

Since it is a hybrid event, onsite and online participants are welcome.

Please click the link below to join online:

<https://us02web.zoom.us/j/84285449773?pwd=WIRhTTM0dVh1ek8yN08yUkVkNHN1Zz09>

Meeting ID: 842 8544 9773

Passcode: 613760

Time zone: CET

## **2022. 11.21. MONDAY**

**Location: Tavaszmező u. 17. l. 122.**

**Registration: 8:00 – 9:00**

**Opening: 9:00 – 9:20**

**Prof. László Gulácsi, vice rector**

**György Molnár, dean, general chair**

**Zsolt Temesvári, general cochair**

### **Plenary Session:**

**9.20 – 9.40 Péter Baranyi:** TP model transformation in control design

**9.40 – 10.00 Venizelos Efthymiou, Mattia Cabiati and Andrei Morch:** Boosting the R&I activity on Smart Grid Technologies. The needs springing from the Green Deal in achieving Energy Transition

**10.00 – 10.20 Chris Ashe:** Improved Energy Planning through the Integration of Smart Grid Concepts in the Danube Region

**10.20 – 10.40 Zoltán Balogh:** Using commonly available IoT devices to support and facilitate the learning process

### **10.40 -11.00 Coffee break**

### **Session on Power systems, energy efficiency I:**

#### **Chairs: Judith Pálfi, Robert Istók**

**11.00 – 11.20 Alen Hatibovic, Péter Kádár and György Morva:** A Novel Parabolic Equation of the Conductor Curve in an Inclined Span Based on a Known x–coordinate of the Low Point of the Conductor

**11.20 – 11.40 Marek Pavlík, Michal Kolcun, Ján Zbojovský and Ľubomír Beňa:** Monitoring of Photovoltaic Cell Parameters

**11.40 – 12.00 Zsolt Conka, Vladimír Kohan, Róbert Stefko and Michal Kolcun:** Wind turbine power control

**12.00 – 12.20 Michael Dmitriev, György Morva and József Bencsik:** TESTING OF 6-500 kV CABLES IN POLYMER PIPES

**12.20 – 12.40 Moath Bani Fayyad, Angel Gabriel Asipuela Gonzalez and Tamas Ivancsy:** Numerical study of wavy collecting electrodes with different shapes of corona electrodes

**12.40 – 13.00 Peter Kadar:** Paradigm change of the Demand Side Management

## **13.00 - 14.00 Lunch**

### **Session on Power systems, energy efficiency II:**

**Chairs: Judith Pálfi, Robert Istók**

**14.00 – 14.20 Michael Dmitriev, György Morva and József Bencsik:** DAMAGE LOCATING OF 6-500 kV CABLES IN POLYMER PIPES

**14.20 – 14.40 Róbert Istók and Petru Gabriel Puiu:** Aspects of Romanian and Hungarian Energy Production Systems

**14.40 – 15.00 Fahad Al-Amyal, László Számel and Mahmoud Hamouda:** Modeling and simulation of Switched Reluctance Motor with Internal Fault Capability

**15:00 – 15.20 Khaldoon Alfaverh and Laszlo Szamel:** Battery Energy Storage System Impact Over Load Frequency Control In Microgrids

**15.20 – 15.40 Semih Bal and Zoltan Adam Tamus:** Analyzing the Effect of Thermal Stress on Dielectric Parameters of PVC Insulated Low Voltage Cable Sample

**15.40 – 16.00 Dusan Medved, Michal Kolcun, Jozef Kiraly, Olexandr Shavolkin and Iryna Shvedchykova:** Charging Stations with Constant Power in Cooperation with a Photovoltaic Power Plant

## **16.00 – 16.20 Coffee break**

### **Session on Electronic materials, devices and their applications, lighting applications:**

**Chair: Antal Ürmös**

**16.20 – 16.40 Zoltán Farkas, Antal Ürmös, Ákos Nemcsics:** Imprint of Current Economic Facts in the Time Series of Google Results

**16.40 – 17.00 Robert Pinter, Sanja Maravic Cisar, Verica Bulović, Livia Szedmina and Attila Kóvári:** Eye Movement Monitoring for Multimedia Content Ranking

**17.00 – 17.20 Zoltán Farkas, Antal Ürmös: A Brief Overview of GaAs-based Quantum Structures and Their Technologies and Applications**

**17.30 – Gala dinner**

**2022.11.22. TUESDAY**

**Location: Tavaszmező u. 17. I. 122.**

**Session on Power systems, energy efficiency III.:**

**Chairs: Judith Pálfi, Robert Istók**

**9.00 – 9.20 Jan Zbojovsky, Juraj Kurimsky, Iraida Kolcunova, Marek Pavlik and Roman Cimbala: Waveguide model for the purposes of evaluating the shielding effectiveness of the electromagnetic field**

**9:00 – 9:30 E-poster session:**

- **Jozsef Borbely: On The Number of Distinct Dot Product**
- **Jozsef Laszlo Basiszta, Attila Kovari and Jozsef Katona: Architecture of Automated User Interface based Tests with Protocol-Oriented Programming paradigm**

**9.20 – 9.40 Tadeusz Sikora and Miroslava Nejtková: Overloading Wiring Cables to Produce Samples for Fire Investigators**

**9.40 – 10.00 Zoltan Varga, Ervin Racz: COMSOL 3D Simulation of Optimization of Waste Heat Recovery Using Thermoelectric Generator by Modifying the Design**

**10.00 – 10.20 Zoltán Varga. Ervin Racz: Sun Simulator for Laboratory Testing**

**10.20 – 10.40 Mircea Buzdugan: Influence of harmonic and interharmonic distortion on electrical efficiency of low voltage grids**

**10.40 – 11.00 Zoltán Varga Ervin Racz: COMSOL 3D Simulation of Heat Distribution in a Simplified Dye-Sensitized Solar Cell - Thermoelectric Generator Hybrid System**

**11.00 – 11.20 Coffee break**

## **Session on IoT, CPS, Big Data I:**

### **Chairs: József Beinschróth, Sándor Gyányi**

**11.20 - 11.40 György Molnár and Zoltán Szűts:** Use of Artificial Intelligence in Electronic Learning Environments

**11.40 – 12.00 Salim Sir, Fabian Kohlmorgen, Martin Biskup, Markus Kuller, Ingo Kunold and Hendrik Wöhrle:** Discovery and synchronization of thing descriptions in a distributed architecture

**12.00 – 12.20 Noura Sleibi, Areej Aldaghamin and Carsten Wolff:** Automating Distributed Production Testing

**12.20 – 12.40 Gergely Sebestyén and Jozsef Kopjak:** Network Mapping for TDMA Mesh Sensor Networks with Flooding Routing

**12.40 – 13.00 Joseph Anand, Marcel Koch, Fabian Schlenke, Fabian Kohlmorgen and Hendrik Wöhrle:** Classification of Human Indoor Activities with Resource Constrained Network Architectures on Audio Data

## **13.00 - 14.00 Lunch**

## **Session on IoT, CPS, Big Data II:**

### **Chairs: József Beinschróth, Sándor Gyányi**

**14.00 – 14.20 László Balázs, Jozsef Nadas, Erika Tunyogi, Tamás Sándor, Márk Majoros and Róbert Csamangó:** Energy saving potential of adaptive street lighting

**14.20 – 14.40 Máté Solymosi and Zsolt Jurás:** The domestic and international experiences and rules of IOT devices especially mobile phones in NPP's

**14.40 – 15.00 Péter János Varga, Tibor Wührl, Sándor Gyányi, Márk Tamás Baross and Attila Németh:** Jamming Attacks in 5G NR FR1

**15.00 – 15.20 Ali Aghasi:** A Latency-Aware Power-efficient Reinforcement Learning Approach for Task Offloading in Multi-Access Edge Networks

**15.20 – 15.40 György Molnár and József Cserkó:** AI Based Plagiarism Testing Methods

**15.40 – 16.00 József Beinschroth:** Considering dependencies in risk analysis

## **16.00 – 16.20 Coffee break**

**Sessions on Smart Cities and Energy Communities, nearly zero energy buildings, Embedded programming, system controlling, distributed systems and Electronic materials, devices and their applications, lighting applications:**

**Chair: György Schuster**

Sessions on Smart Cities and Energy Communities, nearly zero energy buildings:

**16.20 – 16.40 Richard Haddad, György Morva, Jozsef Bencsik, Peter Kadar:** Energy management system for energy communities

Embedded programming, system controlling, distributed systems session:

**16.40 – 17.00 Tamas Sandor and Attila Fodor:** Calculating the efficiency of an electric motor from the speed of the vehicle and the slope of the road

**17.00 – 17.20 György Schuster:** Certification of software tools used in safety-critical software development

**18.00 Dinner**

#### Satellite Programs

**These programs are attached to IEEE CANDO-EPE 2020 conference:**

**1) PANTERA Workshop**

Within CANDO-EPE 2022 conference (<http://conf.uni-obuda.hu/Kando2022/>)

Boosting the R&I activity on Smart Grid Technologies Strengthen of regional activity in R&I facilitated by the European EIRIE platform

Budapest, Hungary

at 14:00 – 17:00 CET on November 21, 2022

**2) Bay Zoltán Nonprofit Ltd. for Applied Research, the STRIDE project consortium**

STRIDE project FINAL Conference Stride- Improved energy planning through the Integration of Smart Grid concepts in the Danube Region project **closing event**.

Budapest, Hungary

at 1:30 – 16:00 CET on November 21, 2022