

“DUNAREA DE JOS” UNIVERSITY OF GALATI



**FACULTY OF AUTOMATION, COMPUTERS SCIENCE,
ELECTRICAL AND ELECTRONICS ENGINEERING**

ISEEE-2021

**The 7th International Symposium on
Electrical and Electronics Engineering**

October 28-30, 2021

Galați, Romania

General Preliminary PROGRAM



THURSDAY				
28 OCTOBER 2021				
9:30 – 11:30	REGISTRATION (Microsoft Teams)			
12:00 – 12:30	Welcome to the 7th edition of the Symposium on Electrical and Electronics Engineering -Opening Session (General)			
12:30 – 13:00	PLENARY SESSION (PS1) - (General)			
13:00 – 13:15	Break			
13:15 – 13:45	PLENARY SESSION (PS2) - (General)			
13:45 – 14:30	Break			
TECHNICAL SESSIONS				
14:30 – 16:30	TS1 (Channel 1)		TS3 (Channel 3)	TS5 (Channel 5)
16:30 – 17:30	REGISTRATION (Microsoft Teams)			
FRIDAY				
29 OCTOBER 2021				
10:00 – 12:00	REGISTRATION (Microsoft Teams)			
12:15 – 12:45	PLENARY SESSION (PS3) - (General)			
12:45 – 13:00	Break			
TECHNICAL SESSIONS				
13:00 – 15:00	TS4 (Channel 4)		TS6 (Channel 6)	TS2 (Channel 2)

PS1 Strategic Directions of Application Research in Electrical Engineering on the Horizon 2050

Mihai Octavian Popescu., Claudia Popescu

University POLITEHNICA of Bucharest

Chair **Marian Gaiceanu**

PS2 Current Standards and Regulations for Wireless Battery Charging Systems

Andrei Marinescu

Research , Development and Testing National Institute for Electrical Engineering - ICMET CRAIOVA

Chair **Marian Gaiceanu**

PS3 New Achievements in the Rotor Field-Oriented Control for Autonomous Locomotives Part 2: Control Implementation and Experimental Performances at Low Speed

Alexandru Bitoleanu, Mihaela Popescu, Constantin Vlad Suru and Lavinius Sorin Goreci

University of Craiova

Chair **Marian Gaiceanu**

TS1 - Power Electronics and Electrical Drives I

Chair **Mihai-Octavian Popescu, Mihaela Popescu Alexandru Bitoleanu**
Secretary **Cristinel Dache**

1. **Mihaela Popescu and Alexandru Bitoleanu** - *New Achievements in the Rotor Field -Oriented Control for Autonomous Locomotives Part 1: System synthesis and theoretical investigations*
2. **Constantin Vlad Suru, Mihaela Popescu, Mihaita Linca and Mircea Dobriceanu** - *Control Implementation for Battery Charging in Autonomous Locomotive on dSPACE 1104 DSP Board*
3. **Alexandru Savulescu** - *A possibility of energy recovery in the electric drive of crude oil pumping units*
4. **Alexandru Savulescu** - *Study of an objective function of the energetic parameters for the electric drive of a beam pumping unit*
5. **Alexandru Dusa, Emil Mina Rosu, Silviu Ionut Epure, Razvan Constantin Solea, Marian Gaiceanu and Arsene Liviu Sorin** - *Improving the power quality using the Active Power Filter. Experimental results*

TS2 - Data & Signal Processing

Chair **Horia Nicolai Teodorescu**
Co-Chair **Laurentiu Frangu**
Secretary **Rustem Popa**

1. **Cecilia Bolea** - *Implementation of an Algorithm for Automatic Segmentation of Texts Based on Stylometric Analysis*
2. **Horia Nicolai Teodorescu and Marius Hagan** - *Correlational Analysis of Foot Plantar Pressure Signal*
3. **Horia-Nicolai Teodorescu** - *Noise Equilibrium Frequency as a Measure of the Low Noise Devices Quality Involves the Lambert Function*

4. **Marius Sorin Pavel and Rustem Popa** - *An algorithm for pseudocoloring images in FPGA*
5. **Simona-Vasilica Oprea, Adela Bâra and Gabriela Dobrita** - *Big Data Solutions for Extracting Load Flexibility Potential and Assessing Benefits*
6. **Bogdan Ionescu, Marian Craciun, George Petrea, Silviu Epure, Catalin Arama and Ciprian Vlad** - *Health home-monitoring system based on IoT*

TS3 - Power Electronics and Electrical Drives II

Chair **Emil Cazacu**

Co-Chair **Marian Gaiceanu**

Secretary **Marius Solomon**

1. **Emil Cazacu, Marian Barbu and Lucian Petrescu** - *Inrush current and ferroresonance in low-voltage networks – An integral approach*
2. **Marius Dranca, Mihai Chirca, Stefan Breban and Daniel Fodorean** - *Comparative Design Analysis of Two Modular Permanent Magnet Synchronous Generators*
3. **Marius Solomon and Marian Gaiceanu** - *The Optimization of the Dynamic Regime of the Asynchronous Vectorial AC Motor in Flying Shear*
4. **Razvan Buhosu, Marian Gaiceanu, Răzvan Şolea, Iulian Ghenea and Marius George Solomon** - *Non-linear control of 2WS vehicles*
5. **Dache Cristinel Radu, Epure Silviu, Duşa Alexandru, Şolea Răzvan, Găiceanu Marian and Drogeanu Constantin** - *The influence of the type of connection of the filter coils on the efficiency of the filtration process*

TS4 – Automatic Control and Power Systems

Chair **Viorel Minzu**

Co-Chair **Dumitrescu Mariana**

Secretary **Iulian Ghenea**

1. **Viorel Minzu and George Ifrim** - *Optimal Control of Microalgae Growth in Artificially Lighted Photobioreactors*
2. **Firat Bilgin and Musa Alci** - *Generating Z-number by Logistic Regression*
3. **Djamel Ikni and Elena Raducan** - *Comparative Study Between the Flatness-Based and Field-Oriented Control of a Wind-Energy System*
4. **Dumitrescu Mariana** - *Electric Power Supply Fault Tolerant Analysis for a Naval System*
5. **Daniel Ganea and Ciprian Vlad** - *The potential of renewable energies in Romania*

TS5– Electromagnetic Compatibility and Electrical Engineering Tools

Chair **Florin Ciuprina, Florin, Constantinescu**

Secretary **Mihaela Andrei**

1. **Laura Andrei, Florin Ciuprina, Elena Ruxandra Radu, Augusta Raluca Gabor and Denis Mihaela Panaitescu** - *Dielectric performances of LSR-SiO₂ nanocomposites for wearable antennas substrate*
2. **Valentin Nae, Iancu Ciocoi, Gheorghe Samoilescu and Adelina Rodica Bordianu** - *Electromagnetic compatibility of radiocommunication equipment on board a ship*
3. **Adelina Rodica Bordianu, Gheorghe Samoilescu, Iancu Ciocoi and Valentin Nae** - *Electromagnetic shielding for the protection of the human factor on board a ship*
4. **Ion Voncilă, Ion Paraschiv and Mădălin Costin** - *The Influence of Saturation on the Performance of PMSM*
5. **Marian Costea and Tudor Leonida** - *Radiofrequency Disturbances produced by Insulators Strings in wet Conditions*
6. **George Petrea, Viorel Nicolau and Mihaela Andrei** - *On controller integration for electrostatic precipitator*

TS6 – Power Systems and Software Engineering

Chair **Horia Andrei**

Co-Chair **Emil Diaconu**

Secretary **Cristinel Dache**

1. **Horia Andrei, Emil Diaconu, Andrei Gheorghe, Marilena Stanculescu, Radu Porumb, George Seritan, Paul Andrei, Nicu Bizon, Alin Mazare, Laurentiu Ionescu, Marian Gaiceanu and Sorin Deleanu** - *Energy Consumption, Pandemic Period and Online Academic Education: Case Studies in Romanian Universities*
2. **Valentin Ion, Horia Andrei, Emil Diaconu, Dan Puchianu and Andrei Cosmin Gheorghe** - *Modelling the electrical characteristics of video surveillance systems*
3. **Valentin Ion, Horia Andrei, Emil Diaconu, Dan Puchianu and Mihaita Ardeleanu** - *Modelling of Electrical Characteristics for an Anti-Theft Alarm System*
4. **Ionut Craiu, Simona Mihaj, Liviu Olteanu, Emil Diaconu and Mihaita Ardeleanu** - *Study of the possibility of transferring thermal energy by conduction through a solid substance, in concentrated solar power systems*
5. **Valentin Ion, Horia Andrei, Emil Diaconu, Dan Puchianu and Andrei Cosmin Gheorghe** - *Cost and energy consumption analysis of residential security systems*