

Conference programme

October $14^{th} - 16^{th}$, 2015

20th annual meeting of the Thermophysical Society and Working Group of the Slovak Physical Society

Wednesday, October 14, 2015

13:00 – 14:45 Conference registration

13:00 - 14:45 Lunch

15:00 Conference opening - short invitation of conference chairman Igor Medved'

15:10 Invited lecture (30 minutes)

chairman Zbyšek Pavlík

František Chmelík

EXPLORING THERMAL LOADING OF COMPOSITE MATERIALS BY THE ACOUSTIC EMISSION TECHNIQUE

15:40 Lecture (3 x 20 minutes)

<u>Ľudovít Kubičár</u>, Ján Hudec, Danica Fidríková, Peter Dieška, and Martin Vitkovič

EFFECTS IN MONITORING OF THE THERMAL-MOISTURE REGIME OF CULTURAL OBJECTS LOCATED IN DIFFERENT CLIMATE CONDITIONS

Kamil Prusak, Janusz Zmywaczyk, Piotr Koniorczyk, Jan Godzimirski, and Marcin Cegla

THERMO-MECHANICAL ANALYSIS OF CHOSEN EPOXY RESINS USED IN AVIATION TECHNOLOGY

Marcin Cegla, Janusz Zmywaczyk, Piotr Koniorczyk, Jacek Borkowski, and Kamil Prusak

THERMO-MECHANICAL ANALYSIS OF HOMO- AND HETEROGENEOUS SOLID ROCKET PROPELLANTS

16:40 Coffee break (20 minutes)

17:00 Invited lecture (30 minutes)

chairman Janusz Zmywaczyk

Heinz Renner, Vincent Linseis, and Kornelius Nielsch

MEASUREMENT OF PHYSICAL PROPERTIES ON NANO SCALED THIN FILM THERMOELECTRIC MATERIALS

17:30 Lecture (3 x 20 minutes)

Soichiro Wakiya, Noriyoshi Kuwabara, Shuichi Hokoi, and Daisuke Ogura

DETERIORATION OF REMAINS EXHIBITED IN THE EXCAVATION SITE EXHIBITION HALL, HEIJYO-KYU PALACE SITE

Jiří Maděra, Václav Kočí, and Robert Černý

UNCERTAINTY ANALYSIS OF COMPUTATIONAL-EXPERIMENTAL APPROACH FOR DETERMINATION OF EQUIVALENT THERMAL CONDUCTIVITY OF HIGHLY PERFORATED BRICKS

Jan Kočí and Robert Černý

VALIDATION OF GENETIC PROGRAMMING TOOL FOR THE INVERSE ANALYSIS OF MOISTURE TRANSPORT IN BUILDING MATERIALS

19:00 Dinner



Thursday, October 15, 2015

9:00 Invited lecture (30 minutes)

chairman Wolfgang Hohenauer

Tiit Kaljuvee, Rein Kuusik, and Vilma Petkova

THERMAL AND KINETIC CHARACTERISTICS OF SOME OIL SHALE SAMPLES

9:30 Lecture (4 x 20 minutes)

Tomasz Slezak, Janusz Zmywaczyk, Piotr Koniorczyk, and Lucjan Sniezek

DSC Investigations of the Phase Transition in the High Strength Steel S960QL

Jan Fořt, Anton Trník, Milena Pavlíková, and Zbyšek Pavlík

DIATOMITE/PALM WAX COMPOSITE AS A PHASE CHANGE MATERIAL FOR LATENT HEAT STORAGE

Lucie Trhlíková, Oldřich Zmeškal, Radek Prikryl, and Pavel Florian

THERMALPPROPERTIES OF MANNITOL DERIVATIVE

Ján Ondruška, Igor Štubňa, Viera Trnovcová, Tomáš Húlan, and Libor Vozár

DC CONDUCTIVITY OF ILLITE WITH FLY-ASH BETWEEN 20 - 1050 °C

10:50 Coffee break (20 minutes)

11:10 Invited lecture (30 minutes)

chairman Ľudovít Kubičár

Mattias Gustavsson

TESTING THERMAL CONDUCTIVITY OF SAMPLES OF SPECIAL GEOMETRY WITH THE HOT DISK THERMAL CONSTANTS ANALYSER

11:40 Lecture (4 x 20 minutes)

<u>Vlastimil Boháč</u>, Peter Dieška, Viliam Vretenár, Danica Opatt-Fidríková, Vladimír Štofanik, and Marian Markovič

NEW PLANAR DISC TRANSIENT METHOD FOR THE MEASUREMENT OF THERMAL PROPERTIES OF MATERIALS

Zbigniew Suchorab, Łukasz Guz, Grzegorz Łagód, and Henryk Sobczuk

THE POSSIBILITY OF BUILDING CLASSIFICATION FOR MOULD THREAT USING GAS SENSORS ARRAY

Ján Hudec, Ľudovít Kubičár, Christ Glorieux, and Peter Dieška

ANALTYSIS OF CONSTRUCTION VARIANTS OF HOT-BALL SENSOR: EXPERIMENT AND SIMULATION

14:00 Cultural programme

Gabriela Pavlendová, Jozefa Lukovičová, and Ivan Baník

WIRELESS ELECTRO OSMOSIS

13:00 Lunch

19:00 Social programme

Friday, October 16, 2015

9:00 Invited lecture (30 minutes)

chairman Peter Matiašovský

Mária Chromčíková and Marek Liška

APPLICATION OF THERMOPHYSICAL METHODS FOR OXIDE/SILICATE GLASSES

9:30 Lecture (4 x 20 minutes)

Olga Koronthalyova and Lubomir Bagel

EFFECT OF CARBONATION ON LONG-TERM MEASUREMENTS OF SORPTION ISOTHERMS OF AUTOCLAVED AERATED CONCRETE

Petra Jarošová and Jiří Vala

NEW APPROACHES TO THE THERMAL DESIGN OF ENERGY SAVING BUILDINGS

Peter Mihalka and Peter Matiašovský

WATER VAPOUR SORPTION AND HYSTERESIS MODELS APPLICABLE FOR SILICATE BUILDING MATERIALS

Jaroslav Pokorný, Milena Pavlíková, Jaromír Žumár, Anton Trník, and Zbyšek Pavlík

HEAT AND WATER VAPOR TRANSPORT PROPERTIES OF SANDWICH COMPOSITE WITH AEROGEL INSULATION

10:50 Coffee break (20 minutes)

11:10 Lecture (3 x 20 minutes)

chairman Vlastimil Boháč

Jiří Vala and Petra Jarošová

IDENTIFICATION OF EFFECTIVE MATERIAL CHARACTERISTICS IN SEMILINEAR EQUATIONS OF HEAT AND MASS TRANSFER

Ivan Baník and Gabriela Pavlendová

PHOTO- AND THERMO-INDUCED EFFECTS IN CHALCOGENIDE GLASSES FROM POINT OF VIEW OF THE BARRIER-CLUSTER-HEATING MODEL

Daniel Antal, Tomáš Húlan, Anton Trník, Igor Štubňa, and Ján Ondruška

THE INFLUENCE OF TEXTURE AND FIRING ON THERMAL AND ELASTIC PROPERTIES OF ILLITE-BASED CERAMICS

12:10 Closing ceremony

12:30 Lunch