

23rd International Symposium and Summer School on Bioanalysis

Zagreb, July 6-15, 2025

MONDAY 7th July

8:00 REGISTRATION & BREAKFAST

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
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10:00	Marián Masár Comenius University Bratislava, SK	Microchip electrophoresis in bioanalysis: Recent innovations and methodological advances
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10:30	Tomáš Křížek Charles University, CZ	Application of capillary electrophoresis in controlled drug release studies
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11:00 COFFEE BREAK

2ND SESSION (Chairperson: Ferenc Kilár)

11:30	Magdalena Biesaga University of Warsaw, PL	Characterization of antifungal surfactants synthesized by the antarctic <i>Bacillus subtilis</i> WA_51 strain
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12:00	Paulina Luśtyk University of Warsaw, PL	Study of the effect of probiotic bacteria on the metabolism of antioxidants present in food products
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12:20	Paulina Gwardys University of Warsaw, PL	Electrochemically controlled release from a PEDOT-functionalized microgel on an electrode surface
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12:40	Edgar Kmiolek University of Warsaw, PL	Spent coffee grounds as biosorbents and a source of antioxidants
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13:00

LUNCH

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

15:30

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 Băraian
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

17:30

WELCOME PARTY

TUESDAY 8th July

8:00

BREAKFAST

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

11:00

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 *Stachys* 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

13:00	LUNCH	
7 TH SESSION (Chairperson: Jasmina Petreska Stanoeva)		
14:00	SPONSORS	
	Altium Iva Kušec	Upstream and Downstream: A Protein’s Adventure
	Labtim Ivan Grgičević, Vesna Brezovečki-Biđin	Comprehensive discovery lipidomic workflow using multi-reflecting ToF
14:30	Gabriella Donáth-Nagy George Emil Palade University of Medicine, Pharmacy, Science and Technology of Targu Mures, RO	Biological, biochemical and chemical oscillators
14:50	Róbert Tötös Babeş-Bolyai University of Cluj-Napoca, RO	Determination of colchicine-seric protein interactions by spectral methods
15:10	Maria-Bianca Irimes Iuliu Hatieganu University of Medicine and Pharmacy, RO	Development of a dual aptasensor for the detection of inflammatory cytokines in biological fluids
15:30	COFFEE BREAK	
16:00	POSTER SESSION	
18:00	Coordination meeting	

WEDNESDAY 9th July

8:00

BREAKFAST

9:00

EXCURSION

THURSDAY 10th July

8:00

BREAKFAST

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
13:00	LUNCH	

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

18:00

Dinner

FRIDAY 11th July

8:00

BREAKFAST

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, MD

In vitro and *in vivo* 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

13:00	LUNCH	
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13TH SESSION (Chairperson: Marijana Počrnić)

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	
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15:30	COFFEE BREAK	
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SATURDAY 12th July

8:00 – 18:00	*Workshops and seminars in small groups
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SUNDAY 13th July

Free time	
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MONDAY 14th July

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