



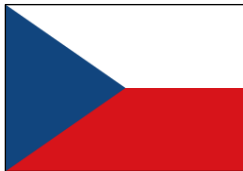
# Thermophysics 2022

October 4<sup>th</sup> – 6<sup>th</sup>, 2022

DALESICE BREWERY, Dalešice, Czech Republic

## Conference program

27th meeting of THERMOPHYSICS



*Sponsorship*



**Hot Disk**<sup>®</sup>



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DALESICE BREWERY, Dalešice, Czech Republic

## Tuesday, October 4, 2022

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**11:00 – 14:30 Conference registration**

**12:30 – 14:15 Lunch**

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**14:30 Conference opening**

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**14:40 Invited Lecture (40 minutes)**

**chairman: Oldřich Zmeškal**

**Mattias Gustavsson, Andrey Sizov**

SPECIFIC HEAT MEASUREMENTS WITH THE HOT DISK THERMAL CONSTANTS ANALYZER (WITHOUT PAPER)

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**15:20 Lectures (3 × 20 minutes)**

**chairman: Oldřich Zmeškal**

**Anna-Marie Lauermannová, Michal Lojka, Ivana Faltysová, Zbyšek Pavlík, Milena Pavlíková, Adam Pivák, Martina Záleská, and Ondřej Jankovský**

MAGNESIUM OXYCHLORIDE CEMENT COMPOSITES FILLED WITH MARTIAN SOIL SIMULANT (007)

**Michal Lojka, Jan Sklenka, Tomáš Hlásek, Filip Antončík, Anna Marie Lauermannová, and Ondřej Jankovský**

COMPARISON OF SUPERCONDUCTING PROPERTIES OF YBCO AND EUBCO SINGLE-DOMAIN BULKS (008)

**Kryštof Skrbek, Vilém Bartůněk, and David Sedmidubský**

SCALE-UP METHOD FOR COMPARATIVE HEAT CAPACITY MEASUREMENT OF LIQUIDS (019)

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**16:20 Coffee Break (20 minutes)**

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**16:40 Lectures (5 × 20 minutes)**

**chairman Vlastimil Boháč**

**Ashis Mallick and Surja Deka**

STRESSES IN A FUNCTIONALLY GRADED ROTATING DISK SUBJECTED TO THERMAL LOADING (009)

**Saumya Singh, Ritesh Dwivedi, Soubhik Kumar Bhaumik, and Pawan Kumar Singh**

MEASUREMENT OF EVAPORATING THIN FILM THICKNESS OF A MICROFLUIDIC CHANNEL USING REFLECTOMETER (018)

**Jiří Vala**

ON THE COMPUTATIONAL HEAT TRANSFER EVALUATION IN BUILDINGS WITH CONTROLLED TEMPERATURE (024)

**Stevan Gavranovic, Jan Blahut, Oldrich Zmeskal, Jan Pospisil, and Vaclav Harna**

IN-SITU THERMAL FABRICATION OF PHOTODETECTORS BASED ON METHYLAMMONIUM LEAD BROMIDE PEROVSKITE (004)

**Lucie Marackova, Oldrich Zmeskal, Premysl Mencik, Radek Prikryl, and Jan Vacula**

THERMAL PROPERTIES OF PLA WITH CONDUCTIVE ADMIXTURES FOR PHOTO-ELECTRIC APPLICATIONS, PREPARED BY 3D PRINTING (010)

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**18:30 Dinner**

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# Thermophysics 2022

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**Wednesday, October 5, 2022**

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**9:00 Invited Lecture (40 minutes)**

**chairman: Ondřej Jankovský**

**Bimal Kumar Sarkar**

TOPOLOGICAL ENTROPY CALCULATIONS ON THE MOLECULAR SEQUENCES (017)

**9:40 Lectures 4 × 20 minutes)**

**Vlastimil Boháč, Rupali Tiwari, L. Krišťák, Luigi Todaro, Valentina Logiudice, Viliam Vretenár**

THERMAL PROPERTIES OF OAK HIGH DENSITY BOARD MEASURED BY THE PULSE TRANSIENT METHOD FOR DIFFERENT HEAT PULSE ENERGY (001)

**Rupali Tiwari, Vlastimil Boháč, , L. Krišťák, Luigi Todaro, Valentina Logiudice, Jan Hudec**

STUDY ON THERMAL PROPERTIES OF LOW DENSITY ALDER WOOD UNDER ROOM AMBIENCE (021)

**Adam Pivák, Martina Záleská, Milena Pavlíková, Jaroslav Zubrzycki, and Zbyšek Pavlík**

EFFECT OF WATER VAPOR ADSORPTION CAPACITY ON THERMAL PROPERTIES OF LIME MORTARS DOPED WITH GRAPHENE NANOPATELET (013)

**Jarosław Zubrzycki, Aleksander Machaj, Zbyšek Pavlík, Grzegorz Łagód**

INFLUENCE OF 3D PRINTING PARAMETERS ON THE MECHANICAL PROPERTIES OF THE SAMPLES MANUFACTURED BY MEANS OF THE FDM METHOD USING THERMOPLASTIC POLYMERS (026)

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**10:50 Coffee Break (20 minutes)**

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**11:10 Lectures (6 × 20 minutes)**

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**chairman: Zbyšek Pavlík**

**Pavel Kopecký, Kamil Staněk, Pavla Ryparová, and Jan Richter**

MODELLING OF MOLD GROWTH ON PINE AND SPRUCE BY THE LOGISTIC EQUATION (006)

**Jan Richter, Kamil Staněk, Petra Schütová, Nicol Pavlíčková**

SORPTION ISOTHERM OF SPRUCE WOOD – MULTIPLE MEASUREMENTS AND BRIEF COMPARISON WITH OTHER SOURCES (015)

**Jan Richter, Kamil Staněk, Pavel Kopecký, Petra Schütová, and Jan Tywoniak**

DYNAMIC MOISTURE TRANSPORT IN SPRUCE WOOD – EXPERIMENT IN HYGROSCOPIC RANGE UNDER ISOTHERMAL CONDITIONS (016)

**Kamil Staněk, Jan Richter, Pavel Kopecký, J. Tywoniak**

SORPTION HYSTERESIS OF SPRUCE WOOD – MEASUREMENT AND MODELLING (020)

**Filip Antončík, Jan Sklenka, Michal Lojka, Tomáš Hlásek and Ondřej Jankovský**

PLASTERS RECYCLING TECHNOLOGY OF REBCO WASTE AND ITS SUBSEQUENT USE AS A REBCO BULK PRECURSOR

**Anna-Marie Lauermannová and Ondřej Jankovský**

CONSTRUCTION MATERIALS BASED ON REACTIVE MAGNESIA ENHANCED BY 1D AND 2D CARBON NANOADDITIVES

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**13:00 Lunch**

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**13:30 Cultural Programme**

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**18:30 Conference Dinner**

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# Thermophysics 2022

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DALESICE BREWERY, Dalešice, Czech Republic

**Thursday, October 6, 2022**

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**09:00 Discussion to Poster Session**

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**chairman: Oldřich Zmeškal**

**Adela Jirickova, Tomas Vrba, Oskar Chmel, Rahul Singh, Adam Fiedler and Ondrej Jankovsky**

NANO-FUNCTIONALIZATION OF CERAMIC FOAM FILTERS USING GRAPHENE OXIDE

**Šimon Marušiak, Milena Pavlíková, Adam Pivák, Łukasz Guz, and Zbyšek Pavlík**

THERMAL PROPERTIES OF LIGHTWEIGHT MKPC COMPOSITES (012)

**Martina Záleská, Milena Pavlíková, Grzegorz Łagód, Zbyšek Pavlík**

EFFECT OF SALINIZATION ON HYGROSCOPICITY OF LIGHTWEIGHT MORTARS WITH ZEOLITE (026)

**Jaroslav Pokorný, Jiří Šál, Tomáš Navara**

THE INFLUENCE OF EXPANDED POLYSTYRENE ON PROPERTIES OF CEMENT-BASED MATERIALS (014)

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**10:35 Closing session**

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