



32nd International Symposium on Analytical and Environmental Problems

***Szeged, Hungary
October 12-13, 2026.***

University of Szeged



Final Program

32nd International Symposium on Analytical and Environmental Problems

Supporting Organizations

Hungarian Academy of Sciences

Hungarian Chemical Society Group of Csongrád County

Institute of Pharmaceutical Analysis, University of Szeged

Department of Molecular and Analytical Chemistry, University of Szeged

General information

The Symposium features recent findings from leading industrial and academic experts in analytical chemistry and environment-related problems.

Symposium Chairman:

István Ilisz, DSc, professor of chemistry

University of Szeged, Institute of Pharmaceutical Analysis

Honorary Chairman:

Zoltán Galbács, PhD, honorary professor

University of Szeged, Department of Molecular and Analytical Chemistry

Organizing Committee:

István Ilisz, DSc

Tünde Alapi, PhD, associate professor

University of Szeged, Department of Molecular and Analytical Chemistry

Róbert Berkecz, PhD, associate professor

University of Szeged, Institute of Pharmaceutical Analysis

Scientific Committee:

István Ilisz, DSc

Tünde Alapi, PhD

Róbert Berkecz, PhD

Daniela Sojic Merkulov, PhD, full professor

University of Novi Sad, Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection

TIMETABLE

Monday

10⁰⁰–10¹⁵: Opening Ceremony

10¹⁵–12⁰⁰: Oral Presentations: Session I

12⁰⁰–13⁰⁰: Coffee Break

13⁰⁰–15⁰⁰: Oral Presentations: Session II

15⁰⁰–17⁰⁰: Poster Session: *Please check the conference website in advance to confirm on which day your poster should be displayed.*

Tuesday

10⁰⁰–12⁰⁰: Oral Presentations: Session I

12⁰⁰–13⁰⁰: Coffee Break

13⁰⁰–15⁰⁰: Oral Presentations: Session II

15⁰⁰–17⁰⁰: Poster Session: *Please check the conference website in advance to confirm on which day your poster should be displayed.*

Oral presentations

The length of oral presentations is 15 minutes. The organizers recommend reserving 2–3 minutes for questions and discussion. Due to the increased number of presenters, we kindly ask for strict adherence to the assigned time in order to keep the schedule on track. Presentations may be prepared in ppt(x) or pdf format. We recommend using a 16:9 slide format for best visibility. Please bring your presentation on a USB stick and upload the file before the session begins. The organizers would appreciate it if you could send your presentation in advance to the conference e-mail address. Please note, however, that the maximum file size that can be accepted is 8 MB. For file identification, please use the following format: Surname_Firstname_Presentation_Day (Monday or Tuesday).

Poster presentations

On both sides of the poster stands, two posters can be displayed. The available area for each poster is 120 cm in height and 70 cm in width. Poster presenters are kindly asked not to exceed the allocated space. Double-sided tape will be provided for mounting the posters. Due to the very large number of poster presentations, we kindly ask presenters to start putting up their posters as early as possible.

Poster placement on the available boards will be carried out continuously on a first-come, first-served basis. No separate identification or assigned poster number will be used for the available spaces. Poster presenters are kindly requested to be present and available to discuss their results during the Poster Sessions.

Oral Presentations: Monday Session I

Session Chair: Dr. István Ilisz (*University of Szeged, Institute of Pharmaceutical Analysis*)

10⁰⁰-10¹⁵

OPENING CEREMONY

10¹⁵-10³⁰

ECOTOXICOLOGICAL EVALUATION OF C₅PbI₃ AND C₅SnI₆ PEROVSKITES ON DAPHNIA MAGNA MODEL ORGANISMS

Adrienn-Dorisz Dávid, László Szandra-Leila, Krisztina Albert, Lilla Szalma, Tamás Gyulavári, Karolina Solymos, Lujza Keresztes, Zoltán Kónya, Zsolt Pap

10³⁰-10⁴⁵

REDUCTION INSTEAD OF OXIDATION – THE POTENTIAL FOR REMOVING PFAS "FOREVER CHEMICALS" USING THE UV/SULFITE ARP PROCESS

Kornél Erdős, Bence Veres, Tünde Alapi

10⁴⁵-11⁰⁰

A LITERATURE REVIEW OF MICROPLASTIC DETECTION QUANTIFICATION AND REMOVAL ENHANCED BY 3D PRINTED SPACERS

Salma Elrehaimah, Aws N. Al-Tayawi, Hadid Sukmana, Timea Miklós, Nóra Ábrahám, Zsuzsanna László, Szabolcs Kertész

11⁰⁰-11¹⁵

AN OVERVIEW ON THE STRATEGIES TO RECYCLE PEROVSKITE AND CIGS SOLAR CELLS TO REDUCE ENVIRONMENTAL IMPACTS

Saji Thomas Kochuveedu, Bodnárné Sándor Renáta, Pedro Anacleto, Francesco De Nicola

11¹⁵-11³⁰

THE ROLE OF A HISTIDINE MUTATION IN THE PROPERTIES OF THE ARSENIC(III)-SENSING AFARSR PROTEIN

Réka S. Gyimesi, Annamária Tóth, Attila Jancsó, Béla Gyurcsik

11³⁰-11⁴⁵

FOOD-DERIVED ECDYSTEROIDS IN VERTEBRATE BLOOD: FROM INSECTIVOROUS BATS TO BROADER VERTEBRATE SCREENING

Mohamed Reda Essaih, Sándor Hornok, István Ilisz, Róbert Berkecz, Attila Hunyadi

11⁴⁵-12⁰⁰

NOVEL PALLADIUM(II) AND PLATINUM(II) COMPLEXES WITH SCHIFF BASES AND A-DIOXIMES: SYNTHESIS, PHYSICO-CHEMICAL CHARACTERIZATION, AND BIOLOGICAL STUDY

Csaba Várhelyi jr., Roland Szalay, János Madarász, Melinda Simon-Várhelyi, Róbert Tótós, Raluca-Anca Mereu, Judit Papp, Judith Mihály

12⁰⁰-13⁰⁰: Coffee Break

Oral Presentations: Monday Session II

Session Chair: Dr. Tünde Alapi (*University of Szeged, Department of Molecular and Analytical Chemistry*)

13⁰⁰-13¹⁵

BISMUTH-BASED MATERIALS FOR RECOVERY OF GOLD FROM AQUEOUS MEDIA AND ANTIMICROBIAL STUDIES

Cătălin Ianăși, Paula Svera, Orsina Verdes, Mariana Suba, Adina Negrea, Petru Negrea, Narcis Duteanu, Mihaela Ciopec, Nicoleta Nemes

13¹⁵-13³⁰

BIOPLASTICS. DEFINITION, EU REGULATION, INVESTIGATION METHODS

Mária Mörtl, Kingkham Paseutsakoun, Pap Klaudia, Tamás Varga, András Székács

13³⁰-13⁴⁵

THE EVOLUTION OF THE ISO 14001 ENVIRONMENTAL MANAGEMENT SYSTEMS

László Berényi

13⁴⁵-14⁰⁰

SURFACTANT-ENGINEERED LIPOSOMES FOR LAMOTRIGINE DELIVERY: COMPARATIVE FORMULATION, PHYSICOCHEMICAL CHARACTERISATION, AND RELEASE KINETICS

Zita Farkaš Agatić, Vesna Tepavčević, Ana Pilipović, Mladena Lalić-Popović, Nemanja Todorović, Mihajlo Milošević, Ana Filipović, Mihalj Poša

14⁰⁰-14¹⁵

THE EFFECT OF DIFFERENT ALGAE SPECIES AND THEIR ETHANOL EXTRACTS ON TOMATO (*SOLANUM LYCOPERSICUM* L.) SEED GERMINATION

Đorđe Vojnović, Jelena Pavličević, Bojana Ikonić, Tamara Erceg, Halis Can Mörel, Davut Laçin, Emine Okudan, Ayşe Zehra Aroğuz, Vesna Teofilović

14¹⁵-14³⁰

CHIRAL HPLC SEPARATION OF PHARMACEUTICALLY RELEVANT COMPOUNDS: RETENTION, SELECTIVITY, AND STRUCTURAL ASPECTS

Gábor Némethi, Antal Péter, István Ilisz

14³⁰-14⁴⁵

XENOBIOTICS IN FOCUS

Linda Szilasi, István Ilisz, Roland Weiczner, Róbert Berkecz

Oral Presentations: Tuesday Session I

Session Chair: Dr. István Ilisz (*University of Szeged, Institute of Pharmaceutical Analysis*)

10⁰⁰-10¹⁵

COMPARISON OF ADVANCED OXIDATION PROCESSES FOR THE TRANSFORMATION OF N-METIL-2-PYRROLIDON IN WATER

Bence Veres, Marcell Matetits, Bora Buchholcz, Judit Waldhauser, Tünde Alapi

10¹⁵-10³⁰

INVESTIGATION OF LUMINESCENT DNA-SILVER NANOCLUSTERS FOR SENSING AND BIOIMAGING APPLICATIONS

Bálint Hajdu, Annamária Tóth, Simon Holm Jacobsen Eiby, Pratik Shah, Hari Chandana Yadavalli, Seong Wook Yang, Morten Jannik Bjerrum, Lars Hemmingsen, Peter Waaben Thulstrup

10³⁰-10⁴⁵

EVALUATING THE ENVIRONMENTAL IMPACT OF NEW COPPER(II) SCHIFF BASE COMPLEXES USING A CELLULAR BIOASSAY

Ildiko Buta, Mara Bogdan, Abedulkadir Abudalleh, Cseh Liliana, Radostina Alexandrova

10⁴⁵-11⁰⁰

GREEN EXTRACTION OF DROUGHT-RESILIENT ROSEMARY: MODULATING EXTRACT COMPOSITION THROUGH SOLVENT SELECTIVITY FOR COSMETIC APPLICATIONS

Daniela Haidu, Manuela Crișan, Mariana Suba, Luminița Crișan, Ildiko Bută, Vlad Alexandru Enache, Camelia Oprean

11⁰⁰-11¹⁵

TAILORING MAGNESIUM-BASED COMPOUNDS THROUGH SYNTHESIS AND STABILITY

Marcela Iosivoni, Nicoleta Pleșu, Aurelia Vișa

11¹⁵-11³⁰

GREENER APPROACHES TO THE SYNTHESIS OF PHOSPHORUS-BASED ANTIMICROBIAL COMPOUNDS

Aurelia Visa, Alexandru Buhai, Liliana Cseh

11³⁰-11⁴⁵

MOLECULAR DETERMINANTS OF SOIL ORGANIC-CARBON PARTITIONING IN ENVIRONMENTAL CHEMICALS

Nicoleta Stoian, Liliana Halip

11⁴⁵-12⁰⁰

METALATED PORPHYRIN DERIVATIVES AS SENSITIVE COMPOUNDS FOR DRUG QUANTIFICATION

Anca Lascu, Ionela Fringu, Nicoleta Plesu

12⁰⁰-13⁰⁰: Coffee Break

Oral Presentations: Tuesday Session II

Session Chair: Dr. Róbert Berkecz (*University of Szeged, Institute of Pharmaceutical Analysis*)

13⁰⁰-13¹⁵

SELF-SUSTAINED COMBUSTION OF AMORPHOUS RIBBONS FOR THE SYNTHESIS OF Cu–Cu₂O/ZrO₂ MIXED OXIDE AS A SUPERCAPACITOR ELECTRODE MATERIAL

Mircea Nicolaescu, Carmen Lazau, Corina Orha, Cosmin Codrean, Cornelia Bandas

13¹⁵-13³⁰

REMOVAL OF DYES FROM AQUEOUS SOLUTIONS USING ACTIVATED CARBON DERIVED FROM COFFEE WASTE: OPTIMIZATION OF THE ADSORPTION PROCESS

Maria-Andreea Nistor, Liliana Halip, Ana-Maria Lacrămă, Elisabeta-Ildyko Szerb, Simona-Gabriela Muntean

13³⁰-13⁴⁵

ACTIVATED CARBON AND COMPOZITES WITH IRON OXIDE, PREPARED FROM WASTE COFFEE: CHARACTERIZATION AND ADSORPTION PROPERTIES OF DYES

Ana-Maria Lacrămă, Maria-Andreea Nistor, Roxana Nicola, Simona-Gabriela Muntean, Elisabeta-Ildyko Szerb

13⁴⁵-14⁰⁰

MICROWAVE-ASSISTED SYNTHETIZED N-DOPED CARBON QUANTUM DOTS. FROM SYNTHESIS TO APPLICATIONS

Roxana Nicola, Carmen Cretu, Alexandru Vișan, Silvana Borcănescu, Ana-Maria Lacrămă, Elisabeta Ildyko Szerb

14⁰⁰-14¹⁵

EFFICIENT COUNTER ELECTRODE BASED ON PEDOT/GO AS SUSTAINABLE Pt-FREE COUNTER ELECTRODE FOR INDOOR DYE-SENSITIZED SOLAR CELLS

Daniel Ursu, Melinda Vajda, Marinela Miclău, Cristian Casut, Radu Banica

14¹⁵-14³⁰

CORROSION INHIBITION OF CARBON STEEL BY ORGANOPHOSPHORUS ACIDS: ELECTROCHEMICAL AND SURFACE-ADSORPTION STUDIES

Nicoleta Plesu, Kostas Demadis, Milica Țară-Lungă Mihali, Ionela Frîngu, Anca Lascu

14³⁰-14⁴⁵

SOL-GEL IMMOBILIZED BIOCATALYSTS FOR THE ENZYMATIC PRODUCTION OF FLAVOR ESTERS IN SOLVENT-FREE SYSTEM

Anemona-Mariana Cornea, Ana Cristina Paul

14⁴⁵-15⁰⁰

IN SILICO IDENTIFICATION OF NOVEL IKK β INHIBITORS BASED ON BILIRUBIN-LIKE COMPOUNDS

Lucia Gradinaru, Alina Bora, Luminita Crisan