

At-a-Glance Program

| WEDNESDAY 16.06.2021 | | | THURSDAY 17.06.2021 | | |
|----------------------|--|---|---------------------|-------------------------------------|--|
| 9:00 | Opening Ceremony | | 9:00 | Plenary Session 3 | |
| 9:30 | Chair: <i>Calin Munteanu</i> | | 10:00 | Chair: <i>Calin Munteanu</i> | |
| 9:30 | Plenary Session 1 | | 10:00 | Smart Grids for Buildings | Electromagnetics (1) |
| 10:30 | Chair: <i>Dan Doru Micu</i> | | 11:30 | | Power Electronics |
| 10:30 | Distributed Generation in Smart Grids | Analysis, Modeling and Optimization (1) | 12:00 | Automation & Protection | Electromagnetics (2) |
| 12:30 | Transmission System Operation & Overhead Lines | Analysis, Modeling and Optimization (2) | 13:30 | | Electric Machines and Drives |
| 15:00 | Plenary Session 2 | | 14:30 | Plenary Session 4 | |
| 16:00 | Chair: <i>Sergiu Dan Stan</i> | | 15:00 | Chair: <i>Calin Munteanu</i> | |
| 16:00 | Renewable Energy - PV & Wind | Energy Market | 15:00 | IoT in Electrical and Power Systems | Education in Electric and Power Engineering & Electromagnetics (3) |
| 17:45 | | Robotics & Medical Engineering | 16:45 | | Analysis, Modeling and Optimization (3) |
| | | | 17:00 | Closing Ceremony | |
| | | | 17:30 | Chair: <i>Calin Munteanu</i> | |

Full Technical Program

| WEDNESDAY 16.06.2021 | | | |
|----------------------|--|---|---|
| 9:00 | Opening Ceremony | | |
| | Chair: <i>Calin Munteanu</i> | | |
| 9:30 | Plenary Session 1 | | |
| | Chair: <i>Dan Doru Micu</i> | | |
| 10:30 | Distributed Generation in Smart Grids | Analysis, Modeling and Optimization (1) | Electromagnetic Compatibility |
| | Chairs: <i>Alexis Polycarpou, Radu Porumb</i> | Chairs: <i>Mihai Gavrilas, Ion Tristiu</i> | Chairs: <i>Paul Bechet, Claudia Pacurar</i> |
| 1 | ID 75: <i>Smart Grid Lab Hessen – a Real-Life Test Environment for Active Distribution Grids</i> Athanasios KRONTRIS, Sophia PFEFFER, Till NEUKAMP, Ingo JEROMIN, Matthias PFEFFER | ID 14: <i>Aspects of Data Models Compatibility within Substation Hybrid LAN's</i> Danut Adrian POSTOVEI, Constantin BULAC, Ion TRISTIU, Balduino CAMACHI, Buddhika KANDAMULLA, Vlad SANDULEAC | ID 67: <i>A Comparative Assessment of Magnetic Concrete versus Ferrite for a High Power Inductive Coupler</i> Andrei MARINESCU, Tiberiu TUDORACHE, Adrian VINTILA, Ionel DUMBRAVA |
| 2 | ID 72: <i>Optimization of Electricity Power Losses using Smart Metering Systems in Romania</i> Claudia Maria MURESAN, Paul MURESAN, Dan Doru MICU, Andrei CECLAN, Levente CZUMBIL, Olimpia Smaranda MINTAS | ID 46: <i>A Novel Concept for Designing the Energy Efficiency Programs</i> MIHAELA A. COROIU, Mircea CHINDRIS | ID 84: <i>A Method Based on Amplitude Probability Density Representation for Sounding High Frequency Noise in Ionospheric Channels</i> Emil SORECAU, Neculai CRAIU, Paul BECHET, Simona MICLAUS, Iulian BOULEANU |
| 3 | ID 95: <i>Optimal Location of a PV System using Grey Wolf Optimizer and Operation Analysis</i> Constantin GHINEA, Mircea EREMIJA, Dorian SIDEA, Lucian TOMA | ID 65: <i>Extracting the Operating Characteristics of Hydropower Plants Using a Clustering-based Efficient Methodology</i> Razan GARBEA, Florina SCARLATAACHE, Gheorghe GRIGORAS, Bogdan Constantin NEAGU | ID 112: <i>Real Time Broadband Electromagnetic Spectrum Monitoring System based on Software Defined Radio Technology</i> Robert HELBET, Paul BECHET, Simona MICLAUS, Annamaria SARBU |
| 4 | ID 118: <i>Multi-Objective Optimal Renewable Distributed Generator Integration in Distribution Systems Using Grasshopper Optimization Algorithm Considering Overcurrent Relay Indices</i> Nasreddine BELBACHIR, Mohamed ZELLAGUI, Samir SETTOUL, Claude Ziad EL-BAYEH | ID 123: <i>An Improved Metaheuristic Algorithm for Load Balancing in LV Distribution Networks</i> Ovidiu IVANOV, Bogdan Constantin NEAGU, Andrei-Ioan NITU, Mihai GAVRILAS | ID 142: <i>Optimization of the Control Circuit of a Wireless Power Supply System</i> Marian Razvan GLIGA, Calin MUNTEANU, Sergiu Iulian ANDREICA, Claudia PACURAR, Adina GIURGIUMAN, Claudia CONSTANTINESCU |
| 5 | ID 108: <i>Assessment of the Romanian Pilot Site Energy Consumption Indicators and Technical Prerequisites in the Implementation of the RE-COGNITION Horizon Project</i> Timea FARKAS, Levente CZUMBIL, Mihaela CRETU, Laura DARABANT, Denisa STET, Andrei CECLAN, Alexis POLYCARPOU, Dan Doru MICU | ID 154: <i>Improved Performance of Grid-Connected Photovoltaic System Based on Fractional-Order PI Controller and Particle Swarm Optimization</i> Marcel I. NICOLA, Claudiu I. NICOLA | ID 129: <i>The Influence of the Geometric Shapes of the Component Elements of the Planar Filter on its Parameters</i> Adina GIURGIUMAN, Calin MUNTEANU, Claudia PACURAR, Claudia CONSTANTINESCU, Marian Razvan GLIGA, Sergiu Iulian ANDREICA |
| 6 | ID 25: <i>Smart Hub Electric Energy Data Aggregation Platform for Prosumers Grid Integration</i> Mihaela A. COROIU, Mircea CHINDRIS, Daniel DUMITRASCU | ID 82: <i>Regressive Model and Artificial Intelligence for Long-Term Load Forecasting: A Study Case for Brazil's Southern Subsystem</i> Bruno KNEVITZ HAMMERSCHMITT, Alzenira da Rosa ABAIDE, Fernando GUILHERME KAEHLER GUARDA, Felipe Cirolini LUCHESE, Marcelo Bruno CAPELETTI, Alexandre Schopf DA SILVEIRA, Criciele Castro MARTINS | ID 141: <i>Interlaboratory Comparison of Electromagnetic Fields in Power Supply Systems</i> Sergiu Iulian ANDREICA, Calin MUNTEANU, Marian Razvan GLIGA, Adina GIURGIUMAN, Claudia PACURAR, Claudia CONSTANTINESCU, Cristian MORARI |
| 12:00 | | | |

| WEDNESDAY 16.06.2021 | | | |
|----------------------|--|--|--|
| 12:30 | Transmission System Operation & Overhead Lines | Analysis, Modeling and Optimization (2) | Mechatronics |
| | channel 1 | channel 2 | channel 3 |
| | Chairs: <i>Constantin Bulac</i> <i>Marcel Istrate</i> | Chairs: <i>Emil Cazacu</i> <i>Levente Czumbil</i> | Chairs: <i>Florin Popister</i> <i>Emil Teutan</i> |
| 1 | ID 20: <i>A Romanian Solution for Real-time Monitoring of Overhead Transmission Lines</i> Constantin MOLDOVEANU, Irene M. IONITA, Sorin ZAHARESCU, Valentin FLOREA, Nicolae Luca IACOBICI, Ioan HATEGAN | ID 17: <i>Long-Term Energy Analysis of a Wastewater Treatment Plant with Biogas Production- Case Analysis</i> Attila TOKOS, Dan Doru MICU, Alina-Ruxandra CARAMITU, Ioan NASCU, Csaba BARTHA, Monica JIPA, Dorian MARIN, Iosif LINGVAY | ID 62: <i>Research on Optimal Scaling of Parts made from Stainless Steel Material by Selective Laser Melting</i> Razvan PACURAR, Bogdan DANCI, Ancuta PACURAR |
| 2 | ID 144: <i>Studying the Impact of Dynamic Line Rating on the Romanian Power Transmission Grid</i> Oana A. LEBEDOV, Bogdan-Adrian ENACHE, Florin-Ciprian ARGATU | ID 7: <i>Energy Consumption in Wastewater Treatment Plants</i> Attila TOKOS, Csaba BARTHA, Dan Doru MICU, Monica JIPA, Ioan NASCU, Iosif LINGVAY | ID 149: <i>A Comparative Analysis of Model-Based Control Methods Applied for the Active Suspension System</i> Horatiu DIUDEA, Tiberiu BALDOGI, Radu N. BALAN |
| 3 | ID 66: <i>Study of Lightning Strokes on HV Overhead Power Lines</i> Anca - Teona S. SOLOMON, Marcel ISTRATE, Dragos MACHIDON | ID 13: <i>Power Quality Evaluation in Autonomous Wastewater Treatment Plant</i> Csaba BARTHA, Attila TOKOS, Dan Doru MICU, Monica JIPA, Dorian MARIN, Alina-Ruxandra CARAMITU, Andreea VOINA, Ioan NASCU, Iosif LINGVAY | ID 150: <i>Improving the Vibration Reliability Testing Process</i> Tiberiu BALDOGI, Horatiu DIUDEA, Radu N. BALAN |
| 4 | ID 134: <i>Deicing System for High Voltage Overhead Power Lines</i> TanTa OVIDIU-MAGDIN, Mihaela PAVAL, Laurentiu Dan MILICI | ID 15: <i>Numerical Analysis of Electro-Pipeline System for Reducing the Corrosion Process</i> Bogdan CHESCA, Valentin IONITA, Lucian PETRESCU, Emil CAZACU, Maria-Catalina PETRESCU | ID 163: <i>Direct-Current Motor Speed Control Using a PID Discrete Controller</i> Iulia CLITAN, Ionut MUNTEAN |
| 5 | ID 87: <i>Aspects Regarding the Presence of TCSC Devices on the Transmission Lines</i> Marian ATANASOAEI, Maricel ADAM, Mihai ANDRUSCA, Alin DRAGOMIR, Cosmin-Nistor DEAC | ID 63: <i>Numerical Modeling Assessment of Electromagnetic Interference between Power Lines and Metallic Pipelines: A Case Study</i> Muresan M. ALEXANDRU, Theofilos PAPAPOULOS, Levente CZUMBIL, Andreas CHRYSOCHOS, Timea FARKAS, Daniel CHIOREAN | ID 164: <i>Proof of Concept System for Supporting Energy Efficiency in Office Buildings</i> Ionut MUNTEAN |
| 6 | ID 94: <i>The Risk Analysis for the Coexistence of Overhead Lines and Urban Green Areas</i> Constantin ZETU, Bogdan Constantin NEAGU, Grigoras N. GHEORGHE, Florina SCARLATA | ID 88: <i>Small-Scale Substation Model – From Design to Implementation</i> Abdullah AL MAHMUD, Scott WANAT, Sorin DELEANU, Marilena STANCIULESCU, Emil CAZACU, Oana DROSU | ID 170: <i>Advanced Control Design for Anti-Lock Braking Systems</i> Roxana RUSU-BOTH, Ionut MUNTEAN |
| 14:00 | | | |

| WEDNESDAY 16.06.2021 | |
|----------------------|---|
| 15:00 | Plenary Session 2 Milos Manic - Title to be nominated Chair: <i>Sergiu Dan Stan</i> |

| WEDNESDAY 16.06.2021 | | | |
|----------------------|--|---|---|
| 16:00 | Renewable Energy - PV & Wind | Energy Market | Robotics & Medical Engineering |
| | channel 1 | channel 2 | channel 3 |
| | Chairs: <i>Renato Rizzo</i> <i>Dan Micu</i> | Chairs: <i>Lucian Toma</i> <i>Silviu Stefanescu</i> | Chairs: <i>Razvan Pacurar</i> <i>Ionut Muntean</i> |
| 1 | ID 99: <i>Geographical Distribution of Renewable Energy Production for Maximum Efficiency and Environmental Sustainability</i> Mahmuda RAHMAN, Shahria TANZIL, Rihad Hasan RITU, Mwanik Derrick KAMUNYA | ID 51: <i>Forecasting Methods to Support the Decision Framework of Prosumers in Deregulated Markets</i> Ioannis PANAPAKIDIS, Nikolaos KOLTSAKLIS, Georgios C. CHRISTOFORIDIS | ID 30: <i>Shape Optimization for the Inscribed Workspace of a Prismatic Actuated 2PRR Parallel Robot</i> Emil TEUTAN, Alexandru OARCEA, Victor COBILEAN, Sergiu-Dan STAN |
| 2 | ID 107: <i>Wind Power in Romania Energy Mix Towards Sustainable Development</i> Razvan BENIUGA, Oana BENIUGA, Dragos MACHIDON, Marcel ISTRATE | ID 100: <i>Demand Side Response in the Electricity Market</i> Shahria TANZIL, Mahmuda RAHMAN, Mwaniki Derrick KAMUNYA, Rihad Hasan RITU | ID 31: <i>Analysis of Kinematic Dexterity based on a 2 DOF Incompletely Restrained Cable-Driven Parallel Robot</i> Victor COBILEAN, Alexandru OARCEA, Sergiu-Dan STAN |
| 3 | ID 19: <i>Identifying the Conditions of Maximum Electricity Demand Coverage, in a Direct Mode, by Wind and Photovoltaic Sources</i> Ion COMENDANT, Iulia PREPELITA, Lilia TURCUMAN | ID 173: <i>Complete liberalization of the energy market a challenge for the household consumer</i> Marius BOLBA, Radu A. MUNTEANU, Andrei CECLAN, Dan IUDEAN | ID 32: <i>Comparative Study of CAD Optimization Features for the Workspace of 3DOF Parallel Robot</i> Alexandru OARCEA, Florin N. POPISTER, Sergiu-Dan STAN, Victor COBILEAN |
| 4 | ID 172: <i>Method for Designing a Photovoltaic System</i> Gina Mihaela LUNA | ID 39: <i>Impact of Demand Side Management on the Self-Sufficiency and Self-Consumption of Buildings with Photovoltaic and Storage Systems</i> Nikolaos S. KELEPOURIS, Angelos I. NOUSDILIS, Aggelos S. BOUHOURAS, Georgios C. CHRISTOFORIDIS, Yerasimos YERASIMO, Nikolas G. CHATZIGEORGIOU, George GEORGHIOU, Gianni CELLI, Susanna MOCCI, Marina GRIGOROVITCH, Erez GAL, Elad TOPEL | ID 36: <i>Trajectory Planning of a 3-RRR Planar Parallel Robot</i> Victor COBILEAN, Alexandru OARCEA, Sergiu-Dan STAN |
| 5 | ID 24: <i>Performance Analysis of Double-Axis Orientating Low Concentration Photovoltaic Systems</i> Dragos MACHIDON, Marcel ISTRATE, Roxana OPREA, Razvan BENIUGA | ID 64: <i>Romanian Innovative System for Power Losses Real Time Monitoring and Analysis in Electrical Transmission and Distribution Systems</i> Constantin MOLDOVEANU, Irene M. IONITA, Virgil BREZOIANU, Sorin ZAHARESCU, Sorin GRIGORESCU, Ioan HATEGAN, Mihai MARCOLT | ID 33: <i>Analytic Synthesis of a Four-Bar Mechanism as Part of a Reclining Mechanism</i> Alexandru OARCEA, Victor COBILEAN, Sergiu-Dan STAN |
| 6 | ID 35: <i>Integrated Approach in Designing Photovoltaic Power Plant</i> Claudia Maria MURESAN, Denisa STET, Stefan CIRSTEIA, Levente CZUMBIL | ID 119: <i>Energy Pulse - the Efficient Solution for Monitoring Electricity Consumption from Decentralized Data Sets</i> Alexandru G. BERCIU, Dacian JURJ, Levente CZUMBIL, Dan Doru MICU, Eva DULF | ID 104: <i>Tissue Thickness and Pressure Measurement Solutions in Life-Saving Surgical Procedures</i> Cosmin DIRZU, Mihai MUNTEANU |
| 7 | ID 159: <i>An Exponential Smoothing Model for Photovoltaic Power Forecasting</i> Luigi Pio DI NOIA, Renato RIZZO | ID 60: <i>New Approach using Optimization Method in Forecasting of the Own Technical Consumption in Distribution Power Grids</i> Adrian GLIGOR, Ilie VLASA, Cristian-Dragos DUMITRU, Emil SAIMAC, Calin MUNTEANU | ID 103: <i>Low Cost Environmental Monitoring System for the Incubators used in Maternity Hospitals</i> Daniel IVASCU, Mihai MUNTEANU |
| 17:45 | | | |

THURSDAY 17.06.2021

9.30

Plenary Session 3

ELECTROGRUP S.A. - Dragos Nedelea - Efficiency Through Smart City Projects

Chair: *Calin Munteanu*

| 10.00 | Smart Grids for Buildings channel 1 | Electromagnetics (1) channel 2 | Power Electronics channel 3 |
|-------|---|--|--|
| | Chairs: <i>Mihaela Albu</i> <i>Oguzhan Ceylan</i> | Chairs: <i>Gabriela Ciuprina</i> <i>Marius Purcar</i> | Chairs: <i>Alecksey Anuchin</i> <i>Petre Dorel Teodosescu</i> |
| 1 | ID 16: <i>A Review of Residential Micro-Combined Heat and Power Systems based on Renewable Energy</i> Andrei-Vasile VLAD, Radu-Adrian TIRNOVAN, Dorin SABOU, Ioan MARIS, Ovidiu-Catalin BLIDAR, Muresan ANDREI | ID 168: <i>FPGA Implementation of Fixed-Point Arithmetic Voltage Mode Controller for the Buck Converter</i> Nicolae A. BRAIC, Gheorghe TURCAN, Eduard Gheorghe VLADU, Gabriel Stefan PETRASUC, Marius NEAG | ID 34: <i>Overmodulation Operation of Two-Level PWM Inverters of Photovoltaic System with Double-Delta Configuration of Winding of Power Transformer</i> Valentin OLESCHUK, Irina Victor VASILIEV, Giovanni GRIVA |
| 2 | ID 41: <i>Fuzzy Logic Controller for Regulating the Indoor Temperature</i> Anca MIRON, Andrei CZIKER, Stefan UNGUREANU | ID 127: <i>Planar Spiral Inductors Parameter Extraction needed to design a Wireless Power Supply System</i> Claudia PACURAR, Vasile TOPA, Adina GIURGIUMAN, Calin MUNTEANU, Claudia CONSTANTINESCU, Marian Razvan GLIGA, Sergiu Iulian ANDREICA | ID 148: <i>Performance Analysis of a Full Bridge Modular Multilevel Converter for High Voltage DC Transmission Using Various Pulse Width Modulation Techniques</i> Ioan C. DAMIAN, Mircea EREMIA |
| 3 | ID 81: <i>Temperature Influence on Electrical Conductivity of PVC-TiO2 Nanocomposites</i> Laura ANDREI, Florin CIUPRINA | ID 110: <i>Numerical Modelling and Analysis of Circular Patch Antenna Array for Further Use Determination</i> Claudia CONSTANTINESCU, Claudia PACURAR, Adina GIURGIUMAN, Calin MUNTEANU, Sergiu Iulian ANDREICA, Marian Razvan GLIGA | ID 9: <i>A Simple and Low-Cost Equipment for Derating the Power Distribution Transformers Subjected to Distorted Operating Currents</i> Emil CAZACU, Lucian PETRESCU, Valentin IONITA |
| 4 | ID 126: <i>Smooth Control of Shed ACLs Capacity based on the Minimum Conversion Time Matching</i> Yuguang SONG, Mingchao XIA, Qifang CHEN | ID 120: <i>Chip Structure Metallization Impact on Thermally Induced Faults in Power IC Devices</i> Luiza DOBRE, Adrian BOJITA, Marius PURCAR, Vasile TOPA, Calin MUNTEANU | ID 53: <i>Analysis of Walking Cell PWM Strategy in Multilevel Frequency Converter in Fault Condition</i> Yulia KAZEMIROVA, Alecksey ANUCHIN, Alexandr ZHARKOV, Maxim LASKEVICH, Alexey KOVYAZIN, Dmitrii SAVKIN |
| 5 | ID 135: <i>Allocation of Distributed Generators Using Parallel Grey Wolf Optimization</i> Soheil YOUNESI, Bahman AHMADI, Oguzhan CEYLAN, Aydogan OZDEMIR | ID 155: <i>Improved Performance of Sensorless Control for PMSM Based on Neuro-Fuzzy Speed Controller</i> Marcel I. NICOLA, Claudiu I. NICOLA | ID 54: <i>Speed and Rotor Flux Estimation using Back-EMF MRAS and Gopinath Observers for Sensorless Vector Control Systems of Induction Motors</i> Olimpiu O. STOICUTA |
| 6 | ID 109: <i>Optimization of Energy Consumption in Public Building</i> Horatiu POP, Alin GRAMA | ID 167: <i>The Simulation of Li-Ion Batteries Using Series-Parallel Cells in Different Modes of Operation</i> Dan Gabriel I. STANESCU, Mircea Emilian ARDELEANU, Ioana-Gabriela SIRBU, Radu Cristian DINU, Simina NACIU | ID 55: <i>Design and Analysis a Speed and Rotor Flux Observer for Sensorless Vector Control Systems of Induction Motors</i> Olimpiu O. STOICUTA |
| 11.30 | | | |

THURSDAY 17.06.2021

| 12.00 | Automation & Protection channel 1 | Electromagnetics (2) channel 2 | Electric Machines and Drives channel 3 |
|-------|---|--|---|
| | Chairs: <i>Dorin Lucache</i> <i>Attila Simo</i> | Chairs: <i>Marian Greconici</i> <i>Florin Ciuprina</i> | Chairs: <i>Leonard Livadaru</i> <i>Lorand Szabo</i> |
| 1 | ID 83: <i>Regulation of Voltage and Reactive Power in AC Microgrid</i> Alexander FISHOV, Yuri V. KAKOSHA, Irina L. KLAVSUTS, Dmitry A. KLAVSUTS | ID 89: <i>A Technique for Passive Ionosphere Sounding Based on Incident Wave Doppler Evaluation</i> Mircea P. STANIC | ID 50: <i>Analysis of a Small Power Zero-Airgap Induction Motor</i> Razvan A. INTE, Dan-Cristian POPA, Florin JURCA, Nicholas HRUSCH, Jeff HEMPHILL, Codrin G. CANTEMIR |
| 2 | ID 132: <i>Arithmetic Optimization Algorithm for Optimal Installation of DSTATCOM into Distribution System based on Various Voltage Stability Indices</i> Mohamed ZELLAGUI, Adel LASMARI, Samir SETTOUL, Claude EL-BAYEH, Rachid CHENNI, Nasreddine BELBACHIR | ID 125: <i>Electromagnetic Field Radiation Generated by Dielectric Barrier Discharge</i> Daniel E. CRETU, Stefan CIAUSU, Radu BURLICA, Dragos ASTANEI, Oana BENIUGA, Dorin TESOI | ID 90: <i>Open Source Software based Design and Optimization Tool for Electrical Machines</i> Teodora LUPU, Radu Andrei MARTIS, Anca I. NICU, Claudia MARTIS |
| 3 | ID 115: <i>Methods of Faults Detection and Location in Electrical Systems</i> Ana-Maria MOLDOVAN, Sanda OLTEAN, Mircea I. BUZDUGAN | ID 56: <i>Transient of High Voltage Circuit Breakers Intelligent Switching during Grid Faults</i> Florin C. BAICEANU, Oana BENIUGA, Razvan BENIUGA, Florin MUNTEANU | ID 91: <i>PM-assisted Synchronous Reluctance Machines for Light Electric Vehicle Propulsion System – Comparative Analysis</i> Radu Andrei MARTIS, Razvan A. INTE, Florin JURCA, Bogdan VARATICEANU, Claudia MARTIS |
| 4 | ID 6: <i>Protection of Power Systems by Earthquake Warning based on Local Assmpt of Seismic Events</i> Victorin Emilian TOADER, Ovidiu CIOGESCU, Andrei MIHAI, Adriana M. BORS, Dan Doru MICU, Iosif LINGVAY | ID 137: <i>Low Cost Foot Pressure Measuring Device</i> Titus CRISAN, Madalin Ionut ARDELEAN, Bogdan TEBREAN, Tudor OLTEAN | ID 92: <i>Comparative Analysis of Two Magnetic Bearings Topologies</i> Cristina ADASCALITEI, Martis RADU, Petros KARASAS, Claudia MARTIS |
| 5 | ID 68: <i>Descriptive Data Analysis of Weater Inputs for Non-Technical Losses Detection System</i> Marcelo B. CAPELETTI, Alzenira da Rosa ABAIDE, Bruno KNEVITZ HAMMERSCHMITT, Nelson KNAK NETO, Laura Lisiane Callai dos SANTOS, Rafael Gressler MILBRADT, Fernando GUILHERME KAEHLER GUARDA, Lucio Rene PRADE, Gabriel da Rosa MOREIRA | ID 22: <i>Functional Characteristics of a Multichannel Frequency Converter</i> Lev KALININ, Dmitrii ZAITEV, Mihai S. TIRSU, Irina GOLUB, Danila KALOSHIN | ID 130: <i>Typhoon HIL real-time Validation of Permanent Magnet Synchronous Motor's Control</i> Tudor MOLDOVAN, Razvan A. INTE, Raul O. NEMES, Mircea RUBA, Claudia MARTIS |
| 6 | ID 121: <i>On Beneficial Vehicle-to-Grid (V2G) Services</i> Edward C. BENTLEY, Ghanim PUTRUS, Gill LACEY, Richard KOTTER, Yue WANG, Ridos DAS, Zunaib ALI, Jos WARNERDAM | ID 57: <i>The impact of Power Transformers on the Energy Performance Indicators of the Power Distribution Grids of Industrial End-Users Transitioning towards Environmental Sustainability</i> Cristian GHEORGHIU, Mircea SCRIPCARIU, Stefan GHEORGHE, Miruna GHEORGHIU, Alexandra Gabriela DOBRICA | ID 160: <i>Study of Parameters Influencing the Electrical Locomotives Efficiency</i> Ileana-Diana NICOLAE, Petre-Marian NICOLAE, Radu Florin MARINESCU, Radu ZLATIAN, Alexandru NETOIU, Ilie GHEORGHE |
| 13.30 | | | |

THURSDAY 17.06.2021

14.30

Plenary Session 4

SIEMENS ENERGY S.A. - Ciprian Dumitrascu - Environmental Friendly Transmission Products

Chair: **Calin Munteanu**

15.00

IoT in Electrical and Power Systems

Education in Engineering & Electromagnetics (3)

Analysis, Modeling and Optimization (3)

channel 1

channel 2

channel 3

Chairs:
George Seritan
Gheorghe Grigoras

Chairs:
Lucian Mandache
Laura Grindei

Chairs:
Bogdan Neagu
Alexandru Baloi

1 ID 147: *Romanian TSO's Augmented Reality Concept*
Claudia CANDALE, Bogdan LEU, Alexandru VOICU, Remus DINCULESCU

ID 97: *Virtual Labs – Challenges, Opportunities and Practical Lessons Learned*
Athanasios KRONTRIS

ID 158: *Three-Windings Transformers Design by Means of Differential Evolutionary Algorithm*
Luigi Pio DI NOIA, Renato RIZZO

2 ID 73: *IoT Power Monitoring Device using Wi-fi and Arduino*
Andrei OLTEAN, Stefan UNGUREANU, Anca MIRON, Andrei CZIKER

ID 105: *Students' Perception on Integrating Collaborative Tools into Electrical Engineering Education*
Laura GRINDEI, Aurelia CIUPE, Bogdan ORZA, Serban MEZA

ID 113: *MATLAB Simulation Analysis of Harmonic Impedance in a Distribution Network in Order to Optimize Passive Compensation Solutions*
Adrian PANA, Alexandru BALOI, Florin MOLNAR-MATEI, Loredana PAVEN, Roxana GOSTE, Ilona BUCATARIU

3 ID 106: *Industrial Internet of Things (IIoT) Integration in Power Grids*
Cornel Cristian ANDREI, Gabriel TUDOR, Madalina ARHIP-CALIN

ID 27: *Smart Assessment Methodology in Physical Education Classes*
Mihai Adrian OLANESCU, Miruna PERIS, Marius Adrian SUCIU, Alexandru IANOSI

ID 48: *Using JTAG Debugging in Modern Power Systems*
Robin N. MOLNAR, Gabriel ILCEA, Daniel DEACONU, Teodor C. PANA, Olimpiu O. STOICUTA

4 ID 18: *Contributions on Monitoring the Condition and the Protection of Insulated Bushings, Pertaining to Transformer Units*
Dumitru SACERDOTIANU, Marcel NICOLA, Iulian HUREZEANU, Florica P. LAZARESCU, Despina ROMAN, Anca ALBITA, Dorina PURCARU

ID 28: *Implementation of Technology in Physical Activities Designed for Students*
Mihai Adrian OLANESCU, Marius Adrian SUCIU, Miruna PERIS

ID 23: *Reliability Assessment of Auxiliary Power Supply Systems for a Nuclear Power Plant (NPP)*
Mihai A. GHIDU, Ciprian-Mircea M. NEMES

5 ID 131: *Edge implementation using Kalman filter*
Gabriel TUDOR, Cornel Cristian ANDREI, Madalina ARHIP, Valentina ROHAT

ID 139: *Responsiveness of a web application and debugging of the APIBlerina ZANAJ*
Elma ZANAJ

ID 136: *The Impact of Distributed Heat Pumps on the District Heating System*
Sergiu ROBU, Mihai LUPU, Vasile DAUD

6 ID 116: *Arduino Platform for Optimized Irrigation in Strawberries Fields*
Ilie-Aurel GHEORGHE

ID 114: *Extended Possibilities for Studying and Diagnosis of Electric Vehicles AC (Three-Phase) Charging Systems*
Ciprian BEJENAR, Marian BEJENAR, Eusebiu Vasile TOADER, Vasilica Oana GROSU, Mihaela PAVAL, Laurentiu Dan MILICI

ID 166: *Integration of Air to Water Heat Pump into District Heating System with CHP*
Mikhail Lev SIT, Mihai S. TIRSU, Anatoly JURAVLIOV, Dmitrii TIMCHENKO

7 ID 76: *Wireless Communication Networks within Electrical Equipment*
Silviu Marian ANTOHI, Maricel ADAM, Mihai ANDRUSCA, Alin DRAGOMIR, Cosmin Nistor DEAC

ID 171: *Reliability Analysis through Block Diagram for a Hybrid Lighting System*
Dan IUDEAN, Adina Georgiana MIHU, Radu A. MUNTEANU

ID 38: *The Influence of Feedwater Preheaters on the Power Plant Thermal Efficiency*
Razvan BENIUGA, Oana BENIUGA, Florin C. BAICEANU, Marcel ISTRATE

16.45

17.00

Closing Ceremony

17.30

Chair: **Calin Munteanu**

channel 1