



ÚSTAV
CHEMICKÝCH VIED

Vás pozýva na
konferenciu

NOVEL TRENDS IN CHEMISTRY, RESEARCH AND EDUCATION 2022

25.11.2022
v aule RBOA5 (M5)
o 8:20

Tešíme sa na Vašu účasť!

Program konferencie:

Pozvané prednášky

- 08:20 – 08:30 **doc. RNDr. Zuzana Vargová, Ph.D.** Otvorenie konferencie
Chairman doc. RNDr. Miroslava Martinková, PhD.
- 08:30 – 09:00 **doc. Ing. Pavol Jakubec, PhD.**
Transformations of the Synthetic Chameleon
 Institute of Organic Chemistry, Catalysis and Petrochemistry, Slovak University of Technology, Radlinského 9, Bratislava, Slovak Republic
- 09:00 – 09:30 **prof. Ing. Peter Šimon, DrSc.**
Application of Isoconversional Methods for the Prediction of Material Lifetimes
 Institute of Physical Chemistry and Chemical Physics, Faculty of Chemical and Food Technology, Slovak University of Technology in Bratislava, Radlinského 9, Bratislava, Slovak Republic
- 09:30 – 10:00 **doc. Mgr. Petr Táborský, Ph.D.**
Enhancement of Luminescence Signal by Deuterated Water – Analytical applications
 Department of Chemistry, Faculty of Science, Masaryk University, Kamenice 753/5, Brno, Czech Republic
- 10:00 – 10:30 **doc. RNDr. Svatava Janoušková, Ph.D.**
How to Work with the Results of International Science Literacy Surveys
 Faculty of Science, Department of Chemistry Education, Charles University in Prague, Hlavova 8, Prague 2, Czech Republic
- 10:30 – 10:45 COFFEE BREAK
Chairman RNDr. Slávka Hamuľáková, PhD.
- 10:45 – 11:15 **RNDr. Ing. Katarína Šipošová, PhD.**
The Intriguing Effect of Selected Amphiphilic Compounds on Protein Amyloid Aggregation
 Institute of Experimental Physics, Slovak Academy of Sciences, Watsonova 47, Košice, Slovak Republic
- 11:15 – 11:45 **RNDr. Romana Smolková, PhD.**
Non-Steroidal Anti-Inflammatory Drug Complexes with Biologically Active Metals and Their Potential in Cancer Treatment
 Department of Ecology, Faculty of Humanities and Natural Sciences, University of Prešov, Ul. 17 novembra č. 1, Prešov, Slovak Republic
- 11:45 – 12:15 **doc. RNDr. Oľga Fričová, PhD.**
Solid-State NMR as a Tool for Structure and Molecular Mobility Characterisation of Materials
 Department of Physics, Faculty of Electrical Engineering and Informatics, Technical University of Košice, Park Komenského 2, Košice, Slovak Republic

12:30 – 13:30 OBED

Chairman RNDr. Monika Tvrdoňová, PhD.13:30 – 13:50 **doc. RNDr. Mária Ganajová, CSc. a RNDr. Ivana Sotáková, Ph.D.***Formative Assessment and Its Implementation into Teaching Science, Mathematics, and Informatics*

Department of Didactics of Chemistry, Institute of Chemistry, Faculty of Science, Pavol Jozef Šafárik University in Košice, Moyzesova 11, Slovak Republic

13:50 – 14:10 **doc. RNDr. Viktor Víglaský, PhD.***Non-Canonical Structural Motifs of Nucleic Acids*

Department of Biochemistry, Institute of Chemistry, Faculty of Science, Pavol Jozef Šafárik University in Košice, Moyzesova 11, Slovak Republic

14:10 – 14:30 **RNDr. Slávka Hamuľáková, PhD.***A Perspective on Potential Multi-Target Drugs Developed and Designed for the Treatment of Alzheimer's Disease*

Department of Organic Chemistry, Institute of Chemistry, Faculty of Science, Pavol Jozef Šafárik University in Košice, Moyzesova 11, Slovak Republic

14:30 – 14:40 COFFEE BREAK

Chairman doc. RNDr. Ladislav Janovec, PhD.14:40 – 15:00 **Mgr. Nikolas Király, PhD.***Novel Metal-Organic Frameworks (MOF) with Tetra/Pentatopic Organic Moiety*

Department of Inorganic Chemistry, Institute of Chemistry, Faculty of Science, Pavol Jozef Šafárik University in Košice, Moyzesova 11, Slovak Republic

15:00 – 15:20 **doc. RNDr. Andrea Straková Fedorková, PhD.***Metal-Organic Frameworks for Improved Cycle Performance of Lithium-Sulphur Batteries*

Department of Physical Chemistry, Institute of Chemistry, Faculty of Science, Pavol Jozef Šafárik University in Košice, Moyzesova 11, Slovak Republic

15:20 – 15:40 **RNDr. Dušan Krnáč***HPLC-MS/MS Method for the Determination of Seven Different Antibiotics in Human Plasma*

ELBLAB GmbH Zentrum für Labor Medizin Meißen Riesa Radebeul, Weinbergstraße 8, Riesa, Germany

Department of Analytical Chemistry, Institute of Chemistry, Faculty of Science, Pavol Jozef Šafárik University in Košice, Moyzesova 11, Slovak Republic

15:40 – 16:15 Diskusia pri posteroch

16:15 **doc. RNDr. Zuzana Vargová, Ph.D.** Ukončenie konferencie

Postery budú počas trvania konferencie umiestnené pred prednáškovou miestnosťou s možnosťou diskusie počas *coffee „breakov“*.

Zoznam posterov

- P1** A. Gucký, S. Hamuľáková, M. Kožurková: Interactions of Novel 4,7-Disubstituted Coumarin Derivatives with Calf Thymus DNA: A Multi-Spectroscopic Study
- P2** K. Krochtová, V. Bogárová, L. Janovec, M. Kožurková: Self-Structure Formation in Polyadenylic Acid by Disubstituted BRACO-19 Analogs
- P3** A. Migasová, Ľ. Zauška, V. Pevná, M. Almáši: Microporous Material UiO-66(Zr)-NH₂ with Histidine-Modified Surface for Drug Delivery
- P4** D. Princík, V. Zelenák: Metal-Organic Frameworks Containing Fluorinated Ligands
- P5** J. Špaková Raschmanová, S. Fazekašová, M. Martinková, M. Bago Pilátová, M. Majirská: Synthesis and Cytotoxic Profile of 3,4-Diamino-3,4-dideoxyphytosphingosines
- P6** J. Tomičová, M. Matiková Maľarová, J. Kuchár, J. Černák, E. Samoľová: Structural Diversity of Iron Complexes with the Ligand 5,5'-dimethyl-2,2'-bipyridine Depending on the Synthetic Conditions
- P7** M. Tvrdoňová, P. Michalčín: Carbohydrate-Amino Acid Hybrids as Organocatalyst for Asymmetric Aldol Reaction
- P8** K. Vargová, M. Martinková, M. Bago Pilátová, A. Kešľáková: Chiron Approach to Stereoselective Synthesis of Novel Phytosphingosine-like Aminotriols
- P9** Ľ. Zauška, M. Almáši: Photoactive Composite Based on Mesoporous Silica SBA-15: Photodegradation of Organic Pollutants