

Location of the Workshop:

Physics Laboratory I, Seminary Building, Room 214.
Department of Physics and Process Control
Szent István University
Páter K. u. 1., Gödöllő, H-2100 Hungary



————— SZENT ISTVÁN UNIVERSITY GÖDÖLLŐ —————

Department of Physics and Process Control

24th WORKSHOP ON

ENERGY AND ENVIRONMENT

PROGRAM

December 6-7, 2018

Gödöllő, Hungary

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Program

December 6 (Thursday)

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

December 7 (Friday)

09.00-09.10 Opening the Workshop by:
 Prof. I. Farkas Head of Mechanical Engineering PhD School
 Institute for Environmental Engineering Systems
 Szent István University, Gödöllő, Hungary
 Prof. L. Káta Dean of Faculty of Mechanical Engineering
 Szent István University, Gödöllő, Hungary
Session 1 *Chairmen: Prof. I. Farkas*
Dr. D. Rusirawan

09.10-09.25 I. Farkas: New achievements in solar PV industry

09.25-09.40 D. Rusirawan and I. Farkas: Characteristics comparison of the first and the second generation of photovoltaic module technologies – a perspective for Indonesian weathers

09.40-09.50 L. Szulyovszky and Gy. Ruda: Controlling harmful building materials and radiation in environmental economy

09.50-10.00 Z. Kapros: Engineering-oriented approach for the general definition of small-scale systems

10.00-10.10 M.A. Al-Neama and I. Farkas: Air mass flow rate effect on the performance of double-pass solar air heater

10.10-10.20 I.R. Nikolényi, Cs. Mészáros and Á. Bálint: Theoretical study of conjugated polymers for solar cell applications

10.20-10.50 COFFE BREAK
Session 2 *Chairmen: Dr. I. Seres*
Dr. L. Hartawan

10.50-11.05 L. Hartawan, T. Shantika, D. Rusirawan and I. Farkas: Wireless monitoring system for mobile hybrid PV – PICO hydro power plant using nRF24L01 and Arduino

11.05-11.15 I. Seres, I. Kocsány and I. Farkas: Operational experiences with a small-scale transparent photovoltaic system

11.15-11.25 S. Gubán and P. Víg: Heat storage at high temperature with phase change materials

11.25-11.35 B. Bokor, D. Eryener, H. Akhan and L. Kajtár: Cooling load reduction with transpired solar collectors

11.35-11.45 H. Zsiborács, G. Pintér, N. Hegedűsné Baranyai: Photovoltaic capacity change in the future based on EU CO scenarios in EU

11.45-11.55 Sz. Bódi, P. Víg and I. Farkas: Use of paraffin wax and water for heat storage in solar systems

11.55-12.05 G. Bencsik, I. E. Háber and I. Farkas: Preparing climate data and city model for computational fluid dynamics simulation

12.05-13.30 LUNCH BREAK
Session 3 *Chairmen: Prof. I. Farkas*
Dr. P. Víg

13.30-13.40 A. Szilágyi, I. Farkas, I. Seres: Application of evaporation cooling with solar energy

13.40-13.50 J. Tóth and I. Farkas: Implementing database support for SIMULINK applied for solar thermal systems

13.50-14.00 W.M.A Elmagid, I. Keppler and I. Molnár: Blade calculation for turbine working solar chimney updraft tower

14.00-14.10 D. Alok and L. Tóth: A New methodology for solving biomass pyrolysis problem

14.10-14.20 D. Atsu, I. Seres and I. Farkas: Investigation of the thermal behaviour of solar PV modules

14.20-14.30 G. Habtay and I. Farkas: Effect of types of chimney in an indirect passive solar dryer

14.30-14.40 M. Haekal, D. Rusirawan and I. Farkas: Design of wind turbine blade under Indonesian wind conditions

14.40-15.00 COFFE BREAK
Session 4 *Chairmen: Dr. S. Bartha*
Dr. Cs. Mészáros

15.00-15.15 S. Bartha, F. Carvalheiro, P. Moniz, L.C. Duarte: Selective fractionation of energy crops within the biorefinery

15.15-15.25 A. Barczy, G. Géczi: Analysis of energy reed growing on wastewater

15.25-15.35 P. Hermanucz, G. Géczi, I. Barótfi: Analysis of multi resources heat pump

15.35-15.45 Z. Patonai and G. Géczi: Waste management of a temporary facility

15.45-16.00 CLOSING