**PQEMC-LF 2023 – Workshop program**

**For on-line connection:**

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Each link will become active 15 minutes earlier than the scheduled time of the event.

**For physical presence**:

INCESA Building, room no. 315, (Decebal Blv., no. 107, Craiova, Dolj County, Romania)

**Workshop program**

**Wednesday, 28 June 2023**

**9:00-10:00** – ***Registration***

**10:00-10:30 – Opening Ceremony**

**10:30-10:45 - Coffee Break**

**10:45-12:30 - Plenary Session**

**Chair: Petre-Marian NICOLAE – Workshop General Chair**

**10:45-11:40 - "Challenges in modelling and measuring the CE exiting power converters**",

Presenter: **PhD Eng., Lu Wan**, *Aalborg University Aalborg, Denmark*

**11:40-12:30 “Developments regarding the recording and monitoring systems of non-sinusoidal and/or non-symmetric regimes for consumers and electrical networks”**

Presenter: **Professor, PhD, Eng., Petre-Marian Nicolae,** *University of Craiova, Romania*

**12:30-13:30 - Lunch**

**13:30-15:10 - Plenary Session**

**Chair: Professor, PhD, Eng., Sebastian KOJ, JADE University of Applied Sciences Wilhelmshaven, Germany**

**13:30-14:20 - “Wind Turbines and Power Grids – Testing Aspects at Jade University of Applied Sciences”**

Presenter: **Professor, PhD, Eng. Sebastian Koj,** JADE University of Applied Sciences, Wilhelmshaven, Germany

**14.20-15:10 - “Practical Aspects of Using Wavelets to Study Power Quality and EMC Problems”**

Presenter: **Associate** **Professor, PhD, Eng. Ileana - Diana Nicolae**, *University of Craiova, Romania*

**Thursday, 29 June 2023**

**10:00-11:40 - *EMC and PQ in Smart Grid***

*Chairs:* Sebastian Koj, *JADE University of Applied Sciences, Wilhelmshaven, Germany*

Ileana-Diana Nicolae, *University of Craiova, Romania*

**3.****An Intelligent Technique for Harmonic State Estimation using Limited Number of Meters***,* Ahmadreza Eslami, Michael Negnevitsky, Evan Franklin , Sarah Lyden, *Centre of Renewable Energy and Power Systems, University of Tasmania, Hobart, Australia*

**8. Considerations on Electromagnetic Disturbances Produced by LEDs Light Sources,** Silvia-Maria Digă1, Nicolae Digă2, Paul-Mihai Mircea1, Marian-Ștefan Nicolae1, Ion Pătru3, Radu-Cristian Dinu1**,** 1*University of Craiova,* 2*Cummins Generator Technologies, Craiova, 3National Institute for Research, Development and Testing in Electrical Engineering – ICMET Craiova, Romania*

**13**. **Labscale Emulation of Abnormalities in Three-Phase Power Systems and their Preemptive Detection using Wavelets**,Helge Lorenzen1, Sebastian Koj1, Josef Timmerberg1, Saba Mylvaganam2, 1*JADE University of Applied Sciences Wilhelmshaven, Germany,* 2*University of South-Eastern Norway Porsgrunn, Norway*

**14. Power Quality Problems that Occur at a Company Producing Electrical Equipment**, Petre-Marian Nicolae, Ileana-Diana Nicolae, Marian - Ştefan Nicolae, *University of Craiova, Romania*

**22**. **Computing and Analysing PQ Indices for a Consumer with Various Sources of Harmonics and Non-symmetries**, Ileana-Diana Nicolae, Petre-Marian Nicolae, Daniel-Nicolae Cîrstea, *University of Craiova, Romania*

**11:40-12:00 – Coffee Break**

**12:00-14:00 - *EMC/EMI and PQ in Transportation Systems and in Power Converters***

*Chairs:* Ruşinaru Denisa, *University of Craiova, Romania*

Iurie Nucă, *University of Craiova, Romania*

**9.****Low-Frequency Conducted Emissions Assessment for Electric Powertrain,** 1,2,3Douglas Nascimento, 4Lu Wan, 1,5Michał Przybylski, 6Flavia Grassi, 1,5Robert Smolenski, 1,5Piotr Lezynski, 1*University of Zielona Gora, Poland,* 2*University of Twente, Netherlands,* 3*Hitachi Energy, Japan,* 4*Aalborg University Aalborg, Denmark,* 5*Institute of Automatic Control, Electronics and Electrical Engineering, Zielona Gora, Poland,* 6*Politecnico di Milano, Italy*

**11. Determination of Operating Characteristics for Asynchronous Generators Connected to the Power Grid,** Raluca-Cristina Presură (Nicolae), Sorin Enache, Marian-Ștefan Nicolae, Ion Vlad, *University of Craiova, Romania*

**16. About Analysis of Emissions from a Switched Mode Power Supply,** Petre-Marian Nicolae, Marius Voinea, Ilie Sorin, Iurie Nucă, *University of Craiova, Romania*

**18. Analysis of Common Mode Currents and Harmonic Pollution at Supplying Induction Motors from Static Converters with Variable Modulation Frequency**, 1Iurie Nucă, 2Lu Wan, 1Petre-Marian Nicolae, 1Ileana - Diana Nicolae, 2Flavia Grassi, 2Xinglong Wu, 1*University of Craiova, Romania*, 2*Politecnico di Milano, Italy*

**20. Using Wavelet Packet Trees to Efficiently Estimate Clustered High Order Harmonics**, Ileana-Diana Nicolae, Petre-Marian Nicolae, Dusan Kostic, Daniel-Nicolae Cîrstea, *University of Craiova, Romania*

**21. Power Quality Impact of Electric Buses’ Charging,** Denisa Rusinaru, Paul Mihai Mircea, Gabriel Cosmin Buzatu, *University of Craiova, Romania*

**14:00-15:00 – *Lunch***

**19:00-22:00 – *Gala Dinner***

**Friday, 30 June 2023**

**10:00-11:40 - *EMC and PQ in Unmanned Vehicles***

*Chairs:* Jenica Corcău, *University of Craiova, Romania*

Liviu Dincă, *University of Craiova, Romania*

**4. Electrostatic Field Interaction Analysis with Photovoltaic Cells for Solar-Powered UAV ,** Andrei Buzdugan, Nicolae Jula, *Doctoral School for Defense and Security Systems Engineering Military Technical Academy „Ferdinand I” Bucharest, Romania*

**5. Ultra-Wideband Received Signal Strength Analysis for UAV Indoor NLOS Navigation** , 1,2Cristian Vidan, 2Georgiana-Florentina Ivănescu, 1Teodor Lucian Grigorie, *1University Politehnica of Bucharest, 2Military Technical Academy “Ferdinand I” Bucharest, Romania*

**6. Performance Analysis of Short-Circuited Microstrip Dipole on Different Dielectric Substrates**, Hatice-Andreea Topal, *University POLITEHNICA Bucharest, Romania*

**7**. **Antenna arrays with radiating element a symmetrical dipole**, Hatice-Andreea Topal, *University POLITEHNICA Bucharest, Romania*

**12**. **Conceptual Proposal for an IAK-52 Aircraft Simulation Workstation,** 1Nicolae-Alin Niculescu, 2Jenica-Ileana Corcau, 1Anton Matei Toma, 2Liviu Dinca, 1 Codrut Nesin, 1*Research, Innovation and Flight Test Center Military Equipment and Technologies Research Agency Craiova*, 2*University of Craiova, Romania*

**11:40-12:00 – Coffee Break**

**12:00-13:40 - *EMC/EMI in Wireless Systems, Biological Effects due to EMI at Low Frequency, EMC/EMI Challenges of Railway Network Electrification, digital Railways, PQ Problems in Supplying Lines***

*Chairs:* Marian-Ștefan Nicolae, *University of Craiova, Romania*

Maria-Cristina Niţu, *ICMET Craiova, Romania*

**10. Effects of Inrush Current on Operating Transformers when the Series Resonance Condition is Met**, Maria-Cristina Niţu, *National Institute for Research, Development and Testing in Electrical Engineering – ICMET Craiova, Romania*

**15. On the Distorting Regime at the Connection of Photovoltaic Plant to Grid,** Ihsan Mizher Baht, Petre-Marian Nicolae and Ileana-Diana Nicolae, *University of Craiova, Romania*

**17. About Measurement System in Stations and Substations using Original Data Acquisition Systems**, Ileana-Diana Nicolae, Petre-Marian Nicolae and Marian - Ştefan Nicolae, *University of Craiova, Romania*

**19. Magnetic and Electric Field Measurement Experiments,** 2Viorica Voicu, 1Livia-Andreea Dina, 1Paul-Mihai Mircea, 2Ionel Dumbrava, 1*University of Craiova,* 2*National Institute for Research, Development and Testing in Electrical Engineering – ICMET Craiova, Romania*

**24.** **Remote Monitoring of Environment Radiation with Arduino Wemos and Geiger Counter Sensors**, Marian-Ștefan Nicolae, Ileana-Diana Nicolae, Raluca-Cristina Presură (Nicolae), Petre-Marian Nicolae, *University of Craiova, Romania*

**13:40 – 14.00 - Closing Ceremony**

**14:00 - 15:00 – *Lunch***