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 PROGRAM





Faculty of Automation, Computers Science, Electrical and Electronics Engineering
THE 7TH INTERNATIONAL SYMPOSIUM ON ELECTRICAL AND ELECTRONICS ENGINEERING
http://www.iseee.ugal.ro/2021

THE 7TH Edition 28-30 October, 2021

THURSDAY 28 OCTOBER 2021					
9:30 – 11:30	REGISTRATION (Microsoft Teams)				
12:00 – 12:30	Welcome to the 7th edition of the International 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		TS3		TS5
	(Channel 1)		(Channel 3)		(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		TS6		TS2
	(Channel 4)		(Channel 6)		(Channel 2)

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

Mihai Octavian POPESCU, Claudia POPESCU

Politechnica University of Bucharest

Chair Marian GAICEANU

PS2 Current Standards, Regulations for Wireless Battery Charging Systems

Andrei MARINESCU

Romanian Academy of Technical Sciences, Craiova Branch

Chair Marian GAICEANU

PS3 New Achievements in the Rotor Field-Oriented Control for Autonomous Locomotives

Part 2: Control Implementation, Experimental Performances at Low Speed

Alexandru BITOLEANU, Mihaela POPESCU, Constantin Vlad SURU, Lavinius Sorin GORECI

University of Craiova

Chair Marian GAICEANU

TS1 - Power Electronics, Electrical Drives I

Chair Mihai Octavian POPESCU

Mihaela POPESCU

Alexandru BITOLEANU

Secretary Cristinel Radu DACHE

- 1. Mihaela POPESCU, Alexandru BITOLEANU New Achievements in the Rotor Field -Oriented Control for Autonomous Locomotives Part 1: System synthesis, theoretical investigations
- 2. Constantin Vlad SURU, Mihaela POPESCU, Mihaita LINCA, Mircea DOBRICEANU Control Implementation for Battery Charging in Autonomous Locomotive on dSPACE 1104 DSP Board
- 3. **Alexandru SAVULESCU** *Study* of an objective function of the energetic parameters for the electric drive of a beam pumping unit
- 4. Alexandru SAVULESCU A possibility of energy recovery in the electric drive of crude oil pumping units
- 5. Alexandru DUSA, Emil Mina ROSU, Silviu Ionut EPURE, Razvan Constantin SOLEA, Marian GAICEANU, Arsene Liviu SORIN Improving the power quality using the Active Power Filter. Experimental results

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TS2 - Data & Signal Processing

Chair Horia Nicolai TEODORESCU

Co-Chair Laurentiu FRANGU

Secretary Rustem POPA

- 1. **Speranta Cecilia BOLEA -** *Implementation of an Algorithm for Automatic Segmentation of Texts Based on Stylometric Analysis*
- 2. Horia Nicolai TEODORESCU, 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, Rustem POPA An algorithm for pseudocoloring images in FPGA
- 5. **Simona Vasilica OPREA, Adela BARA, Gabriela DOBRITA -** Big Data Solutions for Extracting Load Flexibility Potential, Assessing Benefits
- 6. **Bogdan Florin IONESCU, Marian CRACIUN, George PETREA, Silviu Ionut EPURE, Catalin Petrica ARAMA, Ciprian VLAD** Health home-monitoring system based on IoT

TS3 - Power Electronics, Electrical Drives II

Chair Emil CAZACU

Co-Chair Marian GAICEANU

Secretary Marius George SOLOMON

- 1. **Emil CAZACU, Marian BARBU, Lucian PETRESCU** Inrush current, ferroresonance in low-voltage networks An integral approach
- 2. Marius DRANCA, Mihai CHIRCA, Stefan BREBAN, Daniel FODOREAN Comparative Design Analysis of Two Modular Permanent Magnet Synchronous Generators
- 3. Marius George SOLOMON, Marian GAICEANU The Optimization of the Dynamic Regime of the Asynchronous Vectorial AC Motor in Flying Shear
- 4. Radu Cristinel DACHE, Epure Ionut SILVIU, Alexandru DUŞA, Constantin Razvan SOLEA, Găiceanu Marian, Drogeanu Constantin The influence of the type of connection of the filter coils on the efficiency of the filtration process
- 5. Razvan BUHOSU, Marian GAICEANU, Razvan SOLEA, Iulian GHENEA, Marius George SOLOMON Non-linear control of 2WS vehicles

TS4 – Automatic Control, Power Systems

Chair Viorel MINZU

Co-Chair Mariana DUMITRESCU

Secretary **Iulian GHENEA**

- 1. Viorel MINZU, George IFRIM Optimal Control of Microalgae Growth in Artificially Lighted Photobioreactors
- 2. Firat BILGIN, Musa ALCI Generating Z-number by Logistic Regression
- 3. **Djamel IKNI, Elena RADUCAN** Comparative Study Between the Flatness-Based, Field-Oriented Control of a Wind-Energy System
- 4. Mariana DUMITRESCU Electric Power Supply Fault Tolerant Analysis for a Naval System
- 5. Daniel GANEA, Ciprian VLAD The potential of renewable energies in Romania

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TS5- Electromagnetic Compatibility, Electrical Engineering Tools

Chair Florin Ciuprina

Florin Constantinescu

Secretary Mihaela ANDREI

- 1. Laura ANDREI, Florin CIUPRINA, Elena Ruxandra RADU, Augusta Raluca GABOR, Denis Mihaela PANAITESCU Dielectric performances of LSR-SiO2 nanocomposites for wearable antennas substrate
- 2. Valentin NAE, Iancu CIOCIOI, Gheorghe SAMOILESCU, Adelina Rodica BORDIANU Electromagnetic compatibility of radiocommunication equipment on board a ship
- 3. Adelina Rodica BORDIANU, Gheorghe SAMOILESCU, Iancu CIOCIOI, Valentin NAE Electromagnetic shielding for the protection of the human factor on board a ship
- 4. Ion VONCILĂ, Ion PARASCHIV, Mădălin COSTIN The Influence of Saturation on the Performance of PMSM
- 5. Marian COSTEA, Tudor LEONIDA Radiofrequency Disturbances produced by Insulators Strings in wet Conditions
- 6. George PETREA, Viorel NICOLAU, Mihaela ANDREI On controller integration for electrostatic precipitator

TS6 - Power Systems, Software Engineering

Chair Horia ANDREI
Co-Chair Emil DIACONU

Secretary Cristinel Radu DACHE

- 1. Horia ANDREI, Emil DIACONU, Andrei GHEORGHE, Marilena STANCULESCU, Radu PORUMB, George SERITAN, Paul ANDREI, Nicu BIZON, Alin MAZARE, Laurentiu IONESCU, Marian GAICEANU, Sorin DELEANU Energy Consumption, Pandemic Period, Online Academic Education: Case Studies in Romanian Universities
- 2. Valentin ION, Horia ANDREI, Emil DIACONU, Dan PUCHIANU, Andrei Cosmin GHEORGHE Modelling the electrical characteristics of video surveillance systems
- 3. Valentin ION, Horia Andrei, Emil DIACONU, Dan PUCHIANU, Mihaita Nicolae ARDELEANU Modelling of Electrical Characteristics for an Anti-Theft Alarm System
- 4. **Ionut CRAIU, Simona MIHAI, Liviu OLTEANU, Emil DIACONU, 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, Andrei Cosmin GHEORGHE Cost, energy consumption analysis of residential security systems