

Location of the Workshop:

Department of Physics and Process Control
Szent István University

Gödöllő, Páter K. u. 1. H-2103 Hungary



———— Szent István University Gödöllő ————

Department of Physics and Process Control

21th WORKSHOP ON

ENERGY AND ENVIRONMENT

PROGRAM

December 3-4, 2015

Gödöllő, Hungary

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Program

December 3 (Thursday)

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

December 4 (Friday)

09.00-09.15 Opening the Workshop by:
Prof. I. Farkas Director of Institute
Institute for Environmental Engineering Systems
Szent István University, Gödöllő, Hungary
Prof. I. Szabó Dean of Faculty
Faculty of Mechanical Engineering
Szent István University, Gödöllő, Hungary

Session 1

Chairman: Prof. I. Farkas

09.15-09.30 I. Farkas: Technical and environmental issues of the use of photovoltaic technologies
09.30-09.40 M. Balle, I. Farkas: Roof-integrated solar collectors
09.40-09.50 C. Braga, I. Farkas: Comparison of energy intensities in different countries
09.50-10.00 F.N.M. Garcia: Solar climatization
10.00-10.10 G.N.N. Mombach: Comparison of different photovoltaic cell technologies
10.10-10.25 M. Al-Neama, I. Farkas: Performance enhancement methods of solar air heaters
10.25-10.40 D. Csorba, P. Víg: Examination of phase change energetics of Glaubert's salt mixture
10.40-11.10 COFFEE BREAK

Session 2

Chairman: Dr. Cs. Mészáros

11.10-11.25 I. Seres, P. Víg: Development of the flow control in a domestic hot water system
11.25-11.40 P. Weihs, S. Hasel, E. Mursch-Radlgruber, C. Gützer, S. Krispel, M. Peyerl: Can enhanced albedo of cities contribute to mitigate climate change?

11.40-11.50 O. Amanda, I. Farkas: Photovoltaic solar cells materials
11.50-12.00 M.F.A. Pereira: Hybrid power systems in isolated areas
12.00-12.10 A. Tirico, I. Farkas: The social aspects of the solar energy
12.10-12.20 V.F. Wolff: Efficiency of photovoltaic cells
12.20-12.30 F. Baronnet: Solar heated greenhouses
12.30-12.40 D. Lee: Solar dryer
12.40-14.00 LUNCH BREAK

Session 3

Chairman: Prof. P. Weihs

14.00-14.15 Cs. Mészáros, Á. Bálint: Stochastic modelling of convection-diffusion processes through porous media
14.15-14.30 I. Nikolényi: Descriptions of quasi-one-dimensional structures and their possible role on the field of solar technologies
14.30-14.40 M. López Jerez: Efficiency of solar photovoltaic cells
14.40-14.50 S. Pereira: Fuel cells
14.50-15.00 S. Suhyun: Solar thermal power system
15.00-15.15 L. Ökrös, Zs. Termann: Solar PV penetration and installation experiences in Hungary
15.15-15.30 Z. Kapros: The significance of modelling by operation of PV systems with an outlook on smart grid systems
15.30-15.45 J. Tóth, Cs. Mészáros and Á. Bálint: Evaluation results of the soil column experiments
15.45-16.15 COFFEE BREAK

Session 4

Chairman: Dr. J. Buzás

16.15-16.25 M.A. Benyachov: Analysis of solar radiation components
16.25-16.35 J.L.H. Garrido: Solar heated swimming pools
16.35-16.45 M. Melo: Use of solar energy in Brazilian social technologies
16.45-16.55 E. Szabadi, I. Farkas: Passive solar applications
16.55-17.10 S. Bartha, N. Antal: Small scale biogas plant used in rural area and in local food industry
17.10-17.25 E. Prawira, D. Rusirawan, M. Pramuda and I. Farkas: Initial study of hybrid solar-wind energy in Badung area
17.25-17.35 CLOSING