



display. Special booths from Syngene International, Biocon Academy, and Burkert were a focus of attention during the week.

MCADDI 2024 included a reception and dinner at The Oterra, Bangalore, on 26 September and a CEO Forum entitled “India Innovators and Innovation Enablers.” The forum featured industry leaders Akhil Ravi, CEO of Aurigene Pharmaceutical Services Limited, Murthy Chavali, CEO of Satya Pharma Innovations Private Limited, and Murali Ramachandra, CEO of Aurigene Oncology Limited, who shared their visions for India’s current and future role in the global biosciences landscape.

Networking, Celebrations, and Testimonials

Participants enjoyed a reception and dinner at The Oterra, Bangalore on 26 September, a fitting conclusion to a week of learning and collaboration. The event was praised for its seamless organization and impactful sessions.

Sarmistha Majumdar from Schrödinger remarked: “Thanks to Biocon Academy and Kiran Mazumdar Shaw for hosting MCADDI 2024. It was a great platform for professionals to gain a comprehensive view of the drug discovery process”.

Balu N. Balasubramanian, Strategic Pharma Innovation-Sourcing Center LLC, USA, commented: “MCADDI has evolved into a mature and impactful platform, paving the way for students, scientists, and CMOs alike. Biocon Academy’s exceptional coordination has made it a premier event in the biotech space.”

Vincent S. Stoll from AbbVie Inc. shared: “Attending the MCADDI Summit was a fantastic opportunity to engage with scientists and foster collaboration. This event truly enhances knowledge-sharing and networking for professionals and speakers alike.”

<https://iupac.org/project/2023-033-2-700/>

Solubility Phenomena and Related Equilibrium Processes

by Slobodan Gadžurić, Chair of ISSP21

The **21st International Symposium on Solubility Phenomena and Related Equilibrium Processes** (ISSP21) took place from 9-13 September 2024, in Novi Sad, Serbia. In the year when ISSP celebrates its 40th birthday since the first symposium in London, Ontario Canada in 1984, and 50 years of the Solubility data project, whose first meeting happened in Montreal, Canada in 1974, the conference was organized by the University of Novi Sad and chaired by Slobodan Gadžurić (University of Novi Sad, Serbia). The ISSP21 is a continuation of the successful IUPAC conference series, which brings together new results of our scientific work and presents and discusses new findings on various scientific and technological issues related to solubility phenomena and chemical equilibria.

The conference covered various scientific topics, including:

- Aqueous Solutions
- Biofuels
- Computer Assisted Equilibrium Calculation
- Deep Eutectic Solvents
- Environmental Equilibrium Processes and Applications
- Fluid Phase Equilibria
- Molten Salts
- Ionic Liquids
- Nuclear Wastes
- Solution Chemistry Complex Equilibria
- Solubility Phenomena in Pharmaceutical applications

The conference was attended by more than 60 registered participants from 17 countries worldwide. The invited speakers delivered 5 plenary and 8 keynote talks.

Plenary lectures:

- Ivo Leito, University of Tartu, Estonia – *Using the available pK_a data in non-aqueous solvents*
- Clara Magalhães, University of New South Wales, Australia – *Chemistry in Art and Art in Chemistry*
- Andrea Mele, Politecnico di Milano, Italy – *Thirty years of Ionic Liquids*
- Mirjana Minčeva, Technical University of Munich, Germany – *Exploring the Potential: Design Strategies and Applications of Deep Eutectic Solvents*

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- Zdenek Wagner, Czech Academy of Science, Czechia – *Calorimetric and phase equilibrium data: from design of measurements methods to assessment of uncertainty and critical evaluation*

Keynote lectures:

- Magdalena Bendová, University of Chemistry and Technology, Czechia – *Solution behaviour of chiral organic chlorides in water and wet octanol*
- Blanka Kubiková, Slovak Academy of Sciences, Slovakia – *Study of solubility of oxides in molten salts*
- Miha Lukšič, University of Ljubljana, Slovenia – *The Intricate Role of Salts and Sugars in Biomolecular Complexation*
- Demetrio Milea, Università degli Studi di Messina, Italy – *Modeling the dependence of stability constants on medium and ionic strength. The pure water model*
- Caroline Da Ros Montes d'Oca, Federal University of Paraná, Brasil – *Ionic Liquids in organic synthesis: mechanistic aspects in Knoevenagel reactions*
- Ricardo Simões, Universidade de Lisboa, Portugal – *Solute Aggregates in Solution and the Crystallization of Organic Molecules*
- Tatjana Trtić-Petrović, University of Belgrade, Serbia – *Insight into the impact of ionic liquids on forming aqueous biphasic systems*
- Tatjana Verbić, University of Belgrade, Serbia – *Drug solubility enhancement: from buffer complexes formation to acid-base supersolubilization*

The program was compiled from 34 oral presentations. In addition, 25 posters were presented. The Book of Abstracts comprising all contributions is available on the conference web page.

All oral and poster presentations of the early-stage researchers were evaluated by five poster evaluators (Clara Magalhães, Wolfgang Voigt, Demetrio Milea, Earl Waghorne, and Glenn Hefter), and the best oral and the best poster presenters were awarded during the conference dinner a book voucher of 250 euros sponsored by SPRINGER. The awarded students are:

- Bence Kutus, University of Szeged, Hungary for the best oral presentation, and
- Dajana Lazarević, Vinča Institute of Nuclear Sciences, Belgrade, Serbia for the best poster presentation.

In addition, two Franzosini prizes were presented to:



The workshop on Assessment of Reliability and Uncertainty of Solubility Data on the 9th September afternoon.

- Cezary Gumiński from the University of Warsaw, Poland, and
- Christian Ekberg from the University of Göteborg in Sweden,

for their work dedicated to solubility phenomena and critical evaluation of the equilibrium data.

For the first time, the newly established Balarew Award was given to promising young scientist working in the field of solubility and related equilibrium processes. The first awardee was presented to:

- Märt Lõkov from the University of Tartu, Estonia.

During this conference, Clara Magalhães, the IUPAC representative at ISSP21, gave a presentation on the various activities of IUPAC.

A half-day Workshop on Assessment of Reliability and Uncertainty of Solubility Data sponsored by IUPAC was also organized in a hybrid model. The speakers were:

- Zdeněk Wagner, Institute of Chemical Process Fundamentals of the Czech Academy of Sciences, Czechia – *Assessment of repeatability and reproducibility and robust regression of non-normally distributed data*
- Earle Waghorne, University College Dublin, Ireland – *Calculation of consensus values*
- Ala Bazyleva and Vladimir Diky, National Institute of Standards and Technology, USA – *Reliability of thermodynamic property data*
- Johan Jacquemin, Mohammed VI Polytechnic University, Morocco – *Thermodynamic data mining and data curation*

On Sunday, 8 September 2024, the Annual meeting of the IUPAC Subcommittee on Solubility and

Conference Call

Equilibrium Data (SSED) was held at the Faculty of Science, University of Novi Sad from 9am to 6pm in a hybrid form.

In addition to the busy scientific program, the conference was also rich in social events. The conference city tour and wine tasting took place on Wednesday, September 11, 2024, in the afternoon. The conference banquet took place on Thursday, September 12, in the evening in the national restaurant Aqua Doria, which offers traditional Serbian cuisine.

Springer offers the possibility to publish articles from the conference in a special issue of the *Journal of Solution Chemistry* after a peer-review process. Plenary and keynote speakers have been invited to publish their papers in a special issue of *Pure and Applied Chemistry*.

<https://issp2024.pmf.uns.ac.rs/>

The Historic Gathering of IUPAC Presidents at the 10th International Conference of Green Chemistry

The 10th International Conference on Green Chemistry (10ICGC), held in Beijing from 18 to 22 October 2024, marked a significant milestone, not only for its success in terms of participation and excellent programme but also for the remarkable coincidence of having six past and present IUPAC Presidents in attendance. Each one of them—Nicole Moreau (2010-2011), Natalia Tarasova (2016-2017), Qifeng Zhou (2018-2019), Chris Brett (2020-2021), Javier García Martínez (2022-2023), and Ehud Keinan (2024-2025)—have

each played a critical role in advancing the green chemistry agenda. Their collective presence at this major congress devoted to Green Chemistry was a testament to IUPAC's long-standing commitment to promoting sustainable practices in chemistry.

This historic meeting underscored IUPAC's ongoing commitment and leadership to the principles of green chemistry, a field that is critical to addressing global environmental challenges. The participation of Qifeng Zhou, who served as President of Peking University before becoming IUPAC President, was particularly significant. As host, he presented each of the other Presidents with an original piece of Chinese calligraphy he made, with a message of good fortune and well-being. The Presidents enjoyed a private lunch arranged by the conference organisers, during which they recalled various anecdotes from their respective presidencies and discussed the present and future of the Union.

The 10ICGC was jointly organised by the Institute of Chemistry, Chinese Academy of Sciences, the Chinese Chemical Society and the IUPAC Interdivisional Committee on Green Chemistry for Sustainable Development (ICGCSD). The theme of the congress "Green Chemistry for Carbon Neutrality and Sustainable Development," served as a global platform for exchanging ideas and fostering collaboration among stakeholders from academia, industry, NGOs, policy makers and society. The conference made a significant contribution to the advancement of green chemistry for carbon neutrality and sustainable development, with discussions ranging from innovative chemical technologies to the future of sustainable industry. Plenary speakers included Paul T. Anastas, Yale University, USA; Kazunari Domen, University of Tokyo/ Shinshu University, Japan; Javier García Martínez, University



Six past and present IUPAC Presidents attended the 10th International Conference on Green Chemistry in Beijing in October 2024. The historic occasion highlights IUPAC's commitment to Green Chemistry. From left to right: Nicole Moreau, Natalia Tarasova, Qifeng Zhou, Chris Brett, Javier García Martínez and Ehud Keinan.