

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

**CONFERENCE PROGRAM**



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

**September 13 – 16, 2023**

**Iasi, Romania**



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

Circular Economy and Sustainability

13 - 16 September 2023, 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>OAIMDD : The Academic Organization for Environmental Engineering and Sustainable Development</b></p>
	<p><b>Romanian Chemical Society</b></p>

## SPONSORS

	<p>Salubris SA Iasi - Silver sponsor</p>
	<p>ICEEM12 Best PhD oral presentation award (300 EUR) is sponsored by Water MDPI Journal</p>



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## INTERNATIONAL SCIENTIFIC COMMITTEE

### Conference Presidents

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

<b>Prof.Dr., Dr.h.c. Maria Madalena dos Santos Alves</b> University of Minho, Portugal	<b>Prof.Dr., Dr.h.c. Fabio Fava</b> University of Bologna, Italy	<b>Prof. Dr. Monika Molnar</b> Budapest University of Technology, Hungary
<b>Prof.Dr. Cecilia Maria Villas Boas de Almeida</b> Universidade Paulista, Brazil	<b>Prof.Dr. Joan Garcia</b> Universitat Politecnica de Catalunya, Spain	<b>Prof.dr. Ovidiu Nemes</b> Technical University of Cluj Napoca, Romania
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<b>Dr. Nicolas Caradot</b> Berlin Competence Centre for Water, Germany	<b>Prof. Dr. Athanasios Loukas</b> Aristotle University of Thessaloniki, Greece	<b>Dr. Joshua Schaeffer</b> Colorado State University, USA
<b>Prof.Dr. Dan Cascaval</b> <i>"Gheorghe Asachi" Technical University of Iasi, Romania</i>	<b>Assoc.Prof.Dr. Simos Malamis</b> National Technical University of Athens, Greece	<b>Prof. Dr. Stefan Shilev</b> Agricultural University of Plovdiv, Bulgaria



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<b>Assoc.Prof.Dr. Cezar Catrinescu</b> "Gheorghe Asachi" Technical University of Iasi, Romania	<b>Prof.Dr. Teodor Malutan</b> "Gheorghe Asachi" Technical University of Iasi, Romania	<b>Acad.Prof.Dr., Dr.h.c. Bogdan C. Simionescu</b> "Gheorghe Asachi" Technical University of Iasi, Romanian Academy, Romania
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<b>Prof.Dr., Dr.h.c. Anton Friedl</b> Vienna University of Technology, Austria	<b>Dr. Marcela Mihai</b> "P. Poni" Institute of Macromolecular Chemistry, Iasi, Romania	

## Organizing Committee

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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 **12<sup>th</sup> International Conference on Environmental Engineering and Management, ICEEM11** will take place between 13<sup>th</sup> and 16<sup>th</sup> of September 2023, in Iasi, Romania. **ICEEM 12** event is organized by “*Gheorghe Asachi*” **Technical University of Iasi**, *Department of Environmental Engineering and Management*, and **Politecnica delle Marche University**, Italy, *Department of Science and Engineering of Materials, Environment and Urban Planning*. ICEEM12 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 are 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 dynamic of research activities and visibility of TUIASI.

## About the Department of Environmental Engineering and Management

The Department of Environmental Engineering and Management (DEEM) is part of the “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection (FCEEP) of TUIASI. DEEM was 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. DEEM uses the following entities to ensure an integrative approach



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and continuous improvement of education, research and visibility activities:

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

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

The major activities of DEEM are related to:

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

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

At national level, the department members coordinate the environmental engineering network, and developed very strong cooperation relations in various research and educational projects with universities and research institutes in 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, etc.

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

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

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



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

## About the Department of Science and Engineering of Materials, Environment and Urban Planning and 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 ICEEM12 will be organized 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 and cocktail on September 13<sup>th</sup>**), [map here](#).
- „Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, 73 D. Mangeron, Iasi (**Conference sessions on September 14<sup>th</sup> and 15<sup>th</sup>**), [map here](#).

The opening ceremony will take place on September 13<sup>th</sup>, 2023 followed by the conference parallel sessions (PS) on the 14<sup>th</sup> and 15<sup>th</sup> September.

## Registration

ICEEM12 registration will take place on **Wednesday, 13<sup>th</sup> September** at the TUIASI Aula (Carol I Blvd) and on **Thursday, 14<sup>th</sup> September** at „Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection (73 D. Mangeron Blvd).

**All participants will receive the conference materials (ICEEM12 Programme and Book of abstracts) in a stick in their registration folders.**

## Oral and Poster Presentations

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

**Posters presented each day will be removed by their authors at the end of the poster session.**

## Important notes:

- Time allocation for **Plenary/Keynote lectures** is 30 minutes (including discussions)
- Every **oral communication** will be presented in a 15 minutes frame, including discussions. Participants are encouraged to use the presentation template available on the conference website (link here: **Downloads section**).
- **Posters** will be presented in **two dedicated sessions** during which participants will present their poster and will have the opportunity for discussions. **Please search for your poster code on the display panels and use the designated area.** Materials for poster display will be available in place. **Participants are kindly requested to remove their posters after the poster session has ended so as participants in the next poster session could display their communications as well.** Participants are encouraged to use the poster template available on the conference website (link here: **Downloads section**).
- **Technical support (TS)** from ICEEM12 secretariate members is available for all sessions
- All phones should be muted during the ICEEM12 sessions.
- **The time schedule in this programme follows Romanian time.**





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## SHORT CONFERENCE PROGRAM

**Wednesday, 13 September 2023, Aula TUIASI , 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, Aula TUIASI</b>
15.30 – 16.00	<b>Plenary Lecture 1:</b> Exploring the potential of cyanobacterial microbiomes for sustainable bioproducts, <b>Prof.dr. Joan Garcia</b>
16.00 - 16.30	<b>Plenary Lecture 2:</b> Leveraging the potential of data and smart digital technologies for the water sector: return of experience in five European cities: Paris, Berlin, Copenhagen, Milan and Sofia, <b>Dr. Nicolas Caradot</b>
16.30 – 17.00	<b>Plenary Lecture 3,</b> Decentralized wastewater management and resource recovery: experiences, challenges and opportunities, <b>Prof.dr. Simos Malamis</b>
17.00 - 19.00	<b>Welcome Cocktail</b> , Hall of the Lost Steps, Aula TUIASI, Bd. Carol I no. 11 A

**Thursday, 14 September 2023, Faculty of Chemical Engineering and Environmental Protection – FCEEP, 73 D.Mangeron Blvd., Iasi**

8.00 - 9.00	<b>Participants Registration</b> - Orizont Hall, Faculty of Chemical Engineering and Environmental Protection – FCEEP, 73 D.Mangeron Blvd., Iasi		
9.00 - 10.30	PS 1. Waste management in the context of circular (bio)economy	PS 2. Water and wastewater cycles in the context of circular (bio)economy	PS 3. Novel materials for environmental and energy applications
10.30 - 11.00	<b>Coffee break</b>		
11.00 - 12.45	PS 4. Waste management in the context of circular (bio)economy	PS 5. Water and wastewater cycles in the context of circular (bio)economy	PS 6. Novel materials for environmental and energy applications
12.45 - 14.00	<b>Photo session &amp; Lunch break</b>		
14.00 – 15.30	PS 7. Sustainability assessment & eco-innovation	PS 8. Novel materials for environmental and energy applications	PS 9. Monitoring and modeling of environmental pollution
15.00 – 17.00	<b>Coffee break &amp; Posters Session</b> Workshop Romanian Association of Environmental Experts		
19.00	<b>Gala dinner, Magnum Ballroom, INTERNATIONAL Hotel Iasi</b>		

**Friday 15 September 2023, Faculty of Chemical Engineering and Environmental Protection– FCEEP, 73 D.Mangeron Blvd., Iasi**

<b>Time</b>			
8.30 - 9.00	<b>Participants Registration</b> - Orizont Hall, Faculty of Chemical Engineering and Environmental Protection – FCEEP, 73 D.Mangeron Blvd., Iasi		
9.00 - 10.30	PS 10. Sustainability assessment & eco-innovation	PS 11. Environmental biotechnology	PS 12. Monitoring and modeling of environmental pollution
10.30 – 11.30	<b>Coffee break &amp; Posters Session</b>		
11.30	<b>ICEEM 12 Closing ceremony</b>		



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## DETAILED CONFERENCE PROGRAM

### Wednesday, 13 September 2023

Opening ceremony and Plenary conference presentations

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

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

Technical support: Dr. George Barjoveanu & Dr. Petru Apopei

14.00 - 15.00	Participants Registration
15.00 – 15.30	Opening ceremony & Welcome addresses
15.30 – 16.00	<b>Plenary Lecture 1:</b> Exploring the potential of cyanobacterial microbiomes for sustainable bioproducts, <b>Prof.dr. Joan Garcia</b>
16.00 - 16.30	<b>Plenary Lecture 2:</b> Leveraging the potential of data and smart digital technologies for the water sector: return of experience in five European cities: Paris, Berlin, Copenhagen, Milan and Sofia, <b>Dr. Nicolas Caradot</b>
16.30 – 17.00	<b>Plenary Lecture 3:</b> Decentralized wastewater management and resource recovery: experiences, challenges and opportunities, <b>Prof.dr. Simos Malamis</b>
17.00 - 19.00	Welcome Cocktail, Hall of the Lost Steps, Aula TUIASI, Bd. Carol I no. 11 A

### Thursday, 14 September 2023

Parallel session 1. Waste management in the context of circular (bio)economy, Thursday 14.09.2023, 09.00- 10.30

Location: FCEEP CH III

Chairpersons: Prof.dr. Irina Volf and Dr. Giovanni Gadaleta

Technical support: Dr. Daniela Gavrilescu

Time	Code	Title	Authors
9.00 - 9.30	CO.1.1.	<b>Keynote lecture:</b> Treatment technologies for post-consumer cellulosic bio-plastics in the municipal solid waste cycle: Challenges and opportunities	<b>Dr. Sabino de Gisi</b>
9.30 - 9.45	CO.1.2.	Preparing the assessment of students' perception and attitude towards solid waste management in university campuses	Mădălina Rotaru, Maria Gavrilescu
9.45 - 10.00	CO.1.3.	Wastes and additives used for minimization environmental pollution	Vrabie Mihai, Ioan Damian, Harja Maria
10.00 - 10.15	CO.1.4.	Reducing the carbon footprint using waste-derived sustainable materials	Mihaela Caftanachi, Ioan-Alexandru Cotofan, Maria Harja
10.15 - 10.30	CO.1.5.	Single-use beverage packaging waste quantification and sustainability assessment in the romanian context	Bogdan-Constantin Seto, Daniela Gavrilescu, Ana-Maria



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Schiopu, Catalin Neculau,  
Carmen Teodosiu

10.30-11.00

**Coffee break**

### Parallel session 2. Water and wastewater cycles in the context of circular (bio)economy, Thursday 14.09.2023, 09.00- 10.30

Location: FCEEP Council Room

Chairpersons : Prof.dr. Francesco Fatone and Dr. Nicolas Caradot

Technical support: Dr. Daniela Fighir

Time	Code	Title	Authors
9.00 - 9.30	CO.2.1.	<b>Keynote lecture</b> - Water and wastewater cycles in the context of the circular (bio)economy: Emerging electrochemical processes for water circularity	<b>Prof. Florica Manea</b>
9.30 - 9.45	CO.2.2.	Increasing the productivity of aquaponic systems using oxygen nanobubbles	Quartus Paulus Botha, Nicolas Kalogerakis*
9.45 - 10.00	CO.2.3.	Ultra-dispersible small magnetic Fe <sub>3</sub> O <sub>4</sub> nanoparticles as reliable adsorbents for congo red dye removal	Gabriela Buema*, Nicoleta Lupu, Horia Chiriac, Daniel Gherca, George Stoian, Anca Emanuela Minuti, Dumitru-Daniel Herea*
10.00 - 10.15	CO.2.4.	Flocculation of Feo and TiO <sub>2</sub> particles by cationic Pullulan derivatives	Maria-Magdalena Năfureanu*, Marieta Constantin, Luminița Ghimici
10.15 - 10.30	CO.2.5.	Evaluation of the safety and viability of microalgae grown on wastewater as a potential biofertilizer	Enrica Uggetti, Ana Álvarez-González, Lydia Serrano, Gil Gorchs, Eva Gonzalez-Flo, Rubén Díez-Montero
10.30-11.00		<b>Coffee break</b>	

### Parallel Session 3. Novel materials for environmental and energy applications, Thursday 14.09.2023, 09.00- 10.30

Location: FCEEP CH IV

Chairpersons: Prof.dr. Dana Perniu and Prof.Dr. Lidia Favier

Technical support: Dr. Andreea Gherghel

Time	Code	Title	Authors
9.00 - 9.30	CO.3.1.	<b>Keynote lecture</b> - Polyelectrolyte-based composite materials for targeted environmental applications,	<b>Dr. Marcela Mihai</b>
9.30 - 9.45	CO.3.2.	Zwitterionic polymeric beads as sorbents for heavy metal ions from Tarnita surface water: fluidized bed column studies	Marius-Mihai Zaharia, Ana-Lavinia Vasiliu, Florin Bucatariu*, Marcela Mihai
9.45 - 10.00	CO.3.4.	Separation and water cleaning by composites of polyelectrolytes and inorganic microparticles	Larisa-Maria Petrila, Florin Bucatariu, Marius-Mihai Zaharia, Marcela Mihai



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10.00 - 10.15	CO.3.5.	Heterogeneous Fenton-like oxidation of reactive Red 12 azo dye over iron oxide nanoparticles confined in SBA-15 mesoporous silica	Cezar Catrinescu*, Mihaela Bectoraş, Adrian Ungureanu, Carmen Ciotonea, Sébastien Royer
10.15 - 10.30	CO.3.6.	Removal cobalt from polluted water using microspheres of amidoximated starch and chitosan	Melinda Maria Bazarghideanu*, Diana Felicia Loghin, Marcela Mihai
10.30-11.00		<b>Coffee break</b>	

### Parallel Session 4. Waste management in the context of circular (bio)economy, Thursday 14.09.2023, 11.00- 12.45

Location: FCEEP CH III

Chairpersons: Assoc. Prof. Dr. Sabino de Gisi and Dr. Daniela Gavrilescu

Technical support: Dr. Petru Apopei

Time	Code	Title	Authors
11.00 - 11.15	CO.4.1.	Evaluating the biofertilizer properties of sludge derived from constructed wetlands	Uggetti Enrica, Ana Cano, Lydia Serrano, Gil, Gorchs, Roger Castellnou, Llum Colomer and Rebec Moreno
11.15- 11.30	CO.4.2.	Mussels shells in the gulf of La Spezia: a bulky waste or a potential opportunity?	Letizia Caroscio, Cristian Chiavetta, Alessandra Bonoli
11.30 - 11.45	CO.4.3.	Crushed Waste bivalve shells as alternative fillers in the production of bituminous mixtures	Beatrice De Pascale*, Letizia Caroscio, Piergiorgio Tataranni, Alessandra Bonoli, Claudio Lantieri
11.45 - 12.00	CO.4.4.	Performance evaluation of alternative configurations of MBT plant process schemes for unsorted municipal waste treatment	G. Gadaleta*, F. Todaro, S. De Gisi, D. Valenti, M. Notarnicola
12.00 - 12.15	CO.4.5.	Overview of transfer and conversion of PFAS during soil washing of dredged sediments for reuse	Nicola Lancioni, Elisa Blumenthal*, Massimiliano Sgroi, Anna Laura Eusebi, Giancarlo Cecchini, Alessandro Frugis, Marco Lazzazzara, Paolo Crocetti, Maria Grazia Asci, Daniele Matteucci, Francesco Fatone
12.15 - 12.30	CO.4.6.	Recovery of bio-based nitric acid solution from anaerobic digestate through nitritation and decomposition of free nitrous acid	Fabrizio Rizzioli; Riccardo Lo Coco; Fabio Battista; Nicola Frison*
12.30 - 12.45	CO.4.7.	Recovery of carbon-based products from acidogenic fermentation of biowaste via green pertraction processes	Lo Coco R.*, Battista F., Bolzonella D., Frison N.
12.45 – 14.00		<b>Photo session &amp; Lunch break</b>	



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

Thursday 14.09.2023, 11.00- 12.45

Location: FCEEP, Council Room

Chairpersons : Prof.dr. Joan Garcia and Prof.dr. Nikolas Kalogerakis

Technical support: Dr. Corina Musteret

Time	Code	Title	Authors
11.00 - 11.15	CO.5.1.	Purification of saline water streams by extremophiles microalgae: a potential to exploit (explore)	Domenico Palatucci*, Antonio Marzocchela, Antonino Pollio
11.15- 11.30	CO.5.2.	Efficiency in reducing evaporation of reservoirs with PET bottles containing plastic scraps	Jiradet Settakhumpoo and Vacharapoom Benjaoran*
11.30 - 11.45	CO.5.3.	Degradation of procainamide using enzymatic activity produced by laccase	Nicoleta Mirela Marin
11.45 - 12.00	CO.5.4.	Cationic pullulan derivatives for removal of some commercial fungicides from simulated wastewater	Cristina-Eliza Brunchi*, Maria-Magdalena Năfureanu, Marieta Constantin, Luminița Ghimici
12.00 - 12.15	CO.5.5.	Real-time monitoring of organic matter and micropollutants adsorption in wastewater by innovative spectroscopic sensors: a pilot-scale study	Cecilia Bruni*, Marco Parlapiano, Massimiliano Sgroi, Anna Laura Eusebi, Francesco Fatone
12.15 - 12.30	CO.5.6.	SBR treatment of industrial wastewater and process monitoring by UV-visible and fluorescence spectroscopy	Marco Parlapiano, Corinne Andreola, Massimiliano Sgroi, Gianluca Pettinello, Anna Laura Eusebi, Francesco Fatone*.
12.45 – 14.00	<b>Photo session &amp; Lunch break</b>		

### Parallel Session 6. Novel materials for environmental and energy applications, Thursday 14.09.2023, 11.00- 12.45

Location: FCEEP, Room CH IV

Chairpersons : Dr. Marcela Mihai and Assoc.Prof.dr. Cezar Catrinescu

Technical support: Dr. Adela Buburuzan

Time	Code	Title	Authors
11.00 - 11.15	CO.6.1.	Use of granular activated carbon for capecitabine removal from water by sorption process	Aniela Pop, Mina Ionela Popescu, Corina Orha, Anamaria Baci, Sorina Ilies and Florica Manea
11.15- 11.30	CO.6.2.	Performances of magnetic hydrochar composite for water decontamination	Anca Andreea Șăulean, Ecaterina Matei*, Maria Râpă, Andra Mihaela Predescu, Mirela Gabriela Sohaciu, George Coman, Andrei-Constantin Berbecaru, Cristian Predescu
11.30 - 11.45	CO.6.3.	Engineering plasmonic gold and zinc-based layered double hydroxides via structural memory effect as novel photocatalysts to remove dangerous pollutants from water	Andreea Loredana Gavrila, Ridouane Benhiti, Aben Regi Abraham, Gabriela Carja*



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Time	Code	Title	Authors
11.45 - 12.00	CO.6.4.	Application of cellulose nanostructured sponges for contaminated sediments remediation	M.E. Di Clemente*, R. Grisorio, A. Petrella, G.P. Suranna, F. Todaro, M. Notarnicola
12.00 - 12.15	CO.6.5.	Removal of nitrite ions from solutions using new adsorbant-catalysts	Vasile Gutsanu , Gabriela Lisa, Botnaru Maria, Alina-Mirela Ipati, Oleg Petuhov
12.15 - 12.30	CO.6.6.	Heavy metals removal from aqueous solution using a regenerated silica/polyelectrolyte multilayer core-shell composite sorbent	Ana Maria Lupu, Carmen Paduraru, Ramona Ciobanu*, Oana Plavan, Andreea Gherghel, Daniela Fighir, Florin Bucatariu, Marcela Mihai, Carmen Teodosiu
12.30 – 14.00	<b>Photo session &amp; Lunch break</b>		

### Parallel Session 7. Sustainability assessment & eco-innovation Thursday 14.09.2023, 14.00- 15.30

Location: FCEEP, Council Room

Chairpersons: Prof.dr. Carmen Teodosiu and Prof.dr. Francesco Fatone

Technical support: Dr. George Barjoveanu

Time	Code	Title	Authors
14.00 –11.30 - 11.45 14.30	CO.7.1.	<b>Keynote lecture:</b> Circularity measurement and assessment in water towards standardised approaches	<b>Prof.Dr. Evina Katsou</b>
14.30- 14.45	CO.7.2.	Selection of best bio-based practices for WEFE nexus application	Alexandra Tsatsou, Isabella Georgiou, Andriani Galani, Josué González-Camejo*, Tadej Stepišnik Perdih, Constantinos Noutsopoulos, Anna Laura Eusebi, Simos Malamis, Francesco Fatone
14.45 – 15.00	CO.7.3.	Assessing the environmental impacts of small-scale crude palm oil production in Ghana: a life-cycle perspective	Sara Bottausci*, Eric Awere, Sara Pennellini, Alessandra Bonoli
15.00 – 15.15	CO.7.4.	An environmental life-cycle analysis profiling of end-of-life vehicles in Romania	Florența Diniță, George Barjoveanu*, Carmen Teodosiu
15.15 – 17.00	<b>Coffee break &amp; Posters Session</b>		
19.00	<b>Gala dinner, Magnum Ballroom, INTERNATIONAL Hotel Iasi</b>		



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### Parallel Session 8. Novel materials for environmental and energy applications, Thursday 14.09.2023, 14.00- 15.30

Location: FCEEP, Room CH III

Chairpersons : Prof.dr. Florica Manea and Dr. Maria Covei

Technical support: Dr. Andreea Gherghel

Time	Code	Title	Authors
14.00 – 14.15	CO.8.1.	Magnetic chitosan nanocomposite performances in wastewater decontamination	Ecaterina Matei, Anca Andreea Șăulean*, Maria Râpă, Andra Mihaela Predescu, Cristian Predescu, George Coman, Andrei-Constantin Berbecaru, Anamaria Ordace, Grigore Vlad, Dumitru Vâju
14.15 – 14.30	CO.8.2.	Photocatalytic dispersions based on TiO <sub>2</sub> -CuxS for self-decontamination fabrics	Cristina Bogatu, Dana Perniu*, Ovidiu Iorga, Luminita Isac, Ioana Tismanar, Anca Duta
14.30 – 14.45	CO.8.3.	Polysaccharides coatings an innovative alternative to improve the sustainability of food packaging materials	Petronela Nechita*, Mirela Roman, Alina Cantaragiu
14.45 – 15.00	CO.8.4.	Comparative assessment of TiO <sub>2</sub> -GO and TiO <sub>2</sub> -gC <sub>3</sub> N <sub>4</sub> photocatalytic thin films on spherical substrate	M. Covei*, C. Bogatu, S. Gheorghita, A. Duta, H. Stroescu, M. Nicolescu, J.M. Calderon-Moreno, I. Atkinson, V. Bratan, M. Gartner
15.00 – 17.00	<b>Coffee break &amp; Posters Session</b>		
19.00	<b>Gala dinner, Magnum Ballroom, INTERNATIONAL Hotel Iasi</b>		

### Parallel Session 9. Monitoring and modeling of environmental pollution Thursday 14.09.2023, 14.00- 15.30

Location: FCEEP CH IV

Chairpersons: Prof.dr. Anna Laura Eusebi and Dr. Walter Wukovits

Technical support: Dr. Oana Plavan

Time	Code	Title	Authors
14.00 – 14.15	CO.9.1.	Assessment of the degree of soil pollution in the vicinity of the mining sectors in nw romania	Evelyn Terez Polyak, Valer Micle, Ioana Monica Sur
14.15 – 14.30	CO.9.2.	Spatial analysis of aquifers' vulnerability to pollution in Northern Romania using a drastic model	Iuliana Gabriela Breaban*, George-Stefan Alion
14.30 – 14.45	CO.9.3.	Influence of the Covid 19 period on the atmospheric deposition in forest ecosystems from romania	Iacoban Carmen, Buculei Amelia*, Cuciurean Cosmin Ilie, Leca Stefan
14.45 – 15.00	CO.9.4.	Innovative polymer enhanced ultrafiltration to treat drinking water for both cyanobacteria and cyanotoxins removals	Alessia Foglia, Cecilia Bruni*, Enrico Marinelli, Maura Benedetti, Fabiola Gigli, Massimiliano Sgroi, Anna Laura Eusebi, Stefania Gorbi, Francesco Fatone





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Time	Code	Title	Authors
15.00 – 15.15	CO.9.5.	Minimizing NOx emissions in a brick manufacturing process	Costel Anton*, Cătălin Lisă *, Florin Leon, Marius Gavrilescu, Sabina Adriana Floria, Silvia Curteanu
15.00 – 17.00		Coffee break & Posters Session	
19.00		<i>Gala dinner, Magnum Ballroom, INTERNATIONAL Hotel Iasi</i>	

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### **Extra Session. Workshop Romanian Association of Environmental Experts, Thursday 14.09.2023, 14.00 – 15.30**

Location: FCEEP CH106

Chairperson: Assoc.Prof.dr. Brindusa Sluser



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## Friday, 15 September 2023

### Parallel session 10. Sustainability assessment & eco-innovation 09.00-10.30

Location: FCEEP Council Room

Chairpersons: Prof.dr. Anton Friedl and Assoc. Prof. Dr. George Barjoveanu

Technical support: Ramona Ciobanu

Time	Code	Title	Authors
9.15 - 9.30	CO.10.1	Challenges and opportunities in life cycle inventory data generation for the production of chemicals	Bianca Köck, Anton Friedl, Sebastián Serna Loaiza, Walter Wukovits and Bettina Mihalyi-Schneider*
9.30 - 9.45	CO.10.2	Challenges in modeling and sustainability assessment of biorefineries	Diana Felisbertina Dimande*, Walter Wukovits, Bianca-Maria Köck, Michael Harasek, Bettina Mihalyi-Schneider
9.45 - 10.00	CO.10.3	Sustainable water services from the ISO 37120 perspective. Brasov, Romania case study	Dana Perniu*, Camelia Draghici, Carmen Teodosiu
10.00 - 10.15	CO.10.4	Replicability assessment of solutions for alternative water recovery in 5 decentralized regions of America, Asia and Oceania	Josué González-Camejo*, Lucia De Simoni, Anna Laura Eusebi, Francesco Fatone
10.15-11.30	<b>Coffee break &amp; Posters Session</b>		
11.30	<b>ICEEM12 Closing Ceremony</b>		

### Parallel session 11. Environmental biotechnology, 09.00-10.30

Location: FCEEP CH III

Chairpersons: Prof.dr. Maria Gavrilescu and Assoc.prof.dr. Brindusa Sluser

Technical support: Dr. Camelia Betianu

Time	Code	Title	Authors
9.00 - 9.30	CO.11.1.	<b>Keynote lecture:</b> Waste gases as valuable and sustainable feedstocks for innovative bioproducts and biofuels generation,	<b>Dr. Mabel Mora</b>
9.30 - 9.45	CO.11.2.	Contaminant uptake, physiological and antioxidant status of basil plants ( <i>Ocimum basilicum</i> L.) Exposed to perfluorooctanoic acid (PFOA) added in the soil	Anna Wyrwicka-Drewniak*, Fabrizio Pietrini, Laura Passatore, Isabel Nogues, Enrica Donati and Massimo Zacchini
9.45 - 10.00	CO.11.3.	Phytoremediation of Sb-contaminated soils by <i>Nerium oleander</i>	Petroula Seridou, Evdokia Syranidou, Nicolas Kalogerakis*
10.00 - 10.15	CO.11.4.	Fungi from terrestrial and marine plastisphere	Federica Spina*, Francesco Venice, Viktoria Ilieva, Giulia Stilo, Davide Ferrero, Anita Fiorin, Ilaria Filippi, Giovanni Di Benedetto, Giorgia Pellegrino, Maya Dodhia, Barbara La Licata, Alexia Boulanger, Paola Zitella, Nicole R.



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Posth, Pierangiola Bracco, Marco  
Zanetti, Giovanna Cristina Varese

10.30-11.30

**Coffee break & Posters Session**

11.30

**ICEEM12 Closing Ceremony**

## Parallel session 12. Monitoring and modeling of environmental pollution Friday 15.09.2023, 09.00-10.30

Location: FCEEP CH IV

Chairpersons: Prof.dr. Silvia Curteanu and Prof.dr. Igor Cretescu

Technical support: Dr. Oana Plavan

Time	Code	Title	Authors
9.00 - 9.30	CO.12.1.	<b>Keynote lecture:</b> Emerging contaminants and water cycle: occurrence, monitoring, removal and risk assessment	<b>Prof.dr. Anna Laura Eusebi</b>
9.30 - 9.45	CO.12.2.	The impact of climate changes on the hydrological conditions in the Zarqa main hydrographic basin (Dead Sea)	Odai Aloyed, Daniel Scărădeanu
9.45 - 10.00	CO.12.3.	IR nanoscale and spectroscopic characterization of the air-filtered nanoparticles pollution	Ioana Tanasa, Dumitru Botan, Eduard Strainu, Razvan Ababei, Nicanor Cimpoesu, Brindusa Sluser*, Marius Cazacu*
10.00 - 10.15	CO.12.4.	Automatic generation of images from hurricane volume data through evolutionary optimization	Marius Gavrilescu*, Florin Leon
10.15 - 10.30	CO.12.5.	Study on film and pore diffusion modeling for adsorption of organic pollutants in soil	Camelia Bețianu*, Ionela-Cătălina Vasilachi, Mariana Minuț, Maria Gavrilescu*
10.30 - 11.30		<b>Coffee break &amp; Posters Session</b>	
11.30		<b>ICEEM12 Closing Ceremony</b>	



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## POSTER COMMUNICATIONS

### POSTER SESSION 1

Thursday 14.09.2023, 15.30 – 17.00

Location: FCEEP Main hall

#### Section: Environmental biotechnology

Chairperson: Lect.dr. Camelia Betianu

Code	Title	Authors
PO.1.1.	Remediation of crude oil contaminated soil by enhanced natural attenuation technique	Catalina Ghita; Dumitrescu Elena; Ruxandra Cordonasu; Ramona Visoiu; Daniela Muresan
PO.1.2.	Evidence of <i>Sinapis alba</i> l. tolerance and accumulation of Cu(II), Co(II), Ni(ii) and Zn(II) from polluted soils	Raluca-Maria Țăbuleac, Petronela Cozma*, Mariana Minuț, Mihaela Roșca, Raluca-Maria Hlihor, Maria Paiu, Ionela-Cătălina Vasilachi, Diana-Elena Ungureanu-Comăniță, Maria Gavrilescu
PO.1.3.	Alleviating effect of silicon on growth and biochemical response of nickel stressed cucumber seedlings	Aleksandra Witusińska*, Ewa Gajewska, Anna Wyrwicka-Drewniak
PO.1.4.	Behavioral studies on cumulative effects in acute intoxication with a cocktail of polypropylene and valproic acid, using the invasive species <i>Percottus glenii</i>	Alexandra Savuca, Ionut-Alexandru Chelaru, Dorel Ureche, Mircea Nicusor Nicoara*, Alin Ciobica
PO.1.5.	Phytoremediation: a sustainable method for the removal of heavy metals from polluted soils	Ioana Monica Sur, Evelyn Terez Polyak, Valer Micle
PO.1.6.	Experimental studies on the potential of some agricultural plants to absorb lead from contaminated soils	Ionela Cătălina Vasilachi, Răzvan-Andrei Huțuliac, Vasile Stoleru, Maria Gavrilescu
PO.1.7.	Adsorption of heavy metals on medicinal plants dry biomass	Dana-Mihaela Asimincesei, Laura Bulgariu, Maria Gavrilescu
PO.1.8.	<i>Trametes versicolor</i> laccase activity modulated by gold nanoparticles	Anca Ruxandra Leonties, Aurica Precupas, Madalina Tudose, Dragos Baltag, Romica Sandu and Ludmila Aricov

#### Section 2: Water and wastewater cycles in the context of circular (bio)economy

Chairperson: Lect.dr. Daniela Fighir

Code	Title	Authors
PO.2.1	Visible light driven photocatalytic degradation of a pharmaceutical water contaminant: assessment of process efficiency and products phytotoxicity	Maria Paiu, Lidia Favier, Raluca-Maria Hlihor, Doina Lutic, Maria Gavrilescu



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Code	Title	Authors
PO.2.2.	Evaluation of two innovative treatment procedures performance applied in the case of industrial wastewaters	Marius Alexandru Afrasinei and Carmen Zaharia*
PO.2.3.	Advanced numerical modeling, using Mike 11, to determine the volume of water possible to accumulate in a drainage channel for use for irrigation	Stoica (Untaru) Daniela Cristina, Man Teodor Eugen, Beilicci Robert Florin, Ienciu Anisoara Aurelia, Visescu Mircea*, Ilca Marin
PO.2.4	Synthesis, characterization, and efficient applications of ionic liquids-functionalized layered double hydroxides in the adsorption process of precious metals from aqueous solutions.	Nick Samuel Tolea*, Lavinia Lupa, Radu Lazau, Laura Cocheci
PO.2.6.	Study on the water quality monitoring at distribution and discharge in areas with agro-industrial activities	Sebastian Ionuț Ognean*, Valer Micle*, Ioana-Monica Sur, Marin Șenilă, Octavia Maria Tamas-Krumpe, Laurențiu Ognean
PO.2.5.	Layered double hydroxides – sawdust hybrids synthesized from residual solutions and their application as dyes adsorbents	Adelina Cucu-Novăcuț*, Lavinia Lupa, Laura Cocheci, Cornelia Muntean

### Section 3: Waste management in the context of circular (bio)economy

Chairperson: Lect.dr. Daniela Gavrilescu

Code	Title	Authors
PO.3.1.	Wheat straw - a sustainable resource for romanian paper industry	Dan Gavrilescu*, Adrian Catalin Puitel
PO.3.2.	Soil organic amendments improve pepper growth and yield and soil microbial communities development	Vasilka Chopkova and Stefan Shilev
PO.3.3.	Comparison between friendly methods for recovery of valuable metals from electronic waste	Stefan Leontin Martinaș-Ioniță, Gabriela Antoaneta Apostolescu, Maria Harja
PO.3.4.	Spatial monitoring of household waste collection and transport based on real-time monitoring tools	Dorina Maria Petrișor*, Cristina Georgiana Zanfir, Daniela Gavrilescu, Carmen Teodosiu
PO.3.5.	One-part alkali-activated cements based on secondary raw materials	Nicolaie Marin*, Cristina Orbeci, Liliana Bobirică, Constantin Bobirică
PO.3.6.	Identification of food wasting behaviour of consumers based on questionnaires	Paula-Sânziana Oprea*, Elena-Diana Comăniță-Ungureanu, Petronela Cozma, Maria Gavrilescu
PO.3.7.	Comparative evaluation of Romanian agricultural residues and agro-industrial secondary products as feedstocks for biorefinery	Adrian Catalin Puitel, Nechita Macuha, Dumitru Calugareanu, Catalin Balan Dumitrel, Mircea Teodor Nechita, Dan Gavrilescu
PO.3.8.	Improving the properties of composite materials with glass fiber waste and blast furnace slag	Mihaela Fanache (Vasiliu), Ioan Damian, Osman Gencil, Maria Harja*
PO.3.9.	Circular economy in winemaking process: valorization of the grape marc waste through vermicomposting	Georgiana-Diana Dumitriu Gabur, Carmen Teodosiu, Daniela Fighir, Iulian Gabur, Valeriu V. Cotea
PO.3.10.	Analysis of the thermal behaviour of various wastes co-processed in cement plants	Loredana-Vasilica Postolache, Gabriela Soreanu, Igor Cretescu, Gabriela Lisa



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Code	Title	Authors
PO.3.11.	Ensuring secure and sustainable supply chain of critical raw materials in industrial systems	Petronela Cozma, Maria Paiu, Ionela-Cătălina Vasilachi, Dana-Mihaela Asiminicesei, Mariana Minuț, Elena-Diana Comăniță-Ungureanu, Mariana Diaconu, Maria Gavrilescu
PO.3.12.	Reduction of environmental pollution by valorization of ash as sustainable material	Maria Harja*, Lidia Favier, Liliana Lazar

### Section 4: Sustainability assessment & eco-innovation

Chairperson: Assoc. prof.dr. George Barjoveanu

Code	Title	Authors
PO.4.1.	Strategies and tools applied for ensuring sustainability in tourism industry	Raluca-Maria Țăbuleac, Elena-Diana Comăniță-Ungureanu, Petronela Cozma, Maria Gavrilescu*
PO.4.2.	Environmental assessment of Integrated Water Service in South of Italy by LCA approach	Sara Pennellini , Alessandro Rosatti , Alessandra Bonoli
PO.4.3.	Cost-effective sampling strategies for investigation and remediation of polluted soil using geochemical, geostatistical models	Catalina Ghita; Daniel Scradeanu; Dumitrescu Elena; Daniela Muresan

## POSTER SESSION 2

Friday 15.09.2023, 10.30 – 11.30

Location: FCEEP Main hall

### Section 5: Novel materials for environmental and energy applications

Chairperson: Lecturer Dr. Adela Buburuzan

Code	Title	Authors
PO.5.1.	Eco-process for lipids extraction from microalgae using ionic liquids	Alexandra Cristina Blaga, Lenuta Kloetzer, Alexandra Tucaliuc
PO.5.2.	Valorization of shrimp waste from chitin/chitosan extraction as a new liquid bio-coagulant	Nisrine Nouj*, Zineb Majbare, Mohamed Rida Abelouah, Aboubakr Ben Hamou, Ayoub Chaoui, Naima Hafid, Noureddine El Alem, Amane Jada, Ingrid Ioana Buciscanu, Stelian Sergiu Maier, Gabriela Soreanu, Igor Cretescu*
PO.5.3.	Stability of the photocatalytic thin film TiO <sub>2</sub> – g-C <sub>3</sub> N <sub>4</sub>	Silvioara Gheorghita*, Cristina Bogatu, Anca Duta
PO.5.4.	The development and characterization of new membranes based on polysulfone and silsesquioxanes with perspectives IN environmental applications	Ciubotaru Bianca-Iulia, Alexandra Bargan, George Știubianu, Mihaela Dascălu,



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Code	Title	Authors
PO.5.5.	Assessment of limestone thermal decomposition performance and dioxide carbon emission control	Liliana Lazar, Leonid Vasiliu, Elisabeta Droniuc (Hultuana), Gabriela Lisa, Maria Harja
PO.5.6.	Eco-efficient hydrochar for immobilization of pseudomonas species	Emanuel Gheorghită Armanu, Marius Sebastian Secula, Irina Volf
PO.5.7.	Development of hybrid electrodes based on Ti-TiO <sub>2</sub> -rGO by spin-coating method for pollutant detection	Mina Ionela Popescu, Mircea Nicolaescu, Corina Orha, Carmen Lazau, Aniela Pop, Cornelia Bandas*
PO.5.8.	Boron-doped diamond anode in electrochemical filtering system for advanced water treatment	Anamaria Baci, Sorina Motoc, Sorina-Claudia Negrea, Danut Vitan, Corina Orha, Constantin Tudoran, Florica Manea1*
PO.5.9.	Mesoporous titania as a promising photocatalyst for the advanced removal of an emerging water pollutant	Laura Nistor, Lidia Favier, Amalia Sescu, Maria Harja*, Doina Lutic*
PO.5.10	Degradation improvement of an emerging organic contaminant from aqueous suspensions by UV-A photocatalytic oxidation: application in environmental remediation	Alexandra Corina Constandache, Lidia Favier*, Ecaterina Matei
PO.5.11	Eco-friendly process for vitamins separation from aqueous solutions	Alexandra Cristina Blaga*, Alexandra Tucaliuc, Lenuta Kloetzer, Anca Irina Galaction, Dan Cascaval

## Section 6: Monitoring and modeling of environmental pollution

Chairperson: Assoc.Prof.dr. Gabriela Soreanu

Code	Title	Authors
PO.6.1.	Simulation – risk of mobile components migration from a crude oil accidental spill through vadose zone	Catalina Ghita, Daniel Scradeanu, Dumitrescu Elena, Andreea Vladimirescu
PO.6.2.	Monitoring the health of biodiversity in a protected area by remote sensing biophysical index factor	Elena Diana Bobric, Alexandra Petronela Stoleriu, Lilian Niacșu, Iuliana Gabriela Breabăn*
PO.6.3.	Forest dynamics in natural park Putna Vrancea using time-series Sentinel 2 images and lulc data	Adrian George Istrate, Alexandra Petronela Stoleriu, Robert Hritac, Iuliana Gabriela Breaban*
PO.6.4.	The use of artificial neural networks in modelling and predicting PM <sub>10</sub> in an urban area	Iuliana-Gabriela Breaban*, Liliana Dragoi (Oniu), Robert Hritac, Marius-Mihai Cazacu
PO.6.5.	Preliminary investigations on the impacts of poultry meat production chain	Mihaela David, Cristina Ghinea, Maria Gavrilescu
PO.6.6.	Application of an automatic water quality monitoring system in the “Kis-Balaton water protection system”	Zsófia Kovács, Mónika Meiczinger, Gvendolin Kulcsár, Béla Varga, Zsófia Látrányi-Lovász
PO.6.7.	Vegetable and iron-based wastes re-used in green electrochemical detection of doxorubicin in water	Sorina-Claudia Negrea, Sorina Motoc, Anamaria Baci, Anca Andreea Șăulean, Ecaterina Matei, Roxana Trușcă, Florica Manea*
PO.6.8.	Industrial wastewater monitoring of Onesti area, Romania	Madalina Ene, Anca Balasoiu Starpitu, Florentina Daniela Anei, Ioan Bica





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Code	Title	Authors
PO.6.9.	Statistical approach of the water quality parameters dynamics for the Danube River in the Galati - Isaccea area	Catalina Topa, Gabriel Murariu*, Maxim Arseni, Carmen Chitescu, Valentina Calmuc
PO.6.10.	New perspectives of environmental monitoring definition	Cristina Mihaela Salcă Rotaru Camelia Draghici*
PO.6.11	Flood routing and discharge capacity of Colibita reservoir on Bistrita Ardeleana river	Marcoie Nicolae*, Toma Daniel, Boboc Valentin, Hraniciuc Tomi Alexandrel, Balan Catalin Dumitrel
PO.6.12.	About the pollution and self-purification processes of the water of the Danceni reservoir	Borodaev Ruslan, Bunduchi Elena, Gladchi Viorica, Blonschi Vladislav
PO.6.13.	Modeling and optimization of the Rifaximim decolorization process using bacterial foraging optimization and grey worm optimization	Elena Niculina Dragoi, Gabriel Dan Suditu, Mircea Teodor Nechita
PO.6.14.	Comparative evaluation of the dynamic adsorption performance of toluene vapors from gaseous streams	Marilena-Adela Buburuzan
PO.6.15	Environmental impact assessment of gaseous emissions in laying hens manure management	Daniela Gavrilesco*, George Bârjoveanu, Petru Apopei, Andreea Gherghel, Anișoara Talpalaru, Carmen Teodosiu



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