



TECHNICAL UNIVESRITY OF CLUJ-NAPOCA



CNTEE TRANSELECTRICA SA



PROGRAM

MPS 2015
MAIN SPONSOR



MPS 2015
SPONSOR



SECRETARIAT

AVE ACCOMODATION & AURA
EVENTS

Mirela Giurgiu tel. 0745256068

Monday / Luni – 18 May 2015

16⁰⁰- 19⁰⁰ Registration open* – *Grand Hotel Napoca*

19⁰⁰ -23⁰⁰ **Welcome cocktail** – *Grand Hotel Napoca*

Tuesday / Marti – 19 May 2015

10⁰⁰ – 11³⁰ **Opening Ceremony & Plenary sessions** – *Cluj Arena Conference Hall*

11³⁰ – 12³⁰ **Panorama Coffee Break** – *Cluj Arena*

13⁰⁰ – 15⁰⁰ **Poster session** – *Grand Hotel Napoca*

14⁰⁰ – 15⁰⁰ Lunch

15⁰⁰ – 18⁰⁰ **Round tables** – *Grand Hotel Napoca*

Wednesday / Miercuri – 20 May 2015

08³⁰ – 10⁰⁰ **Sessions** – *Grand Hotel Napoca*

10⁰⁰ – 10³⁰ Coffee break

10³⁰ – 12⁰⁰ **Sessions** – *Grand Hotel Napoca*

12⁰⁰ – 12³⁰ Coffee break

12³⁰ – 14⁰⁰ **Sessions** – *Grand Hotel Napoca*

14⁰⁰ – 15⁰⁰ Lunch

15³⁰ – 19⁰⁰ **Technical visit – Salina Turda**

19⁰⁰ – 23⁰⁰ **Conference Banquet** – *Restaurant Sarea-n Bucate, Salina Turda*



Thursday / Joi – 21 May 2015

10⁰⁰ – 12⁰⁰ **Sessions** – *Grand Hotel Napoca*

12⁰⁰ – 12³⁰ **Closing ceremony** – *Grand Hotel Napoca*

*Registration will be open also on 19th and 20th of May / Înregistrarea este posibilă și în zilele de 19 și 20 Mai 2015



MPS 2015



MPS 2015

MAIN SPONSOR



MPS 2015

SPONSOR



SECRETARIAT

AVE ACCOMODATION & AURA
EVENTS

Mirela Giurgiu tel. 0745256068

Tuesday / Marti, 18 May 2015

13⁰⁰ – 15⁰⁰

POSTER SESSION

Chairs: Sorin Pavel, Marius Purcar, Radu A. Munteanu

- 1** **Constantin Buda, Marius Muresan, Adrian Tamas,** *Comparative Calculus of Load Flow in Distribution Networks using Distribution Management System and Paladin Design Base*
- 2** **Constantin Buda, Nicolae Bogdan, Florin Pinte, Speranta Nedelcu, Claudia Hebedean,** *The Replacement of the 110 kV/MV Transformers from the FDEE EDTN Transformer Stations as a Way of Increasing the Efficiency of the Electrical Energy Distribution Activity*
- 3** **Mirela Ilia, Sever Serbu, Mircea Guran, Traian Ilut,** *The influence of the voltage level on losses in medium voltage distribution networks with distributed generation sources*
- 4** **Mircea Horgos, Zoltan Erdei, Cristian Barz, Ionut Birsan, Mirela Ilia,** *Contributions to testing residual current devices at different frequency values*
- 5** **Ladislau Reider, Adela Ordean, Maria Balogh, Mihaela Buda, Speranta Nedelcu, Claudia Hebedean,** *The Replacement of the MV/LV Transformers from the FDEE EDTN Installations as a Way of Increasing the Efficiency of the Electrical Energy Distribution Activity*
- 6** **Sorin G. Pavel, Virgil Maier, Horia G. Beleiu, Vasile Fărcaș,** *Updating in Open Loop Electrical Networks*
- 7** **Victoria-Florica Polec, Virgil Maier,** *Analytical identification of the dependencies corresponding to the maximum energy losses*
- 8** **Cristian Paul Chioncel, Elisabeta Spunei, Cornelia Anghel-Drugarin, Ion Piroi,** *Direct Self Control Structure for the Asynchronous Machine, Implemented in Scilab/Xcos*
- 9** **Lucian Ioan Dulau, Mihail Abrudean, Dorin Bica,** *Power Dispatch in an Electrical Power System with Distributed Generators*
- 10** **Razvan Radu, Dan Doru Micu, Dan Ovidiu Micu, Andrei Ceclan,** *Load ratio influence over the inrush current of a group of distribution transformers*
- 11** **T. György, Karoly A. Biró,** *Loss Analysis of a Low Power Induction Machine with External Rotor*
- 12** **Marius Dranca, Valentin Zaharia, Mihai Chirca, Mircea M. Radulescu, Frédéric Gillon,** *Design and numerical magnetic field analysis of switched reluctance generators*
- 13** **Moldan Dorin Ioan, Razvan Păcurar,** *Finite element analysis to estimate the mechanical behavior of a tripod used in emergency situations*
- 14** **Claudia Hebedean, Calin Munteanu, Adina Racasan, Claudia Pacurar,** *Planar Transformers Improvement in the Conducted Emissions Frequency Range*
- 15** **Adina Racasan, Calin Munteanu, Claudia Pacurar, Claudia Hebedean, Bogdan Mociran,** *Conducted Electromagnetic Emissions Analysis and Suppression Methods*
- 16** **Claudia Pacurar, Vasile Topa, Calin Munteanu, Adina Racasan, Claudia Hebedean, Raluca Oglejan, Gabriel Vlad,** *Solenoid Actuator Parametric Analysis and Numerical Modeling*
- 17** **Elena Dănilă, Dorin Dumitru Lucache,** *PV power source estimation for a custom-designed growing-plant lighting system*
- 18** **Florin Miron, Marius Purcar, Calin Munteanu,** *Numerical Computation of the Electric Field inside a High Voltage Substation*
- 19** **Teodora Susana Oros, Ioan Berinde, Ioan Vadan,** *Voice Coil Generator for a Free-Piston Stirling Engine*
- 20** **Alexandru Cătălin Micaciu, Ioan Gheorghe Vuscan, Radu-Mircea Morariu-Gligor,** *Grinding Procedure o Helical Lip Surfaces o End Mill Cutters*
- 21** **A. T. Popescu, Liviu Miclea,** *Design and Prototype of a Gait Analysis Device*
- 22** **Marius-Daniel Roman, Mircea-Vlad Mureșan,** *Process optimization of aeration in the biological treatment using fine bubble diffusers*
- 23** **Ioan Virag, Lăcrămioara Stoicu-Tivadar,** *A Survey of Web Based Medical Imaging Applications*
- 24** **Alexandra Dalia Danilescu, Corneliu Rusu,** *Morphological image processing for road anomalies detection using 2D images and video data*
- 25** **Rodica Maria Bogza, Laura Bacali,** *Bus matrix and multidimensional models for data warehouse systems*

Tuesday / Marti, 18 May 2015

15⁰⁰ – 18⁰⁰

ROUND TABLES

15⁰⁰ – 17⁰⁰ CIGRE C2 & C4 with IRE – *Grid Operation and Power Quality Aspects Concerning a Big Number of Wind and Photovoltaic Power Plants Integration / Operarea SEN si aspecte de calitatea energiei electrice in conditiile integrarii unui numar mare de CEE si CEF* – **moderators:** Doina Ilisiu and Carmen Stanescu

17⁰⁰ – 18⁰⁰ LST – *Modern solutions for High Voltage Lines and Power Transformers belonging to National Grind Live Line Maintenance / Solutii moderne de mentenanta sub tensiune a liniilor electrice aeriene si a transformatoarelor de putere din Sistemul Electroenergetic National* – **moderator:** Marius Oltean



MPS 2015



**MPS 2015
MAIN SPONSOR**

Electrogrup

**MPS 2015
SPONSORS**

SIEMENS

SECRETARIAT

AVE ACCOMODATION & AURA
EVENTS

Mirela Giurgiu tel. 0745256068



MPS 2015



MPS 2015

MAIN SPONSOR



MPS 2015

SPONSOR



SECRETARIAT

AVE ACCOMODATION & AURA
EVENTS

Mirela Giurgiu tel. 0745256068

Wednesday / Miercuri, 19 May 2015

8³⁰ – 10⁰⁰

TRANSMISSION SYSTEMS OPERATION, CONTROL AND DEVELOPMENT

Chair: *Ciprian Diaconu*

1. **Gheorghe Indre, Daniel Balaci, Dan Gheorghe Vrabie**, *The role and the importance of the technical regulations for the reliability of the interconnected power systems*
2. **Doina Ilişiu, Daniela Fircă**, *The process of Wind and Photovoltaic power plants from ATR to the operation*
3. **Doina Ilişiu, Daniela Fircă**, *System operation in presence of large Wind and Photovoltaic Power Plants*
4. **Valentin Vilcu**, *Reservation of the Bus bar Differential Protection with Distance Protection using IEC61870 Protocol*
5. **Simona - Louise Voronca, Ştefan - Dominic Voronca**, *Survey of existing risk assessment and management standards applied worldwide, for power companies*
6. **Gheorghe Grigoraş, Bogdan Constantin Neagu**, *Market Clearing Price Forecasting in Deregulated Electricity Markets Using a Fuzzy Approach*

ANALYSIS, MODELING, SIMULATION AND OPTIMAL DESIGN IN POWER SYSTEMS

Chair: *Radu Porumb*

1. **Constantin-Cosmin Andronachi, Marcel Istrate**, *Design and Simulation of a Network for Testing a Shunt Switch*
2. **Alin Dragomir, Maricel Adam, Mihai Andruşcă, Adrian Munteanu**, *Long Term Thermal Stresses of a Withdrawable Electrical Contact*
3. **Dragos Machidon, Marcel Istrate**, *Weather influence analysis on the lightning protection current estimation*
4. **Petre-Marian Nicolae, Ileana-Diana Nicolae, Dinut-Lucian Popa, Marian-Stefan Nicolae, Ionut Daniel Smarandescu**, *Issues Related to Voltage Measurement Transformers from a Power Group*
5. **Radu Porumb, Cornel Toader, Nicolae Golovanov, Constantin Bulac, Ion Triştiu**, *Assessment of the Energy Efficiency in Two-Windings Three-Phase Transformers under Harmonic and Unbalanced Regime*
6. **Muth Tudor, Horia Balan**, *Economical and Constructional advantages of HVDC*

10³⁰ - 12⁰⁰

DISTRIBUTION SYSTEMS AND DISPERSED GENERATION 1

Chair: *Radu Pentiu*

1. **Ladislau Reider, Adela Ordean, Maria Cioroslan, Alexandru Avram**, *Determination of Energy Losses Generated when Connecting Power Producers to Medium Voltage Distribution Networks*
2. **Daniel-George Dumitraşcu, Horia-Cornel Bălan**, *Distributed Generation Effects on the Voltage Profile of a Feeder*
3. **George Seritan, Ion Triştiu**, *Continuity of supply, a key parameter for smart grids' resilience evaluation*
4. **Catalin Moldovan, Ovidiu Georgescu, Claudiu Damian, Dorel Jeflea**, *Voltage levele increase in low voltage networks through reactive power compensation using capacitors*
5. **Ioan Berinde, Teodora Susana Oros, Horia Balan**, *Simulation of Operation of a Wind Turbine at Different Wind Speeds*
6. **Ioan Vasile Bărburaş, Tudor Mihai Petrovan, Ichim Năsui, Stelian Bugnar, Ioana Năsui Zah, Ioan Boiciuc**, *Detecting The Fault Location Using Traveling Wave*

ELECTROMAGNETIC COMPATIBILITY, POWER QUALITY AND ENVIRONMENTAL ASPECTS

Chair: *Petre Nicolae*

1. **Carmen Stanescu, Ştefan Gheorghe, Doina Ilişiu, Mihai Sarb, Petru Postolache**, *The Distributed Generation and TSO's Power Quality*
2. **Ileana-Diana Nicolae, Petre-Marian Nicolae, Marian-Ştefan Nicolae**, *Tunning the Parameters for the FFT Analysis of Waveforms Acquired from a Power Plant*
3. **Sorin Nistor, Cătălin Mihai, Călin Munteanu**, *Power quality analysis to connection a PV park at power network in order to obtain the certificate of conformity*
4. **Petre-Marian Nicolae, Camelia-Mihaela Stoica, Livia-Andreea Dina, George Mihai**, *Considerations Concerning Disturbances Generated by a Personal Computer in a Semianechoic Chamber*
5. **A. R. Vulea; Dan Iudean; Radu A. Munteanu; Calin Muresan; Romul Copindean**, *Carbon Monoxide Levels in a Medium Size European City*
6. **Tudor Plesa, Viorel Trifa, Calin Plesa**, *Aspects Concerning Human Body Therapy using Electromagnetic Field*

Wednesday / Miercuri, 19 May 2015

12³⁰ – 14⁰⁰

**DISTRIBUTION SYSTEMS AND DISPERSED
GENERATION 2**

Chair: Andrei Czikar

1. **Pavel Atănăsoae, Radu Pentiu, Eugen Hopulele**, *The Reliability Evaluation of the Electrical Substations with Various Connection Schemes*
2. **Bogdan Constantin Neagu, Gheorghe Grigoraș**, *Data Mining Tools in Electricity Distribution Systems*
3. **Ioan Rusu, Cristiana Ionete, Florin Plesa, Claudiu Vasile**, *Reducing Electricity Acquisition to Cover Internal Energy Consumption of Distribution Operators by using Photovoltaic Panels in 0,4kV Network*
4. **Adrian Munteanu, Maricel Adam, Mihai Andrușcă, Adrian Cotruș**, *Aspects about Supply Systems in Railway Electric Traction*
5. **Lucian Ioan Dulau, Mihail Abrudean, Dorin Bica**, *Economic Issues of Distributed Generation in Power Networks*
6. **Călin Muresan, Radu A. Munteanu, Florin Dragan, Adrian O. Marza, Bogdan Tebrean**, *Application for Implementing the p-q Theory in a Three Phase System*

**RENEWABLE ENERGY AND ENERGY
MANAGEMENT**

Chair: Mihai Gavrilaș

1. **Roxana Aftanase, Mihai Gavrilaș, Ovidiu Ivanov**, *A Survey on Recent Home Energy Management Systems for Demand Response Programs*
2. **Radu Porumb, George Seritan**, *Load profiles definition for the electrical distribution operator*
3. **Ciprian Nemeș, Florin Munteanu, Dragoș Astanei**, *Annual energy harvest of LACARP photovoltaic system*
4. **Mihaela Coroiu, Mircea Chindris**, *Geothermal Energy For Residential Co-Generation*
5. **Mihaela Coroiu**, *Methodology for Energy Efficiency Evaluation*,
6. **Laurentiu Gimpirea**, *3M s(MART) I(nfrastructure) M(angement) S(ystem) - 3M sIMS - Centrally supervised access control and monitoring of network equipment and assets in outdoor locations*



MPS 2015



MPS 2015

MAIN SPONSOR



MPS 2015

SPONSORS

SIEMENS

SECRETARIAT

AVE ACCOMODATION & AURA
EVENTS

Mirela Giurgiu tel. 0745256068



MPS 2015



**MPS 2015
MAIN SPONSOR**



**MPS 2015
SPONSORS**

SIEMENS

Thursday / Joi, 20 May 2015

10⁰⁰ – 12⁰⁰

ELECTROMAGNETICS 1

Chair: Dan Doru Micu

1. **Laurențiu Florin Bădilă**, *Design and Implementation of an Asynchronous Bidimensional Optical Radiation Curtain for Advanced Object Shape Detection*
2. **Karolina Kasas-Lazetic, Dejana Herceg, Nikola Djuric, Miroslav Prsa**, *Modeling Composite Aluminum Conductors for Electric Field Determination*,
3. **Madalin Conecici, Calin Munteanu, Marius Purcar**, *Magnetic field simulation of a Miniature Circuit Breaker's Coil*
4. **Ioana-Gabriela Sîrbu, Dan-Gabriel Stănescu**, *The Influence of the Harmonics in the Contactless Power Transfer Systems*
5. **Ioana-Gabriela Sîrbu**, *Study on the Influence of a Magnetic Core on the Coupled Coils Behavior*
6. **Marcus Svoboda, Lucian Tutelea, Gheorghe Madescu, Marius Biriescu, Martian Mot**, *Modeling of Symmetrical Squirrel Cage Induction Machine with MatLab Simulink*
7. **Călin Mureșan, Valentin Dan Zaharia, Dan Iudean, Titus E. Crisan, Romul Copîndean**, *Computing the Symmetrical Components of a Three Phase System Using TFD*
8. **Dumitru Spermezan, Cristina Chiorean, Horia Balan**, *Simulation from DC to AC commutation using a power inverter and filters*

ELECTROMAGNETICS 2

Chair: Mihai Munteanu

1. **Sergiu Hartopanu, Marian Poboroniuc, Florin Serea, Danut Irimia, Gheorghe Livint**, *New Issues on FES and Robotic Glove Device to Improve the Hand Rehabilitation in Stroke Patients*
2. **Mihai Munteanu, Silviu Muntean, Flavia Munteanu, Rozica Moga, Radu Ciorap**, *Low Cost Wireless System for Monitoring Ambient Parameters in Clinical Environment*
3. **Bianca Enache, Irina Giea**, *A method for implementing, simulating and analyzing a Voice over Internet Protocol network*
4. **Calin Plesa, Roman Morar, Tudor Plesa**, *Optimal Configurations of the ILES Separator, in order to Ennoble the Quartz Sand through Electroseparation*
5. **Mircea-Emilian Ardeleanu**, *Aspects of young people's orientation towards a career in electrical engineering*
6. **Ioan Rusu**, *Photons - Corpuscles with Mass and Negative Electrostatic Charge*
7. **Ioan T. Pop, Florentina Raducanu, Calin Munteanu**, *Recent developments concerning the Investment Works Risk Management in the Romanian Power Grid Company-Transelectrica SA*

SECRETARIAT

AVE ACCOMODATION & AURA
EVENTS

Mirela Giurgiu tel. 0745256068