Location of the Workshop:

Physics Laboratory I, Seminary Building, Room 215.
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

25th WORKSHOP ON

ENERGY AND ENVIRONMENT

PROGRAM

November 28-29, 2019

Gödöllő, Hungary

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Program

November 28 (Thursday)

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

November 29 (Friday)

08.30-08.40 Opening the Workshop by:

Prof. I. Farkas — Head of Mechanical Engineering PhD School, Institute for Environmental Engineering Systems, Szent István University, Gödöllő, Hungary

Prof. I. Szabó — Vice rector for Education, Szent István University, Gödöllő, Hungary

Prof. L. Kátai — Dean of Faculty of Mechanical Engineering, Szent István University, Gödöllő, Hungary

Session 1 — *Chairmen: Prof. I. Farkas, M. Pálfy*

08.40-09.00 I. Farkas: Recent developments in solar thermal energy use

09.00-09.10 M. Pálfy: PV in the last 25 years

09.10-09.20 Z. Farkas, A. Ürmös, Á. Nemcsics: Very high efficiency quantum dot based solar cell and its some technological aspects

09.20-09.30 D. Atsu, I Seres and I. Farkas: Performance analysis of grid connected Si-poly and Si-amorphous photovoltaic systems

09.30-09.40 Ahssan M.A. Alshibil, P. Víg and I. Farkas: Efficiency improvement of the hybrid solar collector systems

09.40-09.50 P. Víg: Examination of a photochatalitic thin layer on solar module

09-50-10.00 B. Varga, Z. Komróczy, Á. Nemcsics: Some aspects of a Hungarian solar cell project

10.00-10.10 I. Seres, D. Atsu, I. Farkas: Voltage-time function measurements of inverters

10.10-10.40 COFFE BREAK

Session 2 — *Chairmen: Prof. K. Gottschalk, Dr. Cs. Mészáros*

10.40-11.00 U. Praeger, H. Scaar, I. Truppel, K. Gottschalk and M. Geyer: A low air speed logger for measurements in storage of agricultural products

11.00-11.10 Cs. Mészáros and Á. Bálint: Symmetry analysis of the optical scattering processes relevant for solar cell materials

11.10-11.20 Gy. Ruda: Energetic and environmental effects of concentrated building activity

11.20-11.30 Z. Patonai, R. Kicsiny, G. Géczi: Research the comfort optimum in the military camp

11.30-11.40 P. Hermanucz: Investigation of micro-scale, renevable energy based cogeneration or trigeneration units

11.40-11.50 A. Qor-el-aine, A. Béres, and G. Géczi: The different transmission of air pollutants in Morocco

11.50-12.00 G. Habtay, J. Buzás and I. Farkas: Analysis of the airflow in chimney based indirect solar dryer

12.00-12.10 J. Tóth, V. Erdélyi, L. Jánosi, I. Farkas: On-off and PID control of a small-scale solar system

12.10-13.30 LUNCH BREAK

Session 3 — *Chairmen: Prof. P. Weihs, Dr. I. Seres*

13.30-13.50 P. Weihs, H. Trimmel, H. Formayer, C. Gützer, I. Nadeem, S. Oswald, S. Faroux, A. Lemonsu, V. Masson, M. Revesz, K. Hasel: Influence of climate change and urban growth of the city Vienna on the thermal comport of its habitants

13.50-14.00 H. Zsiborács, G. Pintér, N. Hegedűsné Baranyai, K. Máté, P. Weihs: CO_2 reductions of photovoltaic and wind energy technologies in Hungary and in Austria: Perspectives for 2030

14.00-14.10 I.R. Nikolényi, J. Tóth: Hubbard model for efficiency calculations of organic solar cells

14.10-14.20 I. Kocsány, I. Seres and I. Farkas: Effects of absorption on heat transfer process in solar collectors

14.20-14.30 M. Haekal, D. Rusirawan and I. Farkas: Feasibility study of hybrid renewable energy system in Cipatujah, West Java - Indonesia

14.30-14.40 Asaad Yasseen, I. Farkas and I. Seres: Modelling aspects of concentrating solar collectors

14.40-14.50 F.A. Irdam, D. Rusirawan, and I. Farkas: Modelling of photovoltaic's characteristics based on fuzzy time series

14.50-15.00 M.F.A.R. Tisyadi, C. Nugraha, Rispianda and M. Daroczi: Augmented reality based learning aid as a potential alternative for paper based media

15.00-15.10 S. Bartha, L. C. Duarte, F. Carvalheiro, P. Moniz: Sustainable marine biorefinery modell base seaweeds value chain developed for small scale units

15.10-15.30 CLOSING