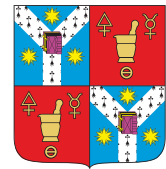




ALEXANDRU IOAN CUZA
UNIVERSITY of IAȘI



FACULTY of CHEMISTRY

Conference Program



26-27 Oct 2023 Iasi, Romania

IasiCHEM 5-MIT 2023

Faculty of Chemistry Conference

Chairs

Prof. Ionel MANGALAGIU

Prof. Aurel PUI

Scientific Committee

President: Prof. Habil. Romeo-Iulian OLARIU

Prof. Doina HUMELNICU

Prof. Costel MOLDOVEANU

Prof. Ramona-Antoaneta DANAC

Dr. Habil. Luminita MARIN

Assoc. Prof. Ionel HUMELNICU

Assoc. Prof. Iustinian-Gabriel BEJAN

Assoc. Prof. Vasile-Robert GRADINARU

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Assoc. Prof. Nicoleta CORNEI

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Dr. Alina-Giorgiana NEGRU

Secretaryship

Assoc. Prof. Dorina AMARIUCAI-MANTU

Phd. Stud. Cornelia AMARANDEI

Phd. Stud. Roxana CIORTEANU

Phd. Stud. Ioana RADU



Presentation time (discussion included)

- Invited Conference: 30 minutes
- Oral Communication: 15 minutes

Posters Program

- Poster numbers will be displayed on the poster panel.
- Posters contributions from **Session I (PI)** will be placed on the poster panel **Thursday, October 26th**, during the registration time from 14⁰⁰ to 14³⁰, and will be removed Thursday after 19⁰⁰.
- Posters contributions from **Session II (PII)** will be placed on the poster panel **Friday, October 27th**, from 8³⁰ to 9⁰⁰ and will be removed Friday after 13³⁰.
- The presence of authors is required.

Scientific Program

Day 1

Thursday, October 26th, Senate Hall

14⁰⁰-14³⁰ **Registration of the participants**

14³⁰-14⁴⁵ **Welcome to MIT 2023 by Chairs**

Prof. Ionel MANGALAGIU

Prof. Aurel PUI

Prof. Habil. Cecilia ARSENE

Session 1

Senate Hall, 14⁴⁵-16⁰⁰

Session chairs: **Prof. Habil. Cecilia ARSENE**

Prof. Aurel PUI

IC-01 **Cathodoluminescence properties of diamonds and zircon from ultrahigh pressure rocks of the Kokchetav Massif, Kazakhstan**

14⁴⁵-15³⁰

Ovidiu Gabriel IANCU¹, Roberto COSSIO², Roberto COMPAGNONI²

¹*“Alexandru Ioan Cuza” University of Iasi, Department of Geology*

²*University of Turin, Department of Mineralogical and Petrological Sciences*

OC-01 **The importance of tailored calibration for quadrupole ICP-MS measurements**

15³⁰-15⁴⁵

Laurentiu-Valentin SOROAGA^{2,3}, Cecilia ARSENE^{1,2,3}, Romeo-Iulian OLARIU^{1,2,3}

¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*

²*“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research, CERNESIM*

³*“Alexandru Ioan Cuza” University of Iasi, RECENT-AIR*

OC-02 **Affinity binding study of ubiquitin containing peptides to a specific lysine-linkage ubiquitin antibody by mass spectrometry**

15⁴⁵-16⁰⁰

Ji Eun JUNG^{1,2}, Vanessa CARDENAS¹, Brindusa Alina PETRE^{1,3}

¹*University of Konstanz, Department of Chemistry, Laboratory of Analytical Chemistry and Biopolymer Structure Analysis, Germany*

²*National Forensic Service, Seoul Institute, Forensic Toxicology & Chemistry Division, Seoul, Korea*

³*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry, Laboratory of Biochemistry*

16⁰⁰-16³⁰ **Poster Session I and Coffee break – The Hall of the Echoing Footsteps**

Session chairs: **Assoc. Prof. Simona Maria CUCU-MAN**
Assoc. Prof. Habil. Gheorghita ZBANCIOC

Session 2

Senate Hall, 16³⁰-17⁴⁵

Session chairs: **Assoc. Prof. Nicoleta CORNEI**

Prof. Habil. Romeo Iulian OLARIU

IC-02 **A passion for a life. From healthy habits to scientific approaches in the MIT era**

16³⁰-17⁰⁰

Marin CHIRAZI

“Alexandru Ioan Cuza” University of Iasi, Faculty of Physical Education and Sports

OC-03 **Al doping of SrTiO₃ nanoceramic boosts photocatalytic efficiency: answers from the structure, morphology and electronic properties contributions**

17⁰⁰-17¹⁵

Ioana RADU¹, Adrian Iulian BORHAN¹, Daniel GHERCĂ¹, Dana Georgeta POPESCU², Camelia Nicoleta BORCA³, Thomas HUTHWELKER³, Georgiana BULAI⁴, Marius-Adrian HUSANU², Aurel PUI¹

¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*

²*National Institute of Materials Physics*

³*Paul Scherrer Institut, Swiss Light Source, Switzerland*

⁴*“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research, CERNESIM*

OC-04 **The atmospheric fate of a gaseous transformation product of limonene**

17¹⁵-17³⁰

Claudiu ROMAN^{1,2}, Cornelia AMARANDEI^{1,2}, Alina Giorgiana NEGRU^{1,2,3}, Cecilia ARSENE^{1,2,3}, Iustinian Gabriel BEJAN^{1,3}, Alexandre TOMAS⁴, Romeo Iulian OLARIU^{1,2,3}

¹*“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research, CERNESIM*

²*“Alexandru Ioan Cuza” University of Iasi, RECENT-AIR*

³*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*

⁴*Université de Lille, Institut Mines-Télécom Nord Europe, Center for Energy and Environment, France*

OC-05 **Atomistic and micromagnetic modelling of magnetic nanomaterials**

- Ana-Maria SOLONARU, Andrei HONCIUC, Mirela HONCIUC¹,
Oana-Iuliana NEGRU, Maria MEDRIHAN
*“Petru Poni” Institute of Macromolecular Chemistry, Department of Electroactive
Polymers*
- PI-07 Novel hybrid azaheterocyclic compounds through click chemistry**
Vasilichia ANTOCI¹, Dorina AMARIUCAI-MANTU¹, Dumitrela
DIACONU², Ramona DANAC¹, Catalina CIOBANU², Violeta
MANGALAGIU², Ionel MANGALAGIU^{1,2}
¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*
²*“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research,
CERNESIM*
- PI-08 Simultaneous determination of protein and essential amino acids in
biological samples**
Elena MIHALCEA¹, Andra Cristina ENACHE², Gabi DROCHIOIU¹
¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*
²*“Petru Poni” Institute of Macromolecular Chemistry*
- PI-09 Photocatalytic performance of undoped and Sr-doped SmFe_{0.7}Co_{0.3}O₃
thin films by using H₂O₂ as co-catalyst**
Nicoleta CORNEI¹, Carmen MITA¹, Diana MARDARE², Georgiana
BULAI³, Marius DOBROMIR⁴
¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*
²*“Alexandru Ioan Cuza” University of Iasi, Faculty of Physics*
³*“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research,
CERNESIM*
⁴*“Alexandru Ioan Cuza” University of Iasi, Faculty of Physics, Research Department*
- PI-10 Adsorption of caffeic and p-coumaric acids on activated carbons**
Irina CEBAN, Raisa NASTAS, Tudor LUPASCU
Moldova State University, Institute of Chemistry, Republic of Moldova
- PI-11 An efficient method for the C-alkylation of 1,2,3-triazoles**
Codruta FRINCUL¹, Elena BICU¹, Catalina-Ionica CIOBANU², Dalila
BELEI¹
¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*
²*“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research,
CERNESIM*
- PI-12 The interrelationship Peroxide index – Chemical composition of
Lavender and Clary sage essential oils during their alteration by on-air
exposure**
Lidia LUNGU, Violeta POPESCU, Svetlana BLAJA, Alexandru
CIOCARLAN, Aculina ARICU
Moldova State University, Institute of Chemistry, Republic of Moldova
- PI-13 The use of machine learning methods in modeling and predicting PM₁₀
in an urban area**
Robert HRITAC¹, Iuliana-Gabriela BREABAN^{1,2}, Marius-Mihai
CAZACU³
¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Geography and Geology, Geoscience
Doctoral School*
²*“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research,
CERNESIM*
³*“Gheorghe Asachi” Technical University of Iasi, Department of Physics*

Day 2

Friday, October 27th, Senate Hall

Session 1

Senate Hall, 09⁰⁰-10³⁰

Session chairs: **Prof. Doina HUMELNICU**
Prof. Ionel MANGALAGIU

IC-03 **Municipal wastewater issues in Moldova and potential of applying the natural treatment systems**
09⁰⁰-09³⁰

Gheorghe DUCA, Victor COVALIOV, Lidia ROMANCIUC,
Olga COVALIOVA
Moldova State University, Institute of Chemistry, Republic of Moldova

OC-06 **New autochthonous carbonic adsorbents for groundwater potabilization**
09³⁰-09⁴⁵

Tudor LUPASCU, Oleg PETUHOV, Tatiana MITINA, Mihail CIOBANU, Raisa NASTAS
Moldova State University, Institute of Chemistry, Republic of Moldova

OC-07 **Nitrogen doped ZrO₂ thin films for photodegradation of Rhodamine B from synthetic water under visible light**
09⁴⁵-10⁰⁰

Carmen MITA¹, Nicoleta CORNEI¹, Mariana FRENTI²,
Georgiana BULAI³, Marius DOBROMIR⁴, Vasile TIRON⁴,
Diana MARDARE²

¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*

²*“Alexandru Ioan Cuza” University of Iasi, Faculty of Physics*

³*“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research, CERNESIM*

⁴*“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research, RAMTECH*

IC-04 **Interdisciplinary approach in science: opportunities and challenges**
10⁰⁰-10³⁰

Mihaela MOCANU
“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research

10³⁰-11⁰⁰ **Poster Session II and Coffee Break – The Hall of the Echoing Footsteps**

Session chairs: **Dr. Alina-Giorgiana NEGRU**
Prof. Costel MOLDOVEANU

Session 2

Senate Hall, 11⁰⁰-12³⁰

**Session chairs: Assoc. Prof. Dalila BELEI
Assoc. Prof. Ionel HUMELNICU**

IC-05
11⁰⁰-11³⁰ **Chitosan based biomaterials: insights into chemistry, properties and their applications**

Luminita MARIN, Daniela AILINCAI, Manuela Maria IFTIME, Anda Mihaela CRACIUN, Andrei BEJAN, Alexandru ANISIEI, Bianca Iustina ANDREICA, Sandu CIBOTARU

“Petru Poni” Institute of Macromolecular Chemistry

OC-08
11³⁰-11⁴⁵ **Amino acids and their short biomimetic aromatic peptides: self-assembly, bioactivity and their targeted applications**

Vasile Robert GRADINARU¹, Stefania-Claudia JITARU¹, Brindusa-Alina PETRE^{1,2}

¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*

²*Regional Institute of Oncology, TRANSCEND*

OC-09
11⁴⁵-12⁰⁰ **Bacteriorhodopsin - the simplest bioenergetic system for ATP production**

Gabi DROCHIOIU

“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry

OC-10
12⁰⁰-12¹⁵ **Synthesis of ion imprinted polymer microspheres by Pickering Emulsion Polymerization Technology**

Oana-Iuliana NEGRU, Andrei HONCIUC, Mirela HONCIUC, Ana-Maria SOLONARU, Maria MEDRIHAN

“Petru Poni” Institute of Macromolecular Chemistry, Department of Electroactive Polymers and Plasmochemistry

OC-11
12¹⁵-12³⁰ **Pickering Emulsion Polymerization Technology (PEmPTech) utilized for obtaining ion-imprinted polymer materials**

Maria MEDRIHAN, Andrei HONCIUC, Valeria HARABAGIU, Ana-Maria SOLONARU, Oana-Iuliana NEGRU, Mirela HONCIUC

“Petru Poni” Institute of Macromolecular Chemistry, Department of Electroactive Polymers and Plasmochemistry

12³⁰-13³⁰ **Poster Session II, Coffee Break and lunch – The Hall of the Echoing Footsteps**

**Session chairs: Dr. Alina-Giorgiana NEGRU
Prof. Costel MOLDOVEANU**

13³⁰-14⁰⁰ **Concluding remarks**

POSTER SESSION II

Friday, October 27th - The Hall of the Echoing Footsteps

PII-01 Synthesis of a new biological active N-(2-aminophenyl)-drim-7,8-en-carboxamide

Svetlana BLAJA¹, Lidia LUNGU¹, Alexandru CIOCARLAN¹, Aculina ARICU¹, Nicoleta VORNICU²

¹Moldova State University, Institute of Chemistry, Republic of Moldova

²T.A.B.O.R. Metropolitan Center of Research

PII-02 Microscopic and molecular approaches into atmospheric bioaerosols from the Iasi urban area

Cristina IANCU^{1,2}, Cornelia AMARANDEI^{2,3}, Naela COSTICA^{3,4}, Iustinian Gabriel BEJAN^{1,2,3}, Romeo Iulian OLARIU^{1,2,3}, Cecilia ARSENE^{1,2,3}

¹“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry

²“Alexandru Ioan Cuza” University of Iasi, RECENT-AIR

³“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research, CERNESIM

⁴“Alexandru Ioan Cuza” University of Iasi, Faculty of Biology

PII-03 The use of qNMR spectroscopy for analytical evaluation of natural extracts. The case of *Lamiaceae* plants

Natalia BIRCA, Alic BARBA, Veaceslav KULCITKI

Moldova State University, Institute of Chemistry, Republic of Moldova

PII-04 Corn stalk agri-residues - raw material for fiber based biorefinery

Adrian Catalin PUITEL¹, Mircea Teodor NECHITA¹, Catalin Dumitrel BALAN¹, Gabriela-Liliana AILIESEI²

¹“Gheorghe Asachi” Technical University, Faculty of Chemical Engineering and Environmental Protection “Cristofor Simionescu”

²“Petru Poni” Institute of Macromolecular Chemistry

PII-05 Novel Phenstatin analogs with indolizinic structure: synthesis and their anticancer properties

Roxana CIORTEANU¹, Ramona DANAC¹, Monica Cornelia SARDARU^{1,2}, Catalina CIOBANU³, Ionel MANGALAGIU¹

¹“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry

²“Petru Poni” Institute of Macromolecular Chemistry

³“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research, CERNESIM

- PII-06 Enhanced *in vitro* effectiveness of conventional drugs using PEGylated Squalene micelles as nanocarriers**
Bogdan Florin CRACIUN, Mariana PINTEALA
“Petru Poni” Institute of Macromolecular Chemistry, Center of Advanced Research in Bionanoconjugates and Biopolymers (IntelCentru)
- PII-07 *In vitro* targeting of MCF-7 tumor cells using PEI- β -CD functionalized gold nanoparticles as non-viral vectors for gene delivery**
Bogdan Florin CRACIUN, Dragos PEPTANARIU, Mihaela SILION, Teodora RUSU, Mariana PINTEALA
“Petru Poni” Institute of Macromolecular Chemistry, Center of Advanced Research in Bionanoconjugates and Biopolymers (IntelCentru)
- PII-08 Dendritic self-assembly patterns in tyrosine-modified lysozyme peptides**
Stefania-Claudia JITARU¹, Andra-Cristina ENACHE³, Gabi DROCHIOIU¹, Brindusa-Alina PETRE^{1,2}, Vasile-Robert GRADINARU¹
¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*
²*Regional Institute of Oncology, TRANSCEND*
³*“Petru Poni” Institute of Macromolecular Chemistry*
- PII-09 Freshwater algal-based biosorbents: preparation and characterization for use in dye-containing effluent treatments**
Carmen ZAHARIA¹, Adrian Catalin PUITEL², Gabriela LISA³, Mariana DIACONU¹, Crinuta-Larisa ORTOVAN¹, Marius-Alexandru AFRASINEI¹
¹*“Gheorghe Asachi” Technical University of Iasi, Department of Environmental Engineering and Management*
²*“Gheorghe Asachi” Technical University of Iasi, Department of Chemical Engineering*
³*“Gheorghe Asachi” Technical University of Iasi, Department of Natural and Synthetic Polymers*
- PII-10 Photothermal hydrogel composites with G4-carbon nanomaterials for enhanced inhibition of *Staphylococcus Aureus***
Monica-Cornelia SARDARU^{1,2}, Irina ROSCA², Alexandru ROTARU²
¹*The Research Institute of the University of Bucharest (ICUB)*
²*“Petru Poni” Institute of Macromolecular Chemistry, Center of Advanced Research in Bionanoconjugates and Biopolymers (IntelCentru)*
- PII-11 Development, validation, and application of a quantitation procedure for 4 synthetic cannabinoids in mouse serum by liquid chromatography tandem mass spectrometry**
Raluca STEFANESCU¹, Leontina Elena FILIPIUC¹, Daniela Carmen ABABEI^{1,2}, Veronica BILD^{1,2}, Gabriela Dumitrita STANCIU¹, Bogdan Ionel TAMBA^{1,3}
¹*“Grigore T. Popa” University of Medicine and Pharmacy, Advanced Center for Research and Development in Experimental Medicine “Prof. Ostin C. Mungiu”*
²*“Grigore T. Popa” University of Medicine and Pharmacy, Pharmacodynamics and Clinical Pharmacy Department*
³*“Grigore T. Popa” University of Medicine and Pharmacy, Department of Pharmacology, Clinical Pharmacology and Algesiology*
- PII-12 Development of polymer electrospun nanocomposites comprising polyether ether ketone and TiO₂**

Timeea-Anastasia CIOBANU¹, Tachita VLAD-BUBULAC², Alina-Mirela IPATE², Daniela RUSU², Gabriela LISA³, Diana SERBEZEANU²

¹*“Alexandru Ioan Cuza” University of Iasi, Faculty of Chemistry*

²*“Petru Poni” Institute of Macromolecular Chemistry*

³*“Gheorghe Asachi” Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection “Cristofor Simionescu”, Department of Chemical Engineering*

PII-13 Potential toxic elements effects on soil quality when the use category changes from a traditional vineyard to residential area (Iasi, Romania)

Ramona HUZUM¹, Iuliana Gabriela BREABAN², Doina Smaranda SIRBU-RADASANU³

¹*“Alexandru Ioan Cuza” University of Iasi, Institute of Interdisciplinary Research, CERNESIM*

²*“Alexandru Ioan Cuza” University of Iasi, Faculty of Geography and Geology, Department of Geography*

³*“Alexandru Ioan Cuza” University of Iasi, Faculty of Geography and Geology, Department of Geology*