EPEi 2026

International Conference and Exposition on Electrical and Power Engineering

Iași, Romania, October 21–24, 2026

TECHNICAL PROGRAM

*Notă internă (draft): lucrările scrise cu roșu au probleme (neînregistrate / fără decizie / de verificat) și trebuie eliminate sau confirmate înainte de publicare. Prezentatorul este marcat cu *.*

WEDNESDAY, OCTOBER 21, 2026 – PRE-CONFERENCE DAY

Faculty of Electrical Engineering, E-building, Prof. D. Mangeron 21–23

09.00-15.00	WAREA – 5th Int. Workshop on Advances in Rehabilitation Engineering Applications – Amphitheater E2
13.30-13.40	ONLINE / HYBRID PRE-OPENING
13.40-14.00	PLENARY LECTURE (online) – Brindha Ramasubramanian: Evolution of Sodium Ion Batteries and the Industrial Outlook
14.00-16.15	ONLINE SESSIONS (3 parallel online rooms, MS Teams)
16.15-16.30	Break
16.30-19.00	ONLINE SESSIONS (3 parallel online rooms, MS Teams)
19.00	Welcome cocktail

THURSDAY, OCTOBER 22, 2026

Aula of "Mihai Eminescu" Central University Library, Str. Păcurari 4, Iași

08.00-12.30	Participants registration ("Mihai Eminescu" Library)
09.00-09.45	**OFFICIAL OPENING** – Hybrid link
09.45-10.00	Coffee break
10.00-11.30	PLENARY LECTURES – Philipp Nenninger, Johana Kuncova-Kallio, Saroj Pullteap
11.30-12.00	Coffee break
12.00-13.00	PLENARY LECTURES – Ioana Pisică, Remus Teodorescu
13.00-14.00	Lunch
14.00-14.45	Transfer by bus to the Faculty of Electrical Engineering
14.00-16.00	EEW – 2nd International Workshop on Energy Efficiency: Transition to Climate Neutrality (Aula, "M. Eminescu" Library)

THURSDAY, OCTOBER 22, 2026

Faculty of Electrical Engineering, E-building / Orion Room, Unirea Hotel

13.30-15.00	IEPMDA – 10th Int. Workshop with Industry (session 1) – Orion Room, Unirea Hotel
14.00-16.00	Participants registration (E-building)
14.45-16.15	PLENARY LECTURES – João Rocha, Pavel Kulha, Cornelia Ivașcu, Tony Lujia Chen
15.30-17.00	IEPMDA – 10th Int. Workshop with Industry (session 2) – Orion Room, Unirea Hotel
16.15-16.30	Coffee break
16.30-18.00	ORAL SESSIONS & WORKSHOPS (6 parallel rooms)
18.30	Depart for GALA DINNER
19.00-23.45	**GALA DINNER**

FRIDAY, OCTOBER 23, 2026

Faculty of Electrical Engineering, E-building / Orion Room, Unirea Hotel

09.00-10.00	Participants registration (E-building)
09.00-10.00	**IEEE EMC & EMB Chapters Meeting – online (Google Meet)**
09.00-09.30	**POSTER SESSION / Coffee break**
09.00-10.30	**IEPMDA – 10th Int. Workshop with Industry (session 3) – Orion Room, Unirea Hotel**
09.30-11.30	**ORAL SESSIONS & WORKSHOPS (6 parallel rooms)**
11.00-12.30	**IEPMDA – 10th Int. Workshop with Industry (session 4) – Orion Room, Unirea Hotel**
10.00-13.00	**AIEE Talk: Careers in the Energy Industry (in Romanian) – Amphitheater E1** Round table: Frontiers in Electrical and Power Engineering Research
11.30-11.45	Coffee break
11.45-13.00	**ORAL SESSIONS & WORKSHOPS (3 parallel rooms)**
13.00-13.15	**Closing ceremony – Hybrid link**
13.15-14.00	Lunch
14.00-22.00	Trip: Strunga Vineyard – Sturdza Castle – La Cimpoescu (wine tasting, visit and dinner)

SATURDAY, OCTOBER 24, 2026

09.00-18.00	Discovering Iași area (sightseeing, industry, culture) – extra guided tour (on demand)

Sessions by day and room

WEDNESDAY, October 21 – WAREA (E-building) and online sessions

Microsoft Teams: link, **code: 527ecgv**

	Amphitheater E2	Online room 1	Online room 2	Online room 3
09:00-13:30	WAREA (09:00-15:00)	–		
13:30-13:40		ONLINE / HYBRID PRE-OPENING (Meeting ID: 327 943 572 887 874 0, passcode: xD3z4hs2)		
13:40-14:00		PLENARY LECTURE (online) – B. Ramasubramanian (Meeting ID: 327 943 572 887 874 0, passcode: xD3z4hs2)		
14:00-16:15		CSAI - O1 + EA - O (Meeting ID: 335 325 145 320 17, passcode: iR7Dd9jh)	PS - O + REN - O (Meeting ID: 365 688 681 929 838 4, passcode: Wk7DE9RV)	PEED - O + EM – O (Meeting ID: 336 546 220 914 321 7, passcode: Gr257Qm2)
16:15-16:30		Break		
16:30-19:00		CSAI - O2 + AR - O (Meeting ID: 391 271 455 230 757 9, passcode: V59n8vP7)	EFEC - O + ECEMB – O+ IA – O (Meeting ID: 387 655 698 685 979 1, passcode: qR7Ch7cr)	MMS - O + EEPE - O (Meeting ID: 310 552 193 100 8, passcode: Bn2hY6yU)
19:00	Welcome cocktail			

THURSDAY, October 22 – afternoon (BCU Aula, E-building, Unirea Hotel)

	Aula BCU	Conf. Hall D. Hurmuzescu	Amf. E4	Amf. E2	Amf. E3	EN-109	EN-003	Orion Room, Unirea Hotel
13:00-14:45	EEW (14:00-16:00)	Lunch / transfer by bus to E-building						IEPMDA - 1 (13:30-15:00)
14:45-16:15		PLENARY LECTURES						IEPMDA - 2 (15:30-17:00)
16:15-16:30	–	Coffee break						
16:30-18:00	–	EM - 1	CSAI - 1	EFEC - 1	AR - 1 + EEPE - 1	PS - 1	EA - 1	
18:30	Depart for GALA DINNER							

FRIDAY, October 23 – morning (E-building and Unirea Hotel)

	Conf. Hall D. Hurmuzescu	Amf. E2	Amf. E3	Amf. E4	EN-109	EN-119	Amf. E1	Orion Room, Unirea Hotel
09:00-09:30	POSTER SESSION – Faculty Hall (E-building) / Coffee						–	IEPMDA - 3 (09:00-10:30)
09:30-11:30	EM - 2	ECEMB - 1	IA - 1	MMS - 1	PS - 2	REN - 1	AIEE Talk & Round table (10:00-13:00)	
11:30-11:45	Coffee break							IEPMDA - 4 (11:00-12:30)
11:45-13:00	EE - 1	–	PEED - 1	MMS - 2	–	–		
13:00-13:15	**CLOSING CEREMONY**							
13:15-14:00	Lunch							
14:00	Depart for trip: Strunga Vineyard – Sturdza Castle – La Cimpoescu (14:00-22:00)							

Online, 09:00–10:00: IEEE EMC & EMB Chapters Meeting (Google Meet)

Legend *(suffix: -1 / -2 oral session, -P poster session, -O online session)*

AR	Automation and Robotics	**EE**	Energy Efficiency	**REN**	Renewable Energy
CSAI	Computer Science and AI Applications	**IA**	Industry Applications	**ECEMB**	9th Int. Workshop on EMC and Engineering in Medicine and Biology
EEPE	Education in Electrical and Power Engineering	**MEEI**	Management and Entrepreneurship in the El. Industry	**IEPMDA**	10th Int. Workshop with Industry on Electromagnetic Properties of Materials
EA	Electrical Apparatus	**MMS**	Metrology and Measurement Systems	**EEW**	2nd Int. Workshop on Energy Efficiency
EM	Electrical Machines	**PEED**	Power Electronics and Electrical Drives	**WAREA**	5th Int. Workshop on Rehabilitation Engineering Applications

EFEC	Electromagnetic Field and Electrical Circuits	**PS**	Power Systems		

WEDNESDAY, OCTOBER 21, 2026

Wednesday, October 21, 2026

09.00 – 15.00

WAREA – 5th International Workshop on Advances in Rehabilitation Engineering Applications

Room: Amphitheater E2, E-building

Chairmen: Marian-Silviu Poboroniuc (TUIASI), Evgeny Zakharov (g.tec medical engineering GmbH, Austria), Dănuț-Constantin Irimia (TUIASI)

Hands-on session with the Unicorn Hybrid BCI system – from raw EEG to working BCI applications.

Invited BCI specialist: Evgeny Zakharov (g.tec medical engineering GmbH, Austria). Team: Dănuț-Constantin Irimia, Alina Baciu, Alexandru Mitocaru (TUIASI). Co-organizer: SCECM Research Centre, Iași.

09.00-09.30	Welcome participants
09.30-12.00	Understand EEG and BCI basics Record and inspect personal EEG
12.00-12.30	Break
12.30-15.00	Rotate through real-time Unicorn applications Experience different BCI applications Build your own BCI applications Demo: BCI & BR41N.IO Hackathon – BCI-based control of a virtual wheelchair (Alexandru Buzamat)
15.00	Closing thoughts

Wednesday, October 21, 2026

13.30 – 13.40

ONLINE / PRE-OPENING

MS Teams: Meeting ID: 327 943 572 887 874 0, passcode: xD3z4hs2

Wednesday, October 21, 2026

13.40 – 14.00

PLENARY LECTURES

Room: Online –

MS Teams: Meeting ID: 327 943 572 887 874 0, passcode: xD3z4hs2

Chairmen: Alin Dragomir, Dorin Lucache

1	**Brindha Ramasubramanian** MINGA Energy Pvt Ltd, India (online)	Evolution of Sodium Ion Batteries and the Industrial Outlook

Wednesday, October 21, 2026

14.00 – 16.15

CSAI - O1 + EA - O – Computer Science and AI Applications / Electrical Apparatus – ONLINE (MS Teams link TBA)

Room: Online room 1

MS Teams: Meeting ID: 335 325 145 320 17, passcode: iR7Dd9jh

Chairmen: Marius Brinzila, Catalin Damian, Dragos Astanei

Nr.	ID	Paper title	Authors
CSAI - O1 – Computer Science and AI Applications - ONLINE 1			
1	12	Network Traffic Forecasting for IoT Devices using Artificial Neural Networks	Anshu Murdan*, Somasoundarum Caremben (Univ. of Mauritius)
2	31	RINA: Robotic Intelligent Neural Assistant for Multimodal Human Machine Interaction	Luisa-Yi Qing Yang*, Marius-Valerian Paulet (TUIASI)
3	40	An Efficient Deep Feature Fusion with LIME Visualization for Accurate Brain Tumor Classification	Oussama Abda*, Hilal Naimi (Univ. of Djelfa); Nicolae Răzvan Mititelu (Univ. of Iasi)

Nr.	ID	Paper title	Authors
4	55	Robustness of artificial intelligence models to labeling noise and class imbalance	Oussama Abda*, Hilal Naimi (Univ. of Djelfa); Nicolae Răzvan Mititelu (Univ. of Iasi)
5	165	Artificial Intelligence for Green Electricity Integration: A Survey of Methods, Applications, and Open Challenges	Vishnu S (MVJ College of Engineering); Thasni T (CET Trivandrum); Nivedhya K, Duethy Elsa Mathews, Malavika M Hari (MVJ College of Engineering)
6	246	Intelligent Route Optimisation from Satellite Imagery Using EGCSA-SwinUNet and Tortuosity-Weighted Graph Navigation	Vasantha Sandhya Venu, Ritesh Chintakindi (Vardhaman College of Engineering)
EA - O – Electrical Apparatus - ONLINE			
7	107	Experimental Investigation of Switching-Position Effects on Lightning Impulse Insulation Performance of High-Voltage Center-Break Disconnectors	Filiz Iman*, Ahmet Ocak, Yakup Orkun Kilic, Seyit Ali Ceyhuni, Hidir Duzkaya, Cengiz Taplamacioglu

Wednesday, October 21, 2026

14.00 – 16.15

PS - O + REN - O – Power Systems / Renewable Energy – ONLINE (MS Teams link TBA)

Room: Online room 2

MS Teams: Meeting ID: 365 688 681 929 838 4, passcode: Wk7DE9RV

Chairmen: Mihai Gavrilaș, Gheorghe Grigoraș, Dragos Machidon

Nr.	ID	Paper title	Authors
PS - O – Power Systems - ONLINE			
1	9	Power Factor Correction and Power Quality Improvement Using Capacitor Banks in Industrial Power Systems	George-Andrei Marin*, Dan Ghiorgita, Marian Gaiceanu, Ciprian Vlad, Adriana Burlibasa, Silviu Epure, George Petrea
2	94	Resilience-Oriented Assessment of Energy Systems Under Hybrid Threats Using a Lightweight Digital Twin Framework	Inga Zicmane, Aleksandrs Sahnovskis*
3	153	Towards Low-Cost AI-Based Fault Monitoring and Diagnosis in Electrical Power Networks	F. Philibert Andriniriniaimalaza*, Nour Mohammad Murad, Alain Randriamanafana, José Maurino Andrinirintsoa, George Balan, Todihasina Roselin Randrianantenaina, Ruffin Manasina, Djaffard Maxwell, Dumitru-Dorin Lucache
4	213	Development of an Extended SCADA Architecture for Monitoring Critical Hospital Infrastructure	Daria Tibrea*, Calin Munteanu, Vasile Topa, Adina Giurgiuman, Claudia Constantinescu, Claudia Pacurar
REN - O – Renewable Energy - ONLINE			
6	28	Development and Evaluation of an Energy Management Framework for a Stand-Alone PV-Battery DC Microgrid Using Simulation and Experimental Investigation	Diana-Alina Panait*, Ionut-Stelian Grecu, Georgiana Dunca
7	99	A CNN–GRU Based Framework for Real-Time State-of-Charge and State-of-Health Estimation of Lithium-Ion Batteries	Md. Abu Hena Safiq Kamal, Md. Masbah Uddin Chowdhury, Rahul R Kumar, Md. Shamim Anower*
8	138	Physics-Informed Transformer for Day-Ahead Renewable Energy Forecasting Using ERA5 Meteorological Data	Sajib Debnath*, Remon Das, Akash Debnath, Md. Kaium Hossain
9	140	An Efficient MPPT Control Algorithm: Modeling, Simulation, and Experimental Validation	Abdelhak Benheniche, Fouad Zebiri

Wednesday, October 21, 2026

14.00 – 16.15

PEED - O + EM - O – Power Electronics and Electrical Drives / Electrical Machines – ONLINE (MS Teams link TBA)

Room: Online room 3

MS Teams: Meeting ID: 336 546 220 914 321 7, passcode: Gr257Qm2

Chairmen: Gabriel Chiriac, Bogdan Vîrlan

Nr.	ID	Paper title	Authors
PEED - O – Power Electronics and Electrical Drives - ONLINE			
1	32	Advanced Microgrid Architectures for Industrial Facilities: Renewable Energy Integration and Future Smart Grid Development	Clark Chicosu*
2	118	Speed-EMF-Adaptive Four-Level Voltage Selection for a Four-Phase 8/6 SRM Drive with Rapid Current Extinction and Energy Recovery	Mohammad Imran Mir*, Subhendu Bikash Santra
3	175	Speed-Adaptive Blended Torque-Sharing Function for Switched Reluctance Motors Under High-Speed Flux-Slope Constraints	Mohammad Imran Mir*, Subhendu Bikash Santra
4	184	Field-Oriented Control of a BLDC Motor with Hall-Effect Position Feedback: Design and Model-in-the-Loop Validation	Mihai Luchian*, Codruta Mihaela Ancuti, Antheia Deacu
5	243	A Cascaded H-Bridge Multilevel Converter with SOC-Based Module Sorting for Battery Energy Storage Systems	Mihai Luchian*, Alin Ilie Stîngu, Codruta Mihaela Ancuti
EM - O – Electrical Machines - ONLINE			
6	218	Turn Position Dependence of Interturn Short Circuit Faults in PMSMs with Tooth Coil Windings	Huseyin Canseven*
7	315	Cost-oriented design of an 8/6 switched reluctance generator for a Darrieus river hydrokinetic turbine: direct particle swarm optimization coupled with Motor-CAD	Solo Njara Rhevi* (ISSTM Madagascar)

Wednesday, October 21, 2026

16.30 – 19.00

CSAI - O2 + AR - O – Computer Science and AI Applications / Automation and Robotics – ONLINE (MS Teams link TBA)

Room: Online room 1

MS Teams: Meeting ID: 391 271 455 230 757 9, passcode: V59n8vP7

Chairmen: Saroj Pullteap, Daniel Petrisor, Alina Baciu, Marian Poboroniuc

Nr.	ID	Paper title	Authors
CSAI - O2 – Computer Science and AI Applications - ONLINE 2			
1	262	Real-Time Gait Assistance Through Integrated Electromyographic and Force Sensing Technology	Phairin Thaisongkroh (Phranakhon Si Ayutthaya Rajabhat Univ.); Pawarisa Namyotha, Saroj Pullteap (Silpakorn Univ.); Marius Branzila (TUIASI)
2	268	Automated Hydrologic Data Collection and HEC-HMS-Based Flood Warning Framework for Real-Time Flood Risk Mapping	Edwin Sammy Ochieng* (Independent Researcher)
3	270	Data- and Compute-Efficient Fine-Tuning of Domain-Specialized Agentic LLMs via TINSNA: A Tiny Intelligence Network for Sample Valuation and Selective Native-Weight Adaptation	Abhishek Lal* (Govt)

Nr.	ID	Paper title	Authors
4	264	Deep Reinforcement Learning for Grapevine Management Across Mediterranean Agroclimatic Conditions: Algorithm Adaptation and Out-of-Distribution Generalization	Stefan Postolache (ISCTE-IUL); Pedro Sebastião (Instituto de Telecomunicações); Vítor Viegas (Portuguese Naval Academy)
5	100	Enhancing prosodic features in audio files to increase intelligibility in noisy environments	Silvia Feraru* (Romanian Academy Iasi)
6	314	Cloud-Native Architecture for the Digital Twin of an IoT-Based Smart Tomato Greenhouse	Marian Stefan Nicolae, Virginia-Alina Zidaru, Petre-Marian Nicolae*, Raluca-Cristina Nicolae, Nicolae-Daniel Cirstea (Univ. of Craiova)
AR - O – Automation and Robotics - ONLINE			
6	13	Development and Implementation of a Solar Powered Autonomous Lawnmower with Dual-Mode Operation	Anshu Murdan*, Mohammud Waseem Hisaund (Univ. of Mauritius)
7	93	Automated Assessment of OPGW Impact on Distance Protection Performance	Inga Zicmane, Aleksandrs Sahnovskis* (RTU Riga)
8	242	Design and Bench Validation of a Microcontroller-Based BLDC Powertrain for an Autonomous Robot	Codruta Ancuti*, Mihai Luchian, Alin Stingu (UPT Timisoara)

Wednesday, October 21, 2026

16.30 – 19.00

EFEC - O + ECEMB - O + IA - O – Electromagnetic Field and Electrical Circuits / 9th International Workshop on Electromagnetic Compatibility and Engineering in Medicine and Biology – ONLINE (MS Teams link TBA) / Industry Applications – ONLINE (MS Teams link TBA)

Room: Online room 2

MS Teams: Meeting ID: 387 655 698 685 979 1, passcode: qR7Ch7cr

Chairmen: Camelia Petrescu, Sebastian Aradoaei

Nr.	ID	Paper title	Authors
EFEC - O – Electromagnetic Field and Electrical Circuits - ONLINE			
1	160	Coupled Electrothermal Analysis of Size-Selective Particle Transport in a High-Shift Deterministic Lateral Displacement Microchannel	Cristina Martin*, Alexandru Mihail Morega (UNST Politehnica Bucuresti), ...
2	164	Increasing the Power Density of a Permanent Magnet Coupling	Madalin Costin, Elena Selim, Ion Voncila* (UDJ Galati), ...
3	185	Microwave Magnetic Ablation in Skin Tumor	Alexandra Nicoleta Popescu*, Alexandru Mihail Morega, Alin Alexandru Dobre (UNST Politehnica Bucuresti)
4	255	Low-Pass Filters with Stepped Impedance in Bluetooth Applications: Architecture, Implementation and Future Trends	Delia Isaila*, Adina Giurgiuman, Claudia Pacurar, Claudia Constantinescu, Sergiu Andreica, Marian Gliga, Lavinia Opris (UTCN)
ECEMB - O – ONLINE			
5	203	Electromagnetic Analysis of a Stented Cerebral Vascular Model under MRI RF Excitation	Ana-Maria Bruma*, Alexandru-Mihail Morega, Yelda Veli (UNST Politehnica Bucuresti)
6	204	Coupled Modeling of Magnetic Nanoparticle Hyperthermia for Intraperitoneal Tumors	Denisa-Florina Albu*, Alexandru-Mihail Morega (UNST Politehnica Bucuresti); Stefan-Gicu Cruceanu (ISMMA Romanian Academy)
IA - O – Industry Applications - ONLINE			
5	154	Marine and Hydraulic Energy Systems for Madagascar: Design, Optimization, and Prototyping	F. Philibert Andriniriniaimalaza*, Nour Mohammad Murad, José Maurino Andrinirintsoa, Solo Njara Rhevihaja, Juvence Ravohitra, Nirilalaina Randriatefison, George Balan, Ruffin Manasina, Dumitru-Dorin Lucache
6	295	Design of the Electric Powertrain System for a Formula Student Electric Vehicle	Paul Ifrim, Ioan-Marian Dobos*, Bogdan Vîrlan, Adrian Munteanu

Nr.	ID	Paper title	Authors
7	125	Reflective Programmatic Agents: Enhancing Code Generation through Introspective Debugging	Sachin Gurjar* ...

Wednesday, October 21, 2026

16.30 – 19.00

MMS - O + EEPE - O– Metrology and Measurement Systems / Education in Electrical and Power Engineering

Room: Online room 3

MS Teams: Meeting ID: 310 552 193 100 8, passcode: Bn2hY6yU

Chairmen: Cristian Zet, Cristian Gyozo Haba

Nr.	ID	Paper title	Authors
MMS - O – Metrology and Measurement Systems - ONLINE			
1	34	A Unified Framework for Statistical Validation of SI-Traceable Measurement Realizations	Serhii Kursin*, Oleh Velychko
2	306	Smart Irrigation System: A Layered IoT Architecture with Edge Decision-Making	Pedro Menezes Sobral, Octavian Postolache*, Mariana Catela Jacob Rodrigues (ISCTE-IUL)
3	316	Applied Edge Computing and Machine Learning for Air Quality Monitoring	Octavian Postolache*, Gonçalo Prazeres Torres, Mariana Jacob Rodrigues (Instituto de Telecomunicações)
4	66	Simulation and Real-Time Implementation of Advanced SOC Estimation on a Custom Two-Cell BMS	Norbert Kertész*, Claudia Pop, Loránd Szabó
5	129	A Multi-Parameter Electrical Measurement Instrument with Automated Probe Switching and Battery State-of-Charge Estimation	Azmain Muksit Anam*, Amir Hamza Talib, Nahinul Islam Prottoy, Sarkar Maheen Ahmed, Lion Ahammad Fahim, Khandoker Tauhid Imam
6	167	BLE-Based Wireless Temperature Telemetry for Electric Motors: A Bench-Scale Proof-of-Concept	Nima Firozabadi*, Ava Sadeghi, Pourya Shamsi
EEPE - O – Education in Electrical and Power Engineering - ONLINE			
7	17	Evaluation of the Professional Tests for Metrologists in the Field of Legal Metrology using the Rasch Model	Oleh Velychko, Tetyana Gordiyenko, Serhii Kursin*, Olena Trofymenko

THURSDAY, OCTOBER 22, 2026

Thursday, October 22, 2026

10.00 – 11.30

PLENARY LECTURES – Hybrid link

Room: Aula of "Mihai Eminescu" Central University Library

MS Teams: Join the meeting on Microsoft Teams

Chairmen: Dorin Lucache, Marian Poboroniuc, Marius Brânzilă

1	**Philipp Nenninger** Karlsruhe University of Applied Sciences, Germany	Digital Transformation of Industry – Challenges and Opportunities along the Product Life Cycle
2	**Johana Kuncova-Kallio** Axamitium Ltd., Tampere, Finland	Commercialization of Science-Driven Products: Bridging Research, Regulation, and Market Success in Medical Devices
3	**Saroj Pullteap** Silpakorn University, Thailand	AI-Powered Sensor Fusion for Enhanced Decision Making

Thursday, October 22, 2026

12.00 – 13.00

PLENARY LECTURES – Hybrid link

Room: Aula of "Mihai Eminescu" Central University Library

MS Teams: Join the meeting on Microsoft Teams

Chairmen: Gheorghe Grigoraș, Dorin Lucache

1	**Ioana Pisică** Brunel University London, UK	Unlocking Flexibility in Sector-Coupled Sustainable Energy Systems
2	**Remus Teodorescu** Aalborg University, Denmark	Physics-Informed Deep Learning for Energy Systems

Thursday, October 22, 2026

13.30 – 15.00

IEPMDA - 1 – 10th International Workshop with Industry on Electromagnetic Properties of Materials and Dedicated Applications

Room: Orion Room, Unirea Hotel

Chairmen: Romeo Cristian Ciobanu, Mihaela Arădoaei

Nr.	ID	Paper title	Authors
1	177	Degradation Evaluation Under Temperature Exposure of Paints with Applications in Electrical Engineering	Alina Ruxandra Caramitu, George Ursache, Sebastian Teodor Aradoaei, Tiberiu Nicolae Morosan*
2	178	Broadband Impedance Spectroscopy as Comparative Method for the Assessment of Contaminated Sites with Polychlorinated Bi-Phenyls	Romeo Ciobanu, Mihaela Aradoaei, Raducu Machidon, Adelina Daniela Agop*
3	179	Electromagnetic Modeling of the Bonding Assembly Formed by Two Parallel Flat Polyolefin Plates and a Composite Hot Melt Containg Microwave-Susceptible Particles	Mihaela Aradoaei, Diana Laura Socotar, Monica Dumitrache*, Sebastian Teodor Aradoaei, Romeo Cristian Ciobanu
4	180	Simulation of Electrochemical Sensor Systems Based on the Electrical Equivalent Circuit	Oliver Daniel Schreiner, Iustin Nicusor Boureanu, Mihaela Aradoaei, Adrian Parfeni*
5	275	Artificial Intelligence for Osteoporosis Detection Using Medical Images: A Review	Maria-Madalina Nastasache, Romeo Cristian Ciobanu, Mirela Elena Popa*
6	182	Development of Special Absorbent Papers Designed for Sample Collection in MicroPads with Electrochemical Detection	Florin Ciolacu, Romeo Cristian Ciobanu, Mihaela Aradoaei, Alexandru Chirica*

Thursday, October 22, 2026

14.00 – 16.00

EEW – 2nd International Workshop on Energy Efficiency: Transition to Climate Neutrality

Room: Aula of "Mihai Eminescu" Central University Library

Chairmen: Bogdan-Constantin Neagu (TUIASI), Alin Dragomir (TUIASI)

Co-chairs: Gheorghe Grigoraș, Dan Micu, Andrei Ceclan, Attila Simo, Răzvan Beniugă, Lucian Rusu

Co-organizers: Environmental Resource Center (CEREM), Society of Energy Auditors and Managers from Romania (SAMER).
Program: TBA

Thursday, October 22, 2026

14.45 – 16.15

PLENARY LECTURES – Hybrid link

Room: Conference Hall D. Hurmuzescu, E-building

MS Teams: Join the meeting on Microsoft Teams

Chairmen: Florentin Trandabăț, Cristian Fosălău, Dorin Lucache

1	**G. João Rocha** University of Évora, Portugal	Practical applications of near surface geophysics with Electrical Resistivity Tomography with a case-study and comparison between Electrical Resistivity Tomography and in-situ sampling of Electric Conductivity
2	**Pavel Kulha** Czech Technical University in Prague, Czech Republic	On Printed IoT Systems for Enhanced Indoor Air Quality Measurements
3	**Cornelia Ivașcu** ASRO, Romania	Standardization and standards
4	**Tony Lujia Chen** University of Manchester, UK	Environmentally Friendlier Replacement of SF6 to Accelerate the Decarbonisation of the Electricity Network

Thursday, October 22, 2026

15.30 – 17.00

IEPMDA - 2 – 10th International Workshop with Industry on Electromagnetic Properties of Materials and Dedicated Applications

Room: Orion Room, Unirea Hotel

Chairmen: Romeo Cristian Ciobanu, Mihaela Arădoaei

Nr.	ID	Paper title	Authors
1	183	Research on the Advancement of Coated Papers for Inkjet Printing of Electrochemical Sensors	Florin Ciolacu, Mihaela Aradoaei, Romeo Cristian Ciobanu, George Ursache*
2	186	Environmental Rehabilitation Model Based on Fuzzy Logic I. Model and Methodolgy Application	Marius Pislaru, Cristina Mihaela Schreiner, Dragos Costin Pascal*, Monica Dumitrache
3	187	Environmental Rehabilitation Model Based on Fuzzy Logic II. Calculus Exemplification and Sensitivity Analysis	Marius Pislaru, Romeo Cristian Ciobanu, Mihaela Aradoaei, Diana Laura Socotar*
4	188	An Example of Simulation Tool Based on a Service-Oriented Architecture in the Ongoing Monitoring and Energy Management of Smart Buildings	Iulian Catalin Rugina, Romeo Cristian Ciobanu, Gheorghe Grigoras, Mihaela Aradoaei, Razvan Petru Livadariu*
5	190	Enhancing Cybersecurity Through Threat Modeling and Increasing Resilience to Phishing Attacks in Email–Web Ecosystems	Paul Hamciuc*, Romeo Cristian Ciobanu, Adrian Parfeni
6	191	Research on Transforming Plastic Waste and Reed into Thermoplastic Insulating Materials for Construction Use	Mihaela Aradoaei, Romeo Cristian Ciobanu, Sebastian Teodor Aradoaei, Ronalld Luigi Eva*

Thursday, October 22, 2026

16.30 – 18.00

EFEC - 1 – Electromagnetic Field and Electrical Circuits - 1

Room: Amphitheater E2

Chairmen: Camelia Petrescu, Marilena Stanculescu

Nr.	ID	Paper title	Authors
1	26	Material–Geometry Optimization of a Quadrupole Electromagnet for Uniform Magnetic Field	Lucian Petrescu*, Valentin Ionita, Mihai Rebican, Maria-Catalina Petrescu (UNST Politehnica Bucuresti)
2	33	A FEMM-Based Parametric Workflow for the Design and Validation of Inductive Wireless Power Transfer Coils	Giani Brăescu*, Marian-Silviu Poboroniuc (TUIASI)
3	50	Characterization and Modelling of the Helmholtz Coils Wireless Power Transfer System	Marilena Stanculescu, Dragos Niculae*, Lavinia Bobaru, Mihai Iordache (UNST Politehnica Bucuresti); Ioana-Gabriela Sîrbu, Lucian Mandache (Univ. of Craiova)
4	74	Regarding Optimization of Wireless Power Transfer Transmission	Alexandru Catalin Burtea, George-Daniel Petre*, Alexandra Miclăuș, Mihai Iordache (UNST Politehnica Bucuresti)
5	87	Use of Specific Programs to Analysis the Wireless Power Transfer	Lavinia Bobaru, Mihai Iordache*, Alexandra Miclăuș, Daniel Petre, Cătălin Burtea (UNST Politehnica Bucuresti)
6	96	Modeling Ferroresonance in a Three-Phase Transformer with a Nonlinear Hysteretic Core	Andrei-Darius Deliu, Emil Cazacu* (UNST Politehnica Bucuresti); Florențiu Deliu (Marine Engineering ...)
7	226	Electromagnetic Immunity of Ultra-Low-Field Point-of-Care MRI: Coupling Mechanisms, Standard Coverage, and a Site-Level Test Protocol	Matei-Constantin Moruz*, Camelia-Petronela Oprea, Andrei Salceanu (TUIASI), ...

Thursday, October 22, 2026

16.30 – 18.00

AR - 1 + EEPE - 1 – Automation and Robotics / Education in Electrical and Power Engineering

Room: Amphitheater E3

Chairmen: Alina Baciu, Marian Poboroniuc, Cristian-Gyozo Haba

Nr.	ID	Paper title	Authors
AR - 1 – Automation and Robotics - 1			
1	80	Inverter design for driving sensorless BLDC motors in VTOL drone control	Tudor Cosarca*, Marian-Silviu Poboroniuc (TUIASI)
2	161	Dual mode driving unit for electric wheelchairs in distributed assistive device ecosystems	Marian-Adrian Filip* (TUIASI)
3	227	Real-Time Monitoring and 3D Visualization of the Trajectory of a Dental X-Ray System Using Inertial Sensors	Lucian Balan*, Ruxandra Tipau, Camelia-Petronela Oprea, Cristian-Gyozo Haba (TUIASI)
EEPE - 1 – Education in Electrical and Power Engineering - 1			
4	132	The influence of generative AI chatbots on technical higher education	Elena Raducan, Alina Pricopie Filip
5	208	Artificial Intelligence in Engineering Education: From Computer-Assisted Instruction to Human–AI Cognitive Partnership	Sebastian Arădoaei, Cristian-Gyozo Haba, Tiberiu Nicolae Moroșan*, Adrian Adăscăliței
6	294	Simulation-Based Photovoltaic System Design for a Water Pumping Station as an Educational Case Study	Oana-Cristina Beniuga*, Constantin-Razvan Beniuga, Florin-Constantin Baiceanu, Armand Teodor Olinici

Thursday, October 22, 2026

16.30 – 18.00

CSAI - 1 – Computer Science and AI Applications - 1

Room: Amphitheater E4

Chairmen: Saroj Pullteap, Lenuta Alboaie

Nr.	ID	Paper title	Authors
1	36	Classification Experiments on Dorsal Hand Low Quality Images Using SIFT Keypoints, Texture and Shape features	Cristina Nita, Ioan Pavaloi (Romanian Academy Iasi); Anca Ignat* (UAIC Iasi); Camelia Luminita Lazar (Romanian Academy Iasi)
2	49	Experiments on outdoor images, Classification, Retrieval and Automated Annotation using CNN, SURF Keypoints, Texture & Shape features	Cristina Nita, Ioan Pavaloi (Romanian Academy Iasi); Anca Ignat* (UAIC Iasi); Camelia Luminita Lazar (Romanian Academy Iasi)
3	71	Analysis of Multimodal Object Detection Using YOLO with CNN or Transformer Backbone	Daniel Slătineanu*, Lavinia-Eugenia Ferariu, Constantin-Cătălin Dosoftei (TUIASI)
4	127	Pipeline with Logic-Syntax-Driven Diagram Planning for Trustworthy LLM-Based Presentation Generation	Silvia Porcarasu*, Lavinia Ferariu (TUIASI)
5	141	UAV-Based Wildfire Detection Using Onboard Edge AI and RGB–Point Infrared Sensor Fusion	Valentin-Bogdan Andronic*, Dan-Marius Dobrea (TUIASI)
6	62	Assessing Stakeholder Needs and Acceptance of Non-Intrusive Elderly Monitoring Technologies: Exploratory survey study	David Viziteu, Andra Viziteu, Lenuta Alboaie (UAIC Iasi)

Thursday, October 22, 2026

16.30 – 18.00

EM - 1 – Electrical Machines - 1

Room: Conference Hall D. Hurmuzescu

Chairmen: Florin Nicolae Jurcă, Bogdan Vîrlan

Nr.	ID	Paper title	Authors
1	22	Calculation of Optimized Reference Currents for Electrically Excited Synchronous Machines using Iso-Contouring	Jan Degel*, Jan Oellerich, Stefan Haehnlein, Lars Boschert, Christian Kloeffer, Martin Doppelbauer
2	23	Online Flux Linkage Estimation for Electrical Machines Combined with Online Parameter Identification Based on Angle-Dependent Control	Stefan Haehnlein*, Mirko Ronecker, Sophia Beck, Lars Boschert, Christian Kloeffer, Martin Doppelbauer
3	27	A Comprehensive Methodology for Correlating Simulated and Experimental SPMSM Flux Maps	Konstantinos Ntontis, Claudia Martis, Cristian Dobos*
4	37	Topologies and Performance of Single-Phase BLDC Machines	Danut Popa*, Florin Jurca, Claudia Martis

Thursday, October 22, 2026

16.30 – 18.00

EA - 1 – Electrical Apparatus - 1

Room: Room EN-003

Chairmen: Bogdan Hnatiuc, Mihai Andrusca

Nr.	ID	Paper title	Authors
1	21	Comparative Analysis of Two MEMS Capacitive Sensors for the Vibration Signatures of Circuit-Breaker Switching Operations	Bogdan Adrian Spanu*, Bogdan Hnatiuc, Mihaela Hnatiuc
2	25	Identifying Electrical Substation Vulnerabilities for Enhancing Resilience	Amalia-Ionela Din*, Sorina Costinas
3	42	STM32 NeuralArt Processor Model Generation for Electric Arc Fault Detection	Bogdan Hnatiuc*, Sorin Sintea, Mihaela Hnatiuc

Nr.	ID	Paper title	Authors
4	24	Resilience of Power Substations to Extreme Weather Events: Current State of Knowledge	Amalia-Ionela Din*, Sorina Costinas
5	237	Aspects Regarding the Monitoring and Diagnostics of the Return Circuit in Electric Railway Traction Systems	Adrian Anton, Mihai Andrusca*, Maricel Adam, Marius Constantin Bodolică, Ionut Nacu, Costica Roman
6	269	Modeling, Simulation, and Analysis of Solid-State Switching for Phase-to-Phase Load Transfer	Marius-Constantin Bodolică, Mihai Andrușcă*, Maricel Adam, Adrian Anton, Paul Tiberiu Mîrț

Thursday, October 22, 2026

16.30 – 18.00

PS - 1 – Power Systems - 1

Room: Room EN-109

Chairmen: Ion Triștiu, Bogdan Constantin Neagu

Nr.	ID	Paper title	Authors
1	38	Probabilistic Assessment of the Time-Shifting Potential of Deferrable Household Appliances	Gulshan Mustafayeva*, Angela Russo, Gianfranco Chicco
2	44	A Dual-Mode MATLAB–Python Co-Simulation Framework for SIL-to-HIL Validation of Reinforcement Learning-Based Microgrid Controllers	Doha Kamal Mohamed Idris*, Raymond Birasa, Mahmuda Rahman, Claudia Steluța Marțiș, Sorin Iulian Cosman
3	45	CodE–CodEPSS Methodology for Scenario Analysis Regarding the Dimensioning of EPSS Systems in Buildings with Critical Functions	Marin-Alexandru Ciorchină*, Cristina Gabriela Sărăcin, Constantin-Adrian Georgescu*
4	84	Data-Driven Assessment of Voltage Harmonics Using Principal Component Analysis	Andrei-Daniel Olteanu, Stefan Gheorghe*, Cristian Gheorghiu, Alexandru Lehadus
5	174	Enhancing Smart Grid Flexibility Through Demand-Side Virtual Power Plant Management in Matlab/Simulink	Ioan-Viorel Banu*, Fadila Barkat, Marcel Istrate, Josep M. Guerrero, Dragos-Alexandru Andrioaia, Petru-Gabriel Puiu
6	199	Enhancing Smart Grid Flexibility Through Demand-Side Virtual Power Plant Coordination of Water Distribution Networks in MATLAB/Simulink	Ioan-Viorel Banu*, Fadila Barkat, Marcel Istrate, Josep M. Guerrero, Narcis Barsan, Emilian Mosnegutu, Sorin-Gabriel Vernica, Petru-Gabriel Puiu, Dragos-Alexandru Andrioaia

FRIDAY, OCTOBER 23, 2026

Friday, October 23, 2026

09.00 – 10.00

IEEE EMC & EMB Chapters Meeting

Room: Online – Google Meet

Friday, October 23, 2026

09.00 – 09.30

POSTER SESSION

Room: Faculty Hall (E-building)

Chairmen: Alina Baciu, Cătălin Dosoftei, Mihaela Hnatiuc, Dragos Astanei, Adrian Munteanu, Sebastian Aradoaei, Marius Pîslaru, Daniel Sticea, Florina Scarlatache, Ovidiu Ivanov

Nr.	ID	Paper title	Authors
AR - P – Automation and Robotics			
1	109	AI-Based Predictive Maintenance of Industrial Robots: State-of-the-Art Review and a Proposed Health Assessment Architecture	Elisabeta Spunei* (UBB)
CSAI - P – Computer Science and AI Applications			
1	56	The Relationship Between Facial Proportions and the Evaluation of Neutral Images in Different Emotional Contexts	Gabriela Tunea*, Codrin Donciu (TUIASI)
2	209	Development and evaluation of a single shot detector architecture for perception tasks	Silviu-Nicolae Dobrea*, Daniel Petrisor (TUIASI)
3	214	Data Recording System for Traffic Monitoring and Development of Perception Pipelines	Silviu-Nicolae Dobrea*, Daniel Petrisor (TUIASI)
4	302	Intelligent system for monitoring physiological parameters and issuing a preliminary verdict based on artificial intelligence	Marius Branzila, Catalin Damian (TUIASI); Calin Corciova (UMF Iasi); Alexandru Atasie (TUIASI)
5	303	IoT Sensory Platform for Plantar Pressure Analysis Based on Intelligent Recognition of Postural Pathologies	Marius Branzila, Catalin Damian, Ilie Guraliuc (TUIASI); Saroj Pullteap (Silpakorn Univ.)
6	317	Comparative analysis between logo created by graphic designer and artificial intelligence platform	Carmen Tita* (TUIASI)
EEPE - P – Education in Electrical and Power Engineering			
1	112	Technician and Skilled Worker Readiness for Renewable Energy Integration in Moldova	Andrei Chiciuc, Alic Bîrcă, Ruslan Balacci
2	155	A Web-Based Educational Platform for High-Reporting Rate Data Aggregation	Anca Petruta Brincoveanu, Ana-Maria Dumitrescu*
3	159	Efficiency of Flow Control of Electrically Driven Centrifugal Pumps	Olivian Chiver*, Liviu Neamt, Cristian Barz
4	267	Perturb & Observe versus Particle Swarm Optimization for Photovoltaic MPPT: A Static and Dynamic Partial-Shading Study	Constantin Razvan Beniuga*, Oana Cristina Beniuga, Bogdan-Andrei Pingescu, Radu Burlica, Valentin Iosif Cosferent, Sebastian-Stefan Galan
EA - P – Electrical Apparatus			
1	19	Monitoring equipment of MV Switchgear Cabinet performed with Modern Relays	Constantin-Bogdan Păduraru, Alin Dragomir*, Maricel Adam, Marian Dragomir, Ștefan-Andrei Nadabaică, Radu Burlică, Tudor-Alexandru Filip, Mihai Boca
2	20	Predictive Algorithm Based on the Arrhenius Law for the Thermal Aging and Remaining Life Estimation of PVC Insulated Cables	Bogdan Adrian Spanu*, Bogdan Hnatiuc, Mihaela Hnatiuc

Nr.	ID	Paper title	Authors
3	207	Thermal Behavior Analysis of a Light Electric Vehicle's Lithium-ion Battery Pack to Prevent Thermal Runaway	Georgel Gabor*, Costica Nituca, Alin Dragomir, Ecaterina Chelaru, Vadim Cazac, Ilie Nuca, Ghenadie Tertea, Lucian Grusac, Corneliu Răileanu
4	41	Detection of an Arc Fault Using STM32 Microcontroller	Sorin-Robertino Sintea, Bogdan Hnatiuc*, Mihaela Hnatiuc, Cătălin Pomozan
5	195	Dust Layer Influence in Infrared Monitoring of Electrical Equipment	Alin Dragomir*, Constantin-Bogdan Păduraru, Maricel Adam, Marian Dragomir, Adrian Anton, Dragoș-George Astanei, Marius-Andrei Olariu, Alexandra Bodoga
6	238	Aspects of Modeling and Simulation of the Return Circuit from Railway Traction	Mihai Andrusca*, Maricel Adam, Adrian Anton, Marius Constantin Bodolică, Gabriel Chiriac, David-Aurel Paizan
7	300	Design and Experimental Validation of a Test Bench for Temperature Measurement in Electrical Machines	Mihaita-Emanuel Anton*, Bogdan Virlan, Ionut Nacu, Adrian Munteanu, Ioan-Marian Dobos
EM - P – Electrical Machines			
1	163	Preliminary Design of Variable Flux Machines Based on the Rotor Parameter Plane	Julius Kesten*, Matthias Brodatzki, Martin Doppelbauer
2	194	Infrared Thermography Monitoring and Diagnosis of Electrical Machines	Alin Dragomir*, Costică Nițucă, Georgel Gabor, Ghenadie Tertea, Vadim Cazac, Ilie Nuca
3	59	Experimental Model of a Gadolinium Thermomagnetic Motor Driven by Ambient Energy	Vasile-Eusebiu Toader*, Ciprian Bejenar*
4	279	Optimization Process of a 1.5kW Electrically Excited Synchronous Generator for Laboratory Use	Bogdan Virlan, Mihaita-Emanuel Anton*, Adrian Munteanu, Leonard Livadaru, Paul Ifrim, Alecsandru Simion
5	297	Thermal Analysis of a Repurposed Three-Phase Self-Cooled Induction Motor Operating as a Synchronous Generator Using ANSYS Motor-CAD	Ionut Nacu, Bogdan Vîrlan, Adrian Munteanu*, Leonard-Mihail Livadaru, Mihaita-Emanuel Anton, Ioan-Marian Dobos
6	58	AC Joule Loss Reduction and Copper–Aluminum Conductor Comparison for a Dual-Rotor Axial-Flux Motor Intended for a Solar Vehicle	Bogdan Butnariu*, Abderrahmane Rebhaoui, Ioan-Claudiu Coțovanu, Răzvan Alexandru Ințe, Florin Nicolae Jurca, Claudia Steluța Marțiș
7	305	Electromagnetic Design of a Permanent Magnet Synchronous Motor for an Artificial Heart	Ioan-Marian Dobos*, Adrian Munteanu, Bogdan Virlan, Ionut Nacu, Alexandru Plesoianu, Mihaita-Emanuel Anton
EFEC - P – Electromagnetic Field and Electrical Circuits			
1	30	Electromagnetic Dosimetry in Pulsed Magnetotherapy: From Measurements to Analytical Assessment	Alina Marina*, Lucian Gabriel Petrescu, Alin-Alexandru Dobre, Maria-Cătălina Petrescu (UNST Politehnica Bucuresti)
2	313	Study on the Use of Solar Panels in Applications such as Powering Pumping Systems	Olga Plopa*, Mădălina Andrei, George Ursache (TUIASI), ...
EE - P – Energy Efficiency			
1	113	Integration of Tools and Algorithms to Transform Existing Buildings from Passive Energy Users into Active Utility Nodes in Relation with the Power Grid	Mihai Tiberiu Tarco*, Andrei Ceclan, Dan Doru Micu, Adrian Ilie Urda, Paul Beniamin Mureșan, Bogdan Constantin Neagu
2	123	Multi-Criteria Energy Optimization of a PV-Battery Fast Charging Station for Electric Bus Fleets	Vadim Cazac*, Ghenadie Tertea, Corneliu Răileanu, Ilie Nucă, Lucian Grușac, Costică Nițucă, Alin Dragomir, Georgel Gabor
3	145	Extension of a digital framework to address legal, technical and financial issues supporting Citizen Energy Communities in the residential sector	Adrian Ilie Urda, Andrei Ceclan, Dan Micu, Radu Adrian Munteanu, Mihai Tiberiu Tarco, Bogdan-Constantin Neagu
4	189	Techno-Economic Assessment of Envelope Insulation, Heat Pump Performance and PV Sizing in a Romanian nZEB House	Constantin Razvan Beniuga*, Elena Bianca Bedrule, Oana Cristina Beniuga Dragoș Lucian Machidon, Bogdan-Constantin Neagu, Dumitru Marcel Istrate
5	256	Economic Break-Even Conditions for Renewable Hydrogen-Fed SOFC Cogeneration in the Republic of Moldova	Dumitru Braga*, Mariana Chivriga, Viorica Hlusov
6	266	Data-Driven Energy Efficiency and Thermal Comfort Optimization in Educational Infrastructure via Integrated Building Management Systems	Ana Georgiana Lupu*, Gabriel-Dumitru Tcaciuc, Carmen-Ema Panaite, Aristotel Popescu, Andrei Trifan

Nr.	ID	Paper title	Authors
IA - P – Industry Applications			
1	201	Regression-Based Performance Assessment of a Photovoltaic System with P&O MPPT Under Real Variable Weather Conditions	Daniela Niste*, Sorin Gheorghe Pavel, Horia Gheorghe Beleiu, Andrei Cziker
2	202	Reactive Power Compensation in Distribution Networks with Photovoltaic Generation: Comparative Analysis and Decision-Tree-Based Scheme Selection	Daniela Niste*, Radu Adrian Tîrnovan, Horia Gheorghe Beleiu, Anca Miron
3	205	Artificial Intelligence for Electric Vehicle Battery Management Systems: Estimation, Control, Safety, and Deployment Challenges	Claudia V. Pop, Paula Serban, Mircea Ruba
4	211	Hardware-in-the-Loop Validation of Simultaneous SoC and Ohmic Resistance Tracking for Lithium-Ion Cells Using EKF, RLS, and Analytical OCV Polynomials	Paula Șerban*, Sebastian Ursache, Claudia Pop, Mircea Ruba
5	212	State of Power Estimation and simulation of Passive Cell Balancing for a Lithium-Ion Battery Pack using Typhoon HIL	Sebastian Ursache*, Paula Serban, Mircea Ruba, Claudia Pop, Gabriel Chindris, Claudia Marțiș
6	283	Analysis of an Organic Rankine Cycle (ORC) System Supplied by Solar Thermal Energy Stored in Sand Batteries	Cristian-Dragoș Dumitru*, Daniel Dragomir-Stanciu, Adrian Gligor, Ilie Vlasa
7	312	Aspects of the Design and Implementation of Grounding Systems with Horizontal Plate Electrodes	Ionut Bentea*, Virgil Maier, Horia Beleiu
MEEI - P – Management and Entrepreneurship in the Electrical Industry			
1	65	Current Challenges in Maintenance Management: A Systematic Literature Review	Denisa-Alexandra Nica*, Ion Verzea
2	67	Green Entrepreneurship and Industry 5.0: Transformative Pathways for the Electrical Industry	Petrina-Delia Vagiuc*, Marius Pîslaru, Adrian Vîlcu, Ionuț-Viorel Herghiligiu
3	68	Organizational Resilience in the Renewable Energy Transition: A Literature Review	Petrina-Delia Vagiuc*, Marius Pîslaru, Adrian Vîlcu, Ionuț-Viorel Herghiligiu
4	79	The Role of ESG Tools in Stimulating Entrepreneurship in the Electrical Industry	Andrei Mămăligă*, Marius Pîslaru, Elena-Lidia Alexa
5	85	An Industry 4.0 KPI Governance Roadmap and Architecture for Lean and Sustainable Manufacturing SMEs	Nicoleta-Mihaela Căsăneanu*, Marius Pîslaru, Larisa Ivașcu, Adrian Vîlcu
6	86	Industry 4.0 Enabled Lean Sustainability Assessment: A Composite KPI Index for Smart Manufacturing Process Governance	Nicoleta-Mihaela Căsăneanu*, Marius Pîslaru, Geanina Ionela Giosan, Ionuț-Viorel Herghiligiu
7	231	Public Monitoring of Radiofrequency Electromagnetic-Exposure: A Comparative Analysis of the ANCOM Monitor-EMF System and Selected International Infrastructures	Geanina Ionela Giosan, Andrei Sălceanu, Marius Pîslaru, Nicoleta-Mihaela Căsăneanu, Sabina Bobu*, Oana Maria Asiminicesei
8	260	Renewable Energy Adoption in the Romanian Agricultural Sector: A Statistical and Fuzzy Modelling Approach for Sustainable Energy Management	Alexandra Coroian*, Geanina Ionela Giosan, Serban Miclea, Muddassar Sarfraz, Larisa Ivașcu
9	290	Management and Entrepreneurship in the Electrical Industry: Strategic Innovation, Digital Transformation, and Sustainable Business Models	Anand Soni, Anurag Shrivastava, Muhammad Ibrahim Abdullah, Larisa Ivașcu*, Shrikant Upadhyay, Mridul Dixit
MMS - P – Metrology and Measurement Systems			
1	152	Development of an Automated Experimental Platform for Thermal Cycling and Temperature Sensor Evaluation	Gina-Ionela Tătaru*, Cristian Zet
PEED - P – Power Electronics and Electrical Drives			
1	60	Complementary Approach on Modeling Symmetric PWM Command for HSFB Topology with MATLAB & Simulink and dSPACE	Ciprian Bejenar*, Vasile-Eusebiu Toader*

Nr.	ID	Paper title	Authors
2	106	Implementation and Experimental Verification of Pulse-Width Modulation Control Algorithms for a Six-Phase Induction Motor Drive	Corneliu Raileanu*, Vadim Cazac, Ilie Nuca, Ghenadie Tertea, Costica Nituca, Lucian Grușac, Alin Dragomir, Georgel Gabor
3	144	Model Predictive Control of Open-End Winding Fractional-Slot Permanent Magnet Synchronous Motor Drives	Marcel Topor, Sorin Deaconu*, Feifei Bu
4	151	Electrothermal Modeling of a Traction Battery for an Electric Bus with Liquid Cooling and Heat Recovery Potential	Vadim Cazac*, Corneliu Raileanu, Ghenadie Tertea, Ilie Nuca, Lucian Grușac, Costică Nițuca, Alin Dragomir, Georgel Gabor
5	158	Single Phase AC-AC SiC Based Grid Voltage Regulator for Smart Home Applications and Remote Area Homes	Dimitri Grigoras*, Stefan-Marius Panaite
6	257	Technologies and Test Stand of the Rotary Sensors Used in Automotive Electric Drive Systems	Daniel Sticea, Gabriel Chiriac, Georgel Gabor, Alina Baciu, Dimitri Grigoras*, Mihai Albu
PS - P – Power Systems			
1	29	Operational schedule integration for enhanced energy consumption forecasting using pretrained time series models	Mihail Vorobiov*, Alexandru Muresan, Dacian I. Jurj, Dan D. Micu
2	148	Energy transfer between neighbors by using DC connection and market available equipment. A proof of concept	Stefan Popa, Mihai Sanduleac, Radu Plamanescu, Cosmin Burcea, Cristina Efemov, Mihaela Albu, Lidia Balan, Valeriu Podborschi, Gabriel Isac
3	225	A Traffic-Light Screen for Prosumer Connection Requests in Low Voltage Networks	Costica Adi Năzăreanu, Bogdan-Constantin Neagu*, Gheorghe Grigoraș, Ion Triștiu, Marius Iuzic
4	278	Challenges in electrical vehicles integration: A preliminary study on Bucharest's power grid	Andrei Tudose, Irina Picioroaga, Catalina Chelu, Andreea Iantoc, Dorian Sidea, Constantin Bulac
5	291	The Positive-Neighbour Concept for Voltage Control in Prosumer-Rich Low-Voltage Networks	Adi Aurelian Gugiuman*, Bianca-Elena Tuchendria, Bogdan-Constantin Neagu, Gheorghe Grigoras, Attila Simo, Simona Dzitac
6	308	Angular Stability Improvement in IBR Dominated Power Systems	Muhammad Haseeb Akram, Lucian Toma*, Alexandra Istrate
7	137	Offshore wind farms energy injection in the electrical grid - flywheel and battery energy storage systems to mitigate power fluctuations	Djamel Ikni, Mamadou Baïlo Camara, Brayima Dakyo, Elena Răducan
REN - P – Renewable Energy			
1	121	A Hybrid AI Framework for Micro-Hydropower Energy Management	Aurel Botezan*, Anca Miron, Stefan Ungureanu
2	156	Spearman Correlation Analysis between Solar Radiation and Meteorological Parameters Measured by a Weather Station in Iași, Romania	Dragos Machidon*, Alexandru Cocuti, Marcel Istrate, Razvan Beniuga
3	215	Grid connection of a permanent-magnet synchronous generator from a wind turbine system operating at wind speeds that vary over time	Emilia Dobrin, Sorin Musuroi, Ciprian Sorandaru*, Valentin Muller
4	234	Analysis of Operational Performance of Photovoltaic Battery Systems	Ciprian Nemes, Alexandru Moscalciuc, Alexandru Tudose, Florin Baiceanu
5	97	The Influence of the Moment of Inertia on Wind Speed Estimation Using a Cup Anemometer	Cristian Paul Chioncel, Elisabeta Spunei*
ECEMB - P – 9th International Workshop on Electromagnetic Compatibility and Engineering in Medicine and Biology			
1	117	Intelligent System for the Recovery of Fine Motor Function in The Hand Based on a Sensory Glove with Real-Time Feedback and Continuous Performance Monitoring	Maria-Ionika Enciu*, Miruna Vraciu*, Marius-Valerian Paulet (TUIASI)
2	233	Dual-Component Assessment of Ambient RF Electromagnetic Exposure from 100 kHz to 30 MHz Using Isotropic E- and H- Field Measurements	Geanina-Ionela Giosan, Andrei Salceanu, Marius Pislaru, Nicoleta-Mihaela Casaneanu/Dascalu, Sabina Bobu*, Marius-Valerian Paulet (TUIASI)

Nr.	ID	Paper title	Authors
3	244	Flexible Intraoral Sensors for Monitoring Salivary Biomarkers and the Oral Microenvironment: Emerging Technologies and Dental Applications	Vlad Salceanu* (UMF Iasi); Marius-Andrei Olariu (TUIASI); Victor-Vlad Costan (UMF Iasi)
4	245	Flexible Sensors for Mechanical and Functional Monitoring in Orthodontics and Craniofacial Medicine: Technologies, Applications, and Clinical	Vlad Salceanu* (UMF Iasi); Marius-Andrei Olariu (TUIASI); Ilie-Cristian Drochioi, Victor-Vlad Costan (UMF Iasi)

Friday, October 23, 2026

09.00 – 10.30

IEPMDA - 3 – 10th International Workshop with Industry on Electromagnetic Properties of Materials and Dedicated Applications

Room: Orion Room, Unirea Hotel

Chairmen: Romeo Cristian Ciobanu, Mihaela Arădoaei

Nr.	ID	Paper title	Authors
1	192	Estimating the Lifetime of Paints Applied to Electrical Equipment Through Their Dielectric Properties	Alina Ruxandra Caramitu, Cristina Mihaela Schreiner, Mirela Elena Popa, Denisa Nicoleta Iordachescu*
2	193	Modeling the Thermal Effect of Microwaves in the Case of Ablation of Tumors Pretreated with Nanoparticles	Radu Florin Damian, Mihaela Aradoaei, Diana Laura Socotar*
3	196	Comparative Combined Voltammetric-Chronoaperometric Analysis of Sensors Based on Carbon Nanofibers, Either with Graphene or Conductive Polymers, with and Without the Addition of Nanoparticles	Oliver Daniel Schreiner, Denisa Nicoleta Iordachescu, Constantin Vlad Chiriac*, Sebastian Teodor Aradoaei, Alexandru Florentin Trandabat
4	197	Comparative Testing by Cyclic Voltammetry of Sensors Based on Graphene and Conductive Polymers, with and Without the Addition of Nanoparticles	Oliver Daniel Schreiner, Raducu Machidon, Constantin Vlad Chiriac*, Sebastian Teodor Aradoaei, Alexandru Florentin Trandabat
5	198	Simulating the Exposure of Animal Tissues to Microwaves for Sterilization Purposes	Radu Florin Damian, Sebastian Teodor Aradoaei, Ronalld Luigi Eva*, Paul Hamciuc
6	200	Recycling Telecommunications Cables at Salisbury Electromagnetic Shielding Systems using Chiral-Honeycomb Configuration	Mihaela Aradoaei, Romeo Cristian Ciobanu, Sebastian Teodor Aradoaei, Alexandru Chirica*, Olga Plopa

Friday, October 23, 2026

09.30 – 11.30

ECEMB - 1 – Session 1

Room: Amphitheater E2

Chairmen: Alexandru Salceanu, Lucian Petrescu

Nr.	ID	Paper title	Authors
1	114	Intelligent Platform for Balance Rehabilitation using CoP and IMU Data Fusion in a Virtual Environment	Miruna Vraciu*, Maria-Ionika Enciu*, Marius-Valerian Paulet (TUIASI)
2	228	Band-Resolved Characterization of Urban Ambient RF Fields: Principal and Complementary Spectral Contributions	Andrei Salceanu* (TUIASI); Catalin Lazarescu (ANCOM Iasi); Eduard Lunca (TUIASI)
3	229	Frequency-Selective Quantification of Ambient RFEMF Contributions in 5G-NR-Capable Spectrum: 30 MHz – 6 GHz Case Study	Andrei Salceanu* (TUIASI); Catalin Lazarescu (ANCOM Iasi); Marinel Temneanu (TUIASI)
4	241	Comparative Assessment of the Electric Field Strength in the Vicinity of a 220 kV Double-Circuit Overhead Transmission Line	Silviu Vornicu, Eduard Lunca (TUIASI); Mircea Horgos (UTCN); Andrei Salceanu (TUIASI)
5	284	Calibrated Detection of Frequency-Tagged Auditory EEG: Comparing Processing Pipelines Across Datasets	Ada Daniela Teodorescu (UVT Timisoara); Oana Cucu (888 Functional Monkeys); Alin Brindusescu* (UVT Timisoara)

Nr.	ID	Paper title	Authors
6	288	Assessment of Radiofrequency Electromagnetic Field Exposure in a Medical Imaging Clinic	Ionel Pavel (TUIASI); Catalin Lazarescu (ANCOM Iasi); Adelina-Cristina Casuta, Valeriu David (TUIASI)

Friday, October 23, 2026

09.30 – 11.30

IA - 1 – Industry Applications - 1

Room: Amphitheater E3

Chairmen: Emil Cazacu, Elena Serea

Nr.	ID	Paper title	Authors
1	35	Investigation of cavitation damage produced by incorrect suction conditions in a multistage centrifugal pump	Lucian George Primejdie*, Diana Maria Bucur, Carmen Georgescu, Georgiana Dunca
2	81	An IoT-Based Building Management System (BMS) for an Office Building: Zigbee–MQTT Architecture, Automation Scenarios, and Energy Performance Indicators	Vasile-Ciprian Stamate*, Bogdanel Anusca, Denis Cojocaru, Damian Lupu, Mihai Mura, Andrei-Georgian Trifan
3	82	An IoT-Based BMS for an Industrial Building: LoRaWAN/Modbus Monitoring, Edge Automation Panel, and Predictive Maintenance within an Industry 4.0 Context	Vasile-Ciprian Stamate*, Bogdanel Anusca, Denis Cojocaru, Damian Lupu, Mihai Mura, George-Laurentiu Iacob
4	134	Real-Time Monitoring of Elevator System based on Acoustic Signals	Cristian-Gyozo Haba, Marian Scutar, Lucian Balan*
5	263	Methodology for Calculation of Pressure Drops within Hydraulic Manifold Blocks Using ANSYS Fluent	Narcis-Ioan Tica*, Daniela Popescu
6	258	Smart System for Real-Time Greenhouse Environmental Monitoring	Bogdan-Andrei Pingescu, Sebastian-Stefan Galan*, Constantin-Razvan Beniugă, Oana-Cristina Beniugă, Dragos Astanei, Galina Verdeș, Mihai Tirsu, Radu Burlică
7	210	Mitigating Ghost Images in Head-Up Displays through Software Control of Projected Image	Robert Ciobanu, Maria-Alexandra Mocanu*, Mircea-Iulian Nistor, Constantin-Daniel Comeagă, Bianca-Elena Preoteasa

Friday, October 23, 2026

09.30 – 11.30

MMS - 1 – Metrology and Measurement Systems - 1

Room: Amphitheater E4

Chairmen: Ana-Maria Dumitrescu, Bogdan Enache

Nr.	ID	Paper title	Authors
1	53	How Many Bayesian Optimization Trials Are Needed for Data Imputation? An Empirical Study of an Office Building in Slovakia	Filip Petrik*, Demetrios N. Papadopoulos, Marek Höger, Peter Braciník
2	54	Assessing the Role of Feature Selection in Time Series Foundation Models for Load Forecasting: A Case Study of a Multi-Purpose Building in Slovakia	Demetrios N. Papadopoulos, Filip Petrik*, Marek Höger, Peter Braciník
3	88	Shutter-Assisted Frequency Estimation Under Undersampling Conditions for Predictive Maintenance of Rotating Machinery	Luisa-Yi Qing Yang*, Codrin Donciu
4	57	Energy Efficient Optimization of UAVs through Payload Power Architecture Design	Irina Vilciu*, Bogdan-Adrian Enache, Mihai-Emil Diaconu, Stavros Gkanatsios, George-Calin Seritan
5	46	Influence of Metal Objects Worn by the User on SAR Distribution in the Proximity of Mobile Devices	Camelia-Petronela Oprea, Gabriel-Valentin Trelea*, Marinel-Costel Temneanu
6	70	Design and Proof-of-Concept Validation of a NIRS-based Non-Invasive Blood Glucose Monitoring System	Vlad Mihai*, Anca Iulia Nicu

Friday, October 23, 2026

09.30 – 11.30

EM - 2 – Electrical Machines - 2

Room: Conference Hall D. Hurmuzescu

Chairmen: Mircea Rădulescu, Adrian Munteanu

Nr.	ID	Paper title	Authors
1	139	Transient Analysis of Line-to-Line Sudden Short-Circuit at Stator-Winding Terminals of an Unloaded Three-Phase Salient-Pole Synchronous Alternator	Mircea Radulescu*
2	78	Efficient Statistical Tolerance Analysis of a Multi-Rotor Axial Flux Machine Using FEM and Superposition	Erling Gjeset*, Jannis Olf, Martin Doppelbauer
3	115	Electromagnetic Performance Comparison of Uniform and Nonuniform Stator Designs in an 18-Slot/6-Pole Surface-Inset PMSM with Skew	Raymond Birasa*, Cristian Aurel Dobos, Doha Kamal Mohamed Idris, Claudia Steluta Martis
4	216	Differential Inductance Matrix Identification in PM-Assisted SynRMs Using Coherent High-Frequency Injection	Cristian Dobos*, Razvan Alexandru Inte, Florin Nicolae Jurca, Claudia Martis
5	265	Series Hybrid Excitation Synchronous Machine Finite Element Analysis and Experimental Tests	Adrian Munteanu*, Bogdan Virlan, Ion Nastas, Leonard Livadaru, Ionut Nacu, Alecsandru Simion

Friday, October 23, 2026

09.30 – 11.30

PS - 2 – Power Systems - 2

Room: Room EN-109

Chairmen: Radu Porumb, Attila Simo

Nr.	ID	Paper title	Authors
1	51	Compliance Assessment of a Photovoltaic Power Plant with the Romanian Grid Code Requirements	Marius Filișanu, Emil Cazacu*, Marilena Stănculescu
2	52	Assessment of Power Quality in Nonsinusoidal Regime. Case study	Marilena Stanculescu*, Sorin Deleanu, Paul Cristian Andrei, Emil Cazacu, Horia Andrei, George-Călin Serițan
3	133	State Estimator Degrading Observability for IEEE33 and IEEE37 Test Systems by using Graph Neural Networks	Vlad Sanduleac, Remus Teodorescu, Mihai Sanduleac
4	150	Analytical Modeling of Load Asymmetry Effects in Transformer Operating Modes	Iulian Rotari*, Ion Stratan, Elena Vasilos
5	220	NSGA-III-Based PID Control of a PV-Fed Buck Converter for Improved Battery Charging Voltage Regulation	Nedim Tutkun*, M. Emin Akpinar, Can Ilbay, Mehmet Simsir
6	309	A Composite Resilience Index for Distribution Networks and Comparative Assessment of Resilience Measures under High-Impact Low-Probability Events	Ciprian Conoro, Lucian Toma*, George-Iulian Ștefan

Friday, October 23, 2026

09.30 – 11.30

REN - 1 – Renewable Energy - 1

Room: Room EN-119

Chairmen: Dumitru Braga, Ciprian Nemes

Nr.	ID	Paper title	Authors
1	10	Experimental Analysis of Power Quality in a 96 kW Off-Grid PV System with Battery Storage	George-Andrei Marin*, Dan Ghiorghita, Marian Gaiceanu, Ciprian Vlad, Adriana Burlibasa, Silviu Epure, George Petrea
2	14	Functional Simulation of a Geothermal Heat Exchanger	Bogdan Tebrean*, Roxana-Valentina Briscan, Mihaela Cretu, Mircea Lancranjan, Dan Doru Micu

Nr.	ID	Paper title	Authors
3	75	Experimental Evaluation of Curvature Geometry and Installation Configuration on the Electrical Performance of Flexible Photovoltaic Modules Under Outdoor Conditions	Zvika Israeli*, Laurentiu-Dan Milici, Ovidiu-Magdin Tanta
4	157	Estimating Global Horizontal Irradiance using Low-Cost Weather Station Data: A Clearness Index Regression Approach for Iași, Romania	Dragos Machidon*, Alexandru Cocuti, Marcel Istrate
5	247	Reduction of CO_2e Emissions And Enhancement of Sanitary Resilience Through Controlled Processing of Animal By-Products	Vasile Rachier*, Octavian Mangos, Andreai Chiciuc, Alin Dragomir, Sergiu Novenco

Friday, October 23, 2026

10.00 – 13.00

AIEE Talk: Careers in the Energy Industry (event held in Romanian)

Room: Amphitheater E1, E-building

Organized by the Romanian Association of Power and Electrical Engineers (AIEE) in partnership with the "Gheorghe Asachi" Technical University of Iași

Round table: Challenges and Frontiers in the Romanian Energy Industry

Room: Faculty Council Room, E-building

Friday, October 23, 2026

11.00 – 12.30

IEPMDA - 4 – 10th International Workshop with Industry on Electromagnetic Properties of Materials and Dedicated Applications

Room: Orion Room, Unirea Hotel

Chairmen: Romeo Cristian Ciobanu, Mihaela Arădoaei

Nr.	ID	Paper title	Authors
1	230	Automotive-Grade Hardware Root-of-Trust and Challenge-Response Authentication for the Internet of Medical Things	Dragos Costin Pascal*, Mihaela Schreiner, Monica Dumitrache, Mihai Sebastian Carp
2	271	Telemedicine Platform with IoT Biometric Monitoring, Artificial Intelligence Assisted Teleconsultation and Interactive Annotation of Medical Imaging	Madalina-Ancuta Pintilei, Cristina Mihaela Schreiner, Maria-Madalina Nastasache, Nicusor Boureanu*
3	272	Comparative Analysis Of Communication Protocols For Remote Electrical Measurement Applications	Adelina-Daniela Agop*, Romeo Cristian Ciobanu
4	273	Statistical Methods for Regional EEG Spectral Analysis in Neurodegenerative Diseases	Diana Socotar, Cristina Mihaela Schreiner, Raducu Machidon*
5	274	Deep Learning for Automated Detection of Osteoporotic Vertebral Fractures: A Review	Maria-Madalina Nastasache, Romeo Cristian Ciobanu, Mirela-Elena Popa*
6	296	Adaptive Architecture for Cybersecurity and Resilience of IoMT Networks in Smart Hospital Ecosystems	Monica Dumitrache*, Adrian Parfeni

Friday, October 23, 2026

11.45 – 13.00

PEED - 1 – Power Electronics and Electrical Drives - 1

Room: Amphitheater E3

Chairmen: Sorin Deaconu, Ilie Nucă, Gabriel Chiriac

Nr.	ID	Paper title	Authors
1	111	Comparative Assessment of Si, SiC and GaN Semiconductor Technologies for High-Speed Electric Vehicle Traction Inverter	Cosmin Negru*

Nr.	ID	Paper title	Authors
2	128	Self-commissioning of Induction Motor Drives Using Fading Memory Kalman Filter Algorithm	Vinay Kathiriya, Yash Mehta, Ravi Prakash Reddy Siddavatam* (IIT Bombay)
3	142	A Novel Sensorless Control for Induction Machine Based on DREM Observer	Andrei-Iulian Iancu, Silvia Placinta*, Darius-Gabriel Depa, Mihai Marin, Răzvan Mocanu, Vasile Horga
4	166	Adaptive Optimal Control of a Drive System with Reluctance Synchronous Machine	Corneliu Boțan*, Vasile Horga
5	254	Battery Degradation in Vehicle-to-Grid and Vehicle-to-Home Systems	Despa Nicolae Cosmin*, Neagu Bogdan-Constantin, Machidon Dragoș-Lucian, Grigoraș Gheorghe
6	285	A Multi-Criteria Reliability Optimization Framework for Advanced Smart Metering Systems Based on Operational and Decision-Support Parameters	Cristian-Dragos Dumitru, Adrian Gligor, Daniel Stanciu-Dragomir, Ilie Vlasa, Horațiu-Ștefan Grif, Simona Dzitac

Friday, October 23, 2026

11.45 – 13.00

MMS - 2 – Metrology and Measurement Systems - 2

Room: Amphitheater E4

Chairmen: George Seriţan, Cristian Fosalau

Nr.	ID	Paper title	Authors
1	76	A Decision-Support Layer for SCADA-Integrated Monitoring of Low-Carbon Hydrogen Production	Sorin Dan Grigorescu, Cristian-Florian Dincă, Nela Slavu, Laurențiu Lipan, Liliana Lazar, Bogdan Enache*
2	147	Development and Experimental Validation of a Multi-Gas Detection System Based on MQ-Series Sensors and Conductance Gas Mixture Analysis	Mihail-Alexandru Condrea*, Cristian Zet, Cristian Ioan Fosalau
3	149	IoT Node for Measuring Plant Characteristics by Bioimpedance Spectroscopy	Robert-Constantin Lungu*, Cristian-Ioan Fosalau
4	135	Radar Technology in Human Presence Detection	Daniel Bostan, Constantin Daniel Oancea*, Adrian Nedelcu
5	253	Distraction Detection using Video Processing: Parameters Classification and BDT Framework	Iulian Constantin Cadare*, Cristian Zet

Friday, October 23, 2026

11.45 – 13.00

EE - 1 – Energy Efficiency - 1

Room: Conference Hall D. Hurmuzescu

Chairmen: Attila Simo, Constantin Răzvan Beniugă

Nr.	ID	Paper title	Authors
1	48	Exergy analysis of a modern air to water heat pump under real heating season condition of Republic of Moldova	Corina Gutu-Chetrusca, Larisa Tcaci, Ala Tverdohleb
2	72	Integrating Positive Energy Districts and Energy Communities beyond conceptual proximity	Ștefan Dragoş Cîrstea*, Denisa Șteț, Roxana Valentina Briscan, Mădălina Călin-Arhip, Radu Florin Porumb
3	91	Healthy or Efficient? The Impact of Smart Dorms	Alexandru-George Berciu, Dan Doru Micu, Eva-Henrietta Dulf, Gianfranco Chicco, Andrea Mazza
4	95	Evaluating the Economic Viability of Shallow Geothermal Systems in Romania's Residential and Non-Residential Sectors	Laszlo Rapolti, Dan Iudean, Călin Mureșan, Marius Bolba, Rareș Pop, Radu Adrian Munteanu
5	276	Requirements-Driven Selection of a Low-Cost Sensor Network for Comparative Greenhouse Experiments	Mihai Tîrșu*, Galina Verdeș, Aurel Speian, Mihai Lupu, Irina Golub, Constantin Răzvan Beniugă, Oana Cristina Beniugă, Radu Burlică
6	282	Day-Ahead Heat Load Forecasting in District Heating Systems Using the XGBoost Algorithm	Alexandru Cebotari*, Daniela Popescu

Nr.	ID	Paper title	Authors
7	307	Vulnerability Assessment and Authentication Hardening of Modbus/TCP, DNP3, and IEC 61850 in Electric Power Networks: A Comparative Testbed Study	Attila Simo*, Nicolae Chiosa (UPT Timisoara); Bogdan-Constantin Neagu (TUIASI); Simona Dzitac (Univ. of Oradea)