

# Conference Programme

WEDNESDAY, NOVEMBER 3, 2010

14:00 Registration

15:00 CONFERENCE OPENING (Robert Cerny)

15:10 Invited lecture (30 minutes, Introduction of invited speaker: Robert Cerny)

Rachel Becker

*Effects of PCM Application on Thermal and Energy Performance of Buildings in Summer*

15:40 Lectures: **Hygrothermal performance of building structures and materials** (6 x 20 minutes, Chairman: Oldrich Zmeskal)

S. Olof Hägerstedt, Jesper Arfvidsson

*Comparison of field measurements and calculations of relative humidity and temperature in wood framed walls (to 16:00)*

Matthias Kersken, Almuth Schade

*How good is the insulation quality of IR reflective insulation products? (to 16:20)*

Christian Bludau, Thomas Schmidt, Hartwig M. Künzle

*Hygrothermal effects in lightweight roofs shaded by PV-elements (to 16:40)*

Andrea Binder, Daniel Zirkelbach, Hartwig Künzle

*New method to quantify liquid transport inside hydrophilic interior insulation materials (to 17:00)*

Dariusz Gawin, Francesco Pesavento, Marcin Koniorczyk, Mateusz Wyrzykowski, Witold Grymin

*Modelling chemical degradation of cement based materials with mechanics of multiphase porous media (to 17:20)*

Ivan Baník, Jozefa Lukovičová, Gabriela Pavlendová, Juraj Veselský

*Measurement of thermophysical properties of heat-insulating materials by constant temperature increase (to 17:40)*

18:00 DINNER

**THURSDAY, NOVEMBER 4, 2010**

**7:30 BREAKFAST**

**8:30 Invited lecture** (30 minutes, Introduction of invited speaker: Vlastimil Bohac)

Ludovit Kubicar

*Measuring Regime and Accuracy of the Transient Hot Ball Method*

**9:00 Lectures: Thermal performance and material properties** (5 x 20 minutes, Chairman: Vlastimil Bohac)

Muhammad Abid, Ulf Hammerschmidt, Vladislav Meier

*Dependence of thermophysical properties of sander sandstone on multiple pore filling fluids (to 9:20)*

Stanislav Stastník, Jiří Vala, Jaroslav Nováček, Daniel Kopkáně

*Properties of PCM-modified building materials (to 9:40)*

Zbigniew Suchorab, Henryk Sobczuk, Mariusz Skwarczyński

*Determination of red brick heat conductivity coefficient depending on moisture (to 10:00)*

Monika Wielgosz, Piotr Koniorczyk

*Analysis of thermophysical parameters measurements of chosen foams, polymers and metals by transient plane source method (to 10:20)*

Jiří Vala, Stanislav Stastník

*Identification problems of heat transfer in building materials (to 10:40)*

**10:40 COFFEE BREAK**

**11:00 Invited lecture** (30 minutes, Introduction of invited speaker: Peter Matiasovsky)

Peter Simon

*Thermal Stability of Glass Evaluated by the Induction Period of Crystallization*

**11:30 Lectures: Moisture related problems** (4 x 20 minutes, Chairman: Peter Matiasovsky)

Kamil Ďurana, Jiří Maděra, Robert Černý

*Numerical analysis of coupled heat and moisture transfer in porous materials at high temperatures (to 11:50)*

Peter Mihalka, Peter Matiasovsky

*Investigation of moisture transport in aluminium cooling panel plaster at cyclic water sorption regimes (to 12:10)*

Danica Fidiriková, Ludovit Kubicar

*Investigation of water diffusion in porous sandstone using transient hot-ball method (to 12:30)*

Olga Koronthalyova

*Microstructure and water vapour adsorption of capillary-porous building materials (to 12:50)*

**13:00 LUNCH**

**13:40 CULTURAL PROGRAMME - trip to environs of Valtice**

**19:00 SOCIAL PROGRAMME - conference dinner and wine testing**

**FRIDAY, NOVEMBER 5, 2010**

**7:30 BREAKFAST**

**8:30 Invited lecture** (30 minutes, Introduction of invited speaker: Ludovit Kubicar)

Andrzej J. Panas

*Comparative-Complementary Investigations of Thermophysical Properties – High Thermal Resolution Procedures in Practice*

**9:00 Lectures: Thermophysical properties and testing methods** (5 x 20 minutes, Chairman: Ludovit Kubicar)

Janusz Zmywaczyk , Marcin Gapski

*Estimation of thermophysical parameters of stainless steel 1H18N9T by an inverse method (to 9:20)*

B. K. Sarkar, A. S. Verma

*Photoacoustic spectroscopic investigation of temperature dependence of optical absorption in Cu<sub>2</sub>GeSe<sub>3</sub> (to 9:40)*

Svetozár Malinarič

*Measurement of thermophysical properties of polypropylene-talc composite (to 9:20)*

Peter Sin, Rudolf Podoba, Igor Stubna

*Thermodilatometry of the Brick Clay (to 10:00)*

Jan Toman, Tomas Korecky, Michal Frank, Robert Cerny

*High Temperature Stability of Board Composites (to 10:20)*

**10:40 COFFEE BREAK**

**11:10 Lectures: Thermophysical and hygric properties and testing methods** (6 x 20 minutes, Chairman: Igor Medved)

Ivan Baník, Frantisek Čulík, Jozefa Lukovičová

*Some specific problems of thermophysics semiconducting materials (to 11:30)*

Ján Ondruska, Igor Medved', Anton Trník

*Thermal diffusivity in electroceramics during linear heating (to 11:50)*

Oldřich Zmeskal, Jaroslav Polcer, Lenka Hrebenova, Pavla Stefková

*Determination of Thermal and Moisture Parameters from the Transient Responses (to 12:10)*

Peter Mihalka, Peter Matiasovsky, Matus Holubek

*Determination of liquid water diffusivity of lime-cement perlite plaster at cyclic wetting and drying regimes (to 12:30)*

Vlastimil Bohac, Ludovit Kubicar, Viliam Vretenar

*Thermophysical properties of natural sandstone measured by pulse transient technique. A new model for cuboid shape samples (to 12:50)*

Beatrix Almero Lavie, Ludovit Kubicar

*Calibration of the Hotball sensors (to 13:10)*

**13:10 LUNCH**

**14:00 MEETING OF THERMOPHYSICS SOCIETY**