain Stimulation Applied in Parkinson's Disease Tremor	Geman O., Chiuchisan I.

2nd Workshop on Internet of Things

11.30 - 12.30, "Gheorghe Asachi" Library, "Alexandru Ioan Cuza" University Building A

Chairmen: Cristian Haba

International Workshop "Romanian Power Engineering Centenary"

10.00 - 12.30, "Dragomir Hurmuzescu" Hall, Faculty of Electrical Engineering

Chairmen: Victor Vaida, Mihai Gavrilas

13.00 – 13.30

Closing ceremony

"Carmen Sylva" Aula, "Alexandru Ioan Cuza" University Building A

13.30 – 14.30

Lunch

Faculty of Electrical Engineering, Main (Entrance) Hall.

Two buses will leave from "Alexandru Ioan Cuza" University to Faculty of Electrical Engineering.



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