



The 2022 finalists are (in alphabetical order):

- Aerogels
- Fibre batteries
- Film-based fluorescent sensors
- Liquid solar fuel synthesis
- Nanoparticle mega libraries
- Nanozymes
- Rational vaccines with SNA
- Sodium-ion batteries
- Textile displays
- VR-enable interactive modeling

IUPAC President, Professor Javier García Martínez, said that “the role of chemistry is central to finding and implementing innovative solutions that enable a more sustainable future. With this initiative, IUPAC informs policy and industry leaders, granting agencies, and the general public about technologies that are already creating new opportunities and opening new avenues for research and industry. The importance of this initiative is emphasized by the generous sponsorship of the International Year of Basic Sciences for Sustainable Development (IYBSSD-2022) and the Federación Empresarial de la Industria Química Española (feiQue) for which IUPAC is deeply grateful.”

The 2022 Top Ten Emerging Technologies in Chemistry are further detailed in a feature article published in this issue of *Chemistry International (CI)* [see page 4]. Fernando Gomollón-Bel, the author of that feature has said, “This project, recognized by experts worldwide, highlights the value of the chemical sciences in the transition to a green economy and a more sustainable world, in line with the United Nations’ Sustainable Development Goals (SDGs). This year IUPAC joins the celebration of the International Year of Basic Sciences for Sustainable Development (IYBSSD), a UN resolution to reaffirm and emphasize the importance of basic sciences, chemistry among them, to attain the ambitious SDGs by 2030. Each of the technologies gives us a glimpse of what chemistry can achieve and how creativity and commitment for a more sustainable future can

yield the solutions we so urgently need.”

The first selection of the Top Ten Emerging Technologies in Chemistry was released in 2019 as a special activity honoring IUPAC’s 100th anniversary. The results were published in the April 2019 issue of *Chemistry International*, 41(2), pp. 12-17, 2019 (<https://doi.org/10.1515/ci-2019-0203>). The results of subsequent editions and the related articles in CI can be accessed at: <https://iupac.org/what-we-do/top-ten/>.

The search for the 2023 Top Ten Emerging Technologies in Chemistry has already begun and is being led again by Michael Droescher.

*The following comprised the panel of judges for the 2022 Top Ten Emerging Technologies in Chemistry: Chair, Michael Droescher, (German Association for the Advancement of Science and Medicine), Jorge Alegre-Cebollada (Centro Nacional de Investigaciones Cardiovasculares, Spain), Christine Luscombe (Okinawa Institute of Science and Technology, Japan), Javier García Martínez (Universidad de Alicante, Spain), Ehud Keinan (Technion, Israel), Rai Kookana (CSIRO Land & Water, Australia), Zhigang Shuai (Tsinghua University, China), Natalia P. Tarasova (D. I. Mendeleev University of Chemical Technology, Russia), and Bernard West (Life Sciences Ontario, Canada).

<https://iupac.org/what-we-do/top-ten/>

IUPAC International Award For Advances In Harmonized Approaches To Crop Protection Chemistry—Call For Nominations

The IUPAC International Award For Advances In Harmonized Approaches To Crop Protection Chemistry recognizes individuals in government, intergovernmental organizations, academia, and industry who have exercised personal leadership for outstanding regulatory, public policy, and/or educational contributions supporting international harmonization of crop protection chemistry. The award is administered by the IUPAC Advisory Committee on Crop Protection Chemistry, a IUPAC subcommittee of Chemistry and the Environment Division, and is presented on a biennial basis.

The next award will be presented as part of the Agrochemicals Division program for the Fall 2023 American Chemical Society meeting in San Francisco, USA, during August of 2023. Awardees receive an honorarium plus travel and per diem reimbursement to attend the award presentation ceremony.



CALL FOR NOMINATIONS

*IUPAC International
Award for Advances in
Harmonized Approaches
to Crop Protection
Chemistry*

Nominations for the 2023 award are due by **1 December 2022** and should be sent to Dr. Laura McConnell <laura.mcconnell@bayer.com> and will consist of:

- A nomination letter including a description (200–1000 words) of the reasons why the nominee should receive this award, stressing the individual's major accomplishments toward international harmonization of crop protection chemistry.
- A curriculum vitae of the candidate that includes places and names of employment, professional affiliations, committee and working group assignments, and listing of relevant regulatory guidance documents, reports, and/or publications.

IUPAC acknowledges Corteva Agriscience for providing continued corporate sponsorship of this award.

Past Awardees:

- 2019 – Mark R. Lynch (posthumously), Department of Agriculture and Food, Ireland
- 2016 – Daniel L. Kunkel, IR-4 Project, Rutgers, NJ, USA
- 2014 – Árpád Ambrus, National Food Chain Safety Office, Budapest, Hungary
- 2012 – Lois A. Rossi, Office of Pesticide Programs, Environmental Protection Agency, Washington, DC, USA
- 2010 – Denis J. Hamilton, Animal and Plant Service, Queensland Department of Primary Industries, Brisbane, Australia

<<https://iupac.org/what-we-do/awards/>>

2023 IUPAC-Solvay International Award For Young Chemists—Call For Applicants

The IUPAC-SOLVAY International Award for Young Chemists is intended to encourage outstanding young research scientists at the beginning of their careers. The awards are given for the most outstanding Ph.D. theses in the general area of the chemical sciences, as described in a 1000-word essay. The award is generously sponsored by Solvay.

In 2023 IUPAC will award up to five prizes. Each prize will consist of USD 1,000 cash award and up to USD 1,000 towards travel expenses to attend the 2023 IUPAC Congress in The Hague (18–25 Aug 2023; see iupac2023.org). In keeping with IUPAC's status as a global organization, efforts will be made to ensure fair geographic distribution of prizes.

The awards will be presented at the 2023 IUPAC Congress. Each awardee will be invited to present a poster on his/her research and to participate in a plenary award session, and is expected to submit a review article for publication in *Pure and Applied Chemistry*.

Complete applications must be received at the IUPAC Secretariat by **15 February 2023**.

<https://iupac.org/2023-iupac-solvay-international-award-for-young-chemists-call-for-applicants/>

2023 Distinguished Women in Chemistry/Chemical Engineering Award—Call for Nominations

IUPAC is pleased to announce the call for nominations for the IUPAC 2023 Distinguished Women in Chemistry or Chemical Engineering Awards. The purpose of the awards program, initiated as part of the 2011 International Year of Chemistry celebrations, is to acknowledge and promote the work of women in chemistry/chemical engineering worldwide.

On 2 August 2011, 23 women were honored during a ceremony held at the IUPAC Congress in San Juan, Puerto Rico. At each of the subsequent IUPAC Congresses, 12 women received this recognition; in Istanbul, Turkey in 2013, in Busan, Korea in 2015, in Sao Paulo, Brazil in 2017, in Paris, France in 2019, and virtually (in Montréal) in 2021. A similar award ceremony will take place during the 2023 IUPAC Congress in