

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

## **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**

17 - 20 September 2025 - Iasi, Romania

## 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>The Academic Organization for Environmental Engineering and Sustainable Development, OAIMDD</b></p>                                                                                                                                    |
|  <p><b>Societatea de Chimie din ROMÂNIA</b></p> | <p><b>Romanian Chemical Society</b></p>                                                                                                                                                                                                      |

## SPONSORS

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|                                                         | <p><b>Salubris SA Iasi - Silver sponsor</b></p>                                                                                                 |
|  <p><b>water</b><br/>an Open Access Journal by MDPI</p> | <p>ICEEM13 Best Oral Presentation Award (300 EUR)<br/>ICEEM13 Best PhD Presentation Award (300 EUR)<br/>are sponsored by Water MDPI Journal</p> |
|                                                         | <p><b>Asociatia Romana de Mediu</b><br/>Romanian Environment Association</p>                                                                    |



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## INTERNATIONAL SCIENTIFIC COMMITTEE

### Honorary Conference President

**Prof.Dr. Dan Cașcaval**

*"Gheorghe Asachi" Technical University of Iasi, Romania*

### Conference Co-Presidents

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

|                                                                                                                   |                                                                                                              |                                                                                             |
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| <b>Prof.Dr., Dr.h.c. Maria<br/>Madalena dos Santos Alves</b><br>University of Minho, Portugal                     | <b>Prof.Dr. Maria Gavrilescu</b><br><i>"Gheorghe Asachi" Technical<br/>University of Iasi, Romania</i>       | <b>Prof. Dr. Monika Molnar</b><br>Budapest University of<br>Technology, Hungary             |
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| <b>Prof.Dr. Dan Cascaval</b><br><i>"Gheorghe Asachi" Technical<br/>University of Iasi, Romania</i>                | <b>Prof.dr. Gabriela Lisa</b><br><i>"Gheorghe Asachi" Technical<br/>University of Iasi, Romania</i>          | <b>Prof.Dr. Maria Angeles<br/>Sanroman</b><br>University of Vigo, Spain                     |



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| <b>Assoc.Prof.Dr. Cezar Catrinescu</b><br>"Gheorghe Asachi" Technical University of Iasi, Romania               | <b>Assoc.Prof.Dr. Simos Malamis</b><br>National Technical University of Athens, Greece      | <b>Prof.Dr., Dr.h.c. Wilhelm Schabel</b><br>Karlsruhe Institute of Technology, Germany                                              |
| <b>Prof.Dr., Dr.h.c. Yusuf Chisti</b><br>Massey University, New Zealand                                         | <b>Prof.Dr. Teodor Malutan</b><br>"Gheorghe Asachi" Technical University of Iasi, Romania   | <b>Dr. Joshua Schaeffer</b><br>Colorado State University, USA                                                                       |
| <b>Prof.dr., Dr.h.c. Phillippe Corvini</b><br>University of Applied Sciences and Arts Northwestern, Switzerland | <b>Prof.Dr. Florica Manea</b><br>Politehnica University of Timisoara, Romania               | <b>Prof. Dr. Stefan Shilev</b><br>Agricultural University of Plovdiv, Bulgaria                                                      |
| <b>Prof.Dr. Igor Cretescu</b><br>"Gheorghe Asachi" Technical University of Iasi, Romania                        | <b>Prof.Dr. Giorgio Mannina</b><br>University of Palermo, Italy                             | <b>Acad.Prof.Dr., Dr.h.c. Bogdan C. Simionescu</b><br><br>"Gheorghe Asachi" Technical University of Iasi, Romanian Academy, Romania |
| <b>Dr. Maja Djolic</b><br>University of Belgrade, Serbia                                                        | <b>Prof.Dr. Ecaterina Matei</b><br>Politehnica University of Bucharest, Romania             | <b>Prof. Dr. Joanna Surmacz-Górska</b><br>Silesian University of Technology, Poland                                                 |
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| <b>Dr. Anna Laura Eusebi</b><br>Università Politecnica delle Marche, Italy                                      | <b>Prof. Dr. Anne Menert</b><br>Tallin University of Technology, Estonia                    | <b>Dr. Gerard van den Berg</b><br>KWR, the Netherlands                                                                              |
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| <b>Assoc.Prof.Dr. Lidia Favier</b><br>Universite de Rennes, France                                              | <b>Prof. Dr. Alice Mija</b><br>UNiversite Cote D'Azur, Nice, France                         | <b>Prof. Dr. Scott Weber</b><br>State University of New York at Buffalo, USA                                                        |
| <b>Prof.Dr. Joan Garcia</b><br>Universitat Politecnica de Catalunya, Spain                                      | <b>Dr. Marcela Mihai</b><br>"P. Poni" Institute of Macromolecular Chemistry, Iasi, Romania  | <b>Prof. Dr. Thomas Wintgens</b><br>RWTH Aachen University, Germany                                                                 |
|                                                                                                                 |                                                                                             | <b>Prof. Dr. Thomas Wintgens</b><br>RWTH Aachen University, Germany                                                                 |



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## Organizing Committee

|                                  |                           |
|----------------------------------|---------------------------|
| Prof.dr. Irina Volf              | Dr. Camelia Betianu       |
| Assoc.prof.dr. Brindusa Sluser   | Dr. Alexandra Blaga       |
| Prof.dr. Maria Harja             | Dr. Adela Buburuzan       |
| Assoc.prof.dr. Corina Cernatescu | Dr. Petronela Cozma       |
| Assoc.prof.dr. Florin Ciolacu    | Dr. Daniela Fighir        |
| Dr. Petru Apopei                 | Dr. Daniela Gavrilescu    |
| Dr. Gabriela Apostolescu         | Dr. Corina Musteret       |
| Dr. Nicolae Apostolescu          | Dr. Oana Plavan           |
| Dr. George Barjoveanu            | Dr. Adrian-Catalin Puitel |
|                                  | PhD Stud. Ramona Ciobanu  |



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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, through the *Cristofor Simionescu Faculty of Chemical Engineering and Environmental Protection*, and *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 Cristofor Simionescu Faculty of Chemical Engineering and Environmental Protection (FCEEP)** from Gheorghe Asachi Technical University of Iasi (TUIASI) has as mission the formation of specialists for the domains of Chemical and Environmental Engineering through Bachelor of Science programs (4 years), Master of Science programs (2 years) and PhD programs (3 years). Also, the faculty is involved in research projects financed at national, international level or with industry in the fields of chemical and biochemical engineering, environmental engineering and other domains and in post-doctoral research programs for specialists from various fields.



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The research, innovation and dissemination activities are associated to the academic activities and represent components that cannot be separated from the formative process able to facilitate knowledge and technical progress.

The significant contribution that the faculty bring to the scientific production of TUIASI is due to a scientific community highly qualified, innovative and creative organised in research centres recognised at national and international level as follows:

- *Centre of research in Chemical engineering, Applied informatics and Advanced materials* ([link EERTIS](#))
- *Centre of research in Environmental engineering and Evaluation of impacts (IMEI)* ([link EERTIS](#))
- *Centrul of research in Polymers* ([link EERTIS](#))
- *Laboratoy accredited RENAR according to SR EN ISO/CEI 17025:2018 standard, LACMED* ([link EERTIS](#))

## 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 continous improvement of education, research and visibility activities this department uses the following entities:

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.

*Cristofor Simionescu* Faculty of Chemical Engineering and Environmental Protection and Department of Environmental Engineering and Management have established strong networks of cooperation at different levels:

At national level, the faculty and department members 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 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***



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**Management**, ICEEM, an event which occurs every 2 years (since 2002) and has become a landmark for the international environmental scientific community. In 2025, the conference is at its 13<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).

**Università Politecnica delle Marche (UNIVPM)** was established in 1971 and has about 17000 students and includes 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 WVEELab 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 an USB pen drive in their registration folders.**

## Oral and Poster Presentations

The oral presentations program is structured in plenary and 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.

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 duration, 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 minute frame, including discussions. Participants are encouraged to use the presentation template available on the conference website (link here: **Downloads section**).
- **Posters** will be presented electronically in dedicated sessions of 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**).



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- **Technical support (TS)** from ICEEM13 secretariat 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> ,<br>Hall of the Lost Steps, Aula TUIASI, Bd. Carol I no. 11 A                                                               |
| 15.00 – 15.30                            | <b>Opening ceremony &amp; Welcome addresses</b><br><b>Chair session persons:</b> Prof.Carmen Teodosiu, Prof. Francesco Fatone,<br>Assoc.Prof. Brindusa Sluser |
| 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  | <b>OCS 1.</b> Waste management in the context of circular (bio)economy<br><b>CH III Room</b>                                                                  | <b>OCS 2.</b> Water and wastewater cycles in the context of circular (bio)economy<br><b>Council Room</b>                                                                                                                                                                                                                                                                                               | <b>OCS 3.</b> Innovative and advanced materials<br><br><b>CH IV Room</b> |
| 10:30 - 11:00 | <b>Coffee break</b>                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                          |
| 11:00 - 12:00 | <b>OCS 4.</b> Waste management in the context of circular (bio)economy<br><b>CH III Room</b>                                                                  | <b>OCS 5.</b> Water and wastewater cycles in the context of circular (bio)economy<br><b>Council Room</b>                                                                                                                                                                                                                                                                                               | <b>OCS 6.</b> Innovative and advanced materials<br><br><b>CH IV Room</b> |
| 12.00 - 13:30 | <b>Photo session &amp; Lunch break</b>                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                          |
| 13:30 – 15.30 | <b>WS7 INGENIUM WORKSHOP:</b> Circular bio-economy<br><b>CH III Room</b>                                                                                      | <b>OCS 8.</b> Monitoring and modelling of environmental pollution<br><b>Council Room</b>                                                                                                                                                                                                                                                                                                               |                                                                          |
| 15.30 – 17.30 | <b>Coffee break</b>                                                                                                                                           | <b>Poster Presentations Sessions (PPS)</b><br>PPS 9- Waste management in the context of circular (bio)economy ( <b>CH III Room</b> )<br>PPS 10 - Water and Wastewater cycles in the context of circular (bio)economy ( <b>Council Room</b> )<br>PPS 11 - Innovative and advanced materials ( <b>CH IV Room</b> )<br>PPS 12 - Monitoring and modelling of environmental pollution ( <b>CH IV Room</b> ) |                                                                          |
| 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  | <b>OCS 13.</b> Sustainability assessment & eco-innovation<br><b>CH III Room</b>                                                                                                                                                                                                        | <b>OCS 14.</b> Biotechnologies and bio-processes<br><b>Council Room</b> | <b>OCS 15.</b> Novel processes and technologies<br><b>CH IV Room</b> |
| 11.00 – 12.30 | <b>Poster Presentations Sessions (PPS)</b><br><b>PPS 16</b> - Sustainability assessment & eco-innovation ( <b>CH III Room</b> )<br><b>PPS 17</b> - Biotechnologies and bio-processes ( <b>Council Room</b> )<br><b>PPS 18</b> - Novel processes and technologies ( <b>CH IV Room</b> ) |                                                                         |                                                                      |
| 12.30         | <b>ICEEM 13 Closing ceremony, CH III Room</b>                                                                                                                                                                                                                                          |                                                                         |                                                                      |



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## 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><br><b>Chair session persons:</b> Prof.Carmen Teodosiu, Prof. Francesco Fatone, Assoc.Prof. Brindusa Sluser |
| 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 Matić, Dejan Kosić |
| 9.30 - 9.45   | CO.1.2. | Driving Circularity in the Plastic Sector: Insights and Innovations from The Plan-C Project                 | Andra-Cristina Enache, Petrisor Samoilă, Adrian Bele, Valeria Harabagiu  |
| 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 M. Berta*, Eliza Molnár and Renáta Rauch                           |



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|               |                     |                                                                                                 |                                                  |
|---------------|---------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------|
| 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   | <b>Coffee Break</b> |                                                                                                 |                                                  |

## 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.             | Carbon-Based Electrodes for Electrochemical Degradation of Perfluorooctanoic Acid from Water                                               | Adina Carmen Gavrilescu, Sorina Ilies, Anamaria Baci, Florica Manea**                                                                                                             |
| 10.30-11.00   | <b>Coffee break</b> |                                                                                                                                            |                                                                                                                                                                                   |

## Oral Communication Session OCS 3. Innovative and advanced materials Thursday 18.09.2025, 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  |



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| Time          | Code                | Title                                                                                                                            | Authors                                                                                                                          |
|---------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 10.00 - 10.15 | CO.3.4.             | 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                           |
| 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, Ana-Maria Schiopu, Catalin Neculau, Brindusa-Mihaela Sluser                |
| 11.15- 11.30  | CO.4.2.                                | Lucerne ( <i>Medicago Sativa</i> ) - A Promising Candidate For Multiple Output Biorefinery | Adrian Cătălin Puițel, George Bârjoveanu, Cătălin-Dumitrel Balan Dumitrel, Mircea Teodor Nechita, Laura Bulgariu |
| 11.30 - 11.45 | CO.4.3.                                | Sustainable Uses and Innovations of Waste Management: Exploring Grape Pomace Potential     | Georgiana-Diana Gabur, Carmen Teodosiu, Daniela Fighir, Valeriu V. Cotea                                         |
| 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 18.09.2025, 11.00- 12.00

Location: FCEEP, Council 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, <u>Anca Duta</u> , Jose Maria Calderon Moreno, Hermine Stroescu, Madalina Nicolescu, Irina Atkinson, Mariuca Gartner |



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| Time          | Code                                   | Title                                                                                                                                                         | Authors                                                                                                                                                                                |
|---------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11.15- 11.30  | CO.5.2.                                | A Synergistic Approach of Hydrochar-Based Materials and Immobilized Microorganisms for Organic Pollutants Removal                                             | Emanuel Gheorghita Armanu, Sara Ribeirinho-Soares, Simone Bertoldi, Christian Eberlein, Hermann J. Heipieper, Matthias Schmidt, Olívia Salomé G. P. Soares, Olga C. Nunes, Irina Volf* |
| 11.30 - 11.45 | CO.5.3.                                | GIS and CFD-Based Study for Monitoring Water Resources in the Euphrates-Diwaniyah Region within the WEF Nexus Framework                                       | Mustafa Hathal, Viktor Sebestyén*, Viola Somogyi                                                                                                                                       |
| 11.45 - 12.00 | CO.5.4.                                | 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                                                                                                 |
| 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                                                                                  |
| 12.30 – 13.30 | <b>Photo Session &amp; Lunch Break</b> |                                                                                                                                                               |                                                                                                                                                                                        |

## Oral Communication Session OCS 6. Innovative and advanced materials applications, Thursday 18.09.2025, 11.00- 12.00

Location: FCEEP, CH IV 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.                                | 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                                                                                     |
| 12.00 – 13.30 | <b>Photo Session &amp; Lunch Break</b> |                                                                                                                                           |                                                                                                                             |

## Workshop Session WS7. INGENIUM WORKSHOP: CIRCULAR BIO-ECONOMY Thursday 18.09.2025, 13.30- 15.30

Location: FCEEP CH III

Chairpersons: Markus Graff, Brindusa Sluser, Christine Mulder and Wei Wang

In association with Romanian Environment Association and COST CA 23157 project representatives



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## Oral Communication Session OCS 8. Monitoring and modelling of environmental pollution, Thursday 18.09.2025, 13.30- 15.30

**Location:** FCEEP Council Room

**Chairpersons:** Assoc. Prof. Dr. Brindusa-Mihaela Sluser, Dr. Camelia Betianu

**Technical Support:** Dr. Petru Apopei

| 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> |                                                                                                                                         |                                                                              |

## Poster Presentation Session PPS 9 - Section: Waste management in the context of circular (bio)economy,

**Thursday 18.09.2025, 15.30 – 17.00**

**FCEEP CH III Room**

**Chairperson:** Lect.dr. Camelia Betianu

| 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 Gavrilăscu |



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| Time        | Code    | Title                                                                                                                                            | Authors                                                                                                                             |
|-------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 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. | A Functional Bio-Based Product for Soil Resilience                                                                                               | Maria-Bianca Aiordăchioaie, Irina Volf*                                                                                             |
| 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                                                         |
| 16.45-16.50 | PO1.16. | Sawdust – a Low Cost Adsorbent for Metal Ions Removal from Aqueous Media                                                                         | Gabriela Nacu*, Loredana Munteanu, Laura Bulgariu                                                                                   |
| 16.50-16.55 | PO1.17  | Introduction of the Deposit Return System in Hungary: Early Experiences and Challenges                                                           | Janka Bobek-Nagy, Róbert Kurdi, Szilvia Szabó, Viktor Sebestyén*, Zsuzsanna Banász                                                  |
| 16.55-17.00 | PO1.18  | Implementation and Early Outcomes of Separate Kitchen Waste Collection in a Hungarian City                                                       | Janka Bobek-Nagy*, Katalin Kovács, Róbert Fejes, Róbert Kurdi                                                                       |



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## Poster Presentation Session PPS 10 – Section Water and Wastewater cycles in the context of circular (bio)economy

**Thursday 18.09.2025, 15.30 – 16.45**

**FCEEP Council 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 Gavrilesu                                                                                                                                       |
| 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.  | Engineered Bio-Based Magnetic Composites for Dye Removal: a Circular Approach to Wastewater Treatment                                                            | Andra-Cristina Enache*, Ionela Grecu, Petrisor Samoila, Corneliu Cojocaru                                                                                                      |
| 15.55-16.00 | PO.2.6   | 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*                                                                                     |
| 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 Coagulation-Flocculation and Adsorption Processes                          | Corina-Petronela Musteret*, Oana Plavan, Carmen Teodosiu                                                                                                                       |
| 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                                                                                 |



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| Time        | Code     | Title                                                                                         | Authors                                                                                     |
|-------------|----------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| 16.30-16.35 | PO.2.13. | Characteristics and Treatment Facilities of Collected Wastewaters from a Zootechnical Farm    | Cristina-Alexandra Haivas, Carmen Zaharia                                                   |
| 16.35-16.40 | PO.2.14. | 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 |

## Poster Presentation Session PPS 11 – Innovative and advanced materials

**Thursday 18.09.2025, 15.30 – 16.25**

**FCEEP CH IV 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                                                                    | Claudia Roman*, Gabriel Savin, Georgiana Vitelaru, Miguel A. Delgado, Moisés Garcia-Morales, Liliana Lazar*        |
| 16.05-16.10 | PO.3.8.  | The Physics of Cellulose Nanopaper                                                                                                                                     | Florin Ciolacu* And Diana Ciolacu                                                                                  |
| 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                                                                      |
| 16.20-16.25 | PO.3.11. | Copper Nanoparticles Stabilized on Mesoporous Silica via Deposition-Precipitation for the Selective Hydrogenation of Biomass-Derived Levulinic Acid To γ-Valerolactone | Mihaela Bectoraş, Cezar Catrinescu, Adrian Ungureanu, Carmen Ciotonea, Sébastien Royer                             |



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## Poster Presentation Session PPS 12 – Monitoring and modelling of environmental pollution

**Thursday 18.09.2025, 16.25 – 17.15**

**FCEEP CH IV Room**

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

| Time        | Code                                                          | Title                                                                                                                             | Authors                                                                                                          |
|-------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 16.25-16.30 | PO.3.12.                                                      | Climate Change Impacts on Water Quality: A Bibliometric Analysis of the Current State of Knowledge Using VOS Viewer Software      | Madalina Elena Abalasei*, Carmen Teodosiu                                                                        |
| 16.30-16.35 | PO.3.13                                                       | Impact of Ambient Noise on Urban Population                                                                                       | Simion Sorin, Nălboc Irina*, Găman Angelica, Kovacs Marius, Simion Alexandru                                     |
| 16.35-16.40 | PO.3.14.                                                      | Artificial Intelligence for Climate Change Mitigation: Opportunities, Applications and Challenges                                 | Maria Gavrilescu                                                                                                 |
| 16.40-16.45 | PO.3.15.                                                      | Phytoremediation of Heavy Metal-Contaminated Soils by Rapeseed ( <i>Brassica Napus L.</i> )                                       | Petronela Cozma*, Raluca-Maria Hlihor, Maria Paiu, Maria Gavrilescu                                              |
| 16.45-16.50 | PO3.16.                                                       | 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 |
| 16.50-16.55 | PO.3.17.                                                      | Dynamic Behavior and Comparative Performance of VOCs Adsorption on Polymeric and Carbon-Based Systems                             | Marilena-Adela Buburuzan*                                                                                        |
| 16.55-17.00 | PO.3.18.                                                      | Employees' Perception on Indoor Air Quality in Office Buildings: Pollution Awareness and Effective Solutions                      | Adrian Cătălin Toma* and Irina Volf                                                                              |
| 17.00-17.05 | PO.3.19.                                                      | Hydrological Adaptation in Semi-Arid Basins: A Comparative Study of the Zarqa and Ebro Basins                                     | Aloyed Odai Fahad Talab, Daniel Scradeanu                                                                        |
| 17.05-17.10 | PO.3.20.                                                      | Dynamic Behavior of Persistent Organic Pollutants in Soil                                                                         | Camelia Bețianu*, Adrian Puițel, Teodor Măluțan, Maria Gavrilescu                                                |
| 17.10-17.15 | PO.3.21.                                                      | 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 OCS 13. Sustainability assessment & eco-innovation, 09.00-11.00

**Location:** FCEEP CH III Room

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

**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 OCS 14. Biotechnologies and bioprocesses

### Friday 19.09.2025, 09.00-10.30

**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 Continous 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                                                                   |
| 10.00 - 10.15 | CO.13.4. | Photodegradation of Rosemary Extracts                                                                                | Claudia Cobzaru, Cătălina Elena Iacob, Gabriela Antoaneta                                                                  |



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| Time          | Code     | Title                                                                                                                               | Authors                                                                                             |
|---------------|----------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|               |          |                                                                                                                                     | Apostolescu, Nicolae Apostolescu, Corina Cernătescu*                                                |
| 10.15 - 10.30 | CO.13.5  | 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* |
| 10.30 - 10.45 | CO.13.6. | Sustainable Agricultural Practices: Reducing Carbon Footprint of Wheat Production                                                   | Iulian Gabur, Georgiana-Diana Gabur*                                                                |
| 11.00-11.30   |          | <b>Coffee break</b>                                                                                                                 |                                                                                                     |

## Oral Communicaton Session OCS 15. Novel processes and technologies Friday 19.09.2025, 09.00-10.30

**Location:** FCEEP CH IV Room

**Chairpersons:** Prof.Dr. Luminita Andronic, 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 Cd <sup>2+</sup> , Cr <sup>3+</sup> And Ni <sup>2+</sup> Removal        | Nicoleta-Mirela Marin                                                                                 |
| 10.45-11.00   | CO.14.7. | Green Nitrate and Hydrogen Peroxide Synthesis by Non-thermal Plasma Reactors for agricultural applicationsE         | Bogdan-Andrei Pingescu, Daniel Asmarandei, Dragoș Astanei, Oana Beniugă, Răzvan Beniugă, Radu Burlică |
| 11.00 – 11.30 |          | <b>Coffee break</b>                                                                                                 |                                                                                                       |



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## **Posters Presentation Session PPS 16. Section: Sustainability assessment & eco-innovation**

**Friday 19.09.2025, 11.30-12.15**

**Location: FCEEP CH III Room**

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

| <b>Time</b>   | <b>Code</b> | <b>Title</b>                                                                                                                       | <b>Authors</b>                                                                                                                                        |
|---------------|-------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 Ludușanu, Grigore Tinică, Maria Gavrilăscu                                                                                       |
| 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 Țăbuleac, Maria Gavrilăscu                                                                                   |
| 11.45-11.50   | PO.4.4.     | Green Transformation in Tourism: Eco-Innovation Adoption and Sustainability Performance Across Europe                              | Raluca-Maria Țăbuleac*, Tiberiu Vlad Simion, Elena-Diana Comăniță-Ungureanu, Petronela Cozma, Camelia Betianu, Isabela Maria Simion, Maria Gavrilăscu |
| 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, Gabriela Ungureanu, Cătălin Onuțu , Adrian Alexandru Șerbănoiu                                                                        |
| 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>ICEEM13 Closing ceremony FCEEP CH III Room</b>                                                                                  |                                                                                                                                                       |



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## Posters Presentation Session PPS 17. Section: Biotechnologies and bioprocesses

**Friday 19.09.2025, 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. | 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*                                   |
| 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 Paraschiv, Anca Irina Galaction              |
| 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, Kinga M. Berta*                                |
| 12.00-12.05   | PO.5.7. | Advanced Liquid-Liquid Extraction of Malic Acid with Ionic Liquids in Bioprocessing Applications                                                                  | Alexandra Cristina Blaga*, Dan Cascaval, Anca Irina Galaction                                                 |
| 12.30         |         | <b>ICEEM13 Closing ceremony, FCEEP CH III Room</b>                                                                                                                |                                                                                                               |

## Posters Presentation Session PPS18. Section: Novel processes and technologies

**Friday 19.09.2025, 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                                       |



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| Time          | Code                                               | Title                                                                                                                                                                  | Authors                                                                                                                                  |
|---------------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 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>ICEEM13 Closing ceremony, FCEEP CH III Room</b> |                                                                                                                                                                        |                                                                                                                                          |



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## LIST OF PARTICIPANTS

| Name                               | Affiliation                                                       |
|------------------------------------|-------------------------------------------------------------------|
| <b>A</b>                           |                                                                   |
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| <b>C</b>                           |                                                                   |
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| Name                         | Affiliation                                                                  |
|------------------------------|------------------------------------------------------------------------------|
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| <b>F</b>                     |                                                                              |
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| <b>H</b>                     |                                                                              |
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| Diana Hanganu                | "Gheorghe Asachi" Technical University of Iasi, Romania                      |
| Maria Harja                  | "Gheorghe Asachi" Technical University of Iasi, Romania                      |
| Gabriela Hristea             | INCD ICPE CA, Romania                                                        |
| <b>I</b>                     |                                                                              |
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# 13<sup>th</sup> INTERNATIONAL CONFERENCE ON ENVIRONMENTAL ENGINEERING AND MANAGEMENT

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