

Final Program

November 17, 2021

Online sessions via Zoom

Join Zoom Meeting

<https://us02web.zoom.us/j/82948315766?pwd=MHlxM2pqNU9NemJVL3Exd0ZpRzJCdz09>

Meeting ID: 829 4831 5766

Passcode: 989573

Session on IoT, CPS, Big Data

Session chair: Ervin RÁCZ

1. **14:00** Amir Mashmool, Samiyeh Khosravi, Javad Hassannataj Joloudari, Irum Inayat and Taghi Javdani Gandomani, Amir Mosavi:
A Statistical Model to Assess the Team's Productivity in Agile Software Teams
2. **14:20** Kourosh Kakhi, Roohallah Alizadehsani, Abbas Khosravi, Saeid Nahavandi and Sheikh Mohammed Shariful Islam:
Challenges of Internet of Medical Things for Electronic Healthcare
3. **14:40** Fabian Schlenke, Fabian Kohlmorgen, Joerg Bauer, Markus Kuller, Nursi Karaoglan and Hendrik Woehrle:
Towards activity recognition in smart homes using multimodal data

Session on Power systems, energy efficiency

Session chair: Ervin RÁCZ

4. **15:00** Ramy Afia and Zoltán Tamus:
Thermal-Mechanical Accelerated Aging Tests of XLPO Insulation Based Photovoltaic Cables: Inverse Aging Behavior

Session on Smart Cities and Energy Communities, nearly zero energy buildings

Session chair: Ervin RÁCZ

5. **15:20** Guglielmina Mutani, Silvia Santantonio and Valeria Todeschi:
Evaluation of ventilation loads in buildings energy modelling at urban scale

6. **15:40** Guglielmina Mutani, Emanuela Fabiano, Davide Astiaso Garcia and Francesco Mancini:
Spatial energy modelling for the Metropolitan City of Rome.
7. **16:00** Mohammad Tayarani Darbandy:
Exploring the effect of adding harmful waste instead of straw in mud bricks from an
environmental viewpoint

Session on Electronic materials, devices and their applications, lighting applications

Session chair: Ervin RÁCZ

8. **16:20** Zoltán Farkas, Antal Ürmös and Ákos Nemcsics:
Results of Principal Component Analyses on a Database of Gallium Arsenide-based Zero
Dimensional Nanostructures

Session on Embedded programming, system controlling, distributed systems

Session chair: Ervin RÁCZ

9. **16:40** István Bendiák:
Analysis of Shaft Alignment Fault of Asynchronous Motors by Current Signature Method

Session on Computer Systems for Healthcare and Medicine, Data Acquisition Systems

Session chair: Ervin RÁCZ

10. **17:00** Mohamad Roshanzamir, Mohammad Tayarani Darbandy, Mahdi Roshanzamir, Roohallah
Alizadehsani and Afshin Shoeibi:
Genetic Programming for optimization of CAD detection process

November 18, 2021

Hybrid sessions

Presentations are held onsite, but all authors can connect via Zoom

Join Zoom Meeting

<https://us02web.zoom.us/j/82948315766?pwd=MHlxM2pqNU9NemJVL3Exd0ZpRzJCdz09>

Meeting ID: 829 4831 5766

Passcode: 989573

Onsite venue: **Óbuda University KVK, Building A, Meeting Room 122 on 1st floor**

Address: Tavaszmező u. 17, H-1084 Budapest, Hungary

8:00 Registration

9:30 Opening Ceremony

Session on Power systems, energy efficiency

Chair: Péter Kádár

Secretary: Gábor Szalai

1. **10:00** Zoltan Varga and Dr. Ervin Racz:
Risk Assessment Matrix for a Small-Size Household Dye-Sensitized Solar Photovoltaic Power Plant System
2. **10:20** Alen Hatibovic, Péter Kádár and György Morva:
Special Parabolic Equation of the Conductor Curve for the Use in Inclined Spans Based on the Given y -coordinate of the Low Point
3. **10:40** Mircea Buzdugan:
Achieving Electromagnetic Compatibility Compliance in a Polluted Environment -Case Study-
4. **11:00** Róbert Istók, Péter Kádár and Levente Reizer:
Solar Carport with Energy Storage Capabilities
5. **11:20** Zsolt Čonka, Michal Kolcun, Juraj Kurimsky, Vladimír Kohan, Gyorgy Morva, Judith Pálfi, Peter Holcsik and Ervin Rác:
Problems related with designing of relay protection for a distribution network containing a local generation unit

11:40 – 12:00 Coffee Break

6. **12:00** Tin Benšić, Toni Varga, Marinko Barukčić and Vedrana Jerković Štil:
Applied ARMA process as current filter for VFD application
7. **12:20** Dušan Medved' and Branislav Genčúr:
Utilization of Thermoelectric Effect
8. **12:40** Vladimir Kohan, Zsolt Conka, Michal Kolcun, Matej Karabinos, Peter Havran, Robert Stefko and Rikin Tailor:
Use of FACTS system to improve power system operation (damping oscillation and power flow control)
9. **13:00** Laith Al Quraan, Fahad Al-Amyal and Szamel Laszlo:
Adaptive Firing Angles Control for Switched Reluctance Motor
10. **13:20** Dušan Medved' and Patrik Hrivniak:
Open-source Platform Utilization for Electricity Measuring

13:40 – 14:20 Lunch

Session on Smart Cities and Energy Communities, nearly zero energy buildings

Chair: Ervin Rácz

Secretary: László Magocsi

11. **14:20** Rituraj Rituraj and Peter Kadar:
SMART METER: ADVANTAGES AND ITS ROADMAP IN INDIA
12. **14:40** Marek Pavlík, Ján Zbojovský and Iraida Kolcunova:
Compare of fabric and brick wall as shielding material dependence on electromagnetic field
13. **15:00** Ján Zbojovský, Jaroslav Džmura, Juraj Kurimský, Marek Pavlík and Roman Cimbala:
Measurement and analysis of environmental parameters in the vicinity of telecommunication transmitters

Session on IoT, CPS, Big Data

Chair: Ervin Rácz

Secretary: László Magocsi

14. **15:20** Gergely Kún, Róbert Kovács, Tibor Wühl, Kristóf Mészáros, László Náday, Sándor Gyányi and Péter János Varga
Introduction of 5G in education
15. **15:40** Gergely Kún, Tibor Wühl, Péter János Varga, Dóra Wühl, Sándor Gyányi and László Náday:
Relationship between 5G and transportation

16:00 – 16:20 Coffee Break

Session on Electronic materials, devices and their applications, lighting applications

Chair: László Balázs

Secretary: László Magocsi

16. **16:20** László Balázs, Zsolt Molnár, József Nádas, Kál Sztratosz, Tamás Páva and Zoltán Sejpes:
Optimizing photosynthetic photon flux density distribution in vertical farms
17. **16:40** Zoltán Farkas, Antal Ürmös and Ákos Nemcsics:
Regression Study on Logarithms of Geometrical and Technological Parameters of Zero-dimensional Nanostructures

Session on Embedded programming, system controlling, distributed systems

Chair: György Schuster

Secretary: László Magocsi

18. **17:00** Daniel Pál, Lubomír Beňa and Zsolt Čonka:
Optimization algorithms for calculation of selected network parameters
19. **17:20** István Bendiák and Tamás Sándor
Comparison of the propulsion of electric vehicles for passenger cars and buses in terms of efficiency optimization
20. **17:40** Tamas Sandor and Attila Fodor:
Study of vehicle dynamic properties and gear shifting mechanism of electric vehicles
21. **18:00** Tamás Sándor and Soma Koppány Somogyi:
Optimizing the consumption of intelligent twin drives on buses in a MATLAB environment using artificial intelligence
22. **18:20** Tamás Sándor and Bertold János Héjja:
The role of traffic effects and environmental effects in optimizing the consumption of an electric bus
23. **18:40** György Schuster:
Software planning

**Thank you for your presentation, attendance and cooperation!
See you next year at CANDO-EPE 2022!**