

The Future of Chemistry: Catalyzing Innovation for Sustainable Development.

The 2023 **World Chemistry Leadership Meeting (WCLM)** of IUPAC will be held during the World Chemistry Congress (WCC) at The Hague in The Netherlands on 23 August 2023. The theme of the meeting has its roots in a relatively new (2019) IUPAC project—the identification of the Top Ten Emerging Technologies in Chemistry—technologies that are judged to have the highest potential to improve the quality of life, contribute to economic growth, and advance society towards a more sustainable future. Every year and since 2019 when this project was initiated as one marking IUPAC's 100th anniversary, it has sparked a global conversation about how chemistry is evolving, and it has raised questions such as what is the “next best thing” in chemistry? how do we prepare for it? where is chemistry heading with regards to access to resources, regulation, energy, health, materials, *etc.*?

While this year's Top Ten emerging Technologies will be revealed in a later issue of *Chemistry International*, the 2023 WCLM will attempt to answer some of the aforementioned questions. In planning for this biennial meeting, the WCLM organizers reached out to leaders in the global chemical community and asked what they perceived as Society's most pressing problems and what challenges chemistry faces in finding solutions to those problems. The time allotted to the WCLM will not permit us to provide a comprehensive overview, but we do hope that the topics selected will be of interest to researchers from all areas of chemistry, including industry, government, and academia.

The following topics were selected:

- The digitalization of chemistry (artificial intelligence, machine learning, virtual reality, quantum computers, robotics)
- The advanced chemical recycling of plastics
- New fuels (the future of energy and the environment)
- Pandemic responsiveness (speed of testing, personalized medicine, wearable sensors)
- New methods for drug discovery (programmable chemical syntheses, spatial genomics—will build on the first bullet point above)
- The future of chemistry education (how should chemists be prepared for the lab of the future, for data sharing/management, for the interdisciplinary nature of scientific research, *etc.*?)



We are inviting one speaker per topic for a fifteen to twenty minute presentation. Time will be allotted at the end for a wrap-up and a question-and-answer session. Pending speaker permissions, we will record the session and post it to the IUPAC YouTube channel.

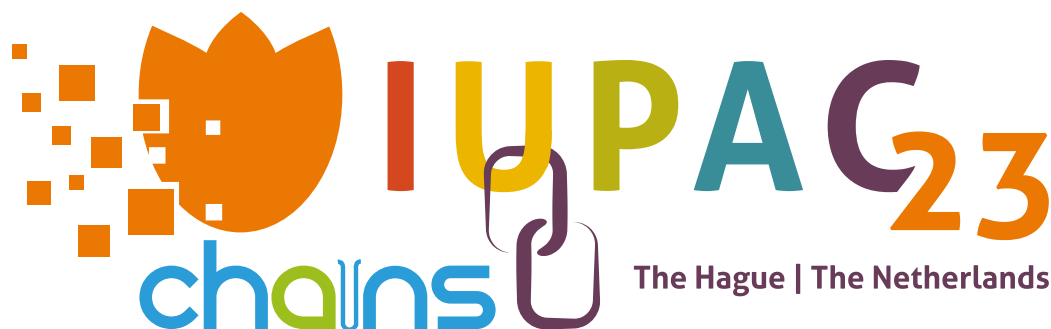
The goal with this WCLM is to lay a foundation for future meetings where chemistry leaders from around the world will gather, learn more about emerging trends in chemistry, and determine what they need to do to prepare their labs, their researchers, and the next generation of students for a successful future.

Look for progress on the development of the 2023 WCLM in future editions of *Chemistry International* as well as in future editions of IUPAC Concentrates. We look forward to seeing you in The Hague and invite your feedback in order to shape future meetings that will meet your needs and expectations.

The 2023 WCLM Organizing Team

Michael Droescher; Jeremy Frey; Zhigang Shuai; Bonnie Lawlor; Fabienne Meyers; Greta Heydenrych

<https://iupac.org/tag/wclm/>



The Hague | The Netherlands

CONNECTING CHEMICAL WORLDS

SAVE THE DATE

18 – 25 August 2023, General Assembly

20 – 25 August 2023, World Chemistry Congress

World Forum The Hague, The Netherlands

*"I look forward to
welcoming you
to the Netherlands
in 2023!"*

Stay informed

Please visit the website and leave your contact
details for updates on IUPAC | CHAINS 2023

Ben Feringa, Honorary Chair

www.iupac2023.org



IUPAC

INTERNATIONAL UNION OF
PURE AND APPLIED CHEMISTRY

KNVCV

