

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

**PRELIMINARY CONFERENCE PROGRAM**



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**September 8 – 10, 2021**



11<sup>th</sup> INTERNATIONAL CONFERENCE ON  
ENVIRONMENTAL ENGINEERING AND MANAGEMENT  
Environmental Engineering for a Clean and Healthy Planet

8 - 10 September 2021, MuttENZ, Switzerland

This is a preliminary program. Please consider the following:

- **Onsite activities are marked in orange.** These presentations will be held in MuttENZ - Switzerland by participants and will be broadcasted online as well.
- **Online presentations are marked in green.**
- **To be confirmed participants are presented in plain white.** These are presentations that have been accepted, but participants have not registered yet on [www.iceem.ro](http://www.iceem.ro). Participants are urged to complete their registration until 20 August 2021.
- Every oral communication will be presented in a 10 minutes frame (including discussions). Participants are encouraged to use the presentation template available on the conference website.
- Posters will be presented in dedicated sessions during which participants will present their poster in 5 minutes (including discussions). Participants are encouraged to use the poster template available on the conference website.
- This is a preliminary version and modifications are likely to occur.



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## SHORT PROGRAM

### Wednesday, 8 September 2021

13.00-14:00	Onsite Participants Registration
14.00-14.15	Opening ceremony & Welcome addresses
14.15 – 14.45	<b>Plenary Lecture 1:</b> <i>Microbial exopolymers: Characterisation and potential for resource recovery</i> , Prof. Dr. Mark van Loosdrecht
14.45 – 15.15	<b>Plenary Lecture 2,</b> <i>Clean and healthy planet: Understanding the full implications of the circular economy</i> , Prof.Dr., Dr.h.c. ing. Adisa Azapagic
15.15 - 15.45	<b>Plenary Lecture 3,</b> <i>Funding for bio-based industries in Europe: past, present &amp; future</i> , Philippe Mengal
16.30 – 18.30	On-site Conference Dinner

### Thursday, 9 September 2021

Time			
8:00 - 9:00	Onsite Participants Registration		
9:00 - 10:30	Keynotes lectures sessions		
9.00 - 9.30	<b>Keynote lecture 1</b> <i>Electrifying biotechnology – Recent advances in bioproduction and bioremediation</i> , <b>Prof.Dr. Korneel Rabaey</b>		
9.30 - 10.00	<b>Keynote lecture 2</b> <i>Advances in water resource recovery from wastewater treatment: the EU project Wider-Uptake</i> , <b>Prof.dr. Giorgio Mannina</b>		
10.00 - 10.30	<b>Keynote lecture 3 -</b> <i>Towards a real circular plastic economy: the different options to reconnect growth and sustainability for the plastic sector</i> , <b>Assoc.Prof.dr. Paola Fabbri</b>		
10:30 - 11:00	Coffee break		
11:00 - 13:00	PS 1. Environmental biotechnology	PS 2 Water and wastewater cycles in the context of circular (bio)economy	PS 3. Novel materials for environmental and energy applications
13.00 - 14:00	Lunch break		
14:00 - 16:00	PS FLASH PRESENTATIONS 1. Environmental biotechnology -	PS FLASH PRESENTATIONS 2 Water and wastewater cycles in the context of circular (bio)economy	PS4. Sustainability assessment & eco-innovation
16.30	PS. Prolific Project workshop (onsite)		



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Time

17.30

Onsite Conference Dinner

**Friday 10 September 2021**

Time

8:00 - 9:00

Registration

9:00 - 10:30

Keynotes lectures sessions

9.00-9.30

*Keynote lecture 4 - Rising stars among solar cell materials, Prof.Dr. Frank Nüesch*

9.30.-10.00

*Keynote lecture 5 - Sustainability at the heart of the European Green Deal, Dr. Giovanni De Santi*

10.00-10.30

*Keynote lecture 6 - Halogenated contaminants – a persistent problem, Prof. Dr. Jacob de Boer*

10:30 - 11:00

Coffee break

11:00 – 13:00

PS 5. Waste management in the context of circular (bio)economy

PS 6. Monitoring and modelling of environmental pollution

13:00 – 14:00

Lunch Break

14.00 - 15.00

PS 7. Waste management in the context of circular (bio)economy

PS 8. Monitoring and modelling of environmental pollution

15.00 - 16.00

FLASH PRESENTATIONS 3. Waste management in the context of circular (bio)economy

FLASH PRESENTATIONS 4. Monitoring and modelling of environmental pollution

16:00 - 17.00

ICEEM 11 CLOSING CEREMONY



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## DETAILED CONFERENCE PROGRAM

### Wednesday, 8 September 2021

Location: *To be announced*

13.00-14:00	Onsite Participants Registration
14.00-14.15	Opening ceremony & Welcome addresses
14.15 – 14.45	<b>Plenary Lecture 1:</b> <i>Microbial exopolymers: Characterisation and potential for resource recovery</i> , Prof. Dr. Mark van Loosdrecht
14.45 – 15.15	<b>Plenary Lecture 2,</b> <i>Clean and healthy planet: Understanding the full implications of the circular economy</i> , Prof.Dr., Dr.h.c. ing. Adisa Azapagic
15.15 - 15.45	<b>Plenary Lecture 3,</b> <i>Funding for bio-based industries in Europe: past, present &amp; future</i> , Philippe Mengal
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10.00-10.30	<b>Keynote lecture 3 -</b> <i>Towards a real circular plastic economy: the different options to reconnect growth and sustainability for the plastic sector</i> , <b>Assoc.Prof.dr. Paola Fabbri</b>
10:30 - 11:00	Coffee break



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**Thursday, 9 September 2021**

Locations: *To be announced*

**Parallel Session 1. Environmental biotechnology**

Thursday 9.09.2021, 11:00 – 13:00,

Chairpersons : *tba*

Time	Title	Authors
11.00 - 11.10	Towards plastic-biodegradation: isolation and characterization of a soil bacterium growing on polyurethane oligo- and monomers	María José Cárdenas Espinosa, Óscar González i Puiggené, Tabea Schmidgall, Uwe Kappelmeyer, Dietmar Schlosser, Nico Jehmlich, Hermann J. Heipieper, Christian Eberlein
11.10 - 11.20	Life cycle assessment and cost effectiveness analysis of bio-electrochemical remediation technologies, Victor Misev,	Victor Misev, Vinzenz Müller, Christoph Hugi
11.20 - 11.30	Control of the nitrate and sulphate reduction in a microbial electrolysis cell for PCE removal	Edoardo Dell'Armi, Marco Zeppilli, Federica De Santis, Mauro Majone, Marco Petrangeli Papini,
11.30 - 11.40	Coupling biogas upgrade with the valorisation of H <sub>2</sub> S, CO <sub>2</sub> and digestate by employing purple phototrophic bacteria, Sarah Notarfrancesco, Gonzalo A. Martinez, Elena Morselli, Joana M. B. Domingos, Fabio Fava, Lorenzo Bertin	Sarah Notarfrancesco, Gonzalo A. Martinez, Elena Morselli, Joana M. B. Domingos, Fabio Fava, Lorenzo Bertin
11.40 - 11.50	The microbial electrochemical snorkel: a passive electrobioremediation system for enhancing hydrocarbons biodegradation in contaminated soils,	Carolina Cruz Viggì, Matteo Tucci, Bruna Matturro, Simona Crognale, Ilaria Pietrini, Simona Rossetti, Federico Aulenta
11.50 - 12.00	Biostimulation effect of different PHAs on a marine PCB dechlorinating microbial community,	Alberto Botti, Giulio Zanaroli, Fabio Fava
12.00 - 12.10	<i>Carboxylic acids recovery using ionic resins: anion adsorption isotherm prediction and tests at semi-pilot scale, tbc</i>	<i>Elena Morselli, Sarah Notarfrancesco, Gonzalo A. Martinez, Joana M. B. Domingos, Fabio Fava, Lorenzo Bertin,</i>
12.10 - 12.20	<i>Electrobioremediation of a PCB-contaminated marine sediment: a preliminary study, tbc</i>	<i>Alberto Botti, Fabio Fava, Giulio Zanaroli,</i>
12.20 - 12.30	<i>Soil and endophytic bacteria as a tool for remediation of Sb(III) polluted soils, tbc</i>	<i>Vasiliki Aggelopoulou, Konstantinos Fytrilakis, Evdokia Syranidou, Nicolas Kalogerakis,</i>
13:00 – 14:00	<b>Lunch break</b>	

**Parallel Session 2. Water and wastewater cycles in the context of circular (bio)economy**

Thursday 9.09.2021, 11:00 – 13:00,

Chairpersons: *tba*



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Time	Title	Authors
11.00 - 11.10		
11.10 - 11.20	Tin oxide onto titanium substrate for advanced degradation of cytostatics from water	Corina Orha, Cornelia Bandas, Carmen Lazau, Mina Ionela Popescu, Mircea Nicolaescu, Sorina Negrea, Aniela Pop, Florica Manea,
11.20 - 11.30	The long-term effect of selected heavy metals' ions on the anammox process in a continuous-flow anaerobic membrane-assisted bioreactor (AnMBR)	Piotr Gutwiński, Grzegorz Cema, Aleksandra Ziemińska-Buczyńska, Sławomir Ciesielski, Joanna Surmacz-Górska,
11.30 - 11.40	IL functionalized Mg <sub>3</sub> Al-LDH as new efficient adsorbent materials for the recovery of Pd ions from aqueous solutions	S.N. Țolea, I.C. Bălescu, L. Lupa, L. Coheci, R. Pode
11.40 - 11.50	Combined electrochemical water softening and nitrate electro bioremediation	Alba Ceballos-Escalera, Narcís Pous, M. Dolors Balaguer, Sebastià Puig
11.50 - 12.00	Fault diagnosis of the WWTP dissolved oxygen and nitrates sensors	Alexandra-Veronica Luca, Melinda Simon-Várhelyi, Norbert-Botond Mihály, Marius Adrian Brehar, Vasile-Mircea Cristea
12.00 - 12.10	Optimization of bioplastics production with Cyanobacteria	Estel Rueda, Joan García
12.10 - 12.20	Sanitation and recovery of resources by short-rotation-plantations in India	Mirko Hänel, Andres C. Acosta, Nadeem Khalil, Carlos A. Arias,
12.20 - 12.30	Phytoremediation potential of crop plants cultivated on sewage sludges: a preliminary study	Mirko Salinitro, Sofia Montanari, Andrea Simoni, Claudio Ciavatta, Annalisa Tassoni
12.30 - 12.40	<i>Potential and Validation of Sustainable Natural &amp; Advance Technologies for Water &amp; Wastewater Treatment, Monitoring and Safe Water Reuse in India (PAVITR), tbc</i>	<i>Nadeem Khalil, Mirko Hänel, Andres C. Acosta, Carlos A. Arias,</i>
12.40 - 12.50	<i>Masi F., Domestic sewage management using nature-based solutions for reuse in public park: an Indian experience, tbc</i>	<i>Bresciani R., Pophali G. R., Labhasetwar P., Hirulkar D., Lakhani H., Sahu N.,</i>
12.50 - 13.00	<i>Comparative study regarding adsorptive abilities of activated carbon, natural zeolite and manganese sand of cytostatics from water, tbc</i>	<i>Sergiu Vasilie, Claudia Delcioiu, Aniela Pop, Corina Orha, Florica Manea,</i>
13.00 : 14.00	<b>Lunch Break</b>	

## Parallel Session 3. Novel materials for environmental and energy applications

Thursday 9.09.2021, 9:00 – 10:30, CH III Room

Chairpersons: tba

Time	Title	Authors
11.00 - 11.10	Synthesis and characterization of quartz sand/polyethyleneimine composite particles with application in water cleaning	Florin Bucatariu, Marius-Mihai Zaharia, Larisa-Maria Petrila, Marin-Aurel Trofin, Marcela Mihai,
11.10 - 11.20	3D anisotropic polysaccharide-based	Maria Valentina Dinu, Maria



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Time	Title	Authors
	cryogels as multifunctional eco-friendly materials for wastewater treatment	Marinela Lazar, Ionel Adrian Dinu, Irina Elena Raschip, Claudiu-Augustin Ghiorghita, Luminita Ghimici,
11.20 - 11.30	Daisogel/(polycation/polyanion)n composite microparticles with affinity for emerging pollutants	Marcela Mihai, Larisa-Maria Petrila, Marin-Aurel Trofin, Marius-Mihai Zaharia, Florin Bucatariu,
11.30 - 11.40	Marcela Mihai, Acrylic ion exchange resins. synthesis and preliminary tests on water cleaning from tarnața closed mine area	Marius-Mihai Zaharia, Florin Bucatariu, Maria Ignat, Marin-Aurel Trofin,
11.40 - 11.50	, Adsorption characteristics of an anionic dye (Congo red) onto modified fly ash nanomaterial	Gabriela Buema, Nicoleta Lupu, Horia Chiriac, Dumitru-Daniel Herea, Lidia Favier, Carmen Teodosiu, Gabriela Ciobanu, Maria Harja
11.50 - 12.00	<i>Modified 3D-electrodes for the efficient hydrogen production, tbc</i>	<i>Duca Gheorghe, Covaliov Victor, Covaliova Olga, Drovosekov Andrei</i>
12.00 - 12.10	<i>La<sub>1-x</sub>(Sr, Na, K)<sub>x</sub>MnO<sub>3</sub> perovskites for HCHO oxidation: the role of oxygen species on the catalytic mechanism, tbc</i>	<i>Yin Xu, Jérémy Dhainaut, Jean-Philippe Dacquin, Jean-François Lamonier, Hui Zhang, Sébastien Royer</i>
13.00 : 14.00	<b>Lunch Break</b>	

## Flash poster presentations 1. Environmental biotechnology - Thursday 9.09.2021, 14:00 – 16:00, Chairpersons: tba

Time	Title	Authors
14.00 - 14.05	Response of the microorganisms in the compost bed towards the volatile petroleum hydrocarbons exposure in the presence of the most prevalent inorganic gases in air	Mariana Diaconu, Irina Volf, Igor Cretescu, Gabriela Soreanu,
14.05 - 14.10	A preliminary assessment on the early development of <i>Ocimum basilicum</i> L. in lead contaminated medium	Dana Mihaela Asiminicesei, Raluca Maria Hlihor, Maria Apostol, Laura Hagi Zaleschi, Isabela Maria Simion, Gabriel-Ciprian Teliban, Maria Gavrilescu
14.10 - 14.15	,A review on heavy metal phytoextraction from soils by different plant species	Dana Mihaela Asiminicesei, Raluca Maria Hlihor, Mihaela Roșca, Petronela Cozma, Ionela Vasilachi, Maria Gavrilescu
14.15 - 14.20	Antibiotics effect on the anammox process in short-time exposure	Filip Gamoń, Grzegorz Cema, Aleksandra Ziemińska-Buczyńska,
14.20 - 14.25	Recent development on the modelling and optimization of Cr(VI) removal by fungal biomass	Raluca Maria Hlihor, Mihaela Roșca, Elena Niculina Drăgoi, Mariana Diaconu, Silvia Curteanu, Lidia Favier, Maria Gavrilescu,





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Time	Title	Authors
14.25 - 14.30	Behavior of <i>Sinapis alba</i> L. growth in soil polluted with nickel	Mariana Minuț, Mihaela Roșca, Petronela Cozma, Camelia Smaranda, Mariana Diaconu, Maria Gavrilăscu,
14.30 - 14.35	Investigating the potential of <i>Sinapsis alba</i> LI. (white mustard) to clean-up lindane polluted soils	Petronela Cozma, Mihaela Roșca, Mariana Minuț, Camelia Smaranda, Cezar Catrinescu, Maria Gavrilăscu,
14.35 - 14.40	Biosolids vermicompost improves tomato growth and rhizosphere microbiome development influencing the ability to use carbon sources	Stefan Shilev, Desislava Angelova,
14.40 - 14.45	Exploitation of the microbial biodiversity of plastisphere	Federica Spina, Matteo Florio Furno, Ilaria Filippi, Pierangiola Bracco, Marco Zanetti, Anna Poli, Viktoria Ilieva, Carlo Pretti, Valeria Prigione, Giovanna Cristina Varese,
15.45- 15.50	Influence of the heavy metal Pb(II) on the development and early growth of wheat ( <i>Triticum aestivum</i> , hybrid Glossa)	Ionela Catalina Vasilachi, Dana-Mihaela Asiminesei, Mihaela Rosca, Mariana Minut, Petronela Cozma, Maria Gavrilăscu,
15.50 - 15.55	Ultrasound-assisted extraction of scopolamine from <i>Datura Innoxia</i> and quantitative analysis using gas chromatography	Georgiana Mardare (Balusescu), Liliana Lazar, Teodor Malutan,
15.50 - 16.00	<i>Study of the production of biosurfactants by a strain of Pseudomonas aeruginosa using three carbon sources, tbc</i>	<i>Rym Salah-Tazdaït, Djaber Tazdaït, Laieb Roumaïssa, Nadia Abdi, Hocine Grib, Nabil Mameri</i>
16.00 - 16.05	<i>Isolation and characterization of bacterial isolates capable of degrading a pyrethroid insecticide deltamethrin, tbc</i>	<i>Djaber Tazdaït, Rym Salah-Tazdaït, Hamidou Abdelhak Chouit, Nadia Abdi, Hocine Grib, Nabil Mameri,</i>
16.05 - 16.10	<i>Design and development of full-scale high rate algal ponds for wastewater treatment in India under India-EU research collaboration, tbc</i>	<i>Enrica Uggetti, Antonio Ortiz, Rubén Díez-Montero, Nadeem Khalil, Joan García,</i>

**Flash Poster Presentations 2. Water and wastewater cycles in the context of circular (bio)economy**

**Thursday 9.09.2021, 14:00 – 16:00,**

**Chairpersons: tba**

Time	Title	Authors
14.00 - 14.05	Materials for P removal in wastewater treatment and the P bioavailability for plant growth	S.M. Jensen, C. Esposito, D. Konnerup, H. Brix, C.A. Arias,
14.05 - 14.10	Ionic liquids-based polysulfone membranes for cadmium removal from aqueous solutions	Lavinia Lupa, Samuel Nick Tolea, Oana Dumbrava, Anca Filimon,
14.10 - 14.15	Circular management and laser biotechnology as contribution to municipal bioeconomy and sustainable development adopted to climate change and COVID-19 pandemic	Jan W. Dobrowolski, Tadeusz Zaba,



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Time	Title	Authors
14.15 - 14.20	Carbonaceous aerogel for removing pharmaceutical compounds from aqueous media	Silvia Escudero-Curiel, Marta Pazos, M. Ángeles Sanromán,
14.20 - 14.25	Sustainable use of composite sorbents to remove emerging and priority pollutants in advanced wastewater treatment processes	Carmen Teodosiu, Florin Bucatariu, Daniela Fighir, Irina Morosanu, Ramona Ciobanu, Carmen Paduraru, Marcela Mihai,
14.25 - 14.30	How to choose properly: coagulation vs. electrocoagulation in wastewater treatment	Vladana Rajaković-Ognjanović, Branislav Proročić, Anja Šaponjić, Ognjen Govedarica, Branislava Lekić,
14.30 - 14.35	Immobilization of lead loaded fly ash in cement matrix	Soumitra Maiti, Basheshwer Prasad, Ashwani Kumar Minocha,
14.35 - 14.40	Coagulation-flocculation efficiency to remove natural organic matter for water treatment	Corina-Petronela Musteret, Irina Morosanu, Ramona Ciobanu, Andreea Gherghel, Oana Plavan, Ioana Roman, Carmen Teodosiu,
14.40 - 14.45	Unravelling the fluid flow through an angular photochemical reactor: tracer investigations	Drăgoi Elena Niculina, Suditu Gabriel Dan, Puițel Adrian Cătălin, Dafinescu Vlad, Pintilie Loredana, Nechita Mircea Teodor,
15.45- 15.50	<i>RichWater® SBR as a competitive option for the use of reclaimed water in agriculture, tbc</i>	<i>Lorenzo-López A., Zapata-Aranda P., Caballero-Hernández A.,</i>
15.50 - 15.55	<i>Custom-tailored electrodes for electrochemical advanced oxidation processes, tbc</i>	<i>CO: Antón Puga, Noelia Costa, Emilio Rosales, Marta M. Pazos, M. Ángeles Sanromán,</i>
15.50 - 16.00	<i>Highly active heterogeneous catalyst M-Al<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub> (M = Cu, Fe and Ni) derived from power plant fly-ash for the degradation of acrylonitrile an emerging pollutant, tbc</i>	<i>CO: Arvind Kumar, Basheswar Prasad,</i>

## Parallel Session 4. Sustainability assessment & eco-innovation

Thursday 9.09.2021, 14:00 – 16:00,

Chairpersons: tba

Time	Title	Authors
14.00 - 14.10	The 360° virtual reality preserve the ecological and architectural area	Efthymios - Spyridon Georgiou
14.10 - 14.20	Micropollutant abatement with UV/H <sub>2</sub> O <sub>2</sub> oxidation or low-pressure reverse osmosis? A comparative life cycle assessment for drinking water production	Christine Roth, Robin Wunsch, Fredy Dinkel, Christoph Hugi, Richard Wülser, Michael Thomann
14.20 - 14.30	An LCA study of advanced landfill biogas recovery for residual waste treatment	S. De Gisi, G. Gadaleta, F. Todaro, M. Notarnicola
14.30 - 14.40	Environmental product declarations for building materials: the analysis of system boundary	Francesca Scalisi, Cesare Sposito



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Time	Title	Authors
14.40 - 14.50	A life-cycle analysis of second-hand vehicles impacts in Romania	George Barjoveanu, Florența Diniță, Carmen Teodosiu
14.50 - 15.00	A comparison of the environmental impacts associated with batch and dynamic removal of Cr(VI) by bacterial biomass	Isabela Maria Simion, Raluca Maria Hlihor, Mihaela Roșca, Cătălina Filote, Petronela Cozma, Maria Apostol, Maria Gavrilăscu,
15.00 - 15.10	Life cycle assessment of an eco-designed house using cardboard waste as insulation material	FP: Teofil Campean, Dan-Alexandru Gavrilăscu, <b>Maria Gavrilăscu,</b>
15.10 - 15.20	<i>Sustainability assessment of water consumption: a comparison between plastic bottles and water dispenser at the University of Bologna, tbc</i>	<i>Anna Degli Esposti, Chiara Magrini, Sara Bottausci, Alessandro Dal Pozzo, Alessandra Bonoli,</i>

## Parallel Session: Prolific Project workshop (onsite)

Thursday 9.09.2021, 16:30 – 17:30

Chairpersons: Prof. Phillippe Corvini

Time	Title	Authors
16.30 - 16.40	Cascading processes to extract and valorise proteins and bioactive molecules from legumes, fungi and coffee agro-industrial side streams	Annalisa Tassoni, R. Hochstrat, P.F.X. Corvini,
16.40 - 16.50	Legumes agro-industrial side streams as alternative sources of proteins	Tullia Tedeschi, Barbara Prandi, Stefano Sforza, Marika Bondi, Jeroen Van Malderen, Georgos Tsatsos, Alexandra Nikou, Maria Ilaria Cigognini, Chiara Zurlini, Andrea Brutti,
16.50 - 17.00	Extraction and characterisation of bioactive ingredients from coffee and fungi side-streams	Job Tchoumtchoua, Stéphane Kohlen, Camille Cousseau, Monica Bergamaschi, Nicoletta Simoncini, Stefanie Verstringe, Georgios Tsatsos, Alexandra Nikou, Annalisa Tassoni,
17.00-17.10	Valorization of agro-industrial residues in biocomposites	Micaela Vannini, Laura Sisti, Paola Marchese, Annamaria Celli, Francesca Signori, Vito Gigante, Patrizia Cinelli, Giuseppe Amato, Luciano Navarini, Job Tchoumtchoua, Chiara Zurlini, Maria Ilaria Cigognini
17.10-17.20	Development of food prototypes using proteins derived from agro-industrial side streams	Dennis Schaller, János Petrusán, Reiner Stolzenberger,
17.20-17.30	Combination of life cycle assessment and economic analysis at early-stage development of bio-based products	Emmanuel Oertlé, Andrin Dietziker,

Conference event

17.30 – 18.30 Onsite Conference Dinner,



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**Friday, 10 September 2021**

*Onsite locations to be announced*

Hours	
8:00-9:00	<b>Registration</b>
9.00-10.30	<b>Keynotes lectures sessions</b>
9.00-9.30	<b>Keynote lecture 4 - Rising stars among solar cell materials, Prof.Dr. Frank Nüesch</b>
9.30.-10.00	<b>Keynote lecture 5 - Sustainability at the heart of the European Green Deal, Dr. Giovanni De Santi</b>
10.00-10.30	<b>Keynote lecture 6 - Halogenated contaminants – a persistent problem, Prof. Dr. Jacob de Boer</b>
10.30-11.00	<b>Coffee break</b>

## Parallel Session 5. PS Waste management in the context of circular (bio)economy

Friday 10.09.2021, 11:00 – 13:00,

Chairpersons: tba

Time	Title	Authors
11.00 - 11.10	VFA monitoring using spectroscopy sensor for the waste management control in anaerobic digestion	Miguel Placer, Santiago Gómez-Cuervo, Rocío Pena, Ana Pascual, Juan Antonio Álvarez, Luz Herrero, Francisco Rodriguez,
11.10 - 11.20	Advanced plasma technology for the conversion of waste lubricants	Maria-Oana Agavriloaie, Maria Harja, Dorina Isopescu, Iulian Cucos,
11.20 - 11.30	Evaluation of the barriers and of the motivating factors regarding the WEEE management behaviors of the romanian university students	Oana-Cristina Modoi, Andreea Vescan,
11.30 - 11.40	Application of the eco-management and audit scheme (EMAS) in the waste-to-energy sector in Italy	Stefano Castelluccio, Anna Scarrone, Silvia Fiore, Claudio Comoglio,
11.40 - 11.50	The quantification of PET trays and bio-plastic bags to upgrade an Italian Material Recovery Facility	G. Gadaleta, S. De Gisi, S. M. C. Binetti, F. Todaro, M. Notarnicola,
11.50 - 12.00	Hydrothermal treatment in the valorisation of wastes: generation of adsorbents and catalysts	Valeria Acevedo-García, Emilio Rosales, Marta Pazos, M. Ángeles Sanromán,
12.00 - 12.10	Hydrothermal processing for biomass conversion from wetland engineered wastewater treatment systems [willow-Salix viminalis]	Andrés C. Acosta, Carlos A. Arias, Patrick Biller, Hans Brix,



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12.10 - 12.20	Utilization of waste gypsum for development of sulphate resistant cement	Neeraj Jain, Soumitra Maiti,
12.20 - 12.30	<i>The impact of waste landfills from Neamț county, Romania on the environment, tbc</i>	<i>Alina Agafitei, Vasile Lucian Pavel,</i>
12.30 - 12.40	<i>Production of high value bio-resources from treatment wetland biomass, tbc</i>	<i>Marco A. Rodriguez-Dominguez, Birgit E. Bonefeld, Morten A-Jensen, Mirko Hänel, Andres C. Acosta, Hans Brix, Carlos. A. Arias,</i>
12.40 - 12.50	<i>Hydrogen plasma assisted conversion of municipal waste in energy, tbc</i>	<i>Iulian Cucos, Ion Antonescu, Dorina Isopescu, Vasile Caunii, Ionel-Ciprian Alecu, Maria-Oana Agavriiloaie, Vlad-Catalin Cucos,</i>
12.50 - 13.00	<i>Multi-purpose biorefinery for the valorisation of grape pomace: production of carboxylic acids, polyhydroxyalkanoates and biogas, tbc</i>	<i>Joana M. B. Domingos, Gonzalo A. Martinez, Elena Morselli, Fabio Fava, Lorenzo Bertin,</i>
13.00-14.00	<b>Lunch Break</b>	

## Parallel Session 6. Monitoring and modelling of environmental pollution

Friday 10.09.2021, 11:00 – 13:00,

Chairpersons: tba

Time	Title	Authors
11.00 - 11.10	Enhanced detection of bicalutamide – cytostatic in water at layered double hydroxide – modified carbon nanofiber paste electrode	Sorina-Claudia Negrea, Laura Cochei, Lidia Ani Diaconu, Valeria Nicorescu, Anamaria Baci, Florica Manea,
11.10 - 11.20	Open educational resources for learning waste management in rural communities	Cristina Salca Rotaru, Camelia Draghici,
11.20 - 11.30	Fictitious reference iterative tuning method applied for an anaerobic digestion process controller	Larisa Condrachi, Marian Barbu,
11.30 - 11.40	Nanostructured carbon-based electrode for enhanced determination of sodium diclofenac in water	Sorina Motoc, Elisabeta I. Szerb, Aniela Pop, Sorina Negrea, Florica Manea,
11.40 - 11.50	Design of open education resources for sustainable rural development	Dana Perniu, Ileana Manciualea, Cristina Bogatu, Camelia Draghici,
11.50 - 12.00	Air quality modelling by multivariable ensemble-based regression methods	Marius Gavrilescu,
12.00 - 12.10	Direct mutagenicity testing as part of the ecotoxicity test battery for the assessment complex environmental samples	Rita Márton, Viktória Feigl, Ildikó Fekete-Kertész, Mónika Molnár,



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12.10 - 12.20	Modeling phosphorus loads entering partially hypoxic Lake Morat: quantifying contributing sectors and impacts of possible actions	Leila Schneider, Michael Mattle, Jürg Schweizer,
12.20 - 12.30	Air quality assessment in the minifactory of digital printing on textiles and other flat surfaces	Ada Traumann, Jane Kivistik, Piia Tint,
12.30 - 12.40	<i>Validation of an innovative sensor for on-line monitoring of deposits in drinking water distribution networks under realistic operating conditions, tbc</i>	Gaia Pani, Giulio Bianchi, Ilenia D'Adda, Marco Carminati, Manuela Antonelli, Andrea Turolla,
12.40 - 12.50	<i>,Analysis of PFAS in water: introduction on targeted and untargeted techniques, tbc</i>	Holger Stalz
12.50 - 13.00	<i>Fast Automated Microplastics Analysis Using Laser Direct Chemical Imaging (LDIR 8700), tbc</i>	Lars Hildebrandt, Fadi El Gareb, Tristan Zimmermann, Ole Klein, Kay-Christian Emeis, Daniel Pröfrock, Andreas Kerstan,
13.00-14.00	<b>Lunch Break</b>	

## Parallel Session 7. Waste management in the context of circular (bio)economy

Friday 10.09.2021, 14:00 – 16:00

Chairpersons: tba

Time	Title	Authors
14.00 - 14.10	<i>A sustainable approach through hydrochar addition in bio-based new composite materials, tbc</i>	Iuliana Bejenari, Roxana Dinu, Irina Volf, Alice Mija

## Parallel Session 8. Waste management in the context of circular (bio)economy

Friday 10.09.2021, 14:00 – 16:00

Chairpersons: tba

Time	Title	Authors
14.00 - 14.10	<i>Impact of persistence organic pollutants on the aquatic ecosystems and human health considerations, tbc</i>	Vasile Lucian Pavel, Alina Agafitei,
14.10 - 14.20	<i>Assessment on irrigation water chemical properties in Galati county, Romania and Cahul district, Republic of Moldova, tbc</i>	Sorina-Simona Moraru, Alina Badila, Razvan-Laurentiu Simionica, Catalina-Georgiana Anton, Elena-Georgiana Gheorghe, Alexandru Ion,

## Flash poster presentations 3 Waste management in the context of circular (bio)economy

Friday 10.09.2021, 15:00 – 16:00

Chairpersons: tba



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Time	Title	Authors
15.00 - 15.05	Comparative analysis of two scenarios for food waste management by life cycle assessment (LCA)	Elena-Diana Ungureanu-Comanita, Ersilia Cosbuc, Simona Olteanu, Camelia Smaranda, Maria Gavrilescu,
15.05 - 15.10	Preliminary performance screening of chicken manure waste treatment options	Daniela Gavrilescu, George Barjoveanu, Petru Apopei, Anisoara Talpalaru, Bogdan-Constantin Seto, Carmen Teodosiu,
15.10 - 15.15	<i>Management with evolutionary algorithms of the plasma installation on hydrogen for the conversion of liquid waste, tbc</i>	<i>Iulian Cucos, Ion Antonescu, Dorina Isopescu, Vasile Caunii, Ionel-Ciprian Alecu, Maria-Oana Agavriloaie, Vlad-Catalin Cucos,</i>
15.15 - 15.20	<i>Waste treatment and valorization and perspective for development of circular economy, tbc</i>	<i>Yordanka Dimitrova Gancheva</i>
15.25 - 15.30	<i>,Municipal solid waste characterization and sustainability assessment. Case study: Iasi city, Romania, tbc</i>	<i>Ana Maria Schiopu, Daniela Gavrilescu, Catalin Neculau, Carmen Teodosiu</i>
15.30 - 15.35	<i>Windows waste glass capitalization as aggregate in concret, tbc</i>	<i>Mihaela FANACHE (VASILIU), Liliana LAZAR, Ioan DAMIAN</i>

16.00 – 17.00

ICEEM11 Closing session

## Flash poster presentations 4. Monitoring and modelling of environmental pollution

Friday 10.09.2021, 15:00 – 16:00

Chairpersons: tba

Time	Title	Authors
15.00 - 15.05	Comparative VOCs removal from gaseous streams by adsorption onto polymeric resins and activated carbon systems	Adela-Marilena Buburuzan
15.05 - 15.10	An assessment of heavy metals in commercial wines	Georgiana-Diana Dumitriu (Gabur), Carmen Teodosiu, Irina Morosanu, Oana Plavan, Iulian Gabur, Valeriu V. Cotea
15.10 - 15.15	Water quality assessment and priority pollutants monitoring in the Siret river basin, Romania	Roxana Zait Galan, Brindusa Sluser, Oana Plavan, Carmen Teodosiu
15.15 - 15.20	Environmental issues identification and protection measures in Timișoara, Romania	Nicoleta Mateoc-Sîrb, Hunor Vass, Andreea Jurjescu, Alexandru Pangratie, Cleopatra Pleșca, Teodor Mateoc, Gabriel Șuster



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15.25 - 15.30	Flood risk management using GIS: analysis and implications of flood impact in Timis county, Romania	Clara – Beatrice Vilceanu, Sorin Herban
15.30 - 15.35	Application on air/ozone nanobubbles in the field of disinfection	Petroula Seridou, Nicolas Kalogerakis
15.35 – 15.40	Study on the behavior of organochlorinepesticides on soils	Camelia Bețianu, Petronela Cozma, Diana Elena Comaniță-Ungureanu, Mihaela Roșca, Mariana Minuț, Adrian Puițel, Teodor Măluțan, Maria Gavrilescu
15.40 – 15.45	Cleaning trace drugs from water through TiO <sub>2</sub> photocatalysis	Favier Lidia, Sescu Amalia Maria, Litic Doina, Harja Maria
15.45 – 15.50	<i>, Image of the tourist destination of the subcarpatic region Oltene. Quality and role of certification in tourism, tbc</i>	<i>Girniceanu Adriana, Mazilu Mirela</i>