## The Top Ten Emerging Technologies in Chemistry—Call for Proposals for 2020

**IUPAC has released its call for proposals to identify the top ten emerging technologies in chemistry with the results to be announced in 2020.**

This initiative began in 2018 in recognition of IUPAC's Centenary in 2019, and while it was created to kick off IUPAC's anniversary year in a very visible way, the end goal was to showcase the value of chemistry (and chemists!) and to inform the general public as to how the chemical sciences contribute to the well-being of society and the sustainability of Planet Earth. The finalists for 2019 were announced in April 2019 and detailed in the April/June 2019 issue of *Chemistry International* (*CI*).

The call for the 2020 proposals is now open. Anyone can submit one or more proposals—this call for proposals is open to the global science community as well as to the general public.

Call for proposals—deadline **31 October 2019**

https://iupac.org/top-ten-emerging-technologies-call-2020/

## 2020 IUPAC-Richter Prize in Medicinal Chemistry—Call for Nominations

**The 2020 IUPAC-Richter Prize will be presented during the XXVI EFMC International Symposium on Medicinal Chemistry (6-10 September 2020) in Basel, Switzerland, where the recipient will also give a plenary lecture on the subject of their research.**

The prize is to be awarded to an internationally recognized scientist, preferably a medicinal chemist, whose activities or published accounts have made an outstanding contribution to the practice of medicinal chemistry or to an outstanding example of new drug discovery.

**Prize USD 10 000**

The Prize has been established by a generous gift from the **Chemical Works of Gedeon Richter, Plc.** (Budapest, Hungary) to acknowledge the key role that medicinal chemistry plays toward improving human health.

Applicants should be received by NOMINATION only, with just one person needing to serve in that capacity, although a total of five (5) individuals should be listed as referees overall. The package must be submitted electronically and should contain a complete resume, a professional autobiography of not more than two pages, and a one-page summary of what the individual considers to be their activities, accomplishments and/or publications that have had the most significant impact upon the field of Medicinal Chemistry. The material will be forwarded confidentially to an independent selection committee appointed by the IUPAC Subcommittee on Medicinal Chemistry and Drug Development.

For further information, please contact Prof. Janos Fischer, Member of the IUPAC Sub-committee on Drug Discovery and Drug Development, by email at <j.fischer@richter.hu>.

Nomination materials should be submitted by **15 December 2019.**

https://iupac.org/2020-iupac-richter-prize-call-for-nominations/

## Awardees of the 2019 IUPAC-Zhejiang NHU International Award for Advancements in Green Chemistry

**The first four recipients of the recently established IUPAC-Zhejiang NHU International Award for Advancements in Green Chemistry go to Mingxin Liu from McGill University, Montreal, Xiaofu Sun from the Chinese Academy of Sciences, Beijing, Julian West from Rice University, TX, and to Fabio Aricò from the Università Ca' Foscari, Venezia, Italy. The collaborative award in Green Chemistry has been established to encourage young and experienced chemists, and to emphasize the importance of advancements in Green**


*Presentation of the first awards at the IUPAC Congress in Paris on 12 July 2019; from left: Qifeng Zhou (IUPAC President), Pietro Tundo (ICGCSD Chair), Clement Sanchez (Congress Chair), Jean-Marie Lehn, Fabio Aricò, Xiaofu Sun, Haoran Li (NHU), and Jean-Pierre Vairon.*

**Chemistry and the value of sciences to human progress.**

The awards were presented during the closing ceremony of the IUPAC Congress in Paris on Friday, 12 July 2019. The awardees also attended a special symposium titled "Chemistry Addressing the UN-17 Sustainable Development Goals," organized by the IUPAC Interdivisional Committee on Green Chemistry for Sustainable Development (ICGCSD).

The winners have been invited to prepare a review article for publication in a coming issue of *Pure and Applied Chemistry*. The award will be presented every two years and the next call will be announced in 2020, in advance of the 2021 IUPAC Congress to be held in Montreal, Canada, 13-20 August 2021.

For reference and more details about the awards, including detailed bio of the awardees, see https://iupac.org/iupac-zhejiang-nhu-international-award/

## In Memoriam: René Dybkaer

### a personal memo shared by Brynn Hibbert

**I first met René when the IUPAC General Assembly came to Brisbane Australia in 2001. IUPAC was not an organization I (then) knew much about, but I found myself confronted by Paul De Bièvre demanding that I join a task group on metrological traceability. At the time I would not have called myself a metrologist in chemistry (MiC) or in any other field. The great minds assembled for the project were Paul De Bièvre, René Dybkaer, Ales Fajgelj, and me. I had no idea that our task would take ten years (finally published as De Bièvre, P.; Dybkaer, R.; Fajgelj, A.; Hibbert, D. B.: Metrological traceability of measurement results in chemistry: Concepts and implementation (IUPAC Technical report) *Pure Appl. Chem.* 2011, 83, 1873-1935), and that during the time I would come to form strong friendships with my comrades in the "Gang of Four." Paul is no longer with us and now René has left the stage.**

René was tall, thin with a habit of pursing his lips while saying "Oh no, I don't think that can be right" as he pointed out a logical flaw in an argument. He was invariably correct, and no one took offence, but always deferred to his clarity of thought. This led to a no-compromise approach. Whereas some of us would try and see the others point of view, René simply said what was correct and that was that. We met his splendid wife, and occasionally heard tell of his past. Had he really represented Denmark in the Olympic Games in the 1950s wielding a sword?

*René Dybkaer (left) and Brynn Hibbert at the IUPAC Congress/GA in Torino in 2007.*

I served with René on the Joint Committee for Guides on Metrology (JCGM) Working Group 1, the committee that has the stewardship of the Guide to the Expression of Uncertainty in Measurement (GUM, JCGM 100:2008), and watched him as he created the Silver Book (G. Férard, R. Dybkaer, and X. Fuentes-Arderiu: *Compendium of terminology and nomenclature of properties in clinical laboratory sciences: Recommendations 2016*; RSC Publishing: Cambridge, UK, 2017.) He was the master of the logical naming of quantities by dimension. So on page 146 of the Silver Book we find dimension $L^2MT^{-2}\Theta^{-1}$ the "entitic kelvic energy constant" which to you and me is simply the Boltzmann constant.

René was kind, and generous with his time and thoughts. He had an interest in science fiction and science fantasy and was happy to recommend titles, but above all René was an excellent teacher and companion. René passed away on April 29, 2019.