

Innovative Materials and Processes for a Sustainable  
Development

## CONFERENCE PROGRAM

# 6<sup>th</sup> International Conference on Chemical Engineering

Romania, Iași, October 5 – 7, 2022

# ICCE 2022

*Organized by:*

**“GHEORGHE ASACHI”  
TECHNICAL UNIVERSITY of IAȘI**



**“CRISTOFOR SIMIONESCU”  
FACULTY OF CHEMICAL ENGINEERING  
and ENVIRONMENTAL PROTECTION**



**ASOCIAȚIA “RADU Z. TUDOȘE” A CADRELOR  
DIDACTICE ȘI A ABSOLVENȚILOR FACULTĂȚII DE  
INGINERIE CHIMICĂ ȘI PROTECȚIA MEDIULUI  
“CRISTOFOR SIMIONESCU” DIN IAȘI**

 **avantor™**

2022

## SCIENTIFIC INTERNATIONAL COMMITTEE

**Honorary Conference Chairman: Prof. Dan Cașcaval, “Gheorghe Asachi”**  
Technical University of Iași

**Conference Chairpersons: Prof. Irina Volf, “Gheorghe Asachi”**  
Technical University of Iași  
**Prof. Teodor Măluțan, “Gheorghe Asachi”**  
Technical University of Iași

Prof. Victor David, University of Bucharest  
Prof. Aggregato Davide Fissore, “Politecnico” University of Torino  
Prof. Berta Estevinho, University of Porto, Portugal  
Prof. Renato Froidevaux, University of Science and Technology of Lille 1  
Prof. Anca-Irina Galaction, “Gr. T. Popa” University of Medicine and Pharmacy of Iași  
Prof. Lucian Gavrilă, “V. Alecsandri” University of Bacau  
Prof. Maria Gavrilescu, “Gheorghe Asachi” Technical University of Iași  
Dr. Valeria Harabagiu, Petru Poni Institute of Macromolecular Chemistry of Iași  
Prof. Christoph Herwig, Vienna University of Technology  
Prof. Horia Iovu, University Politehnica of Bucharest  
Prof. Francois Krier, University of Science and Technology of Lille 1  
Prof. Antonio Marzochella, Università Degli Studi Di Napoli Federico II (UNINA)  
Prof. Alice Mija, University of Nice-Sophia Antipolis  
Dr. Marcela Mihai, Petru Poni Institute of Macromolecular Chemistry of Iași  
Prof. Shin'ichi Nakatsuji, University of Hyogo  
Prof. Francesc Castells Piqué, University Rovira i Virgili  
Prof. Valentin Popa, “Gheorghe Asachi” Technical University of Iași  
Prof. Aurel Pui, “A.I. Cuza” University of Iași  
Prof. Licinio Rocha, Saclay Nuclear Research Centre  
Prof. Fernando Rocha, University of Porto, Portugal  
Prof. Wilhelm Schabel, Karlsruhe Institute of Technology  
Acad. Bogdan Simionescu, Vice President of Romanian Academy  
Dr. Iuliana Spiridon, Petru Poni Institute of Macromolecular Chemistry of Iași  
Prof. Alexandru Szep, “Sapientia” University Cluj-Napoca  
Prof. Nicolae Szita, University College London  
Prof. Carmen Teodosiu, “Gheorghe Asachi” Technical University of Iași  
Prof. Nicolae Vaszilcsin, University Politehnica of Timișoara

## About "GHEORGHE ASACHI" TECHNICAL UNIVERSITY

"Gheorghe Asachi" Technical University of Iași (TUIAȘI) is a prestigious Romanian university, classified as a *university for advanced research and education*, according to the Ministry of Education Order (MEN no. 117/2015) being a relevant component of the research and development system of national interest. TUIAȘI develops programs for undergraduate, master, doctoral, postdoctoral studies and scientific research in 14 research areas, out of which 10 areas were classified in the category A, according to Law 1/2011 and HG 789/2011. The doctoral activity is organized within 13 doctoral fields developed according to national and international research priority areas, with over 700 PhD students co-ordinated by 125 doctoral supervisors.

TUIAȘI participated in last years as coordinator or partner in several structural funded programs such as 38 POSDRU projects (doctoral, post-doctoral, improvement of B.Sc. or M.Sc. curricula, etc), 5 POSCCE projects and one POR project.

TUIAȘI has an important research dimension, with 23 accredited research/excellence centres and laboratories focused on creating and transferring knowledge in multi-disciplinary high-tech engineering areas. These centres/laboratories activate within national & international research grants or contracts with industry and governmental organizations generate scientific findings and achievements that acknowledge TUIAȘI in the European scientific area.

Dissemination of research is support by the TUIAȘI international journals: **Environmental Engineering and Management Journal**, **Cellulose Chemistry and Technology** (ISI journals) and **Bulletin of the Polytechnic Institute of Iași** (a BDI publication with 10 specialized sections).

In addition, TUIAȘI provides human resources, infrastructure, library and databases, administrative support, as well as consultancy for adequately implementation of scientific research and development projects.

*Dear Guests,*

*Welcome to the 6<sup>th</sup> International Conference on Chemical Engineering: Innovative Materials and Processes for a Sustainable Development, organized by our faculty with the support of “Gheorghe Asachi” Technical University of Iași!*

*The conference provides an excellent possibility to reach research experts from both academia and industry. Guided by the traditions of previous ICCEs, this year event will bring together leading chemical and environmental engineers, chemists, biotechnologists and other associated professionals from different countries to discuss and share the up-to-date challenges involved in the dynamic and fast-moving fields of materials, processes, bio-industries, eco-design and sustainability research.*

*Thank you for join us these days dedicated to Chemical Engineering.*

**Teodor Măluțan,**

Dean,  
“Cristofor Simionescu” Faculty of Chemical Engineering  
and Environmental Protection

## **GENERAL PROGRAM**

### **Wednesday, 5.10.2022**

**9.00 – 10.30 ON-LINE Registration**

**11.00 – 11.10 Opening Ceremony**

**11.10 – 12.10 Plenary Conferences**

**13.00 – 15.30 Presentations Section 1**

**Advanced Materials, Manufacturing and Processes**

**13.00 – 15.30 Presentations Section 3**

**Environment and Sustainability**

### **Thursday, 6.10.2022**

**11.00 – 11.40 Plenary Conference**

**11.45 – 14.30 Presentations Section 2**

**Biotechnology and Bio-industries**

**11.45 – 14.30 Presentations Section 1**

**Advanced Materials, Manufacturing and Processes**

### **Friday 7.10.2022**

**11.00 – 11.40 Plenary Conference**

**11.45 – 14.30 Presentations Section 3:**

**Environment and Sustainability**

## ORGANIZING COMMITTEE

Prof. Teodor Mălușan Co-Chair of the conference  
Prof. Irina Volf Co-Chair of the conference  
Prof. Nicolae Hurduc  
Prof. Silvia Curteanu  
Prof. Carmen Teodosiu  
Assoc. Prof. Corina Cernătescu

### *Conference secretariat:*

Assoc. Prof. Alexandra Cristina Blaga, [acblaga@tulasi.ro](mailto:acblaga@tulasi.ro)  
Lect. Gabriela Antoaneta Apostolescu (Section 1: [ganto@tulasi.ro](mailto:ganto@tulasi.ro))  
Lect. Lenuța Kloetzer (Section 2: [lkloetzer@ch.tulasi.ro](mailto:lkloetzer@ch.tulasi.ro))  
Lect. Camelia Bețianu (Section 3: [betianuc@tulasi.ro](mailto:betianuc@tulasi.ro))  
Web-site design and administration  
Assoc. Prof. Nicolae Apostolescu, [napostol@tulasi.ro](mailto:napostol@tulasi.ro)  
IT and technical support  
Lect. Elena Niculina Dragoi, [elena.dragoi@tulasi.ro](mailto:elena.dragoi@tulasi.ro)

## Scientific and general information:

### Address and Conference Venue

All ICCE 06 sessions will be using as online platform – Google Meet (join in meetings directly from the email invitation received before the Conference, or directly from the Conference web-site).

### Registration

The ICCE 06 registration will take place on Wednesday, 5<sup>th</sup> October between 9:00 to 10:30 via on line.

### Presentations

Selected papers will be presented (maximum 5 slides or flash presentation using the template provided on conference website). Time allocation for presentations is 5 minutes (and 2 minutes for Q&A).

Authors are invited to send their flash presentations by email to the secretary of each session until 3<sup>rd</sup> October.

Posters will be displayed during full time on the Conference web page (the template is available on web site). Abstracts are published in the Conference Book of Abstracts.

Information concerning the program and other details are available on website:

<http://www.cercetare.icpm.tulasi.ro/conferinte/ICCE2022/>

## Conference Program

Wednesday, 05 October 2022, [meet.google.com/rez-somu-jyv](https://meet.google.com/rez-somu-jyv)

11<sup>00</sup> – 11<sup>10</sup>      **Opening Ceremony**

**Welcome from the organizers**

**Prof. Dan Cașcaval**, Rector of “Gheorghe Asachi” Technical University of Iași

**Prof. Bogdan Cr. Simionescu**, Romanian Academy

### Plenary Session

[meet.google.com/rez-somu-jyv](https://meet.google.com/rez-somu-jyv)

Chairpersons:

**Dr. Alexandra Blaga**, “Gheorghe Asachi” Technical University of Iași

11<sup>10</sup> – 11<sup>50</sup> Plenary Conference: **Dr. Carol Sze Ki Lin**

**City University of Hong Kong**

**Technological advancement and development of circular waste-based biorefinery for sustainable production of chemicals, materials and fuels**

**Prof. Nicolae Hurdac**, “Gheorghe Asachi” Technical University of Iași

11<sup>50</sup> – 12<sup>20</sup> Plenary Conference: **Dr. Benoît Cagnon**

**University of Orleans**

**Elaboration methods and porous properties of carbonaceous materials from biomass as a function of their hemicellulose, cellulose and lignin composition**

**13<sup>00</sup> – 15<sup>30</sup> Presentations on Advanced materials, manufacturing and processes (Section 1),**

[meet.google.com/bgw-upmc-cvt](https://meet.google.com/bgw-upmc-cvt)

Chairpersons:

**Prof. Ioan Mămăligă**, "Gheorghe Asachi" Technical University of Iași,

**Prof. Maria Harja**, "Gheorghe Asachi" Technical University of Iași,

**Dr. Gabriela Apostolescu**, "Gheorghe Asachi" Technical University of Iași

**S1-P01. Microstructure of as-prepared and dried hydrogels made from waste paper, flax and hardwood pulp**

A. M. Mikhailidi<sup>1</sup>, N. E. Kotelnikova<sup>2</sup>

<sup>1</sup>St. Petersburg State University of Industrial Technologies and Design, St. Petersburg, Russia

<sup>2</sup>Institute of Macromolecular Compounds - Russian Academy of Sciences, St. Petersburg, Russia

**S1-P02. Applicability of anthraquinone reactive dyes for paper dyeing**

D. A. Todorova, P. M. Miladinova

University of Chemical Technology and Metallurgy, Faculty of Chemical Technologies, Sofia, Bulgaria

**S1-P03. About the fabrication procedures of layered double hydroxides nanoarchitectonics**

A. L. Gavrilă<sup>1</sup>, A. R. Abraham<sup>2</sup>, G. Carja<sup>1</sup>

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iași, Romania

<sup>2</sup>Mahatma Gandhi University, Kottayam, India

**S1-P04. Modified screen-printed electrodes graphene-based for accurate pesticide residues detection**

G. Hristea, D. Oveză, M. Lungulescu, V. Marinescu

National Institute for R&D in Electrical Engineering, Bucharest, Romania



**S1-P05. Hybrid plasmonic nanostructures of Au/Ag nanoparticles and layered double hydroxides: characterization and the inhibition effect against *Staphylococcus aureus* and *Escherichia coli***

Th. Bahnariu<sup>1</sup>, D. Cojocaru<sup>2</sup>, S. Dunca<sup>2</sup>, G. Carja<sup>1</sup>

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

<sup>2</sup>"Al. I. Cuza" University of Iași, Faculty of Biology, Romania

**S1-P06. Modelling and simulation of a continuous glycerol acetylation process**

A. Maisler, R. György, I. Banu

University Politehnica of Bucharest, Bucharest, Romania

**S1-P07. Evaluating the impact of the diamine structure on the performance of some azo-polyimide-based flexible supports for microelectronic applications**

I. Stoica, I. Sava, I. Butnaru, R. M. Albu, A. I. Barzic, C. Ursu, M. Asandulesa

"Petru Poni" Institute of Macromolecular Chemistry, Iași, Romania

**S1-P08. Research on the use of lignin in the production of solid biofuels**

C. A. Dumitriu (Farcași)<sup>1</sup>, T. Malutan<sup>1</sup>, B. Istrate<sup>2</sup>, F. Ciolacu<sup>1</sup>

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

<sup>2</sup>"Gheorghe Asachi" Technical University of Iași, Faculty of Mechanical Engineering, Iași, Romania

**S1-P09. The influence of environmental factors on the performance of wood coating systems**

A. Mihailă<sup>1</sup>, A-M. Ipate<sup>2</sup>, M.-F. Zaltariov<sup>2</sup>, D. Rusu<sup>2</sup>, R. Constantinel<sup>1</sup>, G. Lisa<sup>1</sup>

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iași, Romania

<sup>2</sup>Petru Poni Institute of Macromolecular Chemistry, Romania

**S1-P10. Textile wastewater color improvement on a spinning disc reactor**

E. T. Iacob Tudose, C. Zaharia

"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

**S1-P11. Modelling of excess molar volume for binary and ternary mixtures of benzyl alcohol, n-hexanol and water**

*I. Bîrgăuanu<sup>1</sup>, C. Lisa<sup>1</sup>, F. Leon<sup>2</sup>, S. Curteanu<sup>1</sup>, G. Lisa<sup>1</sup>*

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

<sup>2</sup>Gheorghe Asachi Technical University of Iași, Faculty of Automatic Control and Computer Engineering, Romania

**S1-P12. Shear deformation response and refractive index of hydroxypropyl methylcellulose at variable temperatures**

*A.I. Barzic, L.I. Buruiana, R.M. Albu, S.L. Nica, M. Soroceanu, I. Stoica*

"Petru Poni" Institute of Macromolecular Chemistry, Iași, Romania

**S1-P13. Development of a new type of amphiphilic semiconducting polymer containing aniline and aniline-propanesulfonic acid**

*M. Asandulesa, A. M. Solonaru, A. Honciuc*

"Petru Poni" Institute of Macromolecular Chemistry, Iași, Romania

**S1-P14. Behavior of biocompatible alloys in physiological environments**

*M. M. Pricopi<sup>1</sup>, R. Chelariu<sup>2</sup>, D. M. Sutiman<sup>1</sup>*

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

<sup>2</sup>"Gheorghe Asachi" Technical University of Iași, Faculty of Materials Science and Engineering, Romania

**S1-P15. Copper(II) ions sorption on calcium phosphate adsorbents**

*S. I. Buștiucel, G. Ciobanu, M. Harja*

"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

**S1-P16. Rheological and dielectric properties of eco-composites of hydroxypropyl methylcellulose loaded with a bio-derived filler**

*R.M. Albu, A.I. Barzic, I. Stoica*

"Petru Poni" Institute of Macromolecular Chemistry, Iași, Romania

**S1-P17. The structure of the soil microbial community and changes in its functionality in response to 2-chlorobiphenyl pollution**

*M. Diaconu<sup>1</sup>, C.D. Balan<sup>1</sup>, N. Marcoie<sup>2</sup>*

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

<sup>2</sup>"Gheorghe Asachi" Technical University of Iași, Faculty of Hydrotechnics, Geodesy and Environmental Engineering, Romania

**S1-P18. Investigations on the viscosity of L-alanine-based solutions for CO<sub>2</sub> absorption**

*R.E. Tataru Farmus, M. Poroch, G. A. Apostolescu, C. Cernatescu, C. Cobzaru, M.A. Vizitiu, E.N. Dragoi, N. Apostolescu*

"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

**13<sup>00</sup> – 15<sup>30</sup> Presentations on Environment and Sustainability  
(Section 3)**

[meet.google.com/afh-qigk-ucj](https://meet.google.com/afh-qigk-ucj)

Chairpersons:

**Prof. Maria Gavrilescu**, “Gheorghe Asachi” Technical University of Iași

**Dr. Brândușa Slușer**, “Gheorghe Asachi” Technical University of Iași

**Dr. Camelia Bețianu**, “Gheorghe Asachi” Technical University of Iași

**S3-P01. Application of membrane separation and adsorption for nutrient recovery from dairy waste waters**

F. L. Pantoja<sup>1</sup>, A. Fazekas<sup>1</sup>, E.J. Sisay<sup>1</sup>, S. Beszedes<sup>2</sup>, Z. László<sup>2</sup>

<sup>1</sup> University of Szeged, Doctoral School of Environmental Sciences, Hungary

<sup>2</sup> University of Szeged, Department of Process Engineering, Hungary

**S3-P02. Investigation of filtration properties of dairy wastewater**

N. Szpisják-Gulyás<sup>1,2</sup>, C. Hodúr<sup>3</sup>, E. Szőke-Trenyik<sup>2</sup>, B. P. Szabó<sup>2</sup>, S. Kertész<sup>3</sup>

<sup>1</sup>Institute of Environmental Science and Technology, University of Szeged, Hungary

<sup>2</sup>University of Szeged, Department of Food Engineering, Hungary

<sup>3</sup>University of Szeged, Department of Biosystems Engineering, Hungary

**S3-P03. Numerical modeling and logical scheme for managing the environmental impact of a large combustion plant**

L. S. Sbîrnă<sup>1</sup>, S. Sbîrnă<sup>2</sup>, C. S. Moldovan<sup>3</sup>

<sup>1</sup>University of Craiova, Faculty of Sciences, Craiova, Romania

<sup>2</sup>Ørsted, Department of Digital Transformation, Denmark

<sup>3</sup>University of Petroșani, Faculty of Mines, Petroșani, Romania

**S3-P04. Enhancing the use of rotating biological contactors for medium-size communities**

E. Gaspar, C. Sava, C. Moise, A. Maier, C.H. Barbu

Lucian Blaga University of Sibiu, Romania

**S3-P05. Sheep wool waste – environmental impact and valorisation possibilities**

B.-D. Chereji, F.-D. Munteanu

Aurel Vlaicu” University of Arad, Faculty of Food Engineering, Tourism and Environmental Protection, Romania

**S3-P06. Using Python multi-paradigm programming language in monitoring the concentration of the main toxic metals within suspended particles – case study: Craiova, May 2022**

L.S. Sbîrnă<sup>1</sup>, S. Sbîrnă<sup>2</sup>, C.S. Moldovan<sup>3</sup>

<sup>1</sup>University of Craiova, Faculty of Sciences, Romania

<sup>2</sup>Ørsted, Department of Digital Transformation, Denmark

<sup>3</sup>University of Petroșani, Faculty of Mines, Romania

**S3-P07. Response of *Medicago sativa* plant to zinc pollution and the opportunity of its use in phytoremediation**

D. M. Asimincesej<sup>1</sup>, I. C. Vasilachi<sup>1</sup>, P. Cozma<sup>1</sup>, M. Gavrilescu<sup>1,2</sup>

<sup>1</sup>“Gheorghe Asachi” Technical University of Iași, “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, Romania

<sup>2</sup>Academy of Romanian Scientists, Bucharest, Romania

**S3-P08. Comparative sustainability assessment of using inactive vs. active microbial biomass for Cd(II) ions uptake from wastewaters**

C. Filote<sup>1,2</sup>, M. Roșca<sup>1</sup>, I. M. Simion<sup>1</sup>, R. M. Hlihor<sup>1</sup>

<sup>1</sup>“Ion Ionescu de la Brad” Iași University of Life Sciences, Faculty of Horticulture, Romania

<sup>2</sup>“Gheorghe Asachi” Technical University of Iași, “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, Romania

**S3-P09. Studies on the behavior of *Amaranthus retroflexus* L. growing on agricultural soil polluted with nickel ions**

M. David<sup>1</sup>, M. Minuț<sup>1</sup>, P. Cozma<sup>1</sup>, M. Roșca<sup>2</sup>, I.-C. Vasilachi<sup>1</sup>, M. Diaconu<sup>1</sup>, M. Gavrilescu<sup>1,3</sup>

<sup>1</sup>“Gheorghe Asachi” Technical University of Iași, “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, Romania

<sup>2</sup>“Ion Ionescu de la Brad” University of Agricultural Sciences and Veterinary Medicine of Iași, Faculty of Horticulture, Romania

<sup>3</sup>Academy of Romanian Scientists, Bucharest, Romania

**S3-P10. Heavy metals toxicity on the development of *Sinapis alba* (white mustard): preliminary studies for establishing its phytoremediation potential**

G.-M. Fînaru Chelaru<sup>1</sup>, P. Cozma<sup>1</sup>, M. Minuț<sup>1</sup>, I.-C. Vasilachi<sup>1</sup>, M. Paiu<sup>1</sup>, M. Roșca<sup>2</sup>, R.-M. Hlihoi<sup>2</sup>, M. Gavrilescu<sup>1,3</sup>

<sup>1</sup>“Gheorghe Asachi” Technical University of Iași, “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, Romania

<sup>2</sup>“Ion Ionescu de la Brad” University of Agricultural Sciences and Veterinary Medicine of Iași, Faculty of Horticulture, Romania

<sup>3</sup>Academy of Romanian Scientists, Bucharest, Romania

**S3-P11. A study of the use of alfalfa (*Medicago sativa* L.) for the phytoremediation of soil polluted with copper**

I.-C. Vasilachi<sup>1</sup>, M. Paiu<sup>1</sup>, C. Betianu<sup>1</sup>, M. Diaconu<sup>1</sup>, M. Gavrilescu<sup>1,2</sup>

<sup>1</sup>“Gheorghe Asachi” Technical University of Iași, Faculty of Chemical Engineering and Environmental Protection “Cristofor Simionescu”, Romania

<sup>2</sup>Academy of Romanian Scientists, Bucharest, Romania

**S3-P12. Measurement of key compositional parameters in three type of biomass wastes in order to define the appropriate feedstock for thermochemical conversion**

G. E. Armanu, B. Tofanica, I. Volf

“Gheorghe Asachi” Technical University of Iași, Faculty of Chemical Engineering and Environmental Protection, Romania

**S3-P13. Preliminary study on the effect of cobalt and nickel ions on the growth and development of *Brassica napus* (rapeseed)**

M. Paiu<sup>1</sup>, P. Cozma<sup>1</sup>, I. C. Vasilachi<sup>1</sup>, M. Minuț<sup>1</sup>, M. Diaconu<sup>1</sup>, M. Gavrilescu<sup>1,2</sup>

<sup>1</sup>“Gheorghe Asachi” Technical University of Iași, Faculty of Chemical Engineering and Environmental Protection “Cristofor Simionescu”, Romania

<sup>2</sup>Academy of Romanian Scientists, Bucharest, Romania

**S3-P14. Food waste management: evaluation of the environmental, economic and social performances of some recovery alternatives**

E. D. Coșbuc<sup>1</sup>, E.-D. Ungureanu-Comăniță<sup>1</sup>, M. Gavrilescu<sup>1,2</sup>

<sup>1</sup>“Gheorghe Asachi” Technical University of Iași, Faculty of Chemical Engineering and Environmental Protection “Cristofor Simionescu”, Romania, Romania

<sup>2</sup>Academy of Romanian Scientists, Bucharest, Romania

**S3-P15. The assessment of Pesticide Contamination Index of soil**

C. Betianu<sup>1</sup>, I.C. Vasilache<sup>1</sup>, M. Minuț<sup>1</sup>, M. Gavrilescu<sup>1,2</sup>

<sup>1</sup>„Gheorghe Asachi” Technical University of Iași, Faculty of Chemical Engineering and Environmental Protection “Cristofor Simionescu”, Romania

<sup>2</sup>Academy of Romanian Scientists, Bucharest, Romania

**S3-P16. Application of hydrogel based on tricarboxi-cellulose in vinyl alcohol matrix for Methylene Blue dye removal from aqueous solutions**

I. Nica<sup>1</sup>, C. Zaharia<sup>1</sup>, R. Cimpoesu<sup>2</sup>, R.E. Tataru-Farmus<sup>1</sup>, A.M. Tanasă<sup>1</sup>, D. Suteu<sup>1</sup>

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

<sup>2</sup>"Gheorghe Asachi" Technical University of Iași, Faculty of Materials Science, Romania

**S3-P17. Application of two residual biomass types as biosorbent for removal of textile dyes and heavy metals from aqueous effluents**

C. L. Ortovan, C. Zaharia

"Gheorghe Asachi" Technical University of Iași, Faculty of Chemical Engineering and Environmental Protection "Cristofor Simionescu", Romania

**S3-P18. Investigation on *Spirulina platensis* development under heavy metal ions exposure**

M. Diaconu, I. Volf, I. Cretescu, G. Soreanu

"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

**Thursday, 06 October 2022**

Chairperson:

**Dr. Alexandra Blaga**, *“Gheorghe Asachi” Technical University of Iași*

**11<sup>00</sup> - 11<sup>40</sup>** Plenary Conference: **Prof. Chenyu Du**

**University of Nottingham**

**The development of biorefining strategy for the production of  
biofuel and biopolymers from marine based resources**

[meet.google.com/rez-somu-jyv](https://meet.google.com/rez-somu-jyv)

**11<sup>45</sup> - 14<sup>30</sup>** **Presentations on Biotechnology and Bio-  
industries (Section 2)**, [meet.google.com/rqt-jbcq-rxw](https://meet.google.com/rqt-jbcq-rxw)

**Dr. Adrian Ungureanu**, *“Gheorghe Asachi” Technical University of Iași*

**Dr. Lenuta Kloetzer**, *“Gheorghe Asachi” Technical University of Iași*

**Dr. Alexandra Tucaliuc**, *“Gheorghe Asachi” Technical University of Iași*

**S2-P01. Sustainable algae processing by real-time analysis of its  
products**

*J. E. Hernandez*

Canterbury Christ Church University, Bioinspired Engineering Research  
Group (BIERG), Canterbury, UK

**S2-P02. Towards a green, flexible and sustainable continuous  
manufacturing of pharmaceuticals**

*D. Copot*

Ghent University, Research Group on Dynamical Systems and Control,  
Ghent, Belgium

**S2-P03. Preparation by electrospinning and characterization of  
different food-grade microstructures containing polyphenols and  
vitamins**

*B. N. Estevinho, A. F. Couto, F. Rocha*

LEPABE, Departamento de Engenharia Química, Faculdade de Engenharia  
da Universidade do Porto, Portugal



**S2-P04. Characterization of essential oils and aromatic compounds with possibility of use in food production**

*O. Tița, T. Opruța, W.C.N. Sas, A. Constantinescu*

„Lucian Blaga” University of Sibiu, Romania

**S2-P05. Development and characterization of fortified cultured buttermilk with vegetable ingredients**

*O. Tița, M. Moga, M. Tița A. Constantinescu*

„Lucian Blaga” University of Sibiu, Romania

**S2-P06. Studies on the possibility of using by-products from the wine industry and their introduction into the manufacturing process of food and pharmaceutical products using technologies environmentally friendly**

*O. Tița, V. Codoi, T. Opruța, W.C.N. Sas A. Constantinescu*

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**S2-P07. *Saccharomyces pastorianus* residual biomass/calcium alginate system acts as an efficient biosorbent to remove pharmaceuticals from aqueous matrices in different operational conditions**

*L. Rusu<sup>1</sup>, C.-G. Grigoraș<sup>1</sup>, E.-M. Suceveanu<sup>1</sup>, A.-I. Simion<sup>1</sup>, L. Favier<sup>2</sup>*

<sup>1</sup>“Vasile Alecsandri” University of Bacau, Faculty of Engineering, Romania

<sup>2</sup>Ecole Nationale Supérieure de Chimie de Rennes, France

**S2-P08. Pyridazinic bioisosters with potential uses in medicinal chemistry**

*R. A. Tucaliuc<sup>1</sup>, I. Mangalagiu<sup>2</sup>*

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<sup>2</sup>“Al. I. Cuza” University of Iași, Faculty of Chemistry, Romania

**S2-P9. Changes of synovial fluid rheological parameters in knee joint degenerative disease**

*I. Onu<sup>1</sup>, A. Tucaliuc<sup>2</sup>, M. Postaru<sup>1</sup>, D. Cascava<sup>2</sup>, A. I. Galaction<sup>1</sup>*

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<sup>2</sup>“Gheorghe Asachi” Technical University of Iași, “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, Romania

**S2-P10. ZnMgY experimental alloy: Case of study for possible medical applications**

*C. Panaghie, N. Cimpoesu*

"Gheorghe Asachi" Technical University of Iași, Faculty of Materials Science and Engineering, Romania

**S2-P11. Fe-Mn-based alloys investigated as possible biodegradable materials**

*A.-M. Roman, N. Cimpoesu*

"Gheorghe Asachi" Technical University of Iași, Faculty of Materials Science and Engineering, Romania

**S2-P12. Modelling the survival rate of *Leptinotarsa decemlineata* Say pests by the use of spontaneous flora extracts**

*G. M. Daraban<sup>1</sup>, M. Badeanu<sup>2</sup>, D. Suteu<sup>1</sup>*

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Iași, Romania  
<sup>2</sup>"Ion Ionescu de la Brad" Iași University of Life Sciences, Faculty of Horticulture, Romania

**S2-P13. Microencapsulated residual *Saccharomyces pastorianus* as biosorbent for dye retention**

*A. M. Tanasă, A.C. Blaga, C. Zaharia, D. Suteu*

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**S2-P14. Cosmetic formulations for combating cutaneous oxidative stress based on plant bioresources**

*A. S. Barna<sup>1</sup>, C. Maxim<sup>1</sup>, A. Blaga<sup>1</sup>, D. Turcov<sup>1</sup>, A. Trifan<sup>2</sup>, D. Șuteu<sup>1</sup>*

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<sup>2</sup>"Grigore T. Popa" University of Medicine and Pharmacy, Faculty of Pharmacy, Romania

**S2-P15. Lignocellulosic crop residues – characterization as raw materials for bio-based production chain**

*A. C. Puițel, G. D. Suditu, M. Danu, M.T. Nechita, Cătălin Dumitrel Balan*

"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

**S2-P16. The potential of *Acmella oleracea* in dermato-cosmetic products**

*D. Turcov*<sup>1</sup>, *A.S. Barna*<sup>1</sup>, *A. Zbranca*<sup>2</sup>, *D. Suteu*<sup>1</sup>

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<sup>2</sup>"Grigore T. Popa" University of Medicine and Pharmacy, Faculty of Medical Bioengineering, Iasi, 700115 Iasi, Romania

**S2-P17. Studies on itaconic acid separation from fermentation broth**

*A. Tucaliuc*<sup>1</sup>, *A.C. Blaga*<sup>1</sup>, *D. Cascaval*<sup>1</sup>, *A. I. Galaction*<sup>2</sup>

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<sup>2</sup>"Grigore T. Popa" University of Medicine and Pharmacy, Faculty of Medical Bioengineering, Romania

**S2-P18. Separation of cinamic and p-metoxicinamic acids by synergic extraction**

*L. Kloetzer*<sup>1</sup>, *M. Postaru*<sup>2</sup>, *A. I. Galaction*<sup>2</sup>, *D. Cascaval*<sup>1</sup>

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**S2-P19. The influence of stress response in anaerobic fermentation processes of *Saccharomyces cerevisiae***

*M. Postaru*<sup>1</sup>, *A. Tucaliuc*<sup>2</sup>, *A.C. Blaga*<sup>2</sup>, *L. Kloetzer*<sup>2</sup>, *D. Cascava*<sup>2</sup>, *A. I. Galaction*<sup>1</sup>

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**S2-P20. Separation of biosynthetic products by pertraction using ionic liquids**

*A.C. Blaga*, *L. Kloetzer*, *A. Tucaliuc*

"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, România

11<sup>45</sup> – 14<sup>30</sup> Presentations on *Advanced materials, manufacturing and processes (Section 1)*,  
[meet.google.com/bgw-upmc-cvt](https://meet.google.com/bgw-upmc-cvt)

Chairpersons:

**Dr. Eugenia Tudose**, “Gheorghe Asachi” Technical University of Iași

**Dr. Florin Ciolacu**, “Gheorghe Asachi” Technical University of Iași

**Dr. Gabriela Apostolescu**, “Gheorghe Asachi” Technical University of Iași

**S1-P19. Producing nanofibrillated cellulose-based oleogels for sustainable and ecofriendly lubrication**

*C. Roman, M. Á. Delgado, S. D. Fernández-Silva, M. García-Morales*

Universidad de Huelva, Escuela Técnica Superior de Ingeniería, Huelva, Spain

**S1-P20. Copolyimides based on aromatic-aliphatic moieties as materials for energy-storage applications**

*I. Butnaru, A. P. Chiriac, M. D. Damaceanu*

“Petru Poni” Institute of Macromolecular Chemistry, Iași, Romania

**S1-P21. Hybrid plasmonic using layered double hydroxides matrices for activating solar-active photocatalysis**

*Th. Bahnariu<sup>1</sup>, R. Benhit<sup>2</sup>, M. Chiban<sup>2</sup>, S. Fouad<sup>2</sup>, G. Carja<sup>1</sup>*

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<sup>2</sup>Ibn Zohr University, Faculty of Sciences, Agadir, Morocco

**S1-P22. Polymer composite electrolytes for high-performance lithium batteries**

*C. Iacob, R. Andrei, E. Carcadea*

National Research and Development Institute for Cryogenic and Isotopic Technologies, ICSI Rm. Vâlcea, Romania

**S1-P23. Enhancement of hydrophobicity of xylan hemicellulose by chemical modification with alkyl ketene dimer**

*P. Nechita<sup>1</sup>, M. Roman<sup>2</sup>, A. V. Botezatu (Dediu)<sup>3</sup>*

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<sup>3</sup>“Dunărea de Jos” University of Galați, Faculty of Sciences and Environment, Romania

**S1-P24. New ferroelectric materials with fluoro-substituted bent shape molecules**

I. Berladean<sup>1,2</sup>, I. Cârtescu<sup>1</sup>, N. Hurduc<sup>1</sup>, Y. Boussoualem<sup>2</sup>, A. Daoud<sup>2</sup>

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<sup>2</sup> Université du Littoral Côte d'Opale, Unité de Dynamique et Structure des Matériaux Moléculaires, Dunkerque, France

**S1-P25. Unique physicochemical properties of gold nanoparticles/layered double hydroxides heterostructures facilitating the controlled release of nanogold**

D. Gilea<sup>1,2</sup>, P. Coof<sup>2</sup>, G. Carja<sup>1</sup>

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<sup>2</sup>University of Antwerpen, Department of Chemistry, Antwerpen, Belgium

**S1-P26. Preparation and characterization of alginate/LDH nanocomposite and investigation of its adsorption performance for phosphate ions**

I. S. Nouaa<sup>1</sup>, R. Benhiti<sup>1</sup>, G. Carja<sup>2</sup>, M. Chiban<sup>1</sup>

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<sup>2</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

**S1-P27. Cyto- and hemocompatible nanoparticles based chitosan grafted poly(ethylene glycol) methyl ether acrylate as a novel drug delivery system**

C.-L. Logiqan<sup>1</sup>, C. Delaite<sup>2</sup>, C.-E. Tiron<sup>3</sup>, C. Peptu<sup>4</sup>, M. Popa<sup>1,5,6</sup>, C. A. Peptu<sup>1</sup>

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<sup>3</sup>Regional Institute of Oncology, Iași, Romania

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<sup>5</sup>"Apollonia" University of Iași, Faculty of Medical Dentistry, Romania

<sup>6</sup>Academy of Romanian Scientists, Bucharest, Romania

**S1-P28. Comparison between oxygen and steam gasification agents for liquid waste valorization process**

M. O. Agavriloaie<sup>1</sup>, I. Cucos<sup>2</sup>, M. Harja<sup>1</sup>

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<sup>2</sup>"Gheorghe Asachi" Technical University of Iași, Faculty of Hydrotechnics, Geodesy & Environmental Engineering, Romania

**S1-P29. Removal of tetracycline from waste water using zinc-based photocatalytic materials**

G. A. Apostolescu<sup>1</sup>, M. A. Vizitiu<sup>1</sup>, C. Cernatescu<sup>1</sup>, R. E. Tataru Farmus<sup>1</sup>, A. M. Luca<sup>2</sup>, C. Cobzaru<sup>1</sup>, N. Apostolescu<sup>1</sup>

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<sup>2</sup>"Grigore T. Popa" University of Medicine and Pharmacy of Iași, Romania

**S1-P30. Synthesis and photodegradation activities of mixed oxides under UV-A irradiation for water treatment applications**

*A. M. Sescu<sup>1</sup>, L. Favier<sup>2</sup>, D. Lutic<sup>3</sup>, A. Enachi<sup>1</sup>, M. Harja<sup>1</sup>*

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<sup>3</sup>"Alexandru Ioan Cuza" University of Iași, Faculty of Chemistry, Romania

**S1-P31. Advanced recovery of valuable metals from e-Waste**

*Ș. L. Martiņaș - Ioniță, G. Ciobanu, G. A. Apostolescu, M. Harja*

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

**S1-P32. Synthesis of magnesium hydroxide adsorbent for Congo Red dye adsorption**

*L.M. Trifas<sup>1</sup>, L. Favier<sup>2</sup>, D. Sibiescu<sup>1</sup>, G. Ciobanu<sup>1</sup>, M. Harja<sup>1</sup>*

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<sup>2</sup>University Rennes, Ecole Nationale Supérieure de Chimie de Rennes, France

**S1-P33. Gas separation membranes obtained from hexafluoroisopropylidene-containing polyimide blends**

*M. D. Damaceanu<sup>1</sup>, I. Butnaru<sup>1</sup>, C. P. Constantin<sup>1</sup>, A. Wolińska-Grabczyk<sup>2</sup>*

<sup>1</sup>"Petru Poni" Institute of Macromolecular Chemistry, Iași, Romania

<sup>2</sup>Polish Academy of Sciences, Centre of Polymer and Carbon Materials, Zabrze, Poland

**S1-P34. Sorption capacity of silicone-based membranes with functionalized silsesquioxanes. Characterization and perspectives for environmental applications**

*A. Bargan, G. Stiubianu, M. Dascalu, A.M. Macsim, A. Bele, A. Soroceanu*

"Petru Poni" Institute of Macromolecular Chemistry, Romania

**S1-P35. The tires waste used as alternative fuel in Portland cement plants**

*L. Vasiliu<sup>1</sup>, O. Gencep, M. Harja<sup>1</sup>*

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

<sup>2</sup>Bartın University, Faculty of Engineering, Bartın, Turkey

**S1-P36. The quality of materials obtained by the waste glass capitalization**

*M. Fanache (Vasiliu), L. Lazar, M. Harja*

<sup>1</sup>"Gheorghe Asachi" Technical University of Iași, "Cristofor Simionescu" Faculty of Chemical Engineering and Environmental Protection, Romania

**S1-P37. The characterization of wastes used for obtaining geopolymeric materials**

*M. Caftanachi<sup>1</sup>, A.I. Cotofan<sup>1</sup>, M. Vrabie<sup>1</sup>, M. Harja<sup>2</sup>*

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Friday, 07 October 2022

Chairperson:

**Prof. Carmen Teodosiu**, “Gheorghe Asachi” Technical University of Iași

11<sup>00</sup> - 11<sup>40</sup> Plenary Conference: **Dr. Sabino De Gisi**

**Bari Polytechnic**

**New insights into the management of cellulosic-based bio-plastics in the Municipal Solid Waste industrial cycle**

[meet.google.com/rez-somu-iyv](https://meet.google.com/rez-somu-iyv)

11<sup>45</sup> – 13<sup>00</sup> Presentations on *Environment and Sustainability (Section 3)*, [meet.google.com/wfv-fsdb-ggz](https://meet.google.com/wfv-fsdb-ggz)

Chairpersons:

**Dr. George Bîrjoveanu**, “Gheorghe Asachi” Technical University of Iași

**Dr. Daniela Gavrilescu**, “Gheorghe Asachi” Technical University of Iași

**Dr. Daniela Fighir**, “Gheorghe Asachi” Technical University of Iași

**S3-P19. Adsorption of methylene blue (MB) and basic red 9 (BR9) in binary solutions using rice husk: factorial design analysis**

*H. Sukmana*<sup>1</sup>, *C. Hodur*<sup>2</sup>

<sup>1</sup> University of Szeged, Doctoral School of Environmental Science, Hungary

<sup>2</sup> University of Szeged, Department of Biosystems Engineering, Hungary

**S3-P20. Chitosan and thiourea-chitosan ultra-lightweight macroporous hydrogels as efficient sorbents for removal of Ag(I) and Pb(II) ions**

*I.-V. Platon*<sup>1</sup>, *C.-A. Ghiorghita*<sup>1</sup>, *M. M. Lazar*<sup>1</sup>, *D. Humelnicu*<sup>2</sup>, *M. V. Dinu*<sup>1</sup>

<sup>1</sup>”Petru Poni” Institute of Macromolecular Chemistry, Iași, Romania

<sup>2</sup> Alexandru Ioan Cuza University of Iași, Faculty of Chemistry, Romania

**S3-P21. Identification and examination of phenol biodegradation pathways of *Acinetobacter towneri* isolated from landfill leachate Cekend, Harghita country**

*E. Csató-Kovács*, *K. Nagy*<sup>1</sup>, *D. R. Fikó*<sup>1,2</sup>, *I. Máthé*<sup>1</sup>

<sup>1</sup>Sapientia Hungarian University of Transylvania, Miercurea Ciuc, Romania

<sup>2</sup>University POLITEHNICA of Bucharest, Bucharest, Romania



**S3-P22. Chitosan-based cryogels for heavy metals removal from wastewater**

*M. M. Lazăr<sup>1</sup>, C.-A. Ghiorghita<sup>1</sup>, D. Humelnicu<sup>2</sup>, M. V. Dinu<sup>1</sup>*

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<sup>2</sup>Alexandru Ioan Cuza University of Iași, Faculty of Chemistry, Iași, Romania

**S3-P23. Assessment of porosity developed during microwave heating of biomass to obtain sorbent-type carbon materials**

*G. Predeanu<sup>1</sup>, V. Slăvescu<sup>1</sup>, A.-M. Manea-Saghin<sup>1</sup>, F. Cosmulescu<sup>2</sup>, A. Fiti<sup>2</sup>, V. Harabagiu<sup>3</sup>, P. Samoilă<sup>3</sup>*

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<sup>2</sup>SC Cosfel Actual SRL Bucharest, Romania

<sup>3</sup>Institute of Macromolecular Chemistry "Petru Poni" Iași, Romania

**S3-P24. Oxidation of metal sulfides in acidic environment**

*E. C. Cârstea, P. Chiriță*

University of Craiova, Department of Chemistry, Romania

**S3-P25. The ecological footprint - a tool for the practical sustainability analysis**

*A. F. Jițăreanu, A. D. Robu, C.L. Costuleanu, M. Mihăilă*

University of Life Sciences "Ion Ionescu de la Brad", Iași, Romania

**S3-P26. Valorisation of biodegradable waste from intensive rearing of poultry for material and energy recovery: process modelling and economic analysis**

*D. Gavrilesku<sup>1</sup>, A. Talpalaru<sup>1,2</sup>, P. Apopei<sup>1</sup>, G. Bârjoveanu<sup>1</sup>, C. Teodosiu<sup>1</sup>*

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<sup>2</sup>SC Edil Industry S.A, Iași, Romania

**S3-P27. Equilibrium studies for the removal of Cd<sup>2+</sup> ions from wastewater using silica/polyelectrolyte multilayer core-shell composites**

*R. Ciobanu<sup>1</sup>, I. Morosanu<sup>1</sup>, D. Fighir<sup>1</sup>, C. Padurarui<sup>1</sup>, F. Bucatariu<sup>1,2</sup>, M. Mihai<sup>1,2</sup>, C. Teodosiu<sup>1</sup>*

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<sup>2</sup>"Petru Poni" Institute of Macromolecular Chemistry, Iași, Romania

**S3-P28. Comparative study of Cu(II) removal from aqueous media using different biomasses as biosorbents**

*L. M. Fluerau, E. Savastru, A.R. Lucaci, L. Nemeş, A. A. Ciobanu, L. Bulgariu Gheorghe Asachi* Technical University of Iaşi, “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, Romania

**S3-P29. Scenario-based analysis of Iaşi County car fleet evolution and environmental performance evaluation**

*F. Dinita (Suhani), G. Barjoveanu, C. Teodosiu* “Gheorghe Asachi” Technical University of Iaşi, “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, Romania

**S3-P30. Preliminary evaluation of the efficiency of a brewery wastewater treatment plant**

*M. N. Capra, D. Fighir, C. Teodosiu* “Gheorghe Asachi” Technical University of Iaşi, “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, Romania

**S3-P31. Functionalization of PET waste and possible applications in the removal of Pb(II) ions from aqueous media**

*C.S. Ciobanu<sup>1</sup>, B. Azanfire<sup>1</sup>, D. Bulgariu<sup>2,3</sup>, R. Copae<sup>1</sup>, V. Livint<sup>1</sup>, L. Bulgariu<sup>1</sup>*  
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<sup>2</sup>Al.I. Cuza University of Iaşi, Faculty of Geography and Geology, Romania  
<sup>3</sup>Romanian Academy, Filial of Iaşi, Romania

**S3-P32. Coagulation-flocculation efficiency to remove manganese and natural organic matter for drinking water treatment**

*C.-P. Musteret<sup>1</sup>, I. Morosanu<sup>1</sup>, O. Plavan<sup>1</sup>, A. Gherghel<sup>1</sup>, I. Roman<sup>1,2</sup>, C. Teodosiu<sup>1</sup>*  
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<sup>2</sup>SC Apavital SA Iaşi, Romania

**S3-P33. Sustainability of packaging waste management in Romania: trends and impact**

*B.C. Seto<sup>1,2</sup>, D. Gavrilescu<sup>1</sup>, C. Teodosiu<sup>1</sup>*  
<sup>1</sup>“Gheorghe Asachi” Technical University of Iaşi, “Cristofor Simionescu” Faculty of Chemical Engineering and Environmental Protection, Romania  
<sup>2</sup>GreenPoint Management, Bucharest, Romania

**S3-P34. Automating watershed delineation using ArcGIS Model Builder**

*P. Stoica, A. Zaborilă, M. Telişcă, R. Giurma-Handley* “Gheorghe Asachi” Technical University of Iaşi, Faculty of Hydrotechnics, Geodesy and Environmental Engineering, Romania

**S3-P35. Evaluation of heat island effect through remote sensing methods**

*I.C. Martincu, A. Zaborilă, I.E. Todirică, P. Stoica, C.R. Giurma-Handley*  
"Gheorghe Asachi" Technical University of Iași, Faculty of Hydrotechnical Engineering, Geodesy and Environmental Engineering, Romania

**S3-P36. Inorganic priority pollutants impact and risk assessment: comparative analysis of the Siret and Prut Rivers water quality**

*B. Sluser<sup>1</sup>, R. Zait<sup>1,2</sup>, R. Neamtu<sup>1</sup>, O. Plavan<sup>1</sup>, D. Fighir<sup>1</sup>, C. Teodosiu<sup>1</sup>*  
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Faculty of Chemical Engineering and Environmental Protection, Romania  
<sup>2</sup>Siret River Water Basin Administration, Bacau, Romania

### Some key figures

- **92 Papers**
- **Participants from 11 countries**
- **50 Universities and Research and Development Institutes**



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