National Institute for Research-Development in Chemistry and Petrochemistry - ICECHIM



The International Symposium

"PRIORITIES OF CHEMISTRY FOR A SUSTAINABLE DEVELOPMENT" PRIOCHEM - XXI

Splaiul Independenței 202, sect. 6, Bucharest



Event organized under the aegis and with the support of the Romanian

Ministry of Education and Research and National Authority for Research



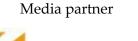
Partners:





Romanian Chemical Society







Event held under the patronage of The Academy of Romanian Scientists



Sponsors:









PUBLIC REPORT

1. About the Event

Between October 15–17, 2025, the National Institute for Research & Development in Chemistry and Petrochemistry – ICECHIM Bucharest organized the 21st edition of the International Symposium "Priorities of Chemistry for a Sustainable Development" (PRIOCHEM XXI). This annual symposium has become one of the flagship events of the Romanian scientific community in the field of chemistry, biotechnology, materials science, and environmental protection.

The 2025 edition was of special significance, as it coincided with the **75th anniversary of ICECHIM's foundation**, celebrating more than seven decades of continuous contribution to Romanian and European chemical research.

The event was held under the auspices of the National Authority for Research (Ministry of Education and Research), with the support of the Romanian Chemical Society, the C.D. Nenițescu Foundation, and the Association for Integrative Education and Development for the Future, under the patronage of the Academy of Scientists of Romania.

Private partners also contributed to the event's success: **Metrohm Romania**, **MDPI Romania**, **New Protocol Group**, **NANOTEAM**, **Phanos (sponsors)**, and **AMEX** (exhibitor), supporting both scientific and outreach activities.

2. International Participation

PRIOCHEM XXI brought together **228 participants** from Romania and abroad, representing one of the highest participation levels in recent years. Among them were **86 international researchers from 19 countries**, including Italy, France, Germany, Poland, Brazil, Turkey, Armenia, Egypt, Jordan, Saudi Arabia, Kazakhstan, Slovenia, Greece, Croatia, Nigeria, India, Indonesia, Malaysia, and Azerbaijan.

Institutional representation included:

- 22 universities and 3 research institutes from abroad;
- 6 national R&D institutes from Romania;
- 7 Romanian universities;

- 8 industrial partners and 2 national clusters (RoHealth and Social Innovation Solutions);
- **2 national authorities** (National Authority for Research; State Office for Inventions and Trademarks);
- International innovators' associations (Indian Innovators Association, INNOPA Indonesia, INOVA doo – Croatia);
- Leading scientific publishers (Frontiers and MDPI);
- The Romanian Chemical Society and the National Academy of Sciences of Azerbaijan.

This geographical and institutional diversity demonstrates the **international prestige of PRIOCHEM** and its role as a **platform for collaboration and knowledge exchange** across continents.

3. Scientific Structure and Programme

The symposium was organized in **two main scientific sections**:

- 1. Multifunctional materials, nanocomposites, innovative technologies and cultural heritage conservation
- 2. Bioresources, biotechnologies and biorefining

The three-day programme included:

- 10 plenary lectures by distinguished international scientists:
 - Prof. Fabiana Arduini (Italy)
 - o Prof. **Francois-Xavier Perrin** (France)
 - o Dr. **Martin Kilo** (Germany)
 - Prof. Anton Ficai (Romania)
 - Dr. Ridha Djellabi (Saudi Arabia)
 - o Dr. **Alvina Avagyan** (Armenia)
 - Dr. Ahmad Ali H. Omari (Jordan)
 - o Dr. **Mahmoud H. Abu Elella** (Egypt)
 - Dr. Gianluca Viscusi (Italy)
 - Dr. Michal Ceglowski (Poland)

- 4 special presentations, including two invited lectures (Mădălina-Elena Argăseală RO
 Health; Andrei Sârbu Romanian Chemical Society) and two author training sessions (Emily
 Young Frontiers; Iustina Boştan MDPI Romania);
- 19 oral communications;
- **60 posters**, some being presented in the interactive *pitching* session "My Poster in 100 Seconds!";
- 7 satellite events and multiple bilateral meetings.

The presented works reflected current research directions in **sustainable chemistry**, **smart materials**, **circular biotechnologies**, **renewable resources**, **and heritage protection**, connecting science, technology, and society in an integrated framework.

4. Satellite Events and Professional Development

On **October 14th**, ICECHIM hosted a series of **satellite workshops** designed to foster collaboration between researchers, companies, and innovation networks.

Among these, the highlight was the workshop "Partnerships, Synergies and Instruments for Innovation and Development", co-organized with the Bucharest–Ilfov Regional Development Agency (ADR BI), Măgurele Science Park, and Inpulse Partners (members of the Enterprise Europe Network). The workshop provided insights into European funding opportunities (Horizon Europe, EIC, EIT), matchmaking sessions, and best practices in technology transfer.

The "Tech Talks – Meet the Mentors!" session, now at its second edition, invited young researchers to engage with experienced innovators — Petru Epure, Radu Porum, Justinian Tomescu, and Manuel Drugulescu — to discuss the theme "Technology Transfer: Challenges and Opportunities." This initiative promotes career development, entrepreneurship, and leadership skills among early-career scientists.

5. Awards and Scientific Recognition

PRIOCHEM XXI featured an extended **awards programme** celebrating research excellence and supporting young scientists.

- > Romanian Chemical Society Awards
- Andreea-Luiza Mîrţ (ICECHIM / National University of Science and Technology Politehnica Bucharest / University of Erlangen-Nürnberg, Germany)

- Alin Gabriel Gheorghe (National University of Science and Technology Politehnica Bucharest)
- Special PRIOCHEM 2025 Award
- Sherif Ashraf Fahmy (Philipps University of Marburg, Germany)
- > PRIOCHEM Ambassador Award
- Asif Abbas Syed (Nazarbayev Intellectual School of Science and Math, Atyrau, Kazakhstan)
- > Future Science Awards
- Ramina Doszhan and Akbota Yersultan (Nazarbayev Intellectual School of Science and Math, Atyrau, Kazakhstan)
- Grigore Pşenovschi (ICECHIM / National University of Science and Technology Politehnica Bucharest)
- > PRIOCHEM 2025 Awards
- Olena Artiushenko (Pontifical Catholic University of Rio de Janeiro, Brazil)
- Laura Mihaela Ștefan (National Institute of Research and Development for Biological Sciences, Bucharest)
- Violeta-Carolina Niculescu (National Institute for Cryogenic and Isotopic Technologies ICSI Râmnicu Vâlcea)
- Aleksandra Lusina (Adam Mickiewicz University, Poland)
- Livia-Teodora Ciobanu (ICECHIM Bucharest)
- **Cătălina Ștefan** (ICECHIM Bucharest)
- **Alexandra Manea** (Hofigal Export-Import S.A.)
- **Cristina Firincă** (ICECHIM Bucharest)
- Nurym Nurtas (Nazarbayev Intellectual School of Science and Math, Atyrau, Kazakhstan)
- **Sevinj Osmanova** and **Aytakin Asgarova** (Baku State University, Azerbaijan)

The diversity of awardees, representing different countries and disciplines, reflects PRIOCHEM's commitment to inclusivity, excellence, and international cooperation.

6. Publication and Visibility

Papers presented during PRIOCHEM XXI are scheduled for publication in leading international journals indexed in **Clarivate Analytics** and **Scopus**, including:

- *Polymers* (Impact Factor 4.9, Q1)
- Frontiers in Materials (Impact Factor 2.9, Q2)
- Farmacia (Impact Factor 1.3, Q3–Q4)
- EMERG Energy. Environment. Efficiency. Resources. Globalization (Scopus-indexed)
- PRIOCHEM XXI Book of Abstracts (Online edition, ISSN 2601 419X and ISSN-L 2601 4181).

The collaboration with **Frontiers** and **MDPI** provides open-access publication opportunities, reinforcing ICECHIM's commitment to **open science and transparent dissemination of research**.

Media coverage was ensured through **Radio România Cultural** and the institute's digital channels (official website, Facebook, LinkedIn, Instagram, YouTube).

7. Impact and Conclusions

PRIOCHEM XXI confirmed ICECHIM's status as a **leading research institution and international collaboration hub** in the field of sustainable chemistry and applied materials science.

The symposium:

- Enhanced the international visibility and reputation of ICECHIM;
- Strengthened cooperation between academia, research institutes, and industry;
- Created new opportunities for project consortia under Horizon Europe, COST, and EUREKA;
- Promoted young researchers through dedicated sessions and awards;
- Highlighted ICECHIM's role as a **connector between science**, **innovation**, **and society**.

Through professionalism, scientific excellence, and international participation, PRIOCHEM XXI has become a model of how a national institute can **build global scientific bridges**, while contributing to Romania's integration in the **European Research Area (ERA)**.









Associated events

Tuesday, 14.10.2025

No.	Starting time	Moderator	Room	Title
W-1	1000	-	Room 1 (3 rd floor)	Parteneriate, Sinergii și Instrumente pentru Inovare și Dezvoltare!
W-2	1400	Nicolae VARACHIU	Room 1 (3 rd floor)	Research and Innovation - societal impact
W-3	0800	Radu Claudiu FIERĂSCU	Room 3 (1st floor)	Abordare integrată pentru protecția mediului – AquaMat
W-4	0900	Radu Claudiu FIERASCU	Room 1 (3 rd floor)	Innovative approach for the protection of medicinal and aromatic plant crops – between circular bioeconomy and nanotechnology
W-5	0800	Irina FIERASCU	Room 1 (3 rd floor)	Transdisciplinary approach for the modern formulation of construction materials, a paradigm shift in the protection of immovable cultural heritage
W-6	0900	Irina Elena CHICAN	Room 1b (3 rd floor)	Advanced ecological solutions to increase the food safety of vegetables and fruits, from producer to consumer
W-7	0900	Ioana Silvia HOSU	Room 3 (1st floor)	Next generation method for studying redox signalling in plants and screening biostimulant potential formulations applied to plants: bimodal sensors.

Scientific Committee (in alphabetical order)

- Dr. Habil. Radu Claudiu FIERĂSCU President of the Scientific Committee INCDCP-ICECHIM, Bucharest, ROMANIA
- Prof. Univ. Dr. Habil. Constantin APETREI "Dunărea de Jos" University of Galați, ROMANIA
- Prof. Dr. Fabiana ARDUINI, Tor Vergata University, ITALY
- Dr. Alvina AVAGYAN, Scientific Centre of Vegetable and Industrial Crops, Darakert, Ararat marz, ARMENIA
- Prof. Dr. Luc AVEROUS University of Strasbourg, FRANCE
- Prof. Dr. Rabah BOUKHERROUB French National Centre for Scientific Research, FRANCE
- Prof. Dr. Hugues BRISSET University of Toulon, FRANCE
- Assoc. Prof. Dr. Michal CEGLOWSKI Adam Mickiewicz University, Poznań, POLAND
- Prof. Dr. Andrew COLLINS, NorGenoTech, Skreia, NORWAY
- Prof. Dr. Gregorio CRINI University of Burgundy Franche Comte, FRANCE
- Prof. Dr. Jacques DESBRIÈRES University of Pau and the Adour Region, FRANCE
- Dr. Habil. Doina DIMONIE INCDCP-ICECHIM, Bucharest, ROMANIA
- Prof. dr. Ridha DJELLABI Alfaisal University, Riyadh, SAUDI ARABIA
- Dr. Biochem. Mihaela DONI INCDCP-ICECHIM, Bucharest, ROMANIA
- Prof. Dr. Luisa DURAES University of Coimbra, PORTUGAL
- Dr. Mahmoud H. Abu ELELLA Cairo Univesity, EGYPT
- Dr. Eng. Cristina Emanuela ENĂȘCUȚĂ INCDCP-ICECHIM, Bucharest, ROMANIA
- Dr. Habil. Anton FICAI University POLITEHNICA of Bucharest/ The Academy of Romanian Scientists, ROMANIA
- Dr. Habil. Irina FIERĂSCU INCDCP-ICECHIM, Bucharest, ROMANIA
- Dr. Eng. Adriana FRONE INCDCP-ICECHIM, Bucharest, ROMANIA
- Prof. Dr. Milen I. GEORGIEV Bulgarian Academy of Sciences, Sofia, BULGARIA
- Prof. Dr. Rodica-Mariana ION INCDCP-ICECHIM, Bucharest, ROMANIA
- Dr. Eng. Tanţa- Verona IORDACHE INCDCP-ICECHIM, Bucharest, ROMANIA
- Dr. Martin KILO Fraunhofer Institute for Silicate Research ISC, GERMANIA
- Prof. Dr. Habil. Anna MALM Medical University of Lublin, Lublin, POLAND
- Prof. Dr. Ioan-Cezar MARCU University of Bucharest, ROMANIA
- Prof. dr. Narcisa MEDERLE University of Life Sciencies "King Michael I" from Timisoara, ROMANIA
- Prof. Dr. Philippe MICHAUD University Clermont Auvergne Pascal Institute, Clermont-Ferrand, FRANCE
- Dr. Habil. Florin OANCEA INCDCP-ICECHIM, Bucharest, ROMANIA
- Prof. Ahmad Ali H. OMARI, Jordan University of Science and Technology, JORDAN
- Prof. Dr. Francois-Xavier PERRIN University of Toulon, FRANCE
- Prof. Dr. Leslie PETRIK University of Western Cape, SOUTH AFRICA

- Prof. Dr. Roberto PETRUCCI University of Perugia, ITALY
- Dr. Habil. Nicoleta RADU INCDCP-ICECHIM, Bucharest, ROMANIA
- Dr. Eng. Valentin RĂDIŢOIU INCDCP-ICECHIM, Bucharest, ROMANIA
- Dr. Eng. Andrei SÂRBU INCDCP-ICECHIM, Bucharest, ROMANIA
- Assist. Prof. Dr. Habil. Elwira Zofia SIENIAWSKA Medical University of Lublin, POLAND
- Prof. Dr. Mircea TEODORESCU University POLITEHNICA of Bucharest, ROMANIA
- Assoc. Prof. Boyko TSYNTSARSKI Institute of Organic Chemistry Bulgarian Academy of Sciences, Sofia, BULGARIA
- Prof. Dr. Artur VALENTE University of Coimbra, PORTUGAL
- Assoc. Prof. Dr. Federica VALENTINI University of Rome Tor Vergata, ITALY
- Dr. Eng. Gianluca VISCUSI, University of Salerno, ITALY
- Prof. Dr. Petrică VIZUREANU "Gheorghe Asachi" Technical University of Iasi / The Academy of Romanian Scientists, ROMANIA
- Dr. Eng. Zina VULUGA INCDCP-ICECHIM, Bucharest, ROMANIA

Organizing Committee

- Dr. Biochem. Mihaela DONI, General Manager
- Dr. Habil. Chem. Radu Claudiu FIERĂSCU
- Dr. Habil. Irina FIERĂSCU (section 1)
- Dr. Eng. Adriana FRONE (section 1)
- Dr. Eng. Tanța Verona IORDACHE (section 1)
- Dr. Eng. Cristina Emanuela ENĂȘCUȚĂ (section 2)
- Dr. Chem. Ana-Maria GURBAN (section 2)

Technical Committee

- Magda-Aura CANTACUZ, Financial Manager
- Ioana CĂRUŢAȘU, Head of Aquisitions-Administrative Service
- Irina Elena CHICAN, Head of Projects Monitoring
- Liliana ILIE, Head of Financial-Accounting Service
- Ştefan MOCANU, Head of IT&C Service
- Mihai PÅTRAŞCU, IT support
- Andra Bianca RUSU, PR & Communication Specialist
- Miriam DAVID, Industrial Property Valorization Specialist
- Ada Lorena NICULIȚĂ, Marketing Specialist

Publication partners:

Frontiers in Materials



Frontiers in Materials









Media partner:



Exhibitor:

