

Location Hours	University of Craiova – Faculty of Electrical and Power Engineering, 107 Decebal Blv., Craiova			
Thursday, October 15				
9:00-10:00	Registration			
10:00-10:40	Opening ceremony / location Room A			
10:40-11:00	Coffee Break			
11:00-13:00	Plenary session / location Room A Plenary talks: P1, P2, P3, P4 Session chairs: Maria Brojboiu Ioana-Gabriela Sîrbu			
13:00-14:30	Lunch / location Emma Est Hotel, Calea Bucuresti 82A, Craiova			
	Regular sessions			
	Room A (Oral sessions)	Room B (Oral sessions)	Room C (Hybrid sessions)	Room D (Poster sessions)
15:00-16:45	EMD & EETS (1) Paper ID: 60; 47; 88; 34 Chairs: Mihaela Popescu Mihăiță Lincă	AAIEE Paper ID: 17; 68; 95 Chairs: Marian-Ștefan Nicolae Dan-Gabriel Stănescu	ECEMB (1) Paper ID: 57; 52; 58; 63; 64; 65 Chairs: Alexandru-Mihail Morega Maria Brojboiu	Conference Desk
16:45-17:00	Coffee Break			
17:00-19:00	CSYS (1) Paper ID: 18; 76; 75; 33; 80 Chairs: Marcel Nicola Andreea Maria Neacă	ECEMB (2); AMEE Paper ID: 100; 82; 53; 62 Chairs: Boris Evstatiev Anatolii Nikitenko	PES (1) Paper ID: 16; 15; 22; 13 Chairs: Seher Kadirova Denisa Rușinaru	MG (1); EMD & EETS (2); EEE Paper ID: 77; 90; 12; 51; 24; 25; 14; 40; 67 Chairs: Ana-Maria Dumitrescu Svilen Rachev
19:45	Gala Dinner – The taste of local tradition. Restaurant Casa Ghincea, 31 Madona Dudu Str., Craiova			
Friday, October 16				
09:00-10:45	AES (1) Paper ID: 29; 30; 31; 32 Chairs: Alexandru-Nicolae Tudosie Jenica-Ileana Corcău	CS Paper ID: 11; 49; 26; 27; 93; 94 Chairs: Mihai Iordache Marilena Stănculescu	MG (2) Paper ID: 21; 43; 48; 61; 70; 71 Chairs: Alin-Iulian Dolan Cristian Bratu	Energy Trends in A Cross-Border Approach: from Tradition to Innovation - Across Tech Talks-
10:45-11:00	Coffee Break			
11:00-13:00	AES (2) Paper ID: 74; 78, 84, 86 Chairs: Liviu Dincă Petre Negrea	PES (2) Paper ID: 36; 83; 39; 35; 56; 79 Chairs: Paul-Mihai Mircea Ionel-Laurențiu Alboteanu	CSYS (2) Paper ID: 19; 20; 69; 72; 73 Chairs: Lucian Mandache Dragoș Niculae	ECEMB (3); PES (3) Paper ID: 97;98; 99; 50;59; 54;81;91;55;87 Chairs: Călin Munteanu Radu Cristian Dinu
13:00-14:00	Lunch / location Emma Est Hotel, Calea Bucuresti 82A, Craiova			
14:00	Departure to Dragasani – Venetic vineyard. Meeting point: Emma Est Hotel, Calea Bucuresti 82A, Craiova			
Saturday, October 17				
10:00-11:30	Research facilities in Electrical Engineering – Guided tour			
11:30-12:00	Closing Ceremony, Room A			

Opening Talk

WELCOME SPEECHES

Maria Brojboiu, Ioana-Gabriela Sîrbu, Leonardo Geo Mănescu, Ana-Maria Dumitrescu – IEEE Romania

YEAR 2026 - ANNIVERSARY YEAR. GENESIS OF THE HIGHER ELECTROTECHNICAL EDUCATION IN CRAIOVA AND THE "ICATE" CONFERENCE

Gheorghe Manolea - The General Association of the Engineers in Romania, Dolj Branch*

Plenary session

- P1 PERFORMANCE ANALYSIS OF A SMALL-SCALE BROILER FARM POWERED BY A PV–GRID–BATTERY ENERGY STORAGE SYSTEM
Boris Evstatiev, Nikolay Valov, Katerina Gabrovska-Evstatieva, Seher Kadirova*, Nikolay Mihailov – “Angel Kanchev” University of Ruse, Bulgaria*
- P2 STRUCTURAL MORPHOLOGY AND ELECTRIC FIELD DESIGN FOR SIZE-SELECTIVE PARTICLE TRANSPORT IN CELL SEPARATION
Alexandru Morega – National University of Science and Technology POLITEHNICA of Bucharest, Romania*
- P3 PRACTICAL ASPECTS REGARDING THE IMPLEMENTATION OF THE ROTOR FLUX-ORIENTED CONTROL ALGORITHM ON RAILWAY TRACTION SYSTEMS
Alexandru Bitoleanu^{1}, Vlad Constantin Suru¹, Mihaela Popescu¹, Tudor Matusa², Catalin Suru² – ¹University of Craiova, Romania; ²SC PROMAT SRL, Romania*
- P4 DYNAMICS, A CURRENT TOPIC IN THE THEORY OF ELECTRICAL MACHINES
Aurel Câmpeanu – University of Craiova, Romania; Technical Sciences Academy of Romania*

Regular sessions

Paper AAIEE - Application of Artificial Intelligence in Electrical Engineering

- ID 17 An IoT-Based Data Fusion and Fault Observer Framework for Monitoring Multi-Source Renewable Energy Microgrids – *Miruna-Gabriela Popa*, Mircea-Ionuț Cincă, Mihai-Iulian Neagoe, Adrian Vintilă, Claudiu-Ionel Nicola, Marcel Nicola*
- ID 68 AI Agent-Assisted Synthetic Li-Ion Battery Data Generation – *Eliza Maria Olariu*, Mircea Ruba, Horia Hedesiu*
- ID 95 An Edge Artificial Intelligence and Internet of Things-Driven Smart Motor Control and Vibration Diagnostic System Powered by Dual-Board Hardware Architecture – *Marian-Ștefan Nicolae*, George-Ionuț Iacob, Raluca-Cristina Nicolae, Petre-Marian Nicolae, Ionel-Cristian Vladu, Ileana-Diana Nicolae*

Paper ECEMB - Electromagnetic Compatibility and Engineering in Medicine and Biology (1)

- ID 57 Repurposing a Laplacian Electrode for Active Electromagnetic Bioimpedance Measurements: An Equivalent Circuit Approach for Cerebral Venous Sinus Characterization – *Andreea-Maria Mitrofan*, Alexandru-Mihail Morega, Alin-Alexandru Dobre*
- ID 52 A Computational Framework for Treatment Planning of Radiofrequency Ablation in Paraspinal Tumors – *Clemența Mihaela Dogaru*, Yelda Veli*
- ID 58 Multi-Scale Electromagnetic Modeling of Cerebral Vascular Structures for MRI Applications – *Ana-Maria Brumă*, Alexandru-Mihail Morega, Yelda Veli*
- ID 63 Mathematical Modeling of Magnetically Guided Drug Transport in Intraperitoneal Tumors – *Denisa-Florina Albu*, Alexandru-Mihail Morega, Ștefan-Gicu Cruceanu*
- ID 64 Analysis of a Dielectric Probe Waveguide Used in Hyperthermia/Ablation – *Alexandra Nicoleta Popescu*, Alexandru-Mihail Morega, Alin-Alexandru Dobre*
- ID 65 Combined Steric and Electrophoretic Separation in a Deterministic Lateral Displacement Device – *Cristina-Maria Martin*, Alexandru M. Morega*

** Session organized under the aegis of the Engineering in Medicine and Biology Chapter of IEEE Romania Section*

ECEMB - Electromagnetic Compatibility and Engineering in Medicine and Biology (2)

- ID 100 Modeling and Simulation of a Three-phase SPWM Inverter with LC Filter for Asynchronous Motor Drive Applications – *Virginia-Alina Zidaru (Paraschiv)*, Marian-Ştefan Nicolae*, Petre-Marian Nicolae, Marian-Cosmin Buşe, Raluca-Cristina Presură (Nicolae)*
- ID 82 Assessing Radiated Electromagnetic Emissions from Modernized Urban Rail Vehicles Equipped with a DC/DC Converter: Measurement Challenges – *Anatolii Nikitenko*, Adam Szeląg*

ECEMB - Electromagnetic Compatibility and Engineering in Medicine and Biology (3)

- ID 97 AI-Assisted Guidance with Instructor Checkpoints for Electrical Engineering Laboratories – *Dan Ielciu, Călin Munteanu*, Sergiu-Iulian Andreica, Marian Gliga, Lavinia-Nicoleta Opris*
- ID 98 Comparative Analysis of Radiated Emission Measurements in a Semi-Anechoic Chamber and a GTEM Cell – *Sergiu-Iulian Andreica*, Călin Munteanu, Marian Gliga, Claudia Constantinescu, Claudia Pacurar, Adina Giurgiuman, Dan Ielciu, Lavinia-Nicoleta Opris*
- ID 99 Magnetic Field Mitigation of High Voltage Power Lines Using Two Passive Loops – *Lavinia-Nicoleta Opris*, Călin Munteanu, Adina Giurgiuman, Claudia Pacurar, Claudia Constantinescu, Marian Gliga, Sergiu-Iulian Andreica, Daniel Ielciu, Ioan T. Pop*
- ID 50 Evaluation of the Performance of Polymeric Insulators under Salt Fog Testing According to IEC 62217:2025 – *Ionuţ Toma*, Maria - Cristina Niţu, Aurelia Iuliana Scorea*
- ID 59 Analysis of the Electric Field during Track and Erosion Testing of Polymer Insulators – *Viorica Voicu, Ionuţ Toma*, Alin Neagoe, Ionel Dumbravă, Denisa Burada*

** Session organized under the aegis of the Electromagnetic Compatibility Society Chapter of IEEE Romania Section*

Paper ID EMD & EETS - Electrical Machines and Drives & Electrical Engineering in Transportation Systems (1)

- ID 60 Voltage Control with Phasor PWM Modulator and Speed Prescription of a Traction System with Induction Motors – *Mihaela Popescu*, Alexandru Bitoleanu, Constantin Vlad Suru*
- ID 47 Experimental Power Quality Assessment of a 4.65 MW Synchronous Motor – *Mihaela Simon*, Elisabeta Spunei, Ana-Maria Dumitrescu*, Ramona Maria Sandu, Marilena Stănculescu*
- ID 88 Power Control Algorithm for Photovoltaic Inverters – *Mihăiţă Lincă*, Constantin Vlad Suru*, Denisa Ruşinaru, Felicia Elena Stan-Ivan, Cristian Bratu*
- ID 34 From 400 V to 800 V: Power Electronics and Distributed Multi-Motor Drive Control in the BMW Neue Klasse Architecture – *Andreea Maria Neacă**

EMD & EETS - Electrical Machines and Drives & Electrical Engineering in Transportation Systems (2)

- ID 12 Intelligent System for Power Transformer Fault Detection Based on Mansour Pentagon and AdaBoostM2 Ensemble Classifier – *Maria-Cristina Niţu*, Ancuţa-Mihaela Aciu*, Marcel Nicola, Claudiu-Ionel Nicola*
- ID 51 Effect of Composite Adsorbent Composition on the Regeneration of Used Transformer Oil – *Maria-Cristina Niţu*, Ancuţa-Mihaela Aciu*
- ID 24 Transient Regimes Specific to Railway Traction Motors – *Sorin Enache, Monica-Adela Enache*, Ion Vlad, Mircea Horgos*
- ID 25 Optimizing Transverse Geometry of Railway Traction Asynchronous Motors – *Monica-Adela Enache, Ion Vlad*, Sorin Enache*

Paper ID CSYS - Control Systems (1)

- ID 18 Pareto-Nash Multiobjective PID-Based LFC for Interconnected Two-Area Power Systems with Chaos Avoidance Analysis – *Marcel Nicola*, Claudiu-Ionel Nicola, Andreea Iacob, Cristian Pîrvu*
- ID 76 Integrated Automotive Body Control System Based on a Centralized ECU Architecture Using STM32 Microcontrollers – *Marius-Catalin Mita, Anca-Cecilia Stoenac, Florina-Luminita Petcu, Florin-Alexandru Dita*, Andrei-Costin Trasculescu, Ionut-Cristian Resceanu*
- ID 75 Intelligent Embedded Architecture for Robotic Platforms – *Ionut-Cristian Resceanu, Ionut-Nicusor Iftimiciuc, Florina-Luminita Petcu, Florin-Alexandru Dita*, Stefan-Irinel Cismaru, Horatiu Roibu*
- ID 33 A Modular IoT-Based Measurement and Control System Using ESP32 Microcontrollers – *Bogdan Tebrean*, Andrei Catinean, Calin Muresan, Levente Czumbil, Titus Eduard Crisan*
- ID 80 Comparison between simple PID and cascade PID's for DC Motor Control – *Marius Lucian Dumitriu, Mircea Nitulescu*

CSYS - Control Systems (2)

- ID 19 A Simple Method to Eliminate Current Quantization Effects in Precise Control of Voice Coils – *Ştefan-Aurelian Nicolescu*, Aurelian Sarca, Radu Jiletcovici*
- ID 20 Control Methods for Satellite Applications – *Flavia- Elena Toma*, Carmen- Ioana Bogliş*
- ID 69 Synthesis of Wedge-Shaped Filters Using Analog Prototypes – *Radu Matei**
- ID 72 Image Analysis Using Square-Shaped Uniform Filter Banks – *Radu Matei**
- ID 73 A New Step-Up Converter with Negative Output Voltage – *Cristian -Valentin Ionici**

Paper ID PES - Power and Energy Systems (1)

- ID 16 PPO-Based Multi-Objective Energy Management for Renewable Microgrids with Battery Energy Storage Systems – *Doha Kamal Mohamed Idris*, Raymond Birasa, Mahmuda Rahman, Claudia Steluța Marțiș, Sorin Iulian Cosman*
- ID 15 Comparative Analysis of the Economic and Operational Performance of Diesel, Electric, and Biogas Buses – *Mihai Lupu, Mihai Tîrșu*, Victor Viziru*
- ID 22 Possibility of Connecting Single-Phase Renewable Energy Sources to a 0.4 kV Three-Phase Line While Complying with Standardized Limits on Unbalance Factors – *Valeriu Bosneaga**
- ID 13 Short-Term Electrical Energy Consumption Forecasting in Educational Buildings Using Machine Learning – *Ana-Maria Moldovan*, Tania Rus, Raluca-Paula Moldovan, Adriana Hădărean*

PES - Power and Energy Systems (2)

- ID 36 A Multi-Layer Framework for Physics-Aware Data Repair and Outlier Detection in Smart Meter Energy Time Series – *Alexandra Mureșan*, Mircea Lăncrănjan, Dacian I. Jurj, Alexandru Mureșan, Levente Czumbil, Dan D. Micu*
- ID 83 Automatic Residential System for the Interconnection and Energy Management of Renewable Energy Sources – *Ionel-Laurențiu Alboteanu*, Gheorghe Manolea, Daniel Cristian Cismaru, Florin Ravigan, Mihăiță Daniel Constantinescu*
- ID 39 Evaluation of Partial Shading Impact on Half-Cut Photovoltaic Modules – *Andrei-Daniel Olteanu*, Paula Anghelita, Stefan Gheorghe, Alexandru-Ionel Constantin, Dorin-Dacian Let, Andreea El-Leathery*
- ID 35 From Coal to Combined Cycle: SCADA-Driven Modernization of the Ișalnița Power Site – *Andreea Maria Neacă*, Felicia Elena Stan Ivan, Adelaida-Mihaela Duinea*
- ID 56 A Visualisation Framework for Behavioral Transparency: An automated Tool for Comparative Analysis on Energy Communities – *Olimpiu Nicolae Moga*, Adrian Florea, Claudiu Solea, Maria Vintan, Dorel Stanescu*
- ID 79 Control Strategy for a DC Microgrid with Interactive Electric Vehicle Integration *James Sora*, Ioan Serban, Nadia M. L. Tan, Martin Votava, Endalkachew Degarege Almwau*

PES - Power and Energy Systems (3)

- ID 54 Performance Analysis of a Natural Gas and Biomass Cogeneration System – *Radu Cristian Dinu**, *Felicia Elena Stan Ivan*, *Adelaida Mihaela Duinea*, *Cosmin Gabriel Buzatu*, *Răzvan Mihai Dumitru*
- ID 81 Agentic Optimization of Energy Communities: with Fotovoltaic Sources, Storage and Electric Vehicles – *Leonardo-Geo Mănescu*, *Denisa Ruşinaru*, *Gabriel Cosmin Buzatu*, *Claudiu Ionuț Popîrlan*, *Cătălina Sitnikov*, *Felicia Elena Stan Ivan**
- ID 91 Eliciting Socio-Technical Requirements for Urban Energy Communities Based on Citizens' Perceptions in Craiova – *Leonardo-Geo Mănescu**, *Elena Maria Calotă*, *Claudiu Coman*, *Iulia Para*
- ID 55 Considerations for Ensuring Electrical Safety in the Area of Energy Capacities Located in Residential Areas – *Silvia-Maria Digă**, *Nicolae Digă*, *Paul-Mihai Mircea*, *Ion Pătru*, *Cristian Bratu*, *Livia-Andreea Dina*
- ID 87 Energy Tracing in Radial Electrical Networks Using Load Images and Kron Equivalents – *Leonardo Geo Mănescu*, *Denisa Rusinaru**, *Gabriel Cosmin Buzatu*, *Cosmin Toma*

Paper ID AMEE - Applied Mathematics in Electrical Engineering

- ID 53 Analysis of a Three-Phase Electrical Distribution Network with Quaternions in the Space of Four-Dimensional Complex Numbers – *Adrian Dănilă**
- ID 62 A Comparative Analysis for Chua's Circuit System Based on Computational Resources – *Adela Ionescu**

Paper ID MG – Magnetism (1)

- ID 77 Influence of Electromagnetic Pickup Position on the Sound Spectrum of a Vibrating Ferromagnetic String – *Andrei Nemeș**, *Dan Gabriel Stănescu**, *Ioana Gabriela Sîrbu*, *Cosmin Ionuț Toma*, *Mihăiță Daniel Constantinescu*, *Gheorghe Eugen Subțirelu*
- ID 90 3-D Approach of DOE-based Optimization of a Superconducting Magnetic Energy Storage Device – *Alin-Iulian Dolan**, *Lucian Mandache*, *Ioana-Gabriela Sîrbu*, *Dan-Gabriel Stănescu*

MG – Magnetism (2)

- ID 21 Noninvasive Signature, Signature Efficiency and Supervision of the Evolution of Four Defects in a Squirrel-Cage Asynchronous & Permanent Magnet Synchronous Hybrid Motor – *Virgiliu Fireteanu**
- ID 43 Thermal Performance Comparison of Litz-Wire and Planar Coils for Wireless Power Transfer Systems– *Lucian Petrascu**, *Adina Giurguman*, *Claudia Constantinescu*, *Vasile Topa*, *Razvan Gliga*, *Claudia Păcurar*
- ID 48 Finite Element Analysis of External Magnetic Field Effects and Shielding Solutions for a Variable Reluctance Sensor – *Cristina-Mihaela Dragomir**, *Mihai Maricar*, *Elena-Andreea Bogdan*, *Oana Mihaela Drosu*, *Marilena Stănculescu*
- ID 61 Numerical Investigation of a Metamaterial Resonator-Based Sensor for Permittivity Measurement – *Alparslan Cinar*, *Umut Kose**
- ID 70 Performance Characteristics of Rectangular Waveguide Filter Loaded by Magnetic Materials – *Achmad Munir*, *Muhammad Farhan Maulana*, *Junas Haidi*, *Novelita Rahayu**
- ID 71 Experimental Investigation of Crosstalk on PCB Structure as Magnetic Material Inclusion – *Novelita Rahayu**, *Levy Olivia Nur*, *Tri Desmana Rachmildha*, *Junas Haidi*, *Rheyuniarto Sahlendar Asthan*, *Achmad Munir*

Paper ID EEE - Environment Engineering and Equipment

- ID 40 Ecological Footprint of Crane Mechanisms Driven by Induction Motors – *Svilen Rachev**, *Ivaylo Ivanov*
- ID 67 Reflective Practices Applied in Project Management Learning Strategies – *Gabriela-Dana Petropol-Serb**, *Gabriel-Ionuț Petropol-Serb*
- ID 14 Automation System for Natural Gas Compressors Installed in Potentially Explosive Atmospheres – *Claudia Săvescu**, *Adrian Săvescu*, *Radu Iorga*, *Sebastian Dinu**, *Alexandru Șerban*, *Sorin Dinu*, *Remus Stoica*, *Dragoș Neacșu*, *Cristian Nechifor*

Paper ID CS - Circuits and Systems

- ID 11 Enhancing Efficiency in Wireless Power Transfer: A Comprehensive Review and Optimization Solutions– *Dragoș Niculae*, *Marilena Stănculescu**, *Maria - Lavinia Bobaru*, *Mihai Iordache*, *Ioana - Gabriela Sîrbu*, *Lucian Mandache*, *Mihaela Simon**
- ID 49 Inductive versus Capacitive Wireless Power Transfer - Comparative Analysis – *Ioana - Gabriela Sîrbu**, *Lucian Mandache*, *Dan Gabriel Stănescu*, *Alin-Iulian Dolan*, *Marilena Stănculescu*, *Mihai Iordache*, *Dragoș Niculae*, *Maria - Lavinia Bobaru*
- ID 26 Sensitivity Analysis of Power Flow and Balance in Non-sinusoidal Regime — Part I: Mathematical Formulation and Numerical Algorithm – *Sorin Deleanu*, *Andrei Gheorghe*, *Paul Cristian Andrei*, *Marilena Stanculescu**, *Horia Andrei*
- ID 27 Sensitivity Analysis of Power Flow and Balance in Non-sinusoidal Regime — Part II: Case Study and Experimental Validation – *Sorin Deleanu*, *Andrei Gheorghe*, *Paul Cristian Andrei*, *Marilena Stanculescu**, *Horia Andrei*
- ID 93 Fast Analysis of Quasi-Periodic Operation Modes and Transients in Nonlinear Lumped Circuits by Multiple Time Scales – *Lucian Mandache**, *Ioana-Gabriela Sirbu*, *Marilena Stănculescu*, *Dragoș Niculae*, *Lavinia Bobaru*, *Mihai Iordache*
- ID 94 Challenges in Electronic Circuit Design: Sensitivity and Tolerance Analyses– *Lucian Mandache**, *Ioana-Gabriela Sirbu*, *Dan-Gabriel Stănescu*, *Alin-Iulian Dolan*, *Dragoș Niculae*, *Mihai Iordache*, *Marilena Stănculescu*, *Mircea-Emilian Ardeleanu*, *Maria Brojboiu*

Paper ID AES - Aerospace Engineering Systems (1)

- ID 29 Evaporative Constraints and Water Injection Optimization in a Fast-Response Axial Turbojet with Combustor Injection – *Alexandru-Nicolae Tudosie**
- ID 30 Control-Oriented Modeling and Stability Analysis of a Water-Assisted Axial Turbojet with Compressor Bleed Reinsertion – *Alexandru-Nicolae Tudosie**
- ID 31 Conceptual Analysis of a Fully Electric Propulsion Architecture for a Cessna 172S Light Aircraft – *Andra-Adelina Cucu**, *Jenica-Ileana Corcău**, *Liviu Dincă*, *Teodor-Lucian Grigorie*, *Cristian Vidan*, *Ciprian-Marius Larco*
- ID 32 Fuel Cell-Based Ecological Energy Source for Airport Operations – *Gabriel Vlăduț**, *Jenica-Ileana Corcău**, *Adrian Hurezeanu*, *Marian- Stefan Nicolae*, *Nicu Becherescu*, *Ionut Victor Suciu*

AES - Aerospace Engineering Systems (2)

- ID 74 An Approach Regarding the Electrical Distribution System for a More-Electric Aircraft – *Eduard-Ionuț Ureche**, *Teodor Lucian Grigorie*, *Jenica Ileana Corcau*, *Petre Negrea**
- ID 78 Current Challenges, Industrial Solutions and Future Directions in Integrated Navigation Systems: An Overview – *Petre Negrea**, *Vlad Aurelian Vaduvescu**, *Mihai Aureliu Lungu*
- ID 84 Using of Hydraulic Locks in Landing Gear Systems – *Liviu Dincă**, *Jenica-Ileana Corcau*, *Ciprian-Marius Larco*, *Cristian Vidan*
- ID 86 Morphing Wing Concept Developed Using Pneumatic Devices – *Alexandru-Robert Vilceanu**, *Liviu Dincă**, *Jenica-Ileana Corcau*