



# SICHEM 2025

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## CONFERENCE PROGRAMME

**06 – 07 November 2025**

**Romanian Chemical Engineering Society**

**Romanian Chemical Society**

**Academy of Technical Sciences – Chemical Engineering Section**

**National University of Science and Technology Politehnica Bucharest,  
Faculty of Chemical Engineering and Biotechnology**  
(Departments of Chemical and Biochemical Engineering and Science and  
Engineering of Oxide Materials and Nanomaterials)

## Bucharest

Bucharest is the capital and largest city of Romania. It is located in the southeast of the country, on the banks of Dâmbovița River, less than 60 km north of the Danube River and the Bulgarian Border.

Bucharest was first mentioned in documents in 1459 as one of the residences of Prince Vlad III Dracula. The city became the capital of Romania in 1862.

Its architecture is a mix of historical (mostly Eclectic, Neoclassical and Art Nouveau), interbellum (Bauhaus, Art Deco and Romanian Revival architecture), communist and modern styles. In the period between the two World Wars, the city's elegant architecture and the sophistication of its elite earned Bucharest the nickname of “Little Paris”.

The city, with an area of 240 km<sup>2</sup>, has a continental climate with four seasons and it is the center of Romania's industry, culture, art, history and finance. It has a population of 2 million that increases during the school period being the 6<sup>th</sup> largest city in the European Union by population within city limits.

Bucharest is worth visiting for its large beautiful parks and its emblematic historical monuments, *e.g.*, the statues of Mihai Viteazul and Spicu Haret (rulers/founders of the modern Romanian school in the University Square), statue of Carol I (situated in front of “Carol I” Central University Library), *Monument of Victory* (placed in Revolution Square) or *Arc of Triumph* (similar with the ones in Rome and Paris).

We recommend you to visit the *Bucharest Old City*, *National Theater*, *Museum of Art* (former *Royal Palace*), *Romanian Atheneum* or *Kretzulescu Church* (build in Romanian original Brancovenesc style) for their architectural value.

For an interesting experience related to the Romanian traditions and house styles from 14th-19th centuries, visit the *Village Museum*, an open-air ethnographic museum located in the *King Michael I Park* (formerly *Herăstrău*) with over 270 authentic farms and houses from all over Romania.



*Mihai Viteazul Monument  
(University Square)*



*Spicu Haret Monument  
(University Square)*



*National Theatre  
(University Square)*



*Kretzulescu Orthodox Church  
(45 Calea Victoriei Blvd. – next to  
the Museum of Art)*



*Museum of Art  
(49-53 Calea Victoriei Blvd. –  
close to Romanian Atheneum)*



*Arc of Triumph  
(close to King Michael I Park)*





*Romanian Atheneum*  
(1-3 Benjamin Franklin, close to  
Calea Victoriei Blvd.)



*Carol I Monument*  
(1 Boteanu Street – next to  
*Romanian Atheneum*)



*Village Museum*  
(28-30 Pavel Kiseleff Street – inside  
*King Michael I Park*)

## Venue

**National University of Science and Technology POLITEHNICA Bucharest** is the oldest and most prestigious engineer school in Romania. Its traditions are related to the establishment, in 1818, by Gheorghe Lazăr, of the first higher technical school with teaching in Romanian, at the *Saint Sava Abbey* in Bucharest.

On 1 October 1864, *The School of Bridges and Roads, Mines and Architecture* was established, which became, on 30 October 1867, *The School of Bridges, Roads and Mines*. Under the leadership of Gheorghe Duca, on 1 November 1881, the institution acquired a new structure, under the name of *The National School of Bridges and Roads*; on 10 June 1920, the *Polytechnic School of Bucharest* was founded, with four departments: Electromechanics, Civil Engineering, Mines and Metallurgy, Industrial Section.

On 3 August 1948, the *Polytechnic Institute of Bucharest* was founded, which initially included 4 faculties and in which, since 1950, have appeared most of the current faculties. Based on the resolution of the Senate of November 1992, the *Polytechnic Institute of Bucharest* became *University POLITEHNICA of Bucharest*.

Today, **POLITEHNICA Bucharest** ([www.upb.ro](http://www.upb.ro)) gathers 15 different faculties, classrooms and laboratories that are distributed in 3 distinct residences: **Polizu** (1-7 Gheorghe Polizu St., sector 1), **Noul Local** (313 Splaiul Independenței), and **Leu** (1-3 Iuliu Maniu Blvd.).

**POLITEHNICA Bucharest** runs a series of doctoral and post-doctoral programs for students from EU and non-EU countries as well as mobility programs for staff and students.



POLITEHNICA Bucharest (Rectorate)

The **International Chemical Engineering and Material Symposium - SICHEM 2025**, will take place at Central Library of POLITEHNICA Bucharest (4<sup>th</sup> Floor) located in 313 Splaiul Independenței.



Central Library of POLITEHNICA Bucharest



Central Library of POLITEHNICA Bucharest (front entrance)

Local host (contact details): [tghdobre@gmail.com](mailto:tghdobre@gmail.com)

### How to reach Bucharest

The nearest airport is **Henri Coanda Airport (Otopeni)** (<https://www.aeroportul-otopeni.info/>) which is about 13 km from Bucharest City Center, around 20 min by train, 45 min by bus, and 25 min by car.

**The train** provides a fast connection between **Henri Coandă Airport** and **Bucharest North Railway Station**. Trains run 24 h a day, every 40 min. The duration of the trip is approx. 20 min. For train schedule see [mersultrenurilor.infofer.ro](https://mersultrenurilor.infofer.ro).

**The 100 Express bus line** operates during the day (bus departs every 15 min) and at night (bus departs every 30 min), and provides a fast transport link between **the center of Bucharest** and **Henri Coandă International Airport**. Airport stops: in front of the Arrivals Terminal and Departures Terminal.

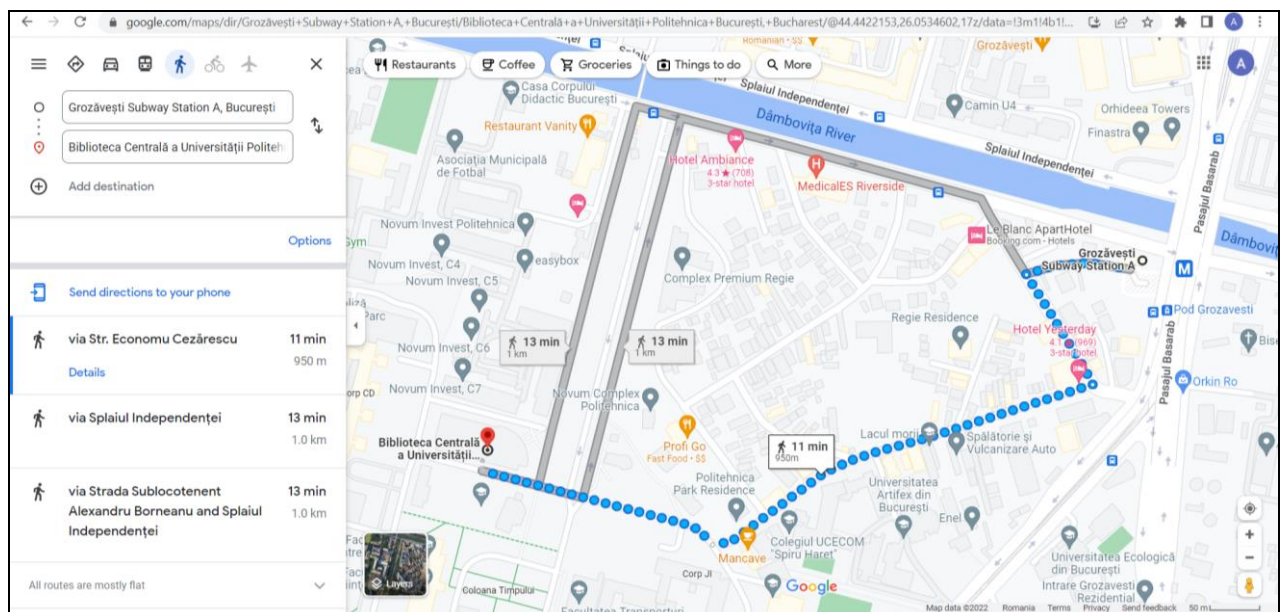
Price for a metropolitan trip of 90 min is 3 lei (0,6 euro).

Currently, there are several ways of paying for the bus: STB card, contactless credit card, text message „C” (valid for 90 min) or „AB” (valid for 24 h) at 7458, metropolitan cards, and Tourist Travel Cards.

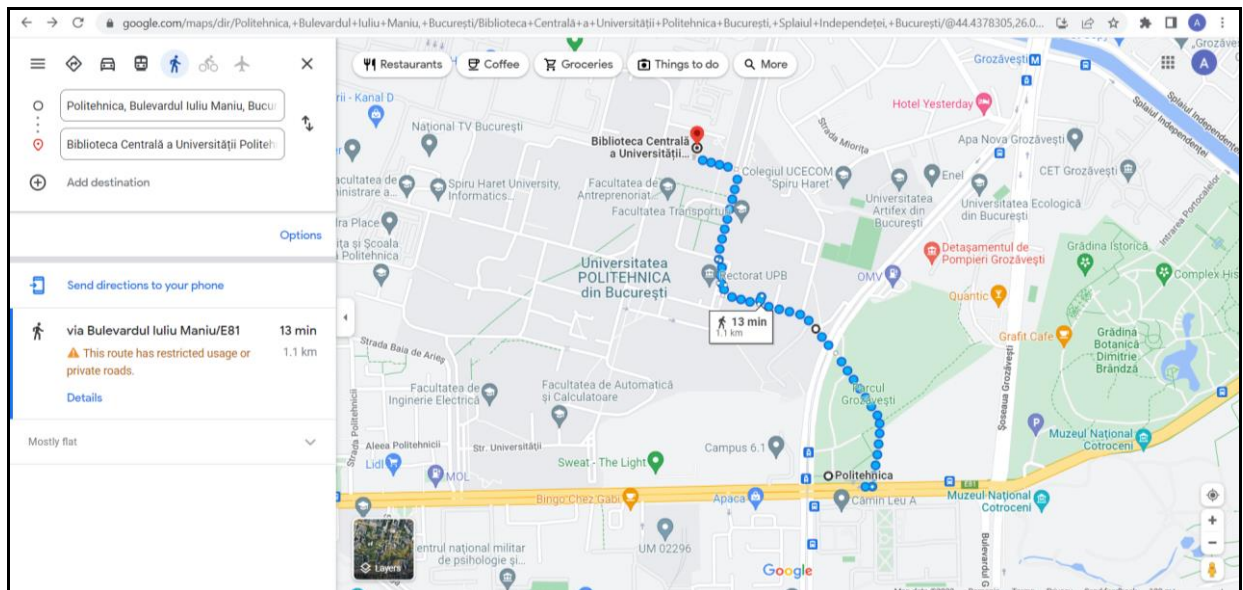


## How to reach Central Library of POLITEHNICA Bucharest

Take the **Subway** from Piața Unirii in **Dristor** direction (**M1 – yellow line**) and get off at **Grozăvești** subway station (**blue dot on the map**). You can buy the passing cards from the kiosk or automatic machines (for a round trip – aprox. 10 lei – 2 euro) or you can pay by card at the turnstile only for 1 trip (1 trip is aprox. 5 lei – 1 euro).



**Alternative way:** take the **Subway** from Piața Unirii in **Preciziei direction (M3 – red line)** and get off at **Politehnica** subway station (**red dot on the map**). Please use the indicated direction for POLITEHNICA Bucharest after you get off the Subway.



## Meals & Accommodation

### Meals & coffee breaks

Lunches, drinks, and coffee breaks will be provided by the local organizer.

### Accommodation

The conference organizer does not offer accommodation spaces, but if you prefer a close accommodation to the Venue of the Conference we suggest Hotel Yesterday (3\*\*\* - <https://yesterday.ro/>) and Hotel Pui de Urs (3\*\*\* - <https://hotel-pui-de-urs-bucharest.hotelmix.ro/>).

## SICHEM 2025

Central Library of POLITEHNICA Bucharest

### PROGRAMME OVERVIEW

| Thursday, November 6 |  |   |  |  |
|----------------------|--|---|--|--|
| 9:00–10:00           | Registration (4 <sup>th</sup> Floor)   |   |  |  |
| 10:00–10:30          | OPENING CEREMONY (4 <sup>th</sup> Floor – 4.1 Room)  |   |  |  |
| 10:30–11:30          | EXCELLENCE AWARDS (4 <sup>th</sup> Floor – 4.1 Room)   |   |  |  |
| 11:30–12:00          | Coffee break (4 <sup>th</sup> Floor)   |   |  |  |
| 12:00–13:30          | Plenary Lectures and Companies Presentations (4 <sup>th</sup> Floor – 4.1 Room)<br>Microsoft Teams/ SICHEM 2025 – General Channel  |   |  |  |
| 12:00–12:25          | Professor Ioan CĂLINESCU (POLITEHNICA Bucharest, Romania)<br><i>PROCESS INTENSIFICATION APPLIED FOR EXTRACTION OF NATURAL PRODUCTS</i>                                       |   |  |  |
| 12:25–12:50          | Professor Claudia I. MUNTEAN (Ovidius University of Constanța, Romania)<br><i>PRESSING CHALLENGES IN OIL REFINING INDUSTRY</i>   |   |  |  |
| 12:50–13:10          | Time for LUDAN ENGINEERING SRL   |   |  |  |
| 13:10–13:35          | Senior Scientist Anca Daniela RAICIU (HOFIGAL S.A.)<br><i>THE ROLE OF ARTIFICIAL INTELLIGENCE IN PHYTOTHERAPY</i>  |   |  |  |
| 13:35–14:30          | Lunch (4 <sup>th</sup> Floor)  |   |  |  |
| 14:30–15:30          | Parallel Sessions A, B, C, and D<br>Oral and Poster Presentations  |   |  |  |
|                      | Keynote Lectures and Oral Presentations  |   |  |  |
|                      | Session A<br>(4.1 Room)<br>Microsoft Teams/<br>SICHEM 2025/<br>Channel A   | Sessions B and D<br>(4.2 Room)<br>Microsoft Teams/<br>SICHEM 2025/<br>Channel B | Session C<br>(3.1 Room)<br>Microsoft Teams/<br>SICHEM 2025/<br>Channel C | Session A and B<br>(3.2 Room)<br>Microsoft Teams/<br>SICHEM 2025/<br>Channel D |
| 15:30–16:00          | Coffee break (4 <sup>th</sup> Floor)   |   |  |  |
| 16:00–17:30          | Plenary Lectures (4 <sup>th</sup> Floor – 4.1 Room)<br>Microsoft Teams/ SICHEM 2025 – General Channel  |   |  |  |
| 16:00–16:25          | Professor Tănase DOBRE (POLITEHNICA Bucharest)<br><i>PROCESS MODELLING THROUGH ANALOGIES: CUSTOMIZE FOR MODELLING OF BLOOD DIALYSIS BY ANALOGY WITH A HEAT TRANSFER CASE</i> |   |  |  |
| 16:25–16:40          | Chemical Engineer Serban CONSTANTINESCU<br><i>MODULAR NUCLEAR POWER PLANT DOICESTI PROJECT</i>   |   |  |  |
| 16:40–17:05          | Professor Christophe VIAL (Clermont Auvergne University, France)<br><i>HYDROGEN–WATER INTERFACES: RECENT INSIGHTS AND APPLICATIONS TO ENERGY CONVERSION</i>                  |   |  |  |
| 17:05–17:30          | Professor Guillaume PIERRE (Clermont Auvergne University, France) <i>IMMOBILIZED ENZYME MONOLITHIC PLATFORM FOR FUNCTIONALIZING POLY- AND OLIGOSACCHARIDES</i>               |   |  |  |
| 17:30–17:45          | Time for METROHM ANALYTICS ROMANIA SRL   |   |  |  |
| 18:00–17:00          | Poster Sessions A and B (4 <sup>th</sup> Floor)  |   |  |  |

| Friday, November 7 |  |  |  |
|--------------------|--|--|--|
| 9:00–9:30          | Registration (4 <sup>th</sup> Floor)   |  |  |
| 09:30–11:00        | Plenary Lectures and Companies Presentations (4 <sup>th</sup> Floor – 4.1 Room)<br>Microsoft Teams/ SICHEM 2025 – General Channel  |  |  |
| 9:30–9:55          | Professor Anton FICAI (POLITEHNICA Bucharest)<br><i>CURRENT AND FUTURE APPLICATIONS OF MESOPOROUS SILICA</i>   |  |  |
| 9:55–10:20         | Professor Alexandre C. DIMIAN (Technical Sciences Academy of Romania)<br><i>LINKING CATALYST DEVELOPMENT AND PROCESS DESIGN: APPLICATION TO BUTADIENE MANUFACTURING FROM ETHANOL</i> |  |  |
| 10:20–10:45        | Professor Sougata GHOSH (RK University, India)<br><i>NOVEL NANOMEDICINE FROM NATURE: A SUSTAINABLE GREEN APPROACH</i>  |  |  |
| 10:45–11:00        | Time for CHEMCO TRADE SRL  |  |  |
| 11:00–11:30        | Coffee break (4 <sup>th</sup> Floor)   |  |  |
| 11:30–13:00        | Parallel Sessions A, B, C and D<br>Oral and Poster Presentations   |  |  |
|                    | Session A<br>(4.1 Room)<br>Microsoft Teams/<br>SICHEM 2025/ Channel A  | Sessions B and D<br>(4.2 Room)<br>Microsoft Teams/<br>SICHEM 2025/ Channel B | Session C<br>(3.1 Room)<br>Microsoft Teams/<br>SICHEM 2025/Channel C |
| 13:00–14:00        | Lunch (2 <sup>nd</sup> Floor)  |  |  |
| 14:00–15:30        | Plenary Lectures and Companies Presentations (4 <sup>th</sup> Floor – 4.1 Room)<br>Microsoft Teams/ SICHEM 2025 – General channel  |  |  |
| 14:00–14:25        | Professor Fabrice GROS (Clermont Auvergne University, France)<br><i>TOWARD HYBRID PHOTOREACTIVE SYSTEMS FOR ENERGY AND ENVIRONMENTAL APPLICATIONS</i>                                |  |  |
| 14:25–14:50        | Senior Scientist Doru Vladimir PUȘCAȘU (CEPROCIM S.A, Bucharest)<br><i>ANALYSIS OF THE SILICATE AND OXIDE COMPOUNDS INDUSTRY</i>   |  |  |
| 14:50–15:15        | Professor Philippe MICHAUD (Clermont Auvergne University, France)<br><i>PHYCOREMEDIATION OF OLIVE MILL-WASTEWATERS</i>   |  |  |
| 15:15–15:30        | Time for ALBA ALUMINIU SRL   |  |  |
| 15:30–16:00        | Coffee break (4 <sup>th</sup> Floor)   |  |  |
| 16:00–16:30        | Poster Sessions C and D (4 <sup>th</sup> Floor)  |  |  |
| 16:00–16:30        | AWARDS and CLOSING CEREMONY  |  |  |
| 16:30–17:30        | SICR GENERAL MEETING   |  |  |



## CONFERENCE PROGRAMME ORAL COMMUNICATIONS

Thursday, November 6

|   |
|---|
| <b>10:00–10:30 OPENING CEREMONY</b> , Microsoft Teams/ SICHEM 2025<br><b>Chairperson: Prof. Tănase DOBRE</b>  |
| <b>MIHNEA COSTOIU</b> , RECTOR OF POLITEHNICA BUCHAREST<br><b>TUDOR PRISECARU</b> , VICE-RECTOR AND PRESIDENT OF THE SENATE OF POLITEHNICA BUCHAREST<br><b>CRISTINA ORBECI</b> , DEAN OF FACULTY OF CHEMICAL ENGINEERING AND BIOTECHNOLOGY<br><b>ECATERINA ANDRONESCU</b> , SICR FOUNDER<br><b>VALERIU JINESCU</b> , PRESIDENT OF TECHNICAL SCIENCES ACADEMY OF ROMANIA (ASTR)<br><b>ILEANA RĂU</b> , DIRECTOR OF DOCTORAL SCHOOL OF FACULTY OF CHEMICAL ENGINEERING AND BIOTECHNOLOGY<br><b>FLORIN OANCEA</b> , SCIENTIFIC MANAGER OF ICECHIM BUCHAREST<br><b>AMALIA ȘTEFANIU</b> , GENERAL MANAGER OF INCDCF-ICCF BUCHAREST<br><b>DMITRI MILIȚESCU</b> , GENERAL MANAGER OF LUDAN ENGINEERING |
| <b>10:30–11:30 SICR EXCELLENCE AWARDS</b><br><b>Chairperson: Prof. Tănase DOBRE, Prof. Costin Sorin BÎLDEA</b>  |
| WORDS IN HONOR OF PROF. DR. ENG. <b>ALEXANDER C. DIMIAN</b><br>LAUDATIO: PROF. DR. ENG. <b>COSTIN SORIN BÎLDEA</b>  |
| WORDS IN HONOR OF PROF. DR. ENG. <b>PAUL VASILESCU</b><br>LAUDATIO: PROF. DR. ENG. <b>OANA PÂRVULESCU</b>   |
| WORDS IN HONOR OF DR. ENG. <b>OVIDIU BĂNCILĂ</b><br>LAUDATIO: PROF. DR. ENG. <b>TĂNASE DOBRE</b>  |
| WORDS IN HONOR OF PROF. DR. ENG. <b>ȘERBAN AGACHI</b><br>LAUDATIO: PROF. DR. ENG. <b>MIRCEA VASILE CRISTEA</b>  |
| WORDS IN HONOR OF PROF. DR. ENG. <b>PETRU ILEA</b><br>LAUDATIO: PROF. DR. ENG. <b>GRAZIELLA TURDEAN</b>   |
| <b>11:30–12:00 Coffee break (4<sup>th</sup> Floor)</b>  |
| <b>12:00–13:30 PLENARY LECTURES AND COMPANIES PRESENTATIONS</b><br>4 <sup>th</sup> Floor – 4.1 Room/ Microsoft Teams/ SICHEM 2025 General Channel<br><b>Chairpersons: Prof. Ioan CĂLINESCU, Prof. Claudia MUNTEAN</b>   |
| <b>12:00–12:25 Plenary Lecture</b><br><b>Ioan CĂLINESCU, Mircea VÎNATORU</b> , <i>PROCESS INTENSIFICATION APPLIED FOR EXTRACTION OF NATURAL PRODUCTS (PL05)</i>   |
| <b>12:25–12:50 Plenary Lecture</b><br><b>Claudia MUNTEAN</b> , <i>PRESSING CHALLENGES IN OIL REFINING INDUSTRY (PL08)</i>   |
| <b>12:50–13:10 Time for LUDAN ENGINEERING SRL</b><br><b>Dmitri MILIȚESCU</b>  |
| <b>13:10–13:35 Plenary Lecture</b><br><b>Anca Daniela RAICIU</b> , <i>THE ROLE OF ARTIFICIAL INTELLIGENCE IN PHYTOTHERAPY (PL13)</i>  |
| <b>13:35–14:30 Lunch (4<sup>th</sup> Floor)</b>   |
| <b>14:30–15:30 Session A Chemical and Biochemical Engineering (CBE)</b><br>4 <sup>th</sup> Floor – 4.1 Room/ Microsoft Teams/ SICHEM 2025 Channel A<br><b>Chairpersons: Assoc. Prof. Gabriela ISOPENCU, Assoc. Prof. Oana CIOCÎRLAN</b>   |
| <b>14:30–14:40 Oral Presentation (SA OP01)</b><br><b>Valeria DANILOVA, Dumitru COMAN, Liliana LAZĂR, Ioan MĂMĂLIGĂ</b> , <i>APPLICATION OF NEW CHELATING RESIN IN BRINE HARDNESS REMOVAL TO FEED THE CHLOR-ALKALI MEMBRANE CELL PROCESS II. THERMODYNAMIC AND KINETIC STUDIES</i>   |
| <b>14:40–14:50 Oral Presentation (SA OP03)</b><br><b>Alexandra-Ioana CRĂCIUN, Alexandru OZUNU</b> , <i>FROM SIMULATION TO SAFETY: CHEMICAL RISK MANAGEMENT AND ENVIRONMENTAL SAFETY IN EUROPEAN CIVIL PROTECTION EXERCISES</i>  |

14:50–15:00 Oral Presentation (SA OP08)

**Romina G. DĂRĂBAN, Adrian G. BODESCU, Vasile M. CRISTEA**, *SIMULATION AND CALIBRATION OF THE MATHEMATICAL MODEL ASM2dISS FOR THE MUNICIPAL WASTEWATER TREATMENT PLANT OF CLUJ-NAPOCA USING WEST+*

15:00–15:10 Oral Presentation (SA OP09)

**Larisa-Maria PETRILA, Florin BUCATARIU, Mihaela SILION, Rénato FROIDEVAUX, Marcela MIHAI**, *ECO-FRIENDLY LACCASE/POLYELECTROLYTE/SILICA COMPOSITES WITH ENHANCED CATALYTIC ACTIVITY IN THE DEGRADATION OF WATER CONTAMINANTS*

15:10–15:20 Oral Presentation (SA OP06) – online

**Adrian G. BODESCU, Romina G. DĂRĂBAN, Vasile M. CRISTEA**, *DECENTRALIZED MODEL PREDICTIVE CONTROL OF THE NITRIFICATION AND DENITRIFICATION PROCESSES IN THE WASTEWATER TREATMENT PLANT*

15:20–15:30 Oral Presentation (SA OP10) – online

**Thomas VEREȘ-DĂNCIUȚ, Vasile-Mircea CRISTEA, Adina-Lucreția MICLĂUȘ, Elisabeta-Cristina TIMIȘ**, *ASSESSMENT OF WWTP PERFORMANCE FOR CHANGES IN INFLUENT, RECYCLE AND WASTE FLOW RATES*

**14:30–15:30 Session B Applied organic, inorganic and supramolecular chemistry (AOISC) + Session D Green applied chemistry and agro-resources valorization (GACARV)**

4<sup>th</sup> Floor – 4.2 Room/ Microsoft Teams/ SICHEM 2025 Channel B

**Chairpersons: Assoc. Prof. Paula POSTELNICESCU, Assoc. Prof. Anca DUMITRESCU**

14:30–14:50 Keynote Lecture (SB KN01) – online

**Cristian CONDEIU, Gherghina CIORTAN**, *THE USE OF AUTOMATIC PROCESS DEVELOPMENT FOR OPTIMIZATION OF CRITICAL PROCESS PARAMETERS IN VARIOUS DRUG SYNTHESSES*

14:50–15:00 Oral Presentation (SB OP01)

**Ștefan-Bogdan IVAN, Ionel POPESCU, Cătălin NEGRILĂ, Florica PAPA, Stéphane LORIDANT, Ioan-Cezar MARCU**, *LOW-TEMPERATURE ETHANE OXIDATION OVER M-MODIFIED (M = Sn, Ti, Sb, Ta) NiNbO MIXED OXIDE CATALYSTS*

15:00–15:10 Oral Presentation (SD OP01)

**Zhonghua CUI, Alexandru OZUNU, Jun MENG**, *VALORIZATION OF LIVESTOCK AND POULTRY MANURE THROUGH BIOCHAR PRODUCTION AND ITS AGRICULTURAL APPLICATIONS*

15:10–15:20 Oral Presentation (SD OP06)

**Elisabeta-Irina GEANA, Andreea Adelina CONSTANTIN, Corina Teodora CIUCURE, Claudia SANDRU, Florian MARIN, Irina PETREANU, Roxana Elena IONETE**, *EVALUATION OF BIOCHEMICAL METHANE POTENTIAL OF DIFFERENT LIGNOCELLULOSIC SUBSTRATES*

15:20–15:30 Oral Presentation (SD OP08) – online

**Sabir IBTISSAM, Soumia ZAIM, Rchid HALIMA, Christinne GARDARIN, Philippe MICHAUD, Guillaume PIERRE, Pierre FONTANILLE, Forano CLAUDE, Alina-Violeta URSU, El Moznine REDDAD, Christophe VIAL, Nmila RACHID**, *BIOREFINERY APPROACH TO PRODUCE BIOENERGY, FOOD AND HIGH VALUE PRODUCTS FROM MOROCCAN SEAWEED CYSTOSEIRA BACCATA*

**14:30–15:30 Session C Biomaterials and composites in chemical and biochemical applications (BCCBA)**

3<sup>rd</sup> Floor – 3.1 Room/ Microsoft Teams/ SICHEM 2025 Channel C

**Chairpersons: Prof. Simina ȘTEFAN, Assoc. Prof. Ioana DIACONU**

14:30–14:40 Oral Presentation (SC OP01)

**Lucia PINTILIE, Maria MAGANU, Constantin DRAGHICI, Miron Teodor CAPROIU, Fawzia SHA'AT, Ramona-Daniela PAVALOIU, Mădălina-Diana GABOREANU, Ioana-Cristina MARINAS**, *ANTIMICROBIAL QUINOLONES ENCAPSULATED IN LIPOSOM*

14:40–14:50 Oral Presentation (SC OP03)

**Adela CIOBANU, Alexandru OZUNU**, *RECONFIGURING MEDICAL WASTE MANAGEMENT IN ROMANIA: CHALLENGES AND SOLUTIONS 2025*

14:50–15:00 Oral Presentation (SC OP05) – online

**Eray ALTAN, Şilan TEKIN, Dilshat TULYAGANOV, Oğuzhan GÜNDÜZ**, *FABRICATION AND CHARACTERIZATION OF PCL/BIOGLASS COMPOSITE MICROSPHERE COATINGS VIA ELECTROSPRAYING FOR ENHANCED SURFACE COMPATIBILITY IN BIOMATERIALS*

15:00–15:10 Oral Presentation (SC OP07) – online

**Dilruba BAYKARA, Mine AKCA, Oguzhan GUNDUZ**, *PHYSICAL – DEVELOPMENT AND CHARACTERIZATION OF HYDROXYAPATITE-REINFORCED SILKMA COMPOSITE SCAFFOLDS FABRICATED VIA DLP 3D PRINTING FOR BONE TISSUE ENGINEERING*

15:10–15:20 Oral Presentation (SC OP09) – online

**Şevval GÜNEŞ, İsmail ATEŞ, Şimal ÇELTIKCI, Ömer FARUK SARAÇ, Oguzhan GÜNDÜZ, Canan DOĞAN, Ayşe Ceren ÇALIKOĞLU KOYUNCU**, *ACETYLSALICYLIC ACID–VITAMIN K LOADED PCL STENTS FABRICATED BY FDM 3D PRINTINGS AS A POTENTIAL VASCULAR IMPLANT MATERIAL*

15:20–15:30 Oral Presentation (SC OP10) – online

**Mohammad MOGHADDASI, Busra OKTAY, Ayse Betul BINGOL, Reyhan YANIKOGLU, Meryem MUSLU, Ibrahim Tarik OZBOLAT, Cem Bulent USTUNDAG**, *CONDUCTIVE NANOCOMPOSITE HYDROGELS FOR NEURAL TISSUE ENGINEERING: A SYSTEMATIC SCOPING REVIEW OF RECENT TRENDS*

**14:30–15:30 Session A and B – online posters**

3<sup>rd</sup> Floor – 3.2 Room/ Microsoft Teams/ SICHEM 2025 Channel D

**Chairpersons: Prof. Tănase DOBRE, Prof. Raluca ISOPESCU**

14:30–14:35 Poster Presentation (SA P06) – online

**Timur CHIS, Daniel IANCU, Lazăr AVRAM, Călin IORGA**, *A NUMERICAL OFFSHORE EXPLOSION MODELING IN NATURAL GAS DRILLING*

14:35–14:40 Poster Presentation (SA P07) – online

**Timur CHIS, Ionuț LUNGU, Doru BÂRSAN, Andrei BĂRBULESCU**, *NUMERICAL MODELS APPLIED IN THE STUDY OF NATURAL GAS MOVEMENT IN UNDERGROUND DEPOSITS*

14:40–14:45 Poster Presentation (SA P08) – online

**Timur CHIS, Al Jaseem AMEER, Răzvan GASPARG**, *MATEMATIC MODELING OF ADSORPTION ON ACTIVATED CARBON OF PETROLEUM GASES*

14:45–14:50 Poster Presentation (SA P09) – online

**Iolanda POPA, Florina CASARIU, Vasile LAVRIC, Timur CHIS, Sorin STEFLEA**, *A NUMERICAL MODEL OF THE VOLATILE COMPOUNDS EMISSION TO OIL AND GASOLINE STORAGE*

14:50–14:55 Poster Presentation (SA P10) – online

**Iolanda POPA, Florina CASARIU, Vasile LAVRIC, Timur CHIS, Sorin STEFLEA**, *A STATISTICAL METHODS FOR EVALUATING THE QUALITY OF FINISHED OIL PRODUCTS*

14:55–15:00 Poster Presentation (SA P11) – online

**Ioana PURGHEL, Maria STOICESCU, Claudiu DOLETE**, *STRUCTURE EQUATIONS OF TERMAL ROCKS AI MODELS*

15:00–15:05 Poster Presentation (SA P12) – online

**Aurelian ŞISINEA, Florin BOGDAN, Mihai ALBULESCU**, *NUMERICAL MODELS TO OIL WATER EMULSION*

15:05–15:10 Poster Presentation (SA P13) – online

**Maria STOICESCU, Sorin STEFLEA, Iolanda POPA, Vasile LAVRIC**, *ANALYSIS OF VOLATILE COMPOUNDS EMISSION TO OIL STORAGES*

15:10–15:15 Poster Presentation (SA P14) – online

**Mihai VIRTOPEANU, Maria STOICESCU**, *APPLICATION OF THE GAMMA FUNCTION IN OIL RESERVOIRES POLYMER INJECTION MODELING*

15:15–15:20 Poster Presentation (SA P15) – online

**Bianca SIMEDREA, Nicoleta-Oana DEMOSTENE, Iuliana DELEANU, Oana PÂRVULESCU, Olga SAPUNARU, Tănase DOBRE**, *CHARACTERISATION AND ANALYTICAL IDENTIFICATION OF POLYAROMATICS FROM DIESEL FUEL*

15:20–15:25 Poster Presentation (SA P24) – online

**Adib ESSID, Jean-Pierre FONTAINE, Alina-Violeta URSU, Christophe VIAL**, *ANALYSIS OF TWO-PHASE FLOW IN A COUNTER-CURRENT BUBBLE COLUMN AS A FUNCTION OF OPERATING PARAMETERS: AN EXPERIMENTAL INVESTIGATION OF GAS AND LIQUID VELOCITIES*



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| <p>15:25–15:30 <b>Poster Presentation (SB P01) – online</b><br/> <b>Florin BOGDAN, Mihai ALBULESCU, Aurelian ȘISINEA, GAS DRYING BY ADSORPTION ON POROUS MATRIX COMPOSITE MATERIALS</b></p>   |   |
| <p>15:30–15:35 <b>Poster Presentation (SA P20) – online</b><br/> <b>Tudor M. CHICIUDEAN, Norbert B. MIHALY, Nicolae CEBOTARU, Marius A. BREHAR, Radu CAUACEAN, Elisabeta C. TIMIS, ARTIFICIAL NEURAL NETWORK MODELLING FOR THE PREDICTION OF WWTP EFFLUENT ORTHO-PHOSPHATES CONCENTRATION</b></p> |   |
| <p><b>15:30–16:00 Coffee break (4<sup>th</sup> Floor)</b></p>   |   |
| <p><b>16:00–17:30 PLENARY LECTURES</b><br/> 4<sup>th</sup> Floor – 4.1 Room/ Microsoft Teams/ SICHEM 2025 General Channel<br/> <b>Chairpersons: Prof. Tănase DOBRE, Chemical Engineer Șerban CONSTANTINESCU</b></p>   |   |
| <p>16:00–16:25 <b>Plenary Lecture</b><br/> <b>Tănase DOBRE, PROCESS MODELLING THROUGH ANALOGIES: CUSTOMIZE FOR MODELLING OF BLOOD DIALYSIS BY ANALOGY WITH A HEAT TRANSFER CASE (PL03)</b></p>  |   |
| <p>16:25–16:40 <b>Plenary Lecture</b><br/> <b>Șerban CONSTANTINESCU, MODULAR NUCLEAR POWER PLANT DOICESTI PROJECT (PL06)</b></p>  |   |
| <p>16:40–17:05 <b>Plenary Lecture - online</b><br/> <b>Christophe VIAL, Adib ESSID, Blandine TAULEIGNE, Alina-Violeta URSU, Alain MARCATI, Jean-Sébastien GUEZ, HYDROGEN–WATER INTERFACES: RECENT INSIGHTS AND APPLICATIONS TO ENERGY CONVERSION (PL10)</b></p>                                   |   |
| <p>17:05–17:30 <b>Plenary Lecture - online</b><br/> <b>Xiaoyang HOU, Gwendoline CHRISTOPHE, Philippe MICHAUD, Pascal DUBESSAY, Guillaume PIERRE, IMMOBILIZED ENZYME MONOLITHIC PLATFORM FOR FUNCTIONALIZING POLY- AND OLIGOSACCHARIDES (PL12)</b></p>   |   |
| <p>17:30–17:45 <b>Time for METROHM ANALYTICS ROMANIA SRL</b></p>  |   |
| <b>10:00–17:00</b>  | <b>Poster Sessions A and B (4<sup>th</sup> Floor)</b> |

## CONFERENCE PROGRAMME ORAL COMMUNICATIONS

Friday, November 7

### 09:30–11:00 PLENARY LECTURES AND COMPANIES PRESENTATIONS

4<sup>th</sup> Floor - 4.1 Room/ Microsoft Teams/ SICHEM 2025 General Channel

**Chairpersons: Prof. Anton FICAI, Senior Scientist Andrei SÂRBU**

09:30–09:55 Plenary Lecture

**Dan-Adrian VASILE, Gabriela PETRISOR, MARIANA JIAN, Rucsandra DUMITRESCU, Ludmila MOTELICA, Natalia DRAGUT, Angela SPOIALA, Roxana TRUSCA, Ovidiu OPREA, Dan Mihaiescu, Coralia BLEOTU, Denisa FICAI, Viorel NACU, Anton FICAI, CURRENT AND FUTURE APPLICATIONS OF MESOPOROUS SILICA (PL04)**

09:55–10:20 Plenary Lecture

**Alexandre DIMIAN, LINKING CATALYST DEVELOPMENT AND PROCESS DESIGN: APPLICATION TO BUTADIENE MANUFACTURING FROM ETHANOL (PL01)**

10:20–10:45 Plenary Lecture

**Sougata GHOSH, NOVEL NANOMEDICINE FROM NATURE: A SUSTAINABLE GREEN APPROACH (PL02)**

10:45–11:00 Time for CHEMCO TRADE S.R.L.

**Adrian ROȘCA**

11:00–11:30 Coffee break (4<sup>th</sup> Floor)

### 11:30–13:00 Session A Chemical and Biochemical Engineering (CBE)

4<sup>th</sup> Floor – 4.1 Room/ Microsoft Teams/ SICHEM 2025 Channel A

**Chairpersons: Assoc. Prof. Alina Violeta URSU, Prof. Oana Cristina PÂRVULESCU**

11:30–11:50 Keynote Lecture (SA KN01)

**Ridha DJELLABI, PHOTOCATALYTIC AND PHOTO-PHOTOELECTROCHEMICAL RECOVERY OF RESOURCES AND CRITICAL METALS: TOWARD A CIRCULAR ECONOMY**

11:50–12:00 Oral Presentation (SA OP02)

**Estera VASILESCU, Alexandru-Cristian VÎLCICĂ, Edna Adriana ANTON, Gabriel-Marius CIOROIU, Liviu-Constantin STAN, Doinița-Roxana TÎRPAN, PRELIMINARY STUDY REGARDING THE ETHANOL PRODUCTION FROM A MIXTURE OF BANANA, ORANGE AND MELON PEEL**

12:00–12:10 Oral Presentation (SA OP04)

**Andreea MANOLACHE, Ionut BANU, Ana-Maria BREZOIU, Oana PÂRVULESCU, Adina GAVRILĂ, SYNTHESIS OF HIGHER ALCOHOLS WITH POTENTIAL APPLICATIONS IN COSMETICS INDUSTRY: PROCESS ANALYSIS**

12:10–12:20 Oral Presentation (SA OP05)

**Nicoleta-Oana DEMOSTENE, Petrica IANCU, Roxana TÎRPAN, Tănase DOBRE, ON THE SEPARATION OF VEGETABLE OILS INTO COMPONENT CLASSES**

12:20–12:30 Oral Presentation (SA OP12)

**Ionuț-Alexandru POPA, Iuliana Mihaela DELEANU, Oana Cristina PÂRVULESCU, Timur-Vasile CHIȘ, Tănase DOBRE, DYNAMIC ADSORPTION BEHAVIOR OF VOLATILE ORGANIC COMPOUNDS ON A REGENERATIVE CELLULOSE-SILICA GEL COMPOSITE – EXPERIMENTAL INVESTIGATION AND MATHEMATICAL MODELLING**

12:30–12:40 Oral Presentation (SA OP13) – online

**Blandine TAULEIGNE, Alain MARCATI, Christophe VIAL, QUANTITATIVE VISUALIZATION OF HYDROGEN MASS TRANSFER IN AQUEOUS MEDIA**

12:40–12:50 Oral Presentation (SA OP07) – online

**Laura Elisabeta PETRAS, Claudia MUNTEAN, Tănase DOBRE, MONITORING OF THE DIESEL HYDRODESULFURIZATION REACTOR AND PRIMARY STATISTICAL DATA EXPLOITATION**

12:50–13:00 Oral Presentation (SA OP11) – online

**Trong Nghia NGO, Christophe VIAL, Adib ESSID, Jean Sébatien GUEZ, Thierry CHÂTEAU, DEEP LEARNING-BASED APPROACH: A VERSATILE DECODER FOR BUBBLE FLOW IMAGE ANALYSIS**

**11:30–13:20 Session B Applied organic, inorganic and supramolecular chemistry (AOISC) + Session D Green applied chemistry and agro-resources valorization (GACARV)**

4<sup>th</sup> Floor – 4.2 Room/ Microsoft Teams/ SICHEM 2025 Channel B

**Chairpersons: Assoc. Prof. Adina GAVRILĂ, Assoc. Prof. Nicoleta-Aurelia CHIRA**

11:30–11:40 Oral Presentation (SB OP07)

**Vasile-Adrian SURDU, Romuald GYÖRGY, FROM DATA TO DISCOVERY: MACHINE-LEARNING-DRIVEN X-RAY DIFFRACTION ANALYSIS APPLIED TO PHASE-DIAGRAM CONSTRUCTION IN COMPLEX OXIDE SYSTEMS**

11:40–11:50 Oral Presentation (SB OP04)

**Alin-Andrei BARNA, Cristina Elena STAVARACHE, Aurelia BRATU, Mihaela TOCIU, Mihaela-Liliana MIHALACHE, Nicoleta-Aurelia CHIRA, RAPID DETECTION AND DIFFERENTIATION OF BUTYRIC VS.  $\omega$ -3 FATTY ACID MOIETIES IN DAIRY FOODS BASED ON COSY NMR SPECTRA**

11:50–12:00 Oral Presentation (SB OP02)

**Cosmin GURAN, Adina GAVRILA, Oana PARVULESCU, Timur CHIS, Tanase DOBRE, CONSIDERATIONS FOR MODELING, CALCULATION AND AUTOMATION OF A FIRE SUPPRESSION INSTALLATION IN AN INDUSTRIAL FACILITY**

12:00–12:10 Oral Presentation (SB OP03)

**Andrei Laurentiu NICULAE, Ioan CALINESCU, Petre CHIPURICI, Radu CHIRIAC, DETERMINATION OF PHYSICO-CHEMICAL PROPERTIES AND STABILITY ASSESSMENT OF NANOFUELS CONTAINING MULTI-WALLED CARBON NANOTUBES**

12:10–12:20 Oral Presentation (SD OP07)

**Irina Maria ARITON, Romuald GYÖRGY, Ionuț BANU, SIMULATION INSIGHTS INTO ETHANOL-TO-BUTADIENE PROCESS**

12:20–12:30 Oral Presentation (SD OP05)

**Ana - Maria BREZOIU, Florin - Cristian TĂNASE, Adrian - Marian MITRICĂ, EVALUATION OF QUINCE WINE PRODUCTION PROCESS AND FRUIT WINE CHARACTERIZATION**

12:30–12:40 Oral Presentation (SD OP02)

**Grigore PȘENOVSCI, Ioan CĂLINESCU, Ciprian-Gabriel CHISEGA-NEGRILĂ, Cristina-Emanuela ENĂȘCUȚĂ, PYROLYSIS OF PLASTIC WASTE TO OBTAIN GASEOUS FUEL**

12:40–12:50 Oral Presentation (SD OP03)

**Eliza-Gabriela BRETTFELD, Tănase DOBRE, CO<sub>2</sub> CAPTURE AND CLIMATE POLICY DYNAMICS**

12:50–13:00 Oral Presentation (SB OP06) – online

**Thomas FLAHAUT, Léa GAUME, Moussa AMROUDINE, Elodie PEGHAIRE, Pascal DUBESSAY, Gwendoline CHRISTOPHE, Alina-Violeta URSU, Philippe MICHAUD, Guillaume PIERRE, ALGAL DIVERSITY AND BIOPOLYMER COMPLEXITY: STRUCTURAL ELUCIDATION OF EXOPOLYSACCHARIDES FROM MICROALGAE**

13:00–13:10 Oral Presentation (SB OP05) – online

**Ali Alparslan CELIK, Melek Beyza REYHANOGLU, Sumeyye CESUR, Oguzhan GUNDUZ, RHEOLOGICAL AND PRINTABILITY EVALUATION OF PEGDA HYDROGELS AT DIFFERENT CONCENTRATIONS FOR DLP PRINTING**

13:10–13:20 Oral Presentation (SD OP04) – online

**Ioana MAIOR, Elena-Alexandra DUȚĂ, Emilia-Ioana TOMA, Anca COJOCARU, Ioana-Alina CIOBOTARU, SYNERGISTIC MIXTURES OF GREEN CORROSION INHIBITORS FOR STEEL ANTICORROSION COATINGS**

**11:30–13:00 Session C Biomaterials and composites in chemical and biochemical applications (BCCBA)**

3<sup>rd</sup> Floor – 3.1 Room/ Microsoft Teams/ SICHEM 2025 Channel C

**Chairpersons: Assoc. Prof. Iuliana Mihaela DELEANU, Assoc. Prof. Alexandra MOCANU**

11:30–11:50 Keynote Lecture (SC KN01) – online

**Viorica MUȘAT, NANO-CHEMISTRY-THE MOST REVOLUTIONARY BRANCH OF NANOTECHNOLOGIES**



11:50–12:00 Oral Presentation (SC OP06)

**Alexandra GINGA, Ionela PETCU, Teodora TOMESCU, Oana BRINCOVEANU, Alexandra MOCANU, Andrada SERAFIM, George VLASCEANU, Roxana Cristina POPESCU, Adela BANCUIU, Sabrina STATE (ROSOIU),** *EUTECTOGELS BASED ON DEEP EUTECTIC SOLVENTS INCORPORATING METALLIC NANOPARTICLES FOR WOUND HEALING APPLICATIONS*

12:00–12:10 Oral Presentation (SC OP02)

**Hussein Fawzi HUSSEIN, Rasheed Saeed FARQAD, Ahmed Bdaiwi SHAALAN, Iuliana Mihaela DELEANU, Majid Hussein MURAD,** *EFFECT OF LASER SURFACE HEAT TREATMENT ON WEAR AND HARDNESS RESISTANCE OF METAL MATRIX COMPOSITE (Al 336.0 ALLOY-  $Y_2O_3$ )*

12:10–12:20 Oral Presentation (SC OP04)

**Doinița-Roxana TÎRPAN, Claudia Ana Maria PATRICHI, Alina Georgiana CIUFU,** *EXTRACTION AND APPLICATION OF ALGAL CELLULOSE IN BIOPOLYMER PRODUCTION*

12:20–12:30 Oral Presentation (SC OP08)

**Gabriela ISOPENCU, Edina RUSEN, Gabriela TOADER, Aurel DIACON, Sabrina STATE (ROSOIU), Oana BRINCOVEANU, Cosmin ROMANIȚAN, Kliment ZANOV, George-Mădălin DĂNILĂ, Alexandra MOCANU,** *MODIFICATION OF BACTERIAL CELLULOSE FOR WOUND DRESSINGS USING SILVER NANOPARTICLES AND PROPOLIS EXTRACTS*

12:30–12:40 Oral Presentation (SC OP11) – online

**Tubanur AVCI, Rabia SULUTAŞ, Fatih Mehmet YILDIZ, Melek Beyza REYHANOĞLU, Şevval GÜNEŞ, Yusuf ÜLKER, Sümeyye Cesur SATIÇ, Canan DOĞAN, Oğuzhan GÜNDÜZ,** *DEVELOPMENT AND CHARACTERIZATION OF ELECTROSPUN PLA/PCL SCAFFOLDS CO-LOADED WITH SILVER SULFADIAZINE AND SUPERCRITICAL-EXTRACTED CLOVE OIL FOR WOUND HEALING APPLICATIONS*

12:40–12:50 Oral Presentation (SC OP12) – online

**Esin Şahsenem KARAKURT, Tuğba KIRIM, Dilara ODABAŞI, Ayşe Betül BINGÖL, Büşra OKTAY, Fatih ÇİFTÇİ, Cem Bulent ÜSTÜNDAĞ,** *A HYBRID APPROACH TO PROMOTE NEURAL REGENERATION THROUGH LAYERED BIOMATERIAL DESIGN*

12:50–13:00 Oral Presentation (SC OP13) – online

**Ayşe Betül BINGÖL, Busra OKTAY, Alpay KOSE, Israa F ABDULAZEZ, Cem Bulent USTUNDAG,** *GRAPHENE OXIDE REDUCTION METHODS: PROPERTIES, APPLICATIONS, AND BIOMEDICAL RELEVANCE*

**13:00–14:00 Lunch (4<sup>th</sup> Floor)**

**14:00–15:30 PLenary LECTURES**

4<sup>th</sup> Floor – 4.1 Room/ Microsoft Teams/ SICHEM 2025 General Channel

**Chairpersons: Prof. Tănase DOBRE, Prof. Anca COJOCARU**

14:00–14:25 Plenary Lecture - online

**Fabrice GROS, Jérémie DAUCHET, Thomas VOUREC'H, Jean-François CORNET,** *TOWARD HYBRID PHOTOREACTIVE SYSTEMS FOR ENERGY AND ENVIRONMENTAL APPLICATIONS (PL11)*

14:25–14:50 Plenary Lecture

**Doru Vladimir PUŞCAŞU, Maria GEORGESCU,** *ANALYSIS OF THE SILICATE AND OXIDE COMPOUNDS INDUSTRY (PL07)*

14:50–15:15 Plenary Lecture - online

**Bouthaina MENAA, Rihab HACHICHA, Pascal DUBESSAY, Slim ABDELKAFI, Imen FENDRI, Philippe MICHAUD,** *PHYCOREMEDIATION OF OLIVE MILL-WASTEWATERS (PL09)*

15:15–15:30 Time for ALBA ALUMINIU SRL

**Tudor DRAGNEA**

**15:30–16:00 Coffee break (4<sup>th</sup> Floor)**

**16:00–16:30 Poster Sessions C and D (4<sup>th</sup> Floor)**

**16:00–16:30 AWARDS and CLOSING CEREMONY (Microsoft Teams – General Channel)**

**16:30–17:30 SICR GENERAL MEETING**

## CONFERENCE PROGRAMME

### POSTER PRESENTATIONS

November 6 – 7

| 10:00–17:00 Poster Session (4 <sup>th</sup> Floor)                |   |
|---|---|
| Session A Chemical and biochemical engineering                    |   |
| SA P01  | <b>Andrei COMAN, Silvia CURTEANU</b> , <i>TRANSPARENT AI MODELS FOR CHEMICAL PROCESS DIAGNOSTICS: INSIGHTS FROM ONER AND JRIP</i>   |
| SA P02  | <b>Dumitriana-Roberta-Marina BRĂNESCU, Silvia CURTEANU</b> , <i>EXPLAINABLE AI METHODS FOR DIAGNOSTICS AND OPTIMIZATION IN CHEMICAL PROCESSES: CASE STUDIES WITH J48, LINEAR REGRESSION, M5P AND M5RULES</i>  |
| SA P03  | <b>Vlad-Iulian CHELMUȘ, Teodora MORARU, Alina MIHALCEA, Camelia UNGUREANU</b> , <i>PRE-BIOREACTOR ASSESSMENT OF CULTURE MEDIA FOR CAROTENOID PRODUCTION BY RHODOTORULA RUBRA ICCF 220</i>   |
| SA P04  | <b>Laurențiu-Constantin MIHAILĂ, Gabriela LISA</b> , <i>EXPERIMENTAL STUDY ON THE INFRARED DRYING OF USED COFFEE GROUND</i>   |
| SA P05  | <b>Paula RUSU, Cătălin LISA</b> , <i>RECOVERY OF USED COOKING OILS: EVALUATION OF PHYSICO-CHEMICAL PROPERTIES AND ANALYSIS OF THE FILTRATION PROCESS</i>  |
| SA P16  | <b>Laura Elisabeta PETRAS, Claudia MUNTEAN, Tănase DOBRE</b> , <i>THERMODYNAMIC CONSIDERATIONS REGARDING DIESEL HYDRODESULFURIZATION</i>  |
| SA P17  | <b>Mihai TONE, Gabriela ISOPENCU, Alexandra MOCANU</b> , <i>PROCESS SIMULATION OF CITRIC ACID BIOSYNTHESIS WITH SUPERPRO DESIGNER</i>   |
| SA P18  | <b>Raluca ISOPESCU, Paula POSTELNICESCU</b> , <i>MODELING THE THERMAL PROCESS IN CURING HIGH CONSISTENCY SILICON RUBBER</i>   |
| SA P19  | <b>Florina LUNGU (IONIȚĂ), Daniela Simina ȘTEFAN</b> , <i>METHODS FOR THE REMOVAL OF IBUPROFEN FROM WATER</i>   |
| SA P21  | <b>Levente BIRÓ, Ana-Maria CORMOȘ</b> , <i>SIMULATION OF FIXED-BED REACTOR FOR COPPER-BASED CHEMICAL LOOPING</i>  |
| SA P22  | <b>Roxana JIDVEIAN, Oana Cristina PÂRVULESCU, Ioana DIACONU, Sorina Laura TOPALĂ</b> , <i>MASS TRANSFER OF INDOLE 3-ACETIC ACID IN A LIQUID MEMBRANE SYSTEM</i>   |
| SA P23  | <b>Anca Mădălina DUMITRESCU, Paula POSTELNICESCU</b> , <i>ELECTRICITY PRODUCED FROM THE RECOVERY OF ORGANIC WASTE IN A MEAN SIZE AGRICULTURAL HOLDING</i>   |
| SA P25  | <b>Alina-Violeta URSU, Philippe MICHAUD, Christophe VIAL, Alain MARCATI, Gholamreza DJELVEH</b> , <i>SUSTAINABLE DOWNSTREAM PROCESSING IN BIOREFINERIES OF PHOTOSYNTHETIC AQUATIC MICROORGANISMS</i>  |
| SA P26  | <b>EUGENIA T. IACOB-TUDOSE</b> , <i>ASSESSMENT OF COLOR AND SUSPENDED SOLIDS REMOVAL IN A SPINNING DISC SYSTEM</i>  |
| 10:00–17:00 Poster Session (4 <sup>th</sup> Floor)                |   |
| Session B Applied organic, inorganic and supramolecular chemistry |   |
| SB P02  | <b>Andrei SÂRBU, Tanța Verona IORDACHE, Ana-Mihaela GAVRILĂ, Anita-Laura CHIRIAC, Anamaria ZAHARIA, Teodor SANDU, Ana Lorena NEAGU, Bianca Elena STOICA, Carmen LAZAU</b> , <i>MOLECULARLY IMPRINTED FILMS FOR BIOMIMETIC SENSORS</i>   |
| SB P03  | <b>Georgeta TEODORESCU (DIACONESCU), Daniela ȘTEFAN</b> , <i>MICROPOLUTANTS PRESENT IN DRINKING WATER</i>   |
| SB P04  | <b>Ludmila MOTELICA, Denisa FICAI, Ovidiu Cristian OPREA, Anton FICAI, Roxana-Doina TRUȘCĂ, Irina FIERĂSCU, Radu Claudiu FIERĂSCU, Mădălin Vasile COMAN</b> , <i>INVESTIGATING OF MASONRY ELEMENTS FOR SELECTING THE APPROPRIATE INORGANIC CONSOLIDANTS: THE CASE OF A ROMANIAN FUNCTIONAL BUILDING</i> |
| SB P05  | <b>Andrei I. CHIRIȚĂ, Ancaelena Eliza STERPU, Olga SĂPUNARU, Tănase DOBRE</b> , <i>CORROSION INHIBITORS IN PETROLEUM PROCESSING</i>   |
| SB P06  | <b>Ludmila MOTELICA, Denisa FICAI, Anton FICAI, Roxana-Doina TRUȘCĂ, Angela SPOIALA, Ovidiu Cristian OPREA, Radu Claudiu FIERĂSCU, Irina FIERĂSCU</b> , <i>SPECTROSCOPIC INVESTIGATIONS ON THE DEGRADED PAINT OF HISTORICAL BUILDINGS</i>   |
| SB P07  | <b>Ion PENCEA, Mihail SECU, Corina SECU, Elena MATEI, Brindus COMANESCU, Cristian PREDESCU, Andrei BERBECARU, Florentina NICULESCU, Andrei L. TIMIS, George COMAN</b> , <i>A ROBUST TOP-DOWN METHOD FOR UNCERTAINTY ESTIMATION OF THE XRF'S OUTCOMES CARRIED ON SOME UPCONVERSION FLUOROPHORES</i>      |
| SB P08  | <b>Andreea Adelina CONSTANTIN, Elisabeta-Irina GEANĂ, Corina Teodora CIUCURE, Oana Romina BOTORAN, Roxana Elena-IONETE</b> , <i>DIFFERENTIATING OF RASPBERRY CULTIVATION REGIMES BASED ON ION CHROMATOGRAPHY CATIONS AND ANIONS PROFILING</i>   |

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| SB P09  | <b>Dragoş GLĂVAN, Paul STĂNESCU, Adina GAVRILĂ, Gabriela ISOPENCU, Ludmila MOTELICA, Ovidiu OPREA, Adrian NICOARĂ, Sergiu SIMA, Oana CIOCÎRLAN, SUSTAINABLE CHOLINE CHLORIDE/GLYCOLIC ACID-BASED NATURAL DEEP EUTECTIC SOLVENT FOR DUAL PLASTICIZING AND EXTRACTION IN CHITOSAN ACTIVE FILMS</b>   |
| <b>10:00–16:00 Poster Session (4<sup>th</sup> Floor)</b>                              |  |
| <b>Session C Biomaterials and composites in chemical and biochemical applications</b> |  |
| SC P01  | <b>Andreea TRIFAN, Cristina BUSUIOC, Eduard LICIU, Andrei-Silviu NEDELCU, Mihai DRAGOMIR, Doru-Daniel CRISTEA, Ciprian-Ştefan MATEESCU, Adela BANCUI, Gabriela TOADER, Aurel DIACON, BRUSHITE VS. MONETITE: OPTIMIZING CALCIUM PHOSPHATE SELECTION FOR 3D-PRINTED BONE SCAFFOLDS</b>   |
| SC P02  | <b>Gabriela-Alexandra ROTARU, Oana-Daciana BOTTA, Victor-Constantin DICULESCU, Cristina BUSUIOC, MICROSTRUCTURED MATERIALS WITH APPLICATIONS IN THE DEVELOPMENT OF PORTABLE BIOSENSORS</b>   |
| SC P03  | <b>J. KISAŁA, A. BARYLYAK, P. KRZEMIŃSKI, R. WOJNAROWSKA-NOWAK, B. CIENIEK, M. KUS-LIŚKIEWICZ, Y. BOBITSK, LASER SURFACE MODIFICATION OF TITANIUM - A WAY TO IMPROVE ITS BIOLOGICAL PROPERTIES</b>   |
| SC P04  | <b>R. LAVRIC, R. GRIGORE, E. MATEI, L. NEDELCU, C. BUSUIOC, I. ENCULESCU, SYNTHESIS AND CHARACTERIZATION OF Ni NANOSTRUCTURES</b>  |
| SC P05  | <b>Ana-Maria FULGHECI, Roxana-Doina TRUŞCĂ, Ludmila MOTELICA, Cristina UNCU, Denisa FICAI, Ovidiu-Cristian OPREA, Anton FICAI, TiO<sub>2</sub> NANOPARTICLES AS PHOTOCATALYSTS FOR THE DEGRADATION OF THE ORGANIC COMPOUNDS</b>  |
| SC P06  | <b>Monica Florentina RADULY, Valentin RĂDIŢOIU, Alina RĂDIŢOIU, Adriana FRONE, Cristian NICOLAE, DEVELOPMENT OF UV LIGHT SHIELDING MATERIALS BY DEPOSITING IRON-CHELATED NATURAL POLYPHENOLIC COMPOUNDS ON SERICITE</b>  |
| SC P07  | <b>Ovidiu Cristian OPREA, Anton FICAI, Ludmila MOTELICA, Denisa FICAI, Roxana TRUŞCĂ, Mariana JIAN, Viorel NACU, Ecaterina ANDRONESCU, NOVEL APPLICATIONS OF COLLAGEN, HYDROXYAPATITE AND POLYPHENOLS – LOADED MCM41 IN BONE TISSUE ENGINEERING</b>  |
| SC P08  | <b>Claudia Valentina POPA, Razvan NEAGU, Lucia-Elena IONESCU, Radu-Iulian TANASA, Diana-Mihaela POPESCU, Cristina-Anca SECARA, Maria MARINESCU, IN VITRO BIOLOGICAL STUDIES OF SOME HYDROGELS FUNCTIONALIZED WITH DIHYDROPYRIMIDINE DERIVATES</b>  |
| SC P09  | <b>A.M. ASOLTANEI, E.T. IACOB-TUDOSE, M.S. SECULA, E.N. DRAGOI, D.N. ISOPESCU, I. MAMALIGA, CHARACTERIZATION OF THE THERMO-HYGROMETRIC BEHAVIOR OF NATURAL WOOL AND EXPANDED POLYSTYRENE INSULATION MATERIALS IN BUILDING APPLICATIONS</b>   |
| SC P10  | <b>Raluca Florenţa DOROFTEI, Mihaela SILION, Daniela IONIŢĂ, Andrei DASCĂLU, Florin NEDEFF, Ana-Maria GEORGESCU, Ana-Maria ROŞU, Diana MIRILĂ, Ileana-Denisa NISTOR, ECO-FRIENDLY BIO-CATALYSTS FROM FISH WASTE FOR DYE REMOVAL IN WATER TREATMENT</b>   |
| SC P11  | <b>Ana-Maria GEORGESCU, Ana-Maria ROŞU, Gabriela MUNTIANU, Emilian MOŞNEGUTU, Diana MIRILĂ, Ileana-Denisa NISTOR, GELATIN-CLAY HYBRID COMPOSITES FOR DYE ADSORPTION IN FOOD INDUSTRY APPLICATIONS</b>  |
| SC P12  | <b>Claudia Ana Maria CANTARAGIU, Doiniţa-Roxana TÎRPAN, Ana Maria NICULESCU ILIE, OPERATION OF A LARGE WASTEWATER TREATMENT PLANTS FOR BIOGAS PRODUCTION</b>   |
| SC P13  | <b>Bogdan PURCĂREANU, Mihai Alexandru FLOREA, Manuela Diana ENE, Sabina Cristiana BĂDULESCU, Dan Eduard MIHĂIESCU, Mihai Alexandru GRIGOROSCUŢĂ, Petre BADICA, Anton FICAI, NEXT-GENERATION MESOPOROUS MCM-41 PLATFORMS FOR VITAMIN C ENCAPSULATION: BRIDGING MATERIAL INNOVATION AND PHARMACEUTICAL EFFICACY</b>                              |
| SC P14  | <b>Sabina Cristiana BĂDULESCU, Manuela Diana ENE, Bogdan PURCĂREANU, Alexandru Mihai FLOREA, Andrei KUNCSE, Petre BADICA, Rica BOSCEANU, IN VITRO TESTING OF CONTROLLED-RELEASE VITAMIN C FORMULAE FOR MODULATION OF IMPORTANT THERAPEUTIC EFFECTS IN SKIN REPAIRING</b>   |
| SC P15  | <b>Gabriela TOADER, Aurel DIACON, Alexandra MOCANU, Livia A. DINU, Pericle VARASTEANU, Oana BRINCOVEANU, Cosmin ROMANITAN, Mioara ALEXANDRU, Florina L. ZORILA, Celina DAMIAN, Edina RUSEN, Raul A. MITRAN, ADVANCED MXENE-POLYMER NANOCOMPOSITES AS SOFT MATERIALS FOR EMI SHIELDING, LIGHT-DRIVEN ACTUATION, AND BIOMEDICAL APPLICATIONS</b> |
| SC P16  | <b>Andreea MOLDOVAN, Aurel DIACON, Gabriela TOADER, Martino ALDRIGO, Sergiu IORDĂNESCU, Alexandra MOCANU, Oana BRINCOVEANU, Cosmin ROMANITAN, Traian ROTARIU, Edina RUSEN, Ana Mihaela GAVRILA, Bodan TRICA, MXENE-POLYPYRROLE-HYDROGELS AS VERSATILE SOFT MATERIALS FOR EMI SHIELDING</b>   |



| <b>10:00–16:00 Poster Session (4<sup>th</sup> Floor)</b>                 |   |
|--|---|
| <b>Session D Green applied chemistry and agro-resources valorization</b> |   |
| SD P01   | <b>Violina POPOVICI, Eugenia COVALIOV, Tatiana CAPCANARI, Oxana RADU, Alexandrina COJOCARI, EVALUATION OF LIPOSOMAL CAROTENOID FORMULATIONS WITH POTENTIAL USE IN FUNCTIONAL FOOD SYSTEMS</b>   |
| SD P02   | <b>Anca M. ROȘCA, Ioan CĂLINESCU, Ioana POPA, Adina I. GAVRILĂ, MICROWAVE-ASSISTED EXTRACTION OF POLYPHENOLS FROM CRATAEGUS MONOGYNA L.</b>   |
| SD P03   | <b>Beatrice C. POTERAȘ, Fulvia MANOLACHE, Adina I. GAVRILĂ, Cristina TODAȘCĂ, ASSESSMENT OF TRANS FATTY ACID INTAKE DURING TRADITIONAL ROMANIAN MEALS</b>   |
| SD P04   | <b>Corina A. STROE, Gabriel MUSTĂȚEA, Elena L. UNGUREANU, Andreea L. MOCANU, Adina I. GAVRILĂ, Mihaela TOCIU, ASSESSMENT OF CHRONIC EXPOSURE AND RISK ASSOCIATED WITH THE CONSUMPTION OF CEREALS AND CEREAL PRODUCTS BY DETECTING THE HEAVY METAL CONTENT</b>   |
| SD P05   | <b>Eugenia COVALIOV, Violina POPOVICI, Tatiana CAPCANARI, Oxana RADU, FERMENTATION-DRIVEN REDUCTION OF ANTINUTRITIONAL FACTORS AND IMPROVEMENT OF MINERAL BIOAVAILABILITY IN LEGUME–CEREAL SYSTEMS</b>  |
| SD P06   | <b>Ana-Maria Nicoleta CODREANU (MANEA), Daniela Simina ȘTEFAN, Rachid AZIAM, Lidia KIM, SMART FERTILIZERS FROM CHROMIUM TANNED LEATHER WASTE</b>  |
| SD P07   | <b>Elena Petronela BRAN, Oana-Irina PATRICIU, Luminița GROSU, Irina-Claudia ALEXA, Brîndușa BĂLĂNUCĂ, Adrian-Ionuț NICOARĂ, Adriana-Luminița FÎNARU, UNMODIFIED WASTE EGGSHELLS: SUITABLE BIOMATERIALS FOR THE REMOVAL OF HEAVY METALS</b>  |
| SD P08   | <b>Luminița GROSU, Daniela NICUȚĂ, Oana-Irina PATRICIU, Irina-Claudia ALEXA, Adriana-Luminița FÎNARU, PURSUING INNOVATIVE AND SUSTAINABLE APPROACHES FOR THE VALORIZATION OF POMACE</b>   |
| SD P09   | <b>Andra-Gabriela ZORCĂ, Alessia-Ioana ENESCU, Ion Sorin JINGA, Cristina BUSUIOC, Iuliana Mihaela DELEANU, AGROWASTE UTILIZATION FOR THE DEVELOPMENT OF WATER-SOLUBLE FOOD PACKAGING</b>  |
| SD P10   | <b>Ionela Otilia BACIU, Oana Cristina PÂRVULESCU, Violeta Alexandra ION, Mihaela TOCIU, Nicoleta CHIRA, COMPOSITION AND ANTIOXIDANT ACTIVITY OF SEA BUCKTHORN FRUIT EXTRACTS</b>  |
| SD P11   | <b>Cristina Anca SECARA, Mihaela DRAGOI CUDALBEANU, Diana-Mihaela POPESCU, Vladimir SUHAIANU, Claudia-Valentina POPA, GREEN CHEMISTRY APPLICATIONS IN THE SEPARATION OF NEUROPROTECTIVE ALKALOIDS FROM NARCISSUS SPECIES</b>  |
| SD P12   | <b>Anca COJOCARU, Claudia IRIMIA, Marian STOICA, Ioana Alina CIOBOTARU, Ioana MAIOR, EQUIVALENT ELECTRICAL CIRCUITS IN ELECTROCHEMICAL SYSTEMS: STEEL IN 3.5% NaCl SOLUTION IN THE PRESENCE OF APIUM GRAVEOLENS EXTRACT</b>   |
| SD P13   | <b>A.M. LĂCĂTUȘ, L. BULGARIU, THEORETICAL FOUNDATIONS OF GOLD(III) RECOVERY FROM CHLORIDE MEDIA USING AQUEOUS POLYETHYLENE GLYCOL SYSTEMS</b>   |
| SD P14   | <b>Ramona-Daniela PAVALOIU, Corina BUBUEANU, Angela CASARICA, Ciprian FODOR, Mariana FODOR, Emilian ROMAN, Diana-Ioana CRISTEA, Teodor-Mihai FLORESCU, Fawzia SHA'AT, TOPICAL OINTMENT CONTAINING A MIXTURE OF ECHINACEA PURPUREA AND ARMORACIA RUSTICANA EXTRACTS - A PHYTOTHERAPEUTIC APPROACH TO SKIN HEALTH</b>       |
| SD P15   | <b>Georgiana Irina VIZITIU (BERCEA), Alina SOCEANU, Simona DOBRINAȘ, Oana Cristina PÂRVULESCU, Vasile LAVRIC, CHARACTERIZATION OF GRAPE POMACE FLOUR FOR OBTAINING VALUE-ADDED PRODUCTS</b>   |
| SD P16   | <b>Grațiela Elena POPESCU, Andreea Cristina DONISE, Oana Cristina PÂRVULESCU, Mihaela Emanuela CRĂCIUN, COMPOSITION AND ANTIOXIDANT ACTIVITY OF EXTRACTS OF BASIL, CHICORY, AND COMMON SAGE</b>   |
| SD P17   | <b>Andreea NICHITOI, Oana Cristina PÂRVULESCU, Violeta Alexandra ION, Ailin MOLOȘAG, Andrei MOȚ, Cristina ORBECI, Tănase DOBRE, Anne-Kristin LØES, Joshua CABELL, Athanasios SALIFOGLU, Carlos Octavio LETELIER-GORDO, PREPARATION, CHARACTERIZATION, AND TESTING OF MARINE RESIDUE-DERIVED FERTILIZERS/BIOSTIMULANTS</b> |
| SD P18   | <b>Vasilica-Alisa ARUȘ, Alin TEUȘDEA, Ana-Maria GEORGESCU, Nicoleta VARTOLOMEI, Nicoleta PLATON, Ileana-Denisa NISTOR, CHROMATIC AND IMAGISTIC ANALYSIS OF BUCKWHEAT-ENRICHED BREAD</b>   |
| SD P19   | <b>Daniela FLOREA, Dan VASILIU, Vasile LAVRIC, Florentina FEDIUC, Naliana LUPAȘCU, Albert SCRIECIU, THE RELATIONSHIP BETWEEN NUTRIENT CONCENTRATIONS AND PHYTOPLANKTON DEVELOPMENT(CHLOROPHYLL-A) IN THE SURFACE WATERS OF THE LOWER DANUBE RIVER</b>   |

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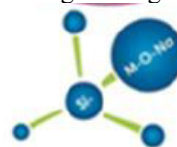
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