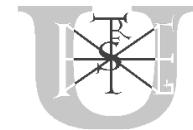


Location of the Workshop:

Google Meet link:

<https://meet.google.com/uhy-jrfr-ppm>



— SZENT ISTVÁN UNIVERSITY GÖDÖLLŐ —

Department of Physics and Process Control

26th WORKSHOP ON

ENERGY AND ENVIRONMENT

PROGRAM

December 10-11, 2020

Gödöllő, Hungary

26th WORKSHOP ON ENERGY AND ENVIRONMENT

December 10-11, 2020, Gödöllő, Hungary

Program (on-line)

December 10 (Thursday)

- 14.30-17.00 Registration
Visiting the Department of Physics and Process Control
Visiting the solar installations

December 11 (Friday)

- | | |
|-----------------|--|
| 08.30-08.40 | Opening the Workshop by: |
| Prof. I. Farkas | Head of Doctoral School of Mechanical Engineering
Szent István University, Gödöllő, Hungary |
| Prof. I. Szabó | Vice rector for Education
Szent István University, Gödöllő, Hungary |
| Prof. L. Kárai | Dean of Faculty of Mechanical Engineering
Szent István University, Gödöllő, Hungary |

Session 1

*Chairmen: Prof. I. Farkas
Dr. D. Rusirawan*

- | | |
|-------------|---|
| 08.40-09.00 | I. Farkas: Achievements of the Hungarian Section of the International Solar Energy Society |
| 09.00-09.10 | D. Rusirawan and I. Farkas: Research and project activities in photovoltaic field at ITENAS Bandung |
| 09.10-09.20 | D. Atsu, I. Seres and I. Farkas: Power quality assessment of microinverters for grid-connected PV systems in low voltage networks |
| 09.20-09.30 | G. Pintér, N. Baranyai Hegedűsné, A. Vincze and H. Zsiborács: The potentials of using power-to-gas technology for balancing solar power plants in Hungary |
| 09.30-09.40 | G. Habtay, J. Buzas and I. Farkas: Solar energy potentials in Eritrea cities |
| 09.40-09.50 | I.R. Nikolényi and J. Tóth: Maximum efficiency study on polythiophene based all-polymer |
| 09.50-10.00 | Mensour Almadhhachi, I. Farkas and I. Seres: Designing a hybrid tree by a combination between black body and solar cells |
| 10.00-10.10 | L. Lidyawati, D. Rusirawan and I. Farkas: Forecasting of photovoltaic modules characteristics using ARIMA and Fuzzy time series models |
| 10.10-10.40 | COFFEE BREAK |

Session 2

Chairmen: Prof. P. Weih

Dr. Cs. Mészáros

- | | |
|---|--|
| 10.40-11.00 | P. Weihs, A. Frisch-Niggemeyer, S. Schreier, M. Revesz, C. Gützer: Potential of digital cameras for scientific investigations: case studies |
| 11.00-11.10 | Cs. Mészáros and Á. Bálint: Symmetry aspects of the optical scattering processes in solar materials with incommensurate modulation |
| 11.10-11.20 | I. Kocsány, I. Seres and I. Farkas: Determining the absorbed solar radiation in solar collectors |
| 11.20-11.30 | Asaad Yasseen, I. Farkas and I. Seres: Performance enhancement of PTSC by selective absorber coatings |
| 11.30-11.40 | Ahssan M.A. Alshibil, P. Víg and I. Farkas: TRNSYS simulation of a flat plate-based hybrid solar collector system |
| 11.40-11.50 | Maytham H. Machi, J. Buzás and I. Farkas: Thermal performance of solar air collectors used in modular solar dryer |
| 11.50-12.00 | Ahmed M. Ajeena, P. Víg and I. Farkas: Performance enhancement of flat plate solar collector using nanocoating and nanofluids |
| 12.00-12.10 | P. Víg and J. Tóth: Effect of water droplets on solar modules performance |
| 12.10-12.40 | LUNCH BREAK |
| <i>Session 3</i> | |
| <i>Chairmen: Dr. I. Seres
Dr. S. Bartha</i> | |
| 12.40-13.00 | I. Seres, B. Bán, Cs. N. Dénes, M. Krasznai, M. Reményi, K. Tóth, P. Unyi: Sensor development for the ESA Cansat project |
| 13.00-13.10 | S. Bartha, L.C. Duarte, F. Carvalheiro, S. di Berardino: Landfill deposit gas emissions: Evaluation and measurement techniques, influence to the local air pollution |
| 13.10-13.20 | P. Hermanucz, G. Géczi: Energy analysis of air source heat pump defrost cycle |
| 13.20-13.30 | A.M. Ahmed and A.R. Imre: Efficiency of organic Rankine cycles with hybrid solar-geothermal heating source |
| 13.30-13.40 | D.I. Permania, I. Farkas: Design and construction of organic Rankine cycle powered by solar thermal heat source |
| 13.40-13.50 | M.H. Ali, Z. Kurjak and J. Beke: Enhancement the efficiency of photovoltaic solar cell by using combination earth-air heat exchanger with assist solar chimney |
| 13.50-14.00 | Sz. Páger, A. Veres, and G. Géczi: Hydronic modelling and basic circuits grouping |
| 14.00-14.10 | L.R. Fekti, L. Szekely and G. Géczi: Researching the effect of pollutants on comfort inside residential buildings with different energy classifications |
| 14.10-14.20 | A. Qor-el-aine, G. Géczi and A. Béres: Source regions of PM10 particles during high concentration days in Kecskemét Hungary |
| 14.20-14.30 | CLOSING |