

PROGRAM

JUNE 8, 2022 | Wednesday

09:00–17:00 Registration & Hospitality desk

SESSION 1

Moderator: Daumantas Matulis

11:00–11:10

Opening remarks
Daumantas Matulis | Conference Chair

11:10–11:40

Using Isothermal Microcalorimetry to Determine the Stability of Whey Protein Bars
Jason Kenealey | Brigham Young University, USA

11:40–12:10

Differential Scanning Calorimetry – A Complimentary Approach For Biomedical Studies
Nichola Garbett | University of Louisville, USA

12:10–12:40

Advances in Biofilm Detection and Monitoring Using Calorimetry, and The Push Towards Clinical Diagnostics Applications
Magnus Jansson | Symcel AB, Sweden

12:40–14:00 Lunch

SESSION 2

Moderator: Lars Wadsö

14:00–14:30

Intrinsic Thermodynamics of Protein-ligand Binding by Isothermal Titration Calorimetry for Drug Design
Daumantas Matulis | Vilniaus University, Lithuania

14:30–15:00

Physical Bioenergetics of Biological Systems
Václav Bocan | Max Planck Institute of Molecular Cell Biology and Genetics, Germany

15:00–15:30

The Intrinsic Thermodynamic Parameters of Carbonic Anhydrase II and Acetazolamide Interaction
Egle Vitkunaite | Vilnius University, Lithuania

15:30–17:00 Coffee break and Poster session

17:15–19:00

Vilnius city tour

19:00–22:00

Get-together dinner at Burbulis wine bar

JUNE 9, 2022 | Thursday

08:30–16:00 Registration & Hospitality desk

SESSION 3

Moderator: Olivier Braissant

09:00–09:30

The Activity of Wood Decaying Fungi Measured by Isothermal Calorimetry
Lars Wadsö | Lund University, Sweden

09:30–10:00

What Relationship Between Heat Generation by Living Organisms, by Heat Engines and by the Human Brain?
Urs von Stockar | Swiss Federal Institute of Technology, Switzerland

10:00–10:30

Differences in Infectivity and Pathogenicity Between Delta and Omicron Strains of SARS-CoV-2 Can Be Explained by Gibbs Energies of Binding and Growth
Marko Popovic | Technical University of Munich, Germany

10:30–11:00 Coffee break

SESSION 4

Moderator: Urs von Stockar

11:00–11:30 Isothermal Microcalorimetry and the Development of Antimicrobial Orthopedic Implants and Dental Aligners

Olivier Braissant | University of Basel, Switzerland

11:30–12:00 Biocalorimetry – An Early Warning Tool for the Detection of *Legionella Pneumophila* in Drinking Water

Christian Fricke | University of Koblenz-Landau, Germany

12:00–12:30 Calorimetric Heat Waves to Study the Soil Sensitivity to Temperature

Nieves Barros | University of Santiago de Compostela, Spain

12:30–14:00 Lunch

14:00–15:00 Poster session

15:00–16:00 ISBC meeting

16:20–22:00 Social program: excursion to Trakai and Conference dinner in Apvalaus Stalo Klubas restaurant in Trakai

JUNE 10, 2022 | Friday

09:00–12:00 Registration & Hospitality desk

SESSION 5

Moderator: Jason Kenealey

09:30–10:00 Isothermal Titration Calorimetry For The Analysis of the Kinetics and Completeness of Enzymatic Polyethylene Terephthalate (PET) Nanoplastic Degradation

Thomas Mascow | Helmholtz-Centre for Environmental Research – UFZ, Germany

10:00–10:30 A Calorimetric Study of Interactions in the Systems of Charged Surfactants and Ionic Poly(amino acid)s

Vytautas Petrauskas | Vilnius University, Lithuania

10:30–11:00 Coffee break

SESSION 6

Moderator: Thomas Mascow

11:00–11:30 Conserved Patterns of Heat Release From Cultured Microorganisms Reveal Simple Growth–Metabolism Relations

Karim Fahmy | HZDR, Institute of Resource Ecology and TU, Germany

11:30–12:00 Isothermal Calorimetry and Complementary Methods to Understand Nucleotide–Based Second Messenger Action on Proteins

Gert Bange | Philipps University Marburg, Germany

12:30–12:40 Closing remarks

Daumantas Matulis | Conference Chair