

# **13<sup>th</sup> INTERNATIONAL CONFERENCE ON ENVIRONMENTAL ENGINEERING AND MANAGEMENT**

## **PRELIMINARY CONFERENCE PROGRAM**



[www.iceem.tuiasi.ro](http://www.iceem.tuiasi.ro)

**17 – 20 September, 2025  
Iasi, Romania**



# 13<sup>th</sup> INTERNATIONAL CONFERENCE ON ENVIRONMENTAL ENGINEERING AND MANAGEMENT

**Empower Sustainability**

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## ORGANISERS

	<p><b>“Gheorghe Asachi” Technical University of Iasi, Romania</b></p> <p><b>“Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection</b></p> <p><b>Department of Environmental Engineering and Management</b></p>
	<p><b>Politecnica delle Marche University, Ancona, Italy</b></p> <p><b>Department of Science and Engineering of Materials, Environment and Urban Planning</b></p>
	<p><i>with the support of:</i></p>
	<p><b>OAIMDD : The Academic Organization for Environmental Engineering and Sustainable Development</b></p>

## SPONSORS

	<p>Salubris SA Iasi - Silver sponsor</p>
 <p><b>water</b> an Open Access Journal by MDPI</p>	<p>ICEEM12 Best PhD oral presentation award (300 EUR) is sponsored by Water MDPI Journal</p>
	<p>Asociatia Romana de Mediu Romanian Environment Association</p>



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### Honorary Conference President

**Prof.Dr. Dan Cașcaval**

*“Gheorghe Asachi” Technical University of Iasi, Romania*

### Conference Co-Presidents

<b>Prof.Dr. Carmen Teodosiu</b> <i>“Gheorghe Asachi” Technical University of Iasi, Romania</i>	<b>Prof. Dr. Francesco Fatone</b> Università Politecnica delle Marche, Italy	<b>Assoc.Prof.Dr. Brindusa Sluser</b> <i>“Gheorghe Asachi” Technical University of Iasi, Romania</i>
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### International Scientific Committee

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## Organizing Committee

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Assoc.prof.dr. Brindusa Sluser	Dr. Alexandra Blaga
Prof.dr. Maria Harja	Dr. Adela Buburuzan
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## GENERAL INFORMATION

The *International Conference on Environmental Engineering and Management (ICEEM)* was initiated and organized every 2 years, since 2002, by the **Department of Environmental Engineering and Management**, Faculty of Chemical Engineering and Environmental Protection of the “*Gheorghe Asachi*” Technical University of Iasi (TUIASI), Romania. The objectives of all ICEEM conference editions were to bring together international researchers, academics, professionals and students, activating in the fields of environmental engineering and management and to support knowledge exchange and dissemination of specific research and educational programmes.

The 13<sup>th</sup> International Conference on Environmental Engineering and Management, **ICEEM13** will take place between 17<sup>th</sup> and 20<sup>th</sup> of September 2025, in Iasi, Romania. **ICEEM 13** event is organized by “*Gheorghe Asachi*” Technical University of Iasi, Department of Environmental Engineering and Management, and **Politecnica delle Marche University**, Italy, Department of Science and Engineering of Materials, Environment and Urban Planning. ICEEM13 is kindly supported by OAIMDD - The Academic Organization for Environmental Engineering and Sustainable Development and the Romanian Chemical Society.

“*Gheorghe Asachi*” Technical University of Iasi (TUIASI) is a prestigious Romanian university, the institution with the oldest tradition in engineering higher education and research in Romania, being classified in the *top ten* Romanian Universities. TUIASI is classified as an *university for advanced research and education* committed to academic excellence as means of communicating and creating the national and international scientific engineering and architecture heritage. TUIASI has given priority to interdisciplinary approach in research, innovation and teaching, within its 11 faculties (10 in engineering fields and 1 in architecture) and 1 Doctoral School, by providing 61 Undergraduate Programmes, 70 Master of Science Programmes, 13 doctoral domains, 11 taught in English study programmes ([www.study.tuiasi.ro](http://www.study.tuiasi.ro)).

TUIASI core values are: creativity, innovation, sustainability, experiential learning, global experiences, all focused on increasing the quality of life are embedded in both traditional and digital training on design, manufacturing and management, with consistent exposure to a large variety of professional work environments. We offer our students access to state-of-the-art equipment, high performance laboratories, learning rooms, creative hubs or TUIASI Library, one of the most beautiful libraries in the world. TUIASI has an important research and innovation dimension, with 27 accredited research/excellence centers and laboratories (out of which one is accredited by RENAR) focused on creating and transferring knowledge, especially in multi-disciplinary high-tech engineering areas. These centers/laboratories activate supported by national & international research grants or contracts with industry and governmental organizations, their activities and results placing TUIASI in the Romanian top of scientific research. The constant focus on interdisciplinary research, on innovation and knowledge transfer, the quality of research staff and their commitment for excellence provided a constant dynamics of research activities and visibility of TUIASI.

### About the Department of Environmental Engineering and Management

The Department of Environmental Engineering and Management (DEEM) is part of the “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection (FCEEP) of TUIASI. DEEM has been established under its actual structure in 1990 and it was ranked on the first place at the level of Romanian universities due to its performances in education and research in the field of environmental engineering. In order to ensure an integrative approach and continuous improvement of education, research and visibility activities this department uses the following





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entities:

- **Research Center for Environmental Engineering and Impact Assessment (IMEI)**, established in 2000 (<http://erris.gov.ro/Centrul-de-Cercetare-Inginer-2>), recognized by the Romanian Research Council (CNCSIS)
- **Laboratory for Environmental Control and Analysis (LACMED)**, established in 2013, accredited by the Romanian Association for Accreditation (RENAR) according to SR EN ISO/CEI 17025:2018 standard, Certificate LI 1054/18.03.2023 (<http://lacmed.icpm.tuiasi.ro>; <http://erris.gov.ro/www.lacmed.ro>)
- **INTERMEDIU Information and Consultancy Centre** established in 1999 and developed through the MATRA projects financed by the Dutch Ministry of Foreign Affairs.

**DEEM** includes 5 Professors, 8 Assoc. Professors, 7 Lecturers, 1 assistant professor, 8 Post-doc researchers, 52 Ph.D. students, 4 administrative staff and 16 constant external collaborators in research projects. Out of the staff members of DEEM, there are 7 PhD supervisors in the field of Environmental Engineering and 1 PhD supervisor in Chemistry.

The major activities of DEEM are related to:

- ✓ Environmental engineering and management studies, at the BSc and MSc level
- ✓ Doctoral and post-doc programmes in Environmental Engineering
- ✓ Multidisciplinary and trans-disciplinary research collaborations at national and international level
- ✓ Cooperation with industry and local/regional authorities
- ✓ Support of environmental education and related trainings
- ✓ Consolidation of human resources & research infrastructure.

The Department of Environmental Engineering and Management has established a strong network of cooperation at different levels:

At national level, the department members coordinate the environmental engineering network, and have developed very strong cooperation relations in various research and educational projects with universities and research institutes throughout Romania: Politehnica University Bucharest, University of Bucharest, Technical University of Civil Engineering Bucharest, Politehnica University Timisoara, Babes-Bolyai University of Cluj Napoca, "Al.I. Cuza" University, Iasi, "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Transilvania University of Braşov, Ovidius University of Constanta, etc.

At international level the research cooperation was developed, staff members being involved in research projects, research mobilities, networking activities, visiting professors (universities/ research institutes from: Austria, Spain, Netherlands, Germany, Italy, Greece, France, United Kingdom, Belgium, Denmark, Poland, Sweden, Finland, Republic of Moldova, USA, Brazil, Canada, etc.

The visibility of the Department of Environmental Engineering and Management (DEEM) is developed mostly through international cooperation, by means of:

- Organization of the **International Conferences on Environmental Engineering and Management**, ICEEM, an event which occurs every 2 years (since 2002) and has become a landmark for the international environmental scientific community. In 2023, the conference will be at its 12<sup>th</sup> edition (more information on <https://www.iceem.tuiasi.ro/> )
- Publication of the **Environmental Engineering and Management Journal** <http://omicron.ch.tuiasi.ro/EEMJ/> (since 2002). EEMJ is an international ISI ranked peer-reviewed journal, with an ISI impact factor of 1.1 (2022).



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**Università Politecnica delle Marche (UNIVPM)** was established in 1971 and has about 17000 students and include five faculties of Engineering, with more than 7200 students, Medicine and Surgery, Economics, Life Science and Agriculture, which permanently employ about 700 academics and 650 technical/administration staff. UNIVPM is very active and performant in the European R&D&I and is currently involved in about 100 Horizon2020 and Horizon Europe projects, mainly in the area of engineering, agriculture and life science. Three Doctoral Schools (Engineering, Agriculture and Economics) support doctoral students during their research training at UNIVPM. UNIVPM fosters internationalization as one of the top priorities of the university strategic development plan and has several international partners. Within the Mediterranean basin, UNIVPM has key coordinating roles being the seat of the UniAdriatic Secretariat ([www.uniadriatic.net](http://www.uniadriatic.net)), which is a "Network of Universities" established with the purpose to create a permanent connection among Universities and Research centres from the Adriatic-Ionian Region.

## **About the Department of Science and Engineering of Materials, Environment and Urban Planning and WVEE Lab Group**

Municipal and industrial wastewater treatment, resource recovery, circular economy and sustainable urban water services and management are the main fields of expertise of the Lab of Water and Waste Environmental Engineering led by Prof. Francesco Fatone, at the Department of Science and Engineering of Material, Environmental and Urban Planning (SIMAU). Besides other national and international projects, the WVEELab has coordinated the Horizon2020 Innovation Action "SMART-Plant" and has been or is WP leader/partner of more than 20 european or international projects in the last 5 years from different financing programmes (such as: FP7, Horizon 2020, PRIMA, LIFE, COSME, JPI, ENICBCMED, INTERREG, TWINNING). Moreover, the UNIVPM has been a member, as the SMART-Plant Coordinator, of the steering committee of the first signed Innovation Deal concerning water reuse, member of ICT4water cluster and co-leader of the "Value in Water" Cluster of Water Europe platform. UNIVPM is also, member of the Cluster Spring, the Italian Cluster of Green Chemistry whose goal is to foster the development of bioindustries in Italy through a holistic approach to innovation. Besides several international workshops and conferences, the WVEELab has chaired the 3rd European Nutrient Event in ECOMONDO in 2018 and the 3rd IWA Resource Recovery Conference in 2019.





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## Address and Conference Venue

The activities of ICEEM13 will take place at the Gheorghe Asachi Technical University of Iasi, Romania at the following locations:

- TUIASI Aula and Hall of the lost steps, 11A Carol I Blvd, (**Opening ceremony, plenary lectures and Welcome cocktail on September 17<sup>th</sup>**), [map here](#).
- „Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, 73 D. Mangeron, Iasi (**Conference sessions on September 18<sup>th</sup> and 19<sup>th</sup>**), [map here](#).

The opening ceremony will take place on September 17<sup>th</sup>, 2025 followed by the conference parallel sessions (PS) on the 18<sup>th</sup> and 19<sup>th</sup> September, all activities being organised **onsite at the designated locations**.

## Registration

The ICEEM13 registration will take place on **Wednesday, 17<sup>th</sup> September** at the TUIASI Aula (Carol I Blvd) and on **Thursday, 18<sup>th</sup> September** at „Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection (73 D. Mangeron Blvd), 1<sup>st</sup> floor.

**All participants will receive the conference materials (ICEEM13 Programme and Book of abstracts) in a USB pen drive in their registration folders.**

## Oral and Poster Presentations

The oral presentations program is structured in plenary or oral communication sessions (OCS), which are held according to this conference program. LDC projectors and a PC (Windows, MS Office, Adobe Acrobat) will be available in the session rooms for presentations. Authors are invited to upload their presentations on the PCs of each room in advance of the beginning of the scheduled session, to avoid last minute problems. Uploading will exclusively be done via USB drives.

In line with our commitment to sustainability, all **poster communications at ICEEM 13** will be conducted exclusively in electronic format. **Please note that printed posters will not be supported during the conference.** Each poster will be presented in a 5-minute oral slot, scheduled according to the official conference program. **Additionally, two wide screens will be available throughout the conference venue, allowing participants to engage in more detailed discussions with colleagues and attendees.**

## Important notes:

- Time allocation for **Plenary/Keynote lectures** is 30 minutes (including discussions)
- Every **oral communication** will be presented in a 15 minutes frame, including discussions. Participants are encouraged to use the presentation template available on the conference website (link here: **Downloads section**).



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- **Posters** will be presented in dedicated sessions in 5 minutes slots during which participants will present their poster. Participants are encouraged to use the poster template available on the conference website (link here: **Downloads section**).
- **Technical support (TS)** from ICEEM13 secretariate members is available for all sessions
- All phones should be muted during the ICEEM13 sessions.



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## SHORT CONFERENCE PROGRAM

### Wednesday, 17 September 2025

TUIASI Aula , Bd. Carol I no. 11 A, Iasi	
14:00 - 15:00	<b>Participants Registration,</b> Hall of the Lost Steps, Aula TUIASI, Bd. Carol I no. 11 A
15.00 – 15.30	<b>Opening ceremony &amp; Welcome addresses</b>
15.30 – 16.00	<b>Plenary Lecture 1:</b> Polysaccharide/synthetic Polymers as Advanced Materials for Water Treatment, <b>Dr. Marcela Mihai</b>
16.00 - 16.30	<b>Plenary Lecture 2:</b> The Macroscopic of H.T. Odum: Perspectives on Environmental Engineering and Management, <b>Prof.dr. Feni Agostinho</b>
16.30 – 17.00	<b>Plenary Lecture 3:</b> Trends on Circular Economy from Web-based Data, <b>Prof.dr. Konstantinos Tsagarakis</b>
17.00 - 19.00	<b>Welcome Cocktail</b> Hall of the Lost Steps, Aula TUIASI, Bd. Carol I no. 11 A

### Thursday, 18 September 2025

8:00 - 9:00	<b>Participants Registration</b> – 1 <sup>st</sup> Floor Main Hall- Faculty of Chemical Engineering and Environmental Protection – FCEEP, 73 D. Mangeron Blvd		
9:00 - 10:30	OCS 1. Waste management in the context of circular (bio)economy	OCS 2. Water and wastewater cycles in the context of circular (bio)economy	OCS 3. Innovative and advanced materials
10:30 - 11:00	<b>Coffee break</b>		
11:00 - 12:00	OCS 4. Waste management in the context of circular (bio)economy	OCS 5. Water and wastewater cycles in the context of circular (bio)economy	OCS 6. Innovative and advanced materials
12.00 - 13:30	<b>Photo session &amp; Lunch break</b>		
13:30 – 15.30	OCS 7. Waste management in the context of circular (bio)economy <b>EMPTY</b>	<b>PS 8 INGENIUM WORKSHOP: Circular bio-economy</b>	OCS 9. Monitoring and modelling of environmental pollution
15.30 – 17.30	<b>Coffee break</b>	<b>Poster Presentations Sessions (PPS)</b> PPS 10- Waste management in the context of circular (bio)economy PPS 11 - Water and Wastewater cycles in the context of circular (bio)economy PPS 12 - Water and Wastewater cycles in the context of circular (bio)economy PPS 13 - Monitoring and modelling of environmental pollution	
19.00	<b>Gala dinner, Magnum Ballroom, <i>INTERNATIONAL Hotel Iasi</i></b>		



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## Friday 19 September 2025

Time			
9:00 - 11:00	OCS 14. Sustainability assessment & eco-innovation	OCS 15. Biotechnologies and bio-processes	OCS 16. Novel processes and technologies
11.00 – 13.00	<b>Coffee and Lunch break</b>	<b>Poster Presentations Sessions (PPS)</b> PPS 16- PPS 17- PPS 18-	
12.30	ICEEM 13 Closing ceremony, CH III Room		



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## PRELIMINARY DETAILED CONFERENCE PROGRAM

### Wednesday, 17 September 2025

**Opening ceremony and Plenary conference presentations**

**Location: TUIASI Aula , Bd. Carol I no. 11 A, Iasi**

**Chairpersons: Prof.dr. Carmen Teodosiu, Prof.dr. Francesco Fatone, Assoc.Prof.dr. Brindusa Sluser**

TUIASI Aula , Bd. Carol I no. 11 A, Iasi	
14:00 - 15:00	<b>Participants Registration</b> , Hall of the Lost Steps, Aula TUIASI, Bd. Carol I no. 11 A
15.00 – 15.30	<b>Opening ceremony &amp; Welcome addresses</b>
15.30 – 16.00	<b>Plenary Lecture 1:</b> Polysaccharide/synthetic Polymers as Advanced Materials for Water Treatment, <b>Dr. Marcela Mihai</b>
16.00 - 16.30	<b>Plenary Lecture 2:</b> The Macroscopic of H.T. Odum: Perspectives on Environmental Engineering and Management, <b>Prof.dr. Feni Agostinho</b>
16.30 – 17.00	<b>Plenary Lecture 3:</b> Trends on Circular Economy from Web-based Data, <b>Prof.dr. Konstantinos Tsagarakis</b>
17.00 - 19.00	Welcome Cocktail Hall of the Lost Steps, Aula TUIASI, Bd. Carol I no. 11 A

### Thursday, 18 September 2025

**Oral communication session OCS 1. Waste management in the context of circular (bio)economy, Thursday 18.09.2025, 09.00- 10.30**

**Location: (FCEEP CH III Room)**

**Chairpersons: Prof.dr. Irina Volf, Dr. Daniela Gavrilescu**

**Technical support: Dr. Petru Apopei**

Time	Code	Title	Authors
9.00 - 9.30	CO.1.1.	<b>Keynote lecture:</b> Challenges, Experimental Approach and Prospects into Microplastics Waste Management	Maria Răpă, Ecaterina Matei, Cristian Predescu, Marta Matic, Dejan Kosić
9.30 - 9.45	CO.1.2.	Sustainable Uses and Innovations of Waste Management: Exploring Grape Pomace Potential	Georgiana-Diana Gabur, Carmen Teodosiu, Daniela Fighir, Valeriu V. Cotea
9.45 - 10.00	CO.1.3.	Comparative Analysis of Waste Forecasting in Hungary and Romania	Róbert Fejes, Róbert Kurdi, Viktor Sebestyén
10.00 - 10.15	CO.1.4.	Redefining Compost Quality: Linking Plant Physiological Responses and Soil Parameters	Kinga Manuélá Berta, Eliza Molnár, Renáta Rauch Sárainé
10.15 - 10.30	CO.1.5.	Valuable and Critical Elements Recovery from Waste Streams: Progress, Methods, and Perspectives	Ana Maria Lupu, Petronela Cozma, Brindusa Sluser
10.30-11.00		Coffee Break	



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## Oral Communication Session OCS 2. Water and wastewater cycles in the context of circular (bio)economy, Thursday 18.09.2025, 09.00- 10.30

**Location:** FCEEP Council Room

**Chairpersons :** Prof.dr. Carmen Teodosiu, Prof.dr. Francesco Fatone

**Technical Support:** Dr. Daniela Fighir

Time	Code	Title	Authors
9.00 - 9.30	CO.2.1.	<b>Keynote lecture</b> - Advanced Oxidation Processes: Catalysts for Water Reuse in the Circular Economy	Cezar Catrinescu, Adrian Ungureanu
9.30 - 9.45	CO.2.2.	Evaluation of Starch-Based Polymers as Flocculating Agents for Water Produced by Petroleum Industry	Melinda-Maria Bazarghideanu, Paulo Cristiano Silva da Rocha, Letícia Dias da Silva, Rita de Cassia Pessanha Nunes, Diana-Felicia Loghin, Marcela Mihai, Elizabete Fernandes Lucas
9.45 - 10.00	CO.2.3.	Next-Generation Nutrient Recovery in WWTPS: Synergistic Use of EBPR, Biochar and Microalgae within the Framework of EU Directive 2024/3019	Nour Hamoud, Alessia Foglia, Carla Maggetti, Anna Laura Eusebi, Massimiliano Sgroi, Francesco Fatone
10.00 - 10.15	CO.2.4.	Recovery of Nitrogen-Based Salts from Anaerobic Reject Water Using an Open-Loop Membrane System	Riccardo Lo Coco, M.Pezzuto, N.Frison*
10.15 - 10.30	CO.2.5.	Long-Term Evaluation of Moving Bed Biofilm Reactor (MBBR) Technology for Partial Denitrification and Anammox Using Ethanol or Methanol with Actual Wastewater	Akarsh Swamilingappa Annaiah, Magnus Christensson, Gonzalo A. Martinez, Lorenzo Bertin
10.30-11.00		<b>Coffee break</b>	

## Oral Communication Session OCS 3. Innovative and advanced materials

**Thursday 14.09.2023, 09.00- 10.30**

**Location:** FCEEP CH IV Room

**Chairpersons:** Assoc. Prof.Dr. Lidia Favier, Dr. Marcela Mihai

**Technical Support:** Dr. Gabriela Apostolescu

Time	Code	Title	Authors
9.00 - 9.30	CO.3.1.	<b>Keynote lecture:</b> Fluoropolymers, Poly/Perfluorinated Substances (PFAS), and Environmental Impact	Alexandru Asandei
9.30 - 9.45	CO.3.2.	Upcycling of Agro-Industrial Waste: Protein Extraction and Biofiller Application in Thermoplastic Composites	Michele Buono*, Alessandro Nanni, Gizem Yaşarünlü, Martino Colonna
9.45 - 10.00	CO.3.3.	Equilibrium Studies for Removal of Sodium Diclofenac from Aqueous Solution Using Silica Composite Microparticles	Ramona Ciobanu*, Carmen Teodosiu, Florin Bucatariu, Marcela Mihai
10.00 - 10.15	CO.3.4.	Copper Nanoparticles Stabilized on Mesoporous Silica via Deposition-Precipitation for the Selective	Mihaela Bectoraş, Cezar Catrinescu, Adrian





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		Hydrogenation of Biomass-Derived Levulinic Acid To $\gamma$ -Valerolactone	Ungureanu, Carmen Ciotonea, Sébastien Royer
10.15 - 10.30	CO.3.5.	Redox Thermal Gas Treatment: The Role of Copper and Carbonate Species in the CO <sub>2</sub> Purification of Industrial Flue Gas	Anthony Abou Rahhal, Eric Genty, Renaud Cousin, Anne Ponchel, Sebastien Noel, Christophe Poupin <sup>1</sup> , Stephane Siffert*
10.30-11.00		<b>Coffee break</b>	

## Oral Communication Session OCS 4. Waste management in the context of circular (bio)economy, Thursday 18.09.2025, 11.00- 12.00

**Location:** FCEEP CH III Room

**Chairpersons:** Assoc. Prof. Dr. Sabino de Gisi, Assoc. Prof. Dr. Maria Râpă

**Technical Support:** Dr. Adela Marilena Buburuzan

Time	Code	Title	Authors
11.00 - 11.15	CO.4.1.	Sustainable Approach of Organic Waste Valorisation in Biogas Plants	Georgiana Petrea, Daniela Gavrilescu, Brindusa Sluser
11.15- 11.30	CO.4.2.	Optimization of Household Waste Collection from Ecological Islands in the Municipality of Galati	Gabriel Murariu, Dan Munteanu, George Mocanu, Catalina Iticescu, Viorel Calinescu
11.30 - 11.45	CO.4.3.	Sawdust – a Low Cost Adsorbent for Metal Ions Removal from Aqueous Media	Gabriela Nacu*, Loredana Munteanu, Laura Bulgariu
11.45 - 12.00	CO.4.4.	Hydrogen Plasma Gasification Equipment for Renewable Energy Production	Iulian Cucos, Ion Antonescu, Perino Baraga, Ioan Calinescu
12.00 – 13.30		<b>Photo Session &amp; Lunch Break</b>	

## Oral Communication Session OCS 5. Water and wastewater cycles in the context of circular (bio)economy

**Thursday 14.09.2023, 11.00- 12.00**

**Location:** FCEEP, CH IV Room

**Chairpersons:** Prof. Dr.Luminița Andronic, Assoc. Prof.Dr. Lidia Favier

**Technical Support :** Dr. Corina- Petronela Mustereț

Time	Code	Title	Authors
11.00 - 11.15	CO.5.1.	Photocatalytic Beads for Continuous Flow Wastewater Treatment for Reuse	Maria Covei, Ioana Tismanar, Anca Duta, Jose Maria Calderon Moreno, Hermine Stroescu, Madalina Nicolescu, Irina Atkinson, Mariuca Gartner
11.15- 11.30	CO.5.2.	A Synergistic Approach of Hydrochar-Based Materials and Immobilized Microorganisms for Organic Pollutants Removal	Emanuel Gheorghita Armanu, Simone Bertoldi, Christian Eberlein, Hermann J. Heipieper, Matthias Schmidt, Olívia Salomé G. P. Soares, Olga C. Nunes, Marius Sebastia Secula, Irina Volf*
11.30 - 11.45	CO.5.3.	GIS and CFD-Based Study for Monitoring Water Resources in the Euphrates-	Mustafa HATHAL, Viktor Sebestyén*, Viola Somogyi



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Time	Code	Title	Authors
		Diwaniyah Region within the WEF Nexus Framework	
11.45 - 12.00	CO.5.4.	DBD Approach and Dielectric Materials Use for Treating Water Contaminated with Hard-to-Degrade Substances	Gheorghe Duca, Lidia Romanciuc, Olga Covaliova*, Marius Andruh, Simona Nica
12.00 - 12.15	CO.5.5.	Closing the Loop in Algal Cultivation: The Case for Medium Recycling in Autotrophic Systems	Luigi Marra, Elena Aurino, Francesca Raganati, Antonino Pollio, Walter Wukovits, Antonio Marzocchella
12.15 - 12.30	CO.5.6.	Closing the loop in algal cultivation: the case for medium recycling in autotrophic systems	Luigi Marra, Elena Aurino, Francesca Raganati, Antonino Pollio, Walter Wukovits, Antonio Marzocchella
12.30 – 13.30	<b>Photo Session &amp; Lunch Break</b>		

## Oral Communication Session OCS 6. Innovative and advanced materials applications, Thursday 14.09.2023, 11.00- 12.00

Location: FCEEP, Council Room

Chairpersons : Prof.dr. Cezar Catrinescu, Prof.dr. Adrian Ungureanu

Technical Support: PhD student Ramona Ciobanu

Time	Code	Title	Authors
11.00 - 11.15	CO.6.1.	Long-term stability of polymer resins used in brine purification and assessment of energy recovery potential of resins waste	Valeria Danilova, Loredana-Vasilica Postolache, Dumitru Coman, Adrian Bele, Claudia Roman, Liliana Lazar (*), Gabriela Lisa
11.15- 11.30	CO.6.2.	Core/Shell Composites Based on Sand and Weak Polyelectrolytes for Water Cleaning	Timeea-Anastasia Ciobanu*, Larisa-Maria Petrila, Florin Bucatariu, Marius-Mihai Zaharia, Marcela Mihai
11.30 - 11.45	CO.6.3.	In-Situ Prepared Vis-Active TiO <sub>2</sub> – G-C <sub>3</sub> N <sub>4</sub> Photocatalytic Films for Wastewater Treatment Applications	Ioana Tismanar*, Maria Covei, Anca Duta
11.45 - 12.00	CO.6.4.	Advanced Recovery of Valuable Materials From E-Waste	Ștefan-Leontin Martinaș-Ioniță, Gabriela Antoaneta Apostolescu, Maria Harja*
12.00 – 13.30	<b>Photo Session &amp; Lunch Break</b>		

## Oral Communication Session OCS 6. Waste management in the context of circular (bio)economy, Thursday 18.09.2025, 13.30 - 15.30

Location: FCEEP CH III

Chairperson: Assoc. Prof. Dr. Maria Râpă, Dr. Daniela Gavrilăscu

Technical Support: Dr. Petronela Cozma

Time	Code	Title	Authors
13.30 – 13.45	CO.7.1.		
13.45 – 14.00	CO.7.2.		



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14.00 – 14.15	CO.7.3.
14.15 – 14.30	CO.7.4.
14.30 – 14.45	CO.7.5.
14.45 – 15.00	CO.7.6.
15.00 – 17.00	Coffee break & Posters Sessions
19.00	Gala dinner, Magnum Ballroom, <i>INTERNATIONAL Hotel Iasi</i>

## Workshop Session 8. INGENIUM WORKSHOP: CIRCULAR BIO-ECONOMY Thursday 18.09.2025, 13.30- 15.30

## Oral Communication Session OCS 9. Monitoring and modelling of environmental pollution, Thursday 18.09.2025, 13.30- 15.30

Location: FCEEP Council Room

Chairpersons: Assoc. Prof. Dr. Gabriela Soreanu, Dr. Oana Plăvan

Technical Support: Dr. Camelia Betianu

Time	Code	Title	Authors
13.30 – 14.00	CO.9.1.	<b>Keynote lecture:</b> Materials and Technologies for the Treatment of Contaminated Marine Sediments in a Circular Economy Perspective	Sabino De Gisi
14.00 – 14.15	CO.9.2.	An Improved Remote Sampling Technique for Atmospheric Pollutants	Teodor D. Andron, Matthew A. Dexter, Tony Rogers, Warren T. Corns
14.15 – 14.30	CO.9.3.	Sensor-Based Assessment of Green Infrastructure Strategies for Air Pollution Control in Urban Areas	Luminita Andronic*, Mihai Daniel Nita, Renate Cornici-Dan, Tiberiu Chiriches
14.30 – 14.45	CO.9.4.	Portable Potentiostat and Graphene-Based Sensors: Fast and Accurate Platform for Real-Time Pesticide Monitoring	Gabriela Hristea*, Dragos Ovezee, Mihai Iordoc
14.45 – 15.00	CO.9.5	Experimental Investigation on the Self-Ignition Behavior of Dangerous Dust Accumulation in Order to Prevent Major Accidents	Irina Nălboc*, Maria Prodan, Andrei Szollosi Moța, Sonia Șuvar, Sorin Simion
15.00 – 15.15	CO.9.6.	Risk Assessment of Air Pollution through Portable Sun Photometer (CALITOO)	Ioana Tanasa*, Marius Cazacu, Brindusa Sluser
15.15 – 15.30	CO.9.7.	Vegetation-Based Air Pollutant Deposition Modeling and Development of a Decision Support System in Brașov City	Zahra Kiyan, Mohamad Gheibi, Luminita Andronic, Mohamed Eldessouki
15.30 – 17.00		Coffee break & Posters Session	
19.00		Gala dinner, Magnum Ballroom, <i>INTERNATIONAL Hotel Iasi</i>	



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## Poster Presentation Session PPS 10 - Section: Waste management in the context of circular (bio)economy,

**Thursday 18.09.2025, 15.30 – 17.05**

**FCEEP CH III Room**

**Chairperson: Lect.dr. Camelia Smaranda**

Time	Code	Title	Authors
15.30-15.35	PO.1.1.	Obtaining Inorganic Materials with High Properties by Using Industrial Waste	Mihaela Caftanachi, Maria Harja*
15.35-15.40	PO.1.2.	The Influence of Additives and Industrial Wastes as Partial Substituents of Cement over Cementitious Materials	Mihai Vrabie, Maria Harja
15.40-15.45	PO.1.3.	Evaluation of Various Lignocellulosic Agri-Wastes as Potential Biorefinery Feedstock	Adrian Cătălin Puițel, Dan Gavrilescu
15.45-15.50	PO.1.4.	Hydrogen Plasma Gasification Equipment for Renewable Energy Production	Iulian CUCOS *, Ion ANTONESCU, Dorina ISOPESCU, Perino BARAGA
15.50-15.55	PO.1.5.	Comparative Study on the Adsorption of Rifaximin onto PET Fibers and PET Fibers Modified With 0.1% Alginate	*Elena Fasniuc – Pereu, Daniela Ionela Ferțu, Laura Bulgariu
15.55-16.00	PO.1.6.	Energy Recovery from Biomass Waste	Loredana-Vasilica Postolache*, Gabriela Soreanu, Igor Cretescu and Gabriela Lisa
16.00-16.05	PO.1.7.	Advancements in Enzymatic and Microbial Plastic Degradation	Mădălina-Maria Enache*, Daniela Gavrilescu, Carmen Teodosiu
16.05-16.10	PO.1.8.	Sustainable Solutions for Food Waste Valorization: Pathways to Recover Bioactive Compounds and Nutrients	Paula-Sânziana Oprea, Elena-Diana Comăniță-Ungureanu, Petronela Cozma, Maria Gavrilescu
16.10-16.15	PO1.9.	Management of Packaging Waste from E-Commerce in the Context of The Circular Economy	Constantin Cîrjan, Daniela Gavrilescu, Carmen Teodosiu
16.15-16.20	PO1.10.	Sustainable Photocatalytic Fertilisers from Snail Waste and TiO <sub>2</sub> Supporting Circular Bioeconomy in Hydroponic Microgreen Cultivation	Elena-Rusandra Illyes*, Luminita Andronic
16.20-16.25	PO1.11.	Optimizing Recycled Steel Slag in Asphalt Base Layers: a Sustainable Alternative to Natural Aggregates	Iriciuc Silviu Cristian, Gimiga Gelu Razvan, Galusca Izabela Narciza, Dima Diana Nicoleta, Scutaru Maria Cristina, Boaca Gheorghita
16.25-16.30	PO1.12.	A Neural Network-Based Classifier for the Recognition and Rough Segmentation of Solid Waste from Images	Marius Gavrilescu
16.30-16.35	PO1.13.	Lucerne (Medicago Sativa) - A Promising Candidate For Multiple Output Biorefinery	Adrian Cătălin Puițel, George Bârjoveanu, Cătălin-Dumitrel Balan Dumitrel, Mircea Teodor Nechita, Laura Bulgariu
16.35-16.40	PO1.14.	Environmental and Economic Perspectives on Using Waste Window Glass as Aggregate in Concrete	Mihaela FANACHE (VASILIU), Liliana LAZAR, Roxana BUCUR, Maria HARJA*
16.40-16.45	PO1.15.	Advanced Recovery Of Valuable Materials From E-Waste	Ștefan-Leontin Martinaș-Ioniță, Gabriela Antoaneta Apostolescu, Maria Harja



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Time	Code	Title	Authors
16.45-16.50	PO1.16.	Driving Circularity in the Plastic Sector: Insights and Innovations from The Plan-C Project	Andra-Cristina Enache, Petrisor Samoila, Adrian Bele, Valeria Harabagiu
16.50-16.55	PO1.17	Introduction of the Deposit Return System in Hungary: Early Experiences and Challenges	Janka Bobek-Nagy, Eliza Molnár*, Róbert Kurdi, Szilvia Szabó, Zsolt Szigetvári, Zsuzsanna Banász
16.55-17.00	PO1.18	Implementation and Early Outcomes of Separate Kitchen Waste Collection in a Hungarian City	Janka Bobek-Nagy, Eliza Molnár*, Katalin Kovács, Róbert Kurdi
17.00-17.05	PO1.19	A Functional Bio-Based Product for Soil Resilience	Maria-Bianca Aiordăchioaie, Irina Volf*

## **Poster Presentation Session PPS11 – Section Water and Wastewater cycles in the context of circular (bio)economy**

**Thursday 18.09.2025, 15.30 – 17.05**

**FCEEP CH IV Room**

**Chairperson: Dr. Corina-Petronela Musteret**

Time	Code	Title	Authors
15.30-15.35	PO.2.1.	Research on the Realization of a Special Operations Facility Used for the Protection of Hydrotechnical Developments and Control of the Negative Effect of Floods	Iulian Cucos *, Ion Antonescu, Perino Baraga, Georgiana Marin
15.35-15.40	PO.2.2.	Granulation and Chemical Conversion of Sewage Sludge Ash. A Technical Approach for the Recovery of Plant-available Phosphorus	Sebastian Jan Baranyai*, Maria Gavrilescu
15.40-15.45	PO.2.3.	Assessment of a Lab Scale Solar Driven Photocatalytic Membrane Reactor Performance for Advanced Treatment of Municipal Wastewater	Lucian Alexandru Constantin*, Mirela Alina Constantin, Valeriu Robert Bădescu, Florenta Daniela Constantinov
15.45-15.50	PO.2.4.	Assessment on Photocatalytic Degradation of Wastewater Containing Textile Black 5 Dye Using Fly Ash – TiO <sub>2</sub> Catalysts	Mirela Alina Constantin*, Lucian Alexandru Constantin, Florenta Daniela Constantinov
15.50-15.55	PO.2.5.	Iron Scraps Waste-Derived Electrocoagulation for Removal of Sodium Dodecyl Sulfate from Water	Mihaela Gabriela Staicu*, Lacrima-Crysty Ighian, Sorina Ilies, Anamaria Baci, Florica Manea
15.55-16.00	PO.2.6	Carbon-Based Electrodes for Electrochemical Degradation of Perfluorooctanoic Acid from Water	Adina Carmen Gavrilescu, Sorina Ilies, Anamaria Baci, Florica Manea**
16.00-16.05	PO.2.7.	Sustainable Aquaculture Systems: Environmental Impact, Technological Innovation and Pathways Toward Circular Economy	Mirela Crețu, Carmelia Mariana Dragomir Bălănică, Marian Tiberiu Coadă, Ciprian Cuzmin
16.05-16.10	PO.2.8.	The Interdependence between Organic Agriculture and the Use of Sludge from Sewage Treatment Plants in Romania	Carmelia Mariana Dragomir Bălănică, Mirela Crețu, Marian Tiberiu Coadă, Ciprian Cuzmin
16.10-16.15	PO.2.9.	Metal-Free Carbon-Based Photocatalysts vs. TiO <sub>2</sub> for Solar Degradation of Micro-Pollutants	Alina Gabriela Tunaru*, Luminita Andronic
16.15-16.20	PO.2.10.	Removal of Manganese, Iron and Disinfection Byproducts Precursors from Groundwater by	Corina-Petronela Musteret*, Oana Plavan, Carmen Teodosiu





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Time	Code	Title	Authors
		Coagulation-Flocculation and Adsorption Processes	
16.20-16.25	PO.2.11.	Green Biosorption of Some Textile Azo Dyes Using a Novel Marine Chito-Protein Matrix: Efficiency, Reusability, and Toxicity Assessment	Nisrine Nouj, Aboubakr Ben Hamou, Ayoub Chaoui Mohamed Rida Abelouah, Mohamed Idbella, Naima Hafid, Gabriela Soreanu, Ingrid Ioana Buciscanu, Nouredine El Alem, Igor Cretescu
16.25-16.30	PO.2.12.	Development of Eco-Friendly Adsorbents Materials from Orange Peels for Water Decontamination Sustainable Applications	Giovanina-Iuliana Ionică, Cristina Orbeci, Liliana Bobirică, Constantin Bobirică, Sorina Coman
16.30-16.35	PO.2.13.	Characteristics and Treatment Facilities of Collected Wastewaters from a Zootechnical Farm	Cristina-Alexandra Haivas And Carmen Zaharia
16.35-16.40	PO.2.14.	Removal of Dyes From Aquatic Environments by Phytoremediation	Andreea-Elisa Reclaru
16.40-16.45	PO.2.15.	Designing A Sustainable Rainwater Management System For The 'Tudor Vladimirescu' Campus, Iași: A Smart City–Smart Campus Approach	Marcoie Nicolae, Nechita Mircea Teodor, Balan Marius, Toma Daniel, Balan Catalin Dumitrel*

## Poster Presentation Session PPS12 – Innovative and advanced materials

**Thursday 18.09.2025, 15.30 – 16.20**

**FCEEP Council Room**

**Chairperson: Dr. Gabriela Apostolescu**

Time	Code	Title	Authors
15.30-15.35	PO.3.1.	Removal of Ceftriaxone from Aqueous Media by Adsorption: Comparison Between Activated Carbon and CNF-Functionalized Composite	Diana Hanganu*, Lidia Favier, Catalina Nutescu (Duduman), Gabriela Apostolescu, Maria Harja
15.35-15.40	PO.3.2.	Cr-polymer Composite Precursor for Obtaining an Adsorbent	Vasile Gutsanu*, Gabriela Lisa, Alina-Mirela Ipate Maria Botnaru
15.40-15.45	PO.3.3.	Entangling Nanostructures of ZnAl Ldh/ZnO/ZnAl <sub>2</sub> O <sub>4</sub> for Ibuprofen Degradation under Solar Light Irradiation	Gabriela Carja, Loredana Gavrila*, Liliana Lazar
15.45-15.50	PO.3.4.	Ni-Doped STiO <sub>3</sub> /Mxene Nanocomposites for Efficient Solar Photocatalytic Hydrogen Generation	Héctor Valdés*, Padmanaban Annamalai, And Bharathkumar Sivakumar
15.50-15.55	PO.3.5.	The Effect of Physico-Chemical Properties Obtained by Different Preparation Methods on CoCuAl Oxide for CO <sub>2</sub> Purification of Industrial Flue Gas	Anthony Abou Rahhal, Eric Genty, Renaud Cousin, Anne Ponchel, Sebastien Noel, Christophe Poupin, Stephane Siffert*
15.55-16.00	PO.3.6	Tailoring the Photocatalytic Properties of TiO <sub>2</sub> via Copper Doping for Enhanced Bisphenol A Degradation under Visible Irradiation	Lidia Favier, Yassine Jari, Chaker Necibi, Bouchaib Gourich, Christophe Vial, Maria Harja, et Nicolas Roche
16.00-16.05	PO.3.7.	Redispersion Strategies for Dried Cellulose Nanofibers: Enabling their Use in Bio-based Lubricating	Gabriel Savin, Georgiana Vitelar, Liliana Lazar*, Miguel A. Delgado, Moisés García-Morales, Claudia Roman*
16.05-16.10	PO.3.8.	The Physics of Cellulose Nanopaper	Florin Ciolacu* And Diana Ciolacu





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Time	Code	Title	Authors
16.10-16.15	PO.3.9.	Heterostructuring Ni Nanoparticles and ZnSnAl LDH for Driving CO <sub>2</sub> Catalytic Reduction Using Solar Light Energy	Gabriela Carja, Denis Cutcovschi*, Elena Seftel
16.15-16.20	PO.3.10.	Solar-Light Responsive Copper Nanoparticles/Layered Double Hydroxides Heterostructures for Efficient Pollutant Removal	Gabriela Carja, Oleg Tihon*, Sofronia Bouariu

## Poster Presentation Session PPS13 – Monitoring and modelling of environmental pollution

**Thursday 18.09.2025, 16.20 – 17.10**

**FCEEP Council Room**

**Chairperson: Assoc.Prof.Dr. Gabriela Șoreanu**

Time	Code	Title	Authors
16.20-16.25	PO.3.11.	Climate Change Impacts on Water Quality: A Bibliometric Analysis of the Current State of Knowledge Using VOS Viewer Software	Madalina Elena Abalasei*, Carmen Teodosiu
16.25-16.30	PO.3.12.	Impact of Ambient Noise on Urban Population	Simion Sorin, Nălboc Irina*, Găman Angelica, Kovacs Marius, Simion Alexandru
16.30-16.35	PO.3.13.	Artificial Intelligence for Climate Change Mitigation: Opportunities, Applications and Challenges	Maria Gavrilescu
16.35-16.40	PO.3.14.	Phytoremediation of Heavy Metal-Contaminated Soils by Rapeseed ( <i>Brassica Napus L.</i> )	Petronela Cozma*, Raluca-Maria Hlihor, Maria Paiu, Maria Gavrilescu
16.40-16.45	PO3.15.	Exploring the Combined Effects of Ceftriaxone And Polypropylene Microplastics on Zebrafish ( <i>Danio Rerio</i> ) Social Behavior	Ramona-Alexandra Ciaușu*, Ionuț-Alexandru Chelaru, Gabriel Andrei Andronic, Dorel Ureche, Mircea Nicușor Nicoară
16.45-16.50	PO.3.16.	DYNAMIC BEHAVIOR AND COMPARATIVE PERFORMANCE OF VocS ADSORPTION ON POLYMERIC AND CARBON-BASED SYSTEMS	Marilena-Adela Buburuzan*
16.50-16.55	PO.3.17.	Employees' Perception on Indoor Air Quality in Office Buildings: Pollution Awareness and Effective Solutions	Adrian Cătălin Toma* and Irina Volf
16.50-17.00	PO.3.18	Detection of Paracetamol from Water on Carbon Paste Electrodes	Aniela Pop, Beatrice Bugărin, Corina Orha, Sorina Ilies, Florica Manea
17.00-17.05	PO.3.19.	Dynamic Behavior of Persistent Organic Pollutants in Soil	Camelia Bețianu*, Adrian Puițel, Teodor Măluțan, Maria Gavrilescu
17.05-17.10	PO.3.20.	Comparative Analysis of Hydrogeological Adaptation Strategies in the Zarqa Main and Ebro Basins	Aloyed Odai, Daniel Scradeanu
17.10-17.15	PO3.21.	Drone Technology in Environmental Education: A Sustainable Training Model in the Era of Climate Change	Marianna Savva*, Alisa Moșneaga, Olga Darii, Anton Danici, Sergiu Pascari
19.00	<b>Gala dinner, Magnum Ballroom, INTERNATIONAL Hotel Iasi</b>		



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**Friday, 19 September 2025**

**Oral Communication Session OCS14. Sustainability assessment & eco-innovation, 09.00-11.00**

**Location: FCEEP CH III Room**

**Chairpersons: Assoc. Prof. Dr. George Barjoveanu, Prof.dr. Feni Agostinho**

**Technical Support: Dr. Petronela Cozma**

Time	Code	Title	Authors
9.00 - 9.30	CO.12.1.	<b>Keynote lecture:</b> Growing Use of Life Cycle Assessment as a Tool to Quantify Sustainability	John D. Atkinson*, Zeinab Mousania
9.30 - 9.45	CO.12.2	Towards Circular Carbon and Water Management: LCA of a Biogas-Based Carbon Dioxide Capture Process	N. Schäuble*, M. Wehinger, C. Huang, L. Lee, J. Hoinkis, M. Graf
9.45 - 10.00	CO.12.3.	From Barriers to Balance: Assessing the Ecological Benefits of Fish Ladders on the Gilort River	Cristian Ioja, Gabriel Meleşcanu, Cristian Tetelea, Marius Matache*
10.00 - 10.15	CO.12.4.	LCA of Cellulose-Based Material Synthesis for the Remediation of Contaminated Sediment	Milvia Elena Di Clemente*, George Barjoveanu, Roberto Grisorio, Andrea Petrella, Gian Paolo Suranna, F. Todaro, Carmen Teodosiu, Michele Notarnicola
10.15 - 10.30	CO.12.5.	Assessing Environmental Impacts of Wefe Nexus Demonstration Sites within the SURENEXUS Project	Elisa Blumenthal, Lorenzo Tombolini*, Alessia Foglia, Virginia Barros, Massimiliano Sgroi, Anna Laura Eusebi, Nikos Bedauc, Doron Markeld, Francesco Fatone
11.00 - 11.30		<b>Coffee break</b>	

**Oral Communication Session OCS15. Biotechnologies and bioprocesses**

**09.00-11.00**

**Location: FCEEP Council Room**

**Chairpersons: Prof.dr. Maria Gavrilescu, Assoc.Prof. Dr. Alexandra Blaga**

**Technical Support: Dr. Adrian Cătălin Puiţel**

Time	Code	Title	Authors
9.00 - 9.30	CO.13.1.	<b>Keynote lecture:</b> Microencapsulation: A New World of Opportunities	Berta Nogueiro Estevinho
9.30 - 9.45	CO.13.2.	Degradation of Paracetamol, Ibuprofen, and Naproxen by Packed Bed Bioreactor System in Continuous Plug Flow Operation	Ixbalanque Arturo Martínez Alva*, Fortunata Santoyo Tepole, Nora Ruiz Ordaz, Juvencio Galíndez Mayer and Eduardo Alor Moha
9.45 - 10.00	CO.13.3.	Esterases as Suitable Enzymes for Production and Recycling of Polyurethanes with the Concept of Cradle-to-Cradle	Martin Halecký*, Jiří Mach, Olga Kočková and Hynek Beneš



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10.00 - 10.15	CO.13.4.	Sustainable Agricultural Practices: Reducing Carbon Footprint of Wheat Production	Iulian Gabur, Georgiana-Diana Gabur*
10.15 - 10.30	CO.13.5	Photodegradation of Rosemary Extracts "	Claudia Cobzaru, Cătălina Elena Iacob, Gabriela Antoaneta Apostolescu, Nicolae Apostolescu, Corina Cernătescu*
10.30 - 10.45		Biosorption of Cationic Dyes Onto a Novel Biocomposite Material Based on Sawdust and Natural Polymers: Evaluation of Kinetic Models	Lăcrămioara Rusu*, Narcis-Teodor Niță, Florin Marian Nedeff, Daniela Șuteu, Elena-Mirela Suceveanu*
11.00-11.30		<b>Coffee break</b>	

## Oral Communicaton Session OCS16. Novel processes and technologies

**Friday 19.09.2025, 09.00-10.30**

**Location: FCEEP CH IV Room**

**Chairpersons: Assoc. Prof.Dr. Lidia Favier, Prof.dr. Igor Cretescu**

**Technical Support: PhD student Ramona Ciobanu**

Time	Code	Title	Authors
9.00 - 9.30	CO.14.1.	<b>Keynote lecture:</b> Recent Advances in Photocatalytic Materials to Prolong the Shelf-Life of Climacteric Fruits	Héctor Valdés
9.30 - 9.45	CO.14.2.	Purification of Saturated Brine Using New Chelating Resin for the Chlor-alkali Sustainable Process	Liliana Lazăr (*), Valeria Danilova, Dumitru Coman, Maria Harja, Ioan Mămăligă
9.45 - 10.00	CO.14.3.	Catalytic Hydro-Dehalogenation Optimization of Pyrolysis Oil from WEEE Plastics	B. M. Falco*, M. E. Di Clemente, E. Fersini , M. Dell'Anna, F. Todaro, M. Notarnicola
10.00 - 10.15	CO.14.4.	A Process Network Towards a Future Methanol Economy	Walter Wukovits*, Diana Dimande, Michael Harasek
10.15 - 10.30	CO.14.5.	Comprehensive Study on the Photocatalytic Removal of an Antidiabetic Drug from Aqueous Solution	Lidia Favier, Diana Hanganu, Andrei Ionut Simion, Cristina Gabriela Grigoras, Maria Harja
10.30-10.45	CO.14.6.	Preparation of a Novel Carbon Adsorbent for the Removal of Cd <sup>2+</sup> , Cr <sup>3+</sup> and Ni <sup>2+</sup>	Nicoleta Marin
11.00 – 11.30		<b>Coffee break</b>	

## Posters Presentation Session PPS 17. Section: Sustainability assessment & eco-innovation

**Friday 15.09.2023, 11.30-12.15**

**Location: FCEEP CH III Room**

**Chairperson: Assoc. Prof.Dr. George Barjoveanu**



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Time	Code	Title	Authors
11.30-11.35	PO4.1.	Life Cycle Assessment of End-of-Life Vehicles in Romania	Florenta Dinita (Suhani - Dinita), George Barjoveanu, Carmen Teodosiu
11.35-11.40	PO.4.2.	Synergizing Quality and Environmental Management in Healthcare Institutions: Pathways toward Sustainable and Patient-Centered Care	Dana-Gabriela Simion Luduşanu, Grigore Tinică, Maria Gavrilescu
11.40-11.45	PO.4.3.	Integrating Tourism, Mobility, and Environmental Sustainability: a Conceptual Framework for the European Union	Tiberiu Vlad Simion, Raluca-Maria Mighiu Țâbuleac, Maria Gavrilescu
11.45-11.50	PO.4.4.	Green Transformation in Tourism: Eco-Innovation Adoption and Sustainability Performance Across Europe	Raluca-Maria Țâbuleac*, Tiberiu Vlad Simion, Elena-Diana Comăniță-Ungureanu, Petronela Cozma, Camelia Smaranda, Isabela Maria Simion, Maria Gavrilescu
11.50 - 11.55	PO4.5.	Nature-Based Solutions Urban Living Lab Tei-Colentina	Cristian Ioja, Maria-Alexandra Calotă, Alina Hossu, Mihai-Răzvan Niță, Marius Lucian Matache*
11.55-12.00	PO4.6.	A Sustainable Environmental Impact Assessment through BIM-LCA Framework – a Case Study	Bogdan Chelaru <sup>1</sup> , Gabriela Ungureanu <sup>2</sup> , Cătălin Onuțu <sup>1</sup> , Adrian Alexandru Șerbănoiu <sup>1</sup>
12.00-12.05	PO.4.7.	An LCA Comparison of Early-Stage Environmental Assessment of Organic-Inorganic Composites for Environmental Applications	George Barjoveanu, Ramona Ciobanu, Oana Plavan, Florin Bucatariu, Marcela Mihai, Carmen Teodosiu, Daniela Fighir
12.05-12.10	PO.4.8.	Sustainability Indicators Considered for Corporate Social Responsibility Assessment: Current Status and Perspectives	Dumitru Botan, Daniela Fighir, Ioana Tanasa, Eduard Strainu, Brindusa Sluser
12.10-12.15	PO.4.9.	Statistical Analysis and Impact Assessment of Car Fleet Pollution: Case Study Iasi City, Romania	Andrei Hancu, Ioana Tanasa, Dumitru Botan, Catalin Balan, Brindusa Sluser
12.30	<b>ICEEM12 Closing ceremony FCEEP CH III Room</b>		

## **Posters Presentation Session PPS 18. Section: Biotechnologies and bio-processes**

**Friday 15.09.2023, 11.30-12.05**

**Location: FCEEP Council Room**

**Chairperson: Assoc.Prof. Dr. Alexandra Blaga**

Time	Code	Title	Authors
11.30-11.35	PO5.1.	Thermodynamic Modeling of Dichromate Anion Biosorption by Green Marine Algae Biomass	Loredana Munteanu*, Gabriela Antoaneta Apostolescu, Laura Bulgariu
11.35-11.40	PO.5.2.	Advanced Liquid-Liquid Extraction of Malic Acid with Ionic Liquids in Bioprocessing Applications	Alexandra Cristina Blaga*, Dan Cascaval, Anca Irina Galaction
11.40-11.45	PO.5.3.	Evaluation of Liquid Waste Streams from Lignocellulosic Agricultural Materials for Itaconic Acid Biosynthesis using <i>Aspergillus Terreus</i>	Alexandra Cristina Blaga*, Adrian Puițel, Dan Cașcaval, Mădălina Postaru, Anca Irina Galaction



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Time	Code	Title	Authors
11.45-11.50	PO.5.4.	Challenges of Biomass Valorization	Lenuța Kloetzer*, Alexandra Cristina Blaga, Alexandra Tucaliuc, Nicholas Brodu, Laurent Balland, Jens Denecke
11.50 - 11.55	PO5.5.	Natural Deep Eutectic Solvents (Nades) as Sustainable Solvents for Enhanced Bioactive Phytoextracts from <i>Artemisia Annua</i> for Dermato-Cosmetic Formulations	Claudia Maxim, Alexandra Cristina Blaga, Adriana Trifan, Delia Turcov, Lacramioara Rusu, Daniela Suteu
11.55-12.00	PO5.6.	<i>Tagetes erecta</i> (marigold) as a Candidate for Phytoremediation of Galvanic Sludge-Polluted Soils	Eliza Molnár*, Janka Bobek-Nagy, Róbert Kurdi, Renáta Rauch Sárainé
12.00-12.05	PO.5.7.	Biosorption Approach to Rifampicin Removal from Aqueous Media using Biocomposite Material Based on Microbial Residual Biomass and Natural Polymers	Elena-Mirela Suceveanu, Narcis-Teodor Niță, Lidia Favier, Lăcrămioara Rusu*
12.30	<b>ICEEM12 Closing ceremony, FCEEP CH III Room</b>		

## Posters Presentation Session PPS19. Section: Novel processes and technologies

**Friday 15.09.2023, 11.30-12.00**

**Location: FCEEP CH IV**

**Chairperson: Dr. Adrian Cătălin Puițel**

Time	Code	Title	Authors
11.30-11.35	PO.6.1.	Control and Performance Assessment for Brine Electrolysis Industrial Process by Ion Exchange Membrane Cell	Dumitru Coman, Valeria Danilova, Liliana Lazar (*), Ioana Fechete, Ioan Mămăligă
11.35-11.40	PO.6.2.	Effectiveness of Soxhlet Extraction on Secondary Metabolites from <i>Datura Innoxia</i> : a Study of Chemical and Morphological Characterization	Georgiana Balusescu(*), Liliana Lazar(*), Adrian-Catalin Puitel, Daniel Gherca, George Stoian, Teodor Malutan
11.40-11.45	PO.6.3.	Condensation-Induced Emulsification: Influence of Operation Parameters on Nanodroplet Formation	Eugenia Teodora Iacob – Tudose*, Marius Sebastian Secula, Camelia Tincu
11.45-11.50	PO.6.4.	Efficient Visible Light-Driven Photocatalytic Degradation of a Synthetic Dye: Assessment of Process Efficiency and Phytotoxicity of Degradation Products	Maria Paiu*, Lidia Favier, Doina Lutic, Raluca-Maria Hlihor, Veronique Alonzo, Maria Gavrilescu
11.50 - 11.55	PO.6.5.	Synthesis and Characterization of a Cu-Enriched NPK Fertilizer Using Copper Recovered from Wastewater and CaO Additives: Agronomic Performance and Material Properties	Tataru -Fărnuș Ramona-Elena, Miscoi Roman, Cimpoeșu Ramona, Apostolescu Nicolae
11.55-12.00	PO.6.6.	Synthesis of ZnWO <sub>4</sub> Catalyst for the Photocatalytic Degradation of Chlortetracycline	Nicolae Apostolescu, Corina Cernătescu, Claudia Cobzaru, Ramona Elena Tătaru Fărnuș, Călin George Pravăț, Gabriela Antoaneta Apostolescu
12.30	<b>ICEEM12 Closing ceremony, FCEEP CH III Room</b>		





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## LIST OF PARTICIPANTS – TO BE UPDATED

Name

Affiliation

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*B*

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