

EXPRES 2018 Technical Program

April 05-07, 2018, Friday April 06

Town Hall-Városháza-Gradska Kuća

*address: Gradska kuca
Trg Slobode 1.
Svečana sala, Díszterem*

8:30 – 9:00 **REGISTRATION** -----

9:00 – 9:15 **OPENING CEREMONY** Assembly Hall

Dr. Bogdan Laban and Timea Horvat Mayor and vice Mayor of Subotica City
Prof. Dr. Laszlo Kajtar
Prof. Dr. Belo Furi
Prof. Dr. Marija Todorović
Prof. Dr. Péter Odry
Prof. Dr. József Nyers

9:30 – 10:30 **SESSION**
Session Chair: **József Nyers**

9:30 **Some thoughts regarding what brings end of this century to building sector and human life**
Branislav Todorović
University of Belgrade,
Editor-in chef of IJ Energy Buildings (Former)

9:45 **Annual energy consumption analysis influenced by the user habits in different climate zones in Turkey**
Tamas Csoknyai*, Uigur Kinay*
* Budapest University of Technology and Economics, Hungary

10:00 **Application of thermopile technology**
I. Farkas*, A. Szente and Peter Odry***,**
* University of Dunaújváros/Computer Engineering, Dunaújváros, Hungary
** Nuclear Power Plant, Paks, Hungary
*** Polytechnic College of Subotica, Subotica-Szabadka, Serbia

10:15 **The cars need lightweight composites to reduce the co₂ emissions to improve the fuel efficiency**
Rudolf Szabó *, Lorant Szabó *
* Ingtex Bt - Rejtő Sándor Foundation , Hungary
Óbuda University, Hungary

10:30 – 11:15 **COFFEE BREAK** -----

11:15 – 12:30 **SESSION**
Session Chair: **Stevan Firstner**

11:15 **Heat pumps thermal use of underground and abandoned mines energy storage for large-scale res utilization**
Marija S. Todorović
ME, FASHRAE, FREHVA, FWAAS, AESS,
Guest Prof. School of Energy and Environment,
Southeast University Nanjing, China,
CEO vea-invi.ltd, Belgrade, Serbia

11:30	Effectiveness comparison of the ground-water and air-water heat pump for domestic heat water production <u>Belo B. Fűri*</u> *Slovak University of Technology, Faculty of Civil Engineering, Department of Building Services, Bratislava, Slovakia
11:45	Open geothermal energy system for the heat supply in Veľký Meder <u>Ján Takács, S. Gažíková *</u> *Slovak University of Technology, Faculty of Civil Engineering, Department of Building Services, Bratislava, Slovakia
12:00	Energetic investigation of sausage-drying procedure with newly developed technique <u>Miklos Kassai, Peter Orban*</u> *Budapest University of Technology and Economics/Department of Building Service Engineering and Process Engineering, Budapest, Hungary
12:15	Nitrogen recovery from human urine using selective gas-permeable hydrophobic membrane <u>Judit Nagy*</u> * BME Budapest, Department of Building Service and Process Engineering, Budapest Hungary
12: 30	Possibilities of energy savings at replacement boiler for gas fuel into renewable energy source <u>Maria Kurčová*</u> *Slovak University of Technology in Bratislava, Faculty of Civil Engineering, Department of Building Services, Slovakia
12:30 – 14:30	LUNCH -----
14:30 – 15:30	SESSION
	<u>Session Chair: Péter Odry</u>
14:30	Operational design of heat treatment equipment for agricultural granular materials <u>Tibor Poós*, Tamas Kovacs*</u> *Budapest University of Technology and Economics/Faculty of Mechanical Engineering/ Department of Building Service Engineering and Process Engineering, Budapest, Hungary
14:45	Measuring and modeling the mixing power of the hulled millet in an agitated drum dryer <u>Tibor Poós*, Daniel. Horváth*, K. Tamás*</u> *Budapest University of Technology and Economics/Faculty of Mechanical Engineering/ Department of Building Service Engineering and Process Engineering, Budapest, Hungary
15:00	Drying characteristics of medicinal plants <u>Tibor Poós* and Evelin Varju*</u> * Budapest University of Technology and Economics/Department of Building Service Engineering and Process Engineering, Budapest, Hungary
15:15	Testing of a vibration fluidized bed dryer design <u>Tibor Poós*, Viktor Szabó*</u> *Budapest University of Technology and Economics/Faculty of Mechanical Engineering/ Department of Building Service Engineering and Process Engineering, Budapest, Hungary
15:30 – 16:00	COFFEE BREAK -----
16:00 – 17:00	SESSION
	<u>Session Chair: Laszlo Kajtar</u>

- 16:00 Transpired solar collectors in building service engineering: combined system operation and special applications**
Balazs Bokor*, **Laszlo Kajtar***
 *Department of Building Services and Process Engineering, Faculty of Mechanical Engineering, University of Technology and Economics, Budapest, Hungary
- 16:15 Dynamic modeling of μ chp in Matlab-Simulink and capability for smart grid**
Mark Karacsi*, **Peter Kádár***
 *Department of Power Systems, Faculty of Electrical Engineering, Óbuda University
- 16:30 Energetic investigation of energy recovery technologies in air handling**
Laith F. AL-Hyari, **Miklos Kassai**
 *Department of Building Services and Process Engineering, Faculty of Mechanical Engineering, University of Technology and Economics, Budapest, Hungary
- 16:45 Impacts of the clothing on comfort parameters and heating energy requirements**
Balázs Czakó*
 Breuer Marcell Doctorial School,
 University of Pécs, Faculty of Engineering and Information Technology
- 17:00 Green roof temperature distribution monitoring system**
Laszlo Lenkovics*
 Breuer Marcell Doctorial School,
 University of Pécs, Faculty of Engineering and Information Technology
- 17:15 Experiences of the PMV model in Hungary**
János Szabó *, **Laszlo Kajtar ***
 *Budapest University of Technology and Economics,
 Department of Building Service and Process Engineering, Hungary
- 17:30 A survey of factors affecting heat delivery and heat balance**
Laszlo Garbai, **Anador Kaszper***
 *Budapest University of Technology and Economics,
 Department of Building Service and Process Engineering, Hungary
- 17:45 Dynamical behavior of a heat pump coaxial evaporator with explicit determination of the phase border**
Arpad Nyers*, **Jozsef Nyers****
 *University of Pécs, Faculty of Engineering and Information Technology
 **Doctoral School of Applied Informatics and Applied Mathematics, University Obuda

19:00 BANQUET IN HOTEL GALERIA

Poster Session -----

Comparison of a conical and a spiral absorber for a solar dish collector

Saša R. Pavlović*, **Velimir P. Stefanović***, **Evangelos Bellos****, **C. Tzivanidis****

*University of Nis/Faculty of Mechanical Engineering, Nis, Serbia

**National Technical University of Athens, School of Mechanical Engineering,
 Thermal energy department, Athens, Zografou, Greece

Economic analyzes and energetic efficiency of small hydro-plant

D. Golubovic*, **P. Kovac****, **D. Jesic*****, **B. Savkovic****, **D. Sarjanovic******

*Faculty of Mechanical Engineering, University of East Sarajevo

**Department for Production Engineering, Faculty of Technical Sciences, University of Novi Sad

***International Technology and Management Academy – MTMA,

**** Sara-Mont. Doo,

April 07, 2018, Saturday

10h. Work Shop

Sightseeing Tour “ Synagogue Subotica – Szabadka”

Organizers

- V3ME, Subotica
- Óbuda University, Hungary
- University BME, Budapest
- Tera Term doo, Subotica

Sponsors

The main sponsor is ELZETT Subotica



- **Government of Subotica**



- **Annus Auto Saloon and Service, Subotica**



- **AKE-Đantar doo, B. Topola**



- **Mini Pani, Subotica**



- **Suboticagas**

