

23rd International Symposium and Summer School on Bioanalysis

Zagreb, July 6-15, 2025

MONDAY 7th July

8:00 REGISTRATION

9:10 OPENING CEREMONY

TIME	PRESENTER	TITLE
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1ST SESSION (Chairperson: Nives Galić)

9:30	Ferenc Kilár University of Pécs, HU	Adventures around the structure and function of a protein - The transferrin.
10:00	Marián Masár Comenius University Bratislava, SK	Microchip electrophoresis in bioanalysis: Recent innovations and methodological advances
10:30	Tomáš Křížek Charles University, CZ	Application of capillary electrophoresis in controlled drug release studies

11:00 COFFEE BREAK

2ND SESSION (Chairperson: Ferenc Kilár)

11:30	Magdalena Biesaga University of Warsaw, PO	Characterization of antifungal surfactants synthesized by the antarctic <i>Bacillus subtilis</i> WA_51 strain
12:00	Paulina Luštyk University of Warsaw, PO	Study of the effect of probiotic bacteria on the metabolism of antioxidants present in food products
12:20	Paulina Gwardys University of Warsaw, PO	Electrochemically controlled release from a PEDOT-functionalized microgel on an electrode surface
12:40	Edgar Kmiolek University of Warsaw, PO	Spent coffee grounds as biosorbents and a source of antioxidants

3RD SESSION (Chairperson: Marián Masár)

14:10	Květa Kalíková Charles University, CZ	Sub/supercritical fluid chromatography for synthetic cannabinoids
14:30	Alex Špalda Comenius University Bratislava, SK	Two translational start codons are used for synthesis of endolysin gp24 from bacteriophage BFK20
14:50	Tímea Dérerová Charles University, CZ	A novel method for characterisation of ionic properties of mixed-mode stationary phases
15:10	Livia Vida University of Pécs, HU	Intraoperative neurocytology of brain tumors

COFFEE BREAK

4TH SESSION (Chairperson: Tomáš Křížek)

16:10	Biljana Balabanova Goce Delcev University, MK	Navigating the methodological and analytical complexities of ICP-MS for elemental impurity analysis in pharmaceuticals
16:30	Alexandra-Iulia Bărăian Iuliu Hatieganu University of Medicine and Pharmacy, RO	Evaluation of synergistic drug combinations for local glioblastoma treatment
16:50	Fruzsina Sótér Semmelweis University, HU	Effect of ethanol on the formation and structure of cochleate drug delivery systems

WELCOME PARTY

TUESDAY 8th July

5TH SESSION (Chairperson: Ede Bodoki)

9:00	Attila Gáspár University of Debrecen, HU	Removal of apolar compounds from aquatic environment using polydimethylsiloxane sponge
9:30	Zsófi Sajtos University of Debrecen, HU	Reconstructing environmental changes through elemental and isotopic analysis of honey
10:00	Margit Cichna-Markl University of Vienna, AT	Species and Cultivar Differentiation for Food Authentication - Development of Assays Based on PCR and High-Resolution Melting
10:30	Marina Stefova Ss. Cyril and Methodius University in Skopje, MK	Method development and application for studying proanthocyanidin profiles of red wines

COFFEE BREAK

6TH SESSION (Chairperson: Attila Gáspár)

11:30	Jasmina Petreska Stanoeva Ss. Cyril and Methodius University in Skopje, MK	Innovative approaches in phytochemical analysis: the role of deep eutectic solvents and mass spectrometry
12:00	Marinela Cvetanoska Ss. Cyril and Methodius University in Skopje, MK	Using natural deep eutectic solvents for extraction of polyphenols from <i>Stachys</i> species,
12:20	Katharina Pühringer University of Vienna, AT	MGMT enhancer methylation in melanoma brain metastases: Association with MGMT expression, genetic variants, and clinical parameters compared to glioblastoma
12:40	Ede Bodoki Iuliu Hatieganu University of Medicine and Pharmacy, RO	Between what we know and what we wonder: Mechanochemical synthesis of molecularly imprinted polymers

7TH SESSION (Chairperson: Jasmina Petreska Stanoeva)

14:00

SPONSORS

Altium	Upstream and Downstream: A Protein's Adventure
Iva Kušec	
Labtim	Comprehensive discovery lipidomic workflow using multi-reflecting ToF
Ivan Grgičević,	
Vesna Brezovečki-Bidin	

14:30

Gabriella Donáth-Nagy	Biological, biochemical and chemical oscillators
George Emil Palade University of Medicine, Pharmacy, Science and Technology of Targu Mures, RO	

14:50

Róbert Tötös	Determination of colchicine-seric protein interactions by spectral methods
Babeş-Bolyai University of Cluj-Napoca, RO	

15:10

Maria-Bianca Irimes	Development of a dual aptasensor for the detection of inflammatory cytokines in biological fluids
Iuliu Hatieganu University of Medicine and Pharmacy, RO	

15:30

COFFEE BREAK

16:00

POSTER SESSION

18:00

Coordination meeting

WEDNESDAY 9th July

9:00

EXCURSION

THURSDAY 10th July

8TH SESSION (Chairperson: Martin Schmid)

9:00	Anikó Takátsy University of Pécs, HU	Use of fullerene-, octadecyl-, and triacontyl silica for solid phase extraction for improved proteomic analysis
9:30	Gyöngyvér Mara Sapientia Hungarian University of Transylvania, RO	Assessing microbial contributions to metabolite variation in microbiome-metabolome association studies
10:00	Gabriel Hancu George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureş, RO	Doping in sport: a neverending story
10:30	Bárdos Vivien Semmelweis University, HU	Study of solubility-permeability interplay

11:00

COFFEE BREAK

9TH SESSION (Chairperson: Gabriel Hancu)

11:30	Martin Schmid University of Graz, AT	The challenge to analyze New Psychoactive Substances
12:00	Gayatri Vishwakarma University of Debrecen, HU	Study of adsorption effects on Taylor dispersion analysis of proteins
12:20	Stefanie Handl University of Graz, AT	Stability studies of semi-preparative fractionated cathinone derivative enantiomers using HPLC-UV
12:40	Magdolna Casian Iuliu Hatieganu University of Medicine and Pharmacy, RO	High-affinity aptamers for vancomycin monitoring in clinical samples by magnetic beads-based SELEX

10TH SESSION (Chairperson: Anikó Takátsy)

14:10	Alexandra Pusta Iuliu Hatieganu University of Medicine and Pharmacy, RO	Advanced electrochemical sensing platforms for non-invasive cortisol monitoring
14:30	Ana-Maria Tătaru Iuliu Hatieganu University of Medicine and Pharmacy, RO	Simultaneous bacteria detection - optimising the electrochemical methods using AI-based approaches
14:50	Paul Cristian Martian Iuliu Hatieganu University of Medicine and Pharmacy, RO	Detection of chloramphenicol using a novel cationic covalent organic framework
15:10	Szabolcs Ianos Győrfi Iuliu Hatieganu University of Medicine and Pharmacy, RO	From resin to recognition: exploring 3D technology in the fabrication of molecularly imprinted polymer-based sensors

15:30 COFFEE BREAK

16:00 POSTER SESSION

FRIDAY 11th July

11TH SESSION (Chairperson: Nives Galić)

9:00	Marko Močibob University of Zagreb, HR	Proteomics in the aminoacyl-tRNA synthetase research
9:30	Tamara Pajpanova Bulgarian Academy of Sciences, BG	Peptide drugs: Chemical strategies to improve their therapeutic efficacy, analytical characterization and pharmacological screening
10:00	Tatyana Dzimbova South-West University Neofit Rilski, BG	Analysis of fluid markers for physical exercise
10:30	Livia Uncu Nicolae Testemitanu State University of Medicine and Pharmacy, MK	<i>In vitro</i> and <i>in vivo</i> analysis of indocyanine green and its use in hepatobiliary surgery

11:00 COFFEE BREAK

12TH SESSION (Chairperson: Ivana Kekez)

11:30	Ivana Tartaro Bujak Ruđer Bošković Institute, HR	The multifaceted role of ionizing radiation: challenges and perspectives in environmental protection
12:00	Pál Salamon Sapientia Hungarian University of Transylvania, RO	Evaluation of microbiological and physico-chemical contaminants in Valea Boroș springs
12:20	Klementina-Imelda Ilkei Sapientia Hungarian University of Transylvania, RO	Gut microbiome structure and metabolic activity in type 2 diabetic patients
12:40	György Juhász J. Selye University, SK	Spectroscopic and theoretical study of EDA complexes between aniline derivatives and TCNE

13TH SESSION (Chairperson: Marijana Pocrnić)

14:00	Ivana Kekez University of Zagreb, HR	Not just growing crystals: Challenges and insights from structural studies of macromolecules
14:30	Aleksandra Maršavelski University of Zagreb, HR	Engineering thermostable metagenomic esterase for polylactic acid biodegradation
14:50	David Klarić University of Zagreb, HR	Exploring host:guest interactions in drug–macrocycle systems using mass spectrometry

15:15 CLOSING CEREMONY

15:30 COFFEE BREAK

SATURDAY 12th July

8:00 – 18:00 *Workshops and seminars in small groups

SUNDAY 13th July

Free time

MONDAY 14th July

8:00 – 18:00 *Workshops and seminars in small groups

TUESDAY 15th July

8:00 – 18:00 *Workshops and seminars in small groups

DEPARTURE

* Workshops:

1. Crystallization of biological macromolecules using ORYX8 robot
2. Chiroptical properties of peptidomimetics: a TD-DFT study
3. LC-MS analysis