

Conference Call

“On behalf of IUPAC and the Committee on Chemistry Education (CCE), I would like to express my heartfelt thanks and deep appreciation for the very successful 27th International Conference on Chemistry Education held in Pattaya, Thailand last week. I congratulate Prof. Supawan Tantayanon and the Conference Organizing Committee for a memorable event that we all enjoyed very much. We were inspired to align our teaching with sustainability and implement new approaches in our practice when we returned home. It was an honour for IUPAC and the CCE to be associated with this conference.

I would like to acknowledge a few things which stood out:

- The conference organization reflected exceptional care and attention to detail in every aspect— the registration, welcoming ceremony, scientific program, excursions and conference dinner. We were hosted in a beautiful setting by a team of friendly and helpful chemistry staff and students who were eager to see to the needs of all visitors.
- The conference was attended by ca. 600 delegates from 56 countries of whom 200 were school teachers. Professor Supawan worked hard to raise funding for registration fee waivers for all of these teachers. Many of the delegates from the region and most of these teachers have never been able to attend an international chemistry education conference before and were most grateful for the opportunity. A special programme was offered for the teachers which included a whole-day workshop on microscale/small-scale chemistry.
- The organizing committee created a special event for Thai school teachers/students called “ICCE2024 Youth Scientists in Schools,” to present their work in the poster session on 16 July. All participants were awarded certificates according to the merit of their work in three levels, Gold, Silver and Bronze, and these certificates and medals were presented to them by the Minister of Education of Thailand.”

Acknowledgement

As Chair of the 27th IUPAC International Conference on Chemistry Education (ICCE 2024), I would like to express my deepest gratitude to all the individuals and organizations that contributed to the success of this event:

1. **The International Advisory Board of ICCE 2024:** Your invaluable guidance was key to shaping this conference. I am particularly grateful to Marietje

Potgieter, Chair of the IUPAC Committee on Chemistry Education, for her crucial advice and support throughout the entire process, from the early stages of preparation to the execution of the conference.

2. **The Organizing Committee:** Your hard work and dedication were evident, especially during the five days of the conference. I would like to extend special thanks to Taweetham Limpanuparb, Supakorn Boonyuen, and Pumidech Puthongkham for their meticulous efforts in logistics and planning.

3. **The plenary, keynote, and invited speakers, along with the chairs, co-chairs, workshop leaders, and reviewers:** Your contributions were pivotal in making the scientific sessions both insightful and engaging.

4. **All the delegates:** Your active participation enriched the conference with outstanding presentations, posters, and workshops, making ICCE 2024 a truly collaborative and interactive event.

5. **The sponsors:** I am deeply thankful for your financial support, which made this conference possible. Special recognition goes to Bangkok Bank Public Company Limited, Dow Thailand, Boon Rawd Brewery Co. Ltd., Shimadzu, Bara Scientific Co., Ltd., the Royal Society of Chemistry (RSC), the American Chemical Society (ACS), International Union of Pure and Applied Chemistry (IUPAC), Organization for Prohibition of Chemical weapons (OPCW), Royal Cliff Hotels group, and many others for your generous contributions.

Your collective efforts and support have made ICCE 2024 a resounding success.

<https://www.icce2024thailand.com/>

Building Chemical Bridges in Latin America: Reflections from the 36th Congreso Latinoamericano de Química

by Javier García-Martínez

Late September last year, I had the pleasure of attending the 36th Congreso Latinoamericano de Química (CLAQ, Latin American Chemistry Congress), held in Panama from 25 September to 9 October. This 2024 event was particularly significant as it coincided with the 50th anniversary of the Colegio Panameño de Químicos (Copaqui), marking an important milestone in the chemical sciences community in Panama. The congress theme, Construyendo Puentes Químicos en América Latina (Building Chemical Bridges in Latin America), emphasised the importance of regional



Javier García-Martínez pictured with some of the early career chemists who attended the 36th Latin American Chemistry Congress in Panama, coinciding with the 5th Student Chemistry Congress.

cooperation and the common challenges and opportunities facing Latin American chemists in the 21st century.

Held in conjunction with the XII Congreso Nacional de Química (National Chemistry Congress) and the V Congreso Estudiantil de Química (Student Chemistry Congress), the CLAQ 2024 programme was diverse and included a number of key events, such as three roundtables on topics such as chemical entrepreneurship, frontiers in chemical research and the role of chemistry in driving innovation in the region. The congress brought together leading researchers, professionals, and students to discuss the latest advances in chemical research in areas ranging from materials science to biotechnology. During the congress, the Latin American Women in Chemistry Awards were presented to Grissel Trujillo de Santiago (Emerging Leader in Chemistry), Priscila Castelani (Leadership in Industry) and Coralía Osorio Roa (Leadership in Academia).

During the congress, I had the privilege of delivering a plenary lecture on Catalysing Circular Chemistry. This was a wonderful opportunity to share recent advances catalysis for a more sustainable future with an audience eager to explore the role of chemistry in addressing climate change and sustainability. I also presented some of IUPAC's key activities and invited participants to attend the Global Women's Breakfast on 11 February

2025, to nominate more candidates for our awards and prizes, and to attend our 53rd IUPAC General Assembly and the 50th World Chemistry Congress, which will be held in Kuala Lumpur, Malaysia, in July 2025.

Particularly useful was my participation in the General Assembly of the Federation of Chemical Societies of Latin America (FLAQ), where I described the main initiatives and programmes organised by IUPAC and invited the participants to benefit from the various efforts made with the Spanish-speaking community in mind, such as the translation into Spanish of the Brief Guides to Inorganic, Organic and Polymer Nomenclature and the OPCW-IUPAC e-Learning Safety Training Programme in Spanish. I also introduced the Presidents' Forum to the representatives of the various Chemical Societies present in the room. This meeting provided an excellent platform to address common goals, including the promotion of chemistry education, the advancement of scientific research, and the implementation of sustainable practices.

I took advantage of my time in Panama to meet with the President and other academic authorities of the University of Panama, the country's largest and oldest university with over 100 000 students. We discussed ways to further strengthen the relationship between IUPAC and Panama's academic institutions. Discussions focused on creating more opportunities for

Panamanian students and researchers to engage with IUPAC's global initiatives, particularly in the areas of sustainability and educational outreach. This meeting was an important step in expanding IUPAC's presence in the region and ensuring that Panama continues to play a vital role in Latin American and global chemistry.

Taking advantage of my visit to the University of Panama, I gave a talk to their chemistry students entitled "Reimagining Our Relationship with the Planet at a Molecular Scale." In this talk, I challenged students to reimagine chemistry at the molecular level to shape global sustainability efforts and urged them to take an active role in rethinking chemical processes to better meet environmental needs. This dialogue with the new generation of Panamanian chemists was particularly rewarding, as their passion and innovative ideas demonstrated the future potential of the region's scientific community.

I am delighted to say that the 36th CLAQ in Panama was a resounding success, both in terms of scientific exchange and in strengthening regional ties. The Congress truly embodied its theme of "Building Chemical Bridges" and facilitated meaningful connections across Latin America. From the lively discussions during the congress to the strategic conversations with academic and industry leaders, it is clear that Latin American chemists are committed to driving the future of the field with an eye towards sustainability, innovation and international collaboration. I am deeply grateful to have been part of this historic event and look forward to continuing to work with my colleagues across the region as we build a stronger, more connected scientific community.

As we look forward to CLAQ 2026 in Lima, Peru, the groundwork laid at the Panama Congress will serve as a foundation for future meetings. The conversations started in Panama will undoubtedly continue in Lima as we strive to further integrate the scientific capabilities of the region. The next Congress promises to build on this year's momentum, with even more ambitious goals to foster chemical innovation and address the global challenges that unite us all.

The 36th Congreso Latinoamericano de Química was a testament to the power of regional cooperation and the critical role of chemistry in shaping a sustainable future. I would like to express my sincere gratitude to Copaqui and the entire Organizing Committee for their extraordinary work in bringing this event to life, and for allowing me to share with chemists from the region how IUPAC is contributing to the advancement of the chemical sciences worldwide, and to invite them to be part of this effort. The discussions, connections and ideas shared in Panama will undoubtedly have a profound

impact in the region, helping to further strengthen the links between the various Latin American chemical societies and between them and the rest of the world.

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African Training School on Green Chemistry and Environmental Sustainability

by Florent Allais

Green chemistry is pivotal in tackling the world's pressing environmental challenges, offering sustainable strategies to reduce pollution and conserve resources, ultimately contributing to a healthier planet. However, for the field to reach its full potential, inclusivity and diversity are essential. The active involvement of African scientists, including women, in green chemistry is key to driving innovation, advancing equity, and ensuring that sustainable solutions are relevant and beneficial to communities worldwide. Their participation enriches the field, fostering a more comprehensive approach to addressing global environmental needs.

Innovation flourishes in diverse settings, where varied perspectives drive groundbreaking advancements. Scientists from Africa in the field shaped by their unique experiences and cultural backgrounds, bring fresh insights that can significantly impact green chemistry. Their understanding of the environmental challenges faced by underrepresented and marginalized communities enables them to develop targeted, practical solutions. For instance, African scientists may focus on sustainable innovations tailored to the continent's specific environmental and economic needs, such as water purification technologies to combat scarcity in arid regions. Likewise, female scientists may prioritize research on the health effects of chemical exposure, particularly addressing the heightened vulnerability of women and children to pollutants.

Diverse teams are more likely to challenge established thinking, explore unconventional approaches, and ask novel questions. This creative tension fosters the development of innovative green chemistry solutions