cheminformatics standards will serve to inform the community and help coordinate further standards development.

Example topics appropriate for this *Cheminformatics: Data and Standards* special issue may include:

1. Cheminformatics standards use-cases and workflows across disciplines.
2. Discussions around how cheminformatics standards advance research and teaching.
3. Perspectives related to current cheminformatics standards and future needs, for example interoperability and metadata considerations.
4. Cheminformatics datasets useful for teaching and/or validation.
5. Standardization needs related to infrastructure (*e.g.,* repositories), cheminformatics toolkits, or data sharing.
6. Conference, symposia, or workshop based outcomes related to cheminformatics standardization.

If you are interested in contributing to this Special Issue, please send a provisional title, together with the name and email address of the submitting author to Vincent Scalfani vfscalfani@ua.edu.

Guest Editors:

- Vincent Scalfani, University of Alabama
- Jonathan Goodman, University of Cambridge
- Ian Bruno, Cambridge Crystallographic Data Centre

Please see the *Pure and Applied Chemistry* Author Guidelines for specific manuscript preparation information at https://www.degruyter.com/journal/key/PAC/html. Note that typically articles in Pure and Applied Chemistry occupy 6-12 journal pages, however, we will also consider shorter discussions appropriate to the special issue. Manuscripts are due by September 30.

IUPAC Periodic Table Challenge 2020: Top Schools Announced

Following the success of the IYPT2019 [10.1515/ci-2020-0204], IUPAC continued the Periodic Table Challenge which not only had more questions, but also welcomed more participants! Since its start in 2019, more than 100 000 tests have been taken by keen players from 155 countries/territories all over the world. Since, the PT Challenge saw not only continued popularity but was translated into Arabic, Chinese, Russian, and Spanish. Countless schools have participated throughout the year and we are proud to announce the list of 15 most active schools that have showed great and sustained interest in the IUPAC Periodic Table Challenge:

TOP7 SCHOOLS

- Bal Bharati Public School, Navi Mumbai (India)
- Colegio Interamericano, Bogota (Colombia)
- Covenant University, Ota (Nigeria)
- STEM High School Qalyubia, Al Obour (Egypt)
- St. Francis English Medium High School, Machilipatnam (India)
- Tarlac State University, Tarlac (Philippines)
- Universidad Central del Este, San Pedro (Dominican Republic)

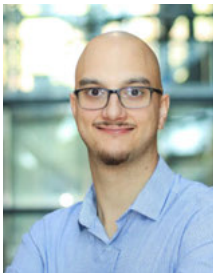
HONORABLE MENTION

- Anglo Sanskrit College, Khanna (India)
- Cluster School of SMK Methodist, Sibu (Malaysia)
- DAV Public School BRS Nagar, Ludhiana (India) Instituto "La Candelaria" Olmos, Buenos Aires (Argentina)
- National Public School Yeshwanthpur, Bangalore (India)
- STEM High School Dakahlia, Belkas (Egypt)
- SMK Ora et Labora BSD, Tangerang Selatan (Indonesia)
- Universidad del Valle de Atemajac, Guadalajara (Mexico)

The highlighted TOP7 SCHOOLS will receive the Periodic Table posters signed by chemistry Nobel Laureates which is made possible by the generous participation from 13 Nobel laureates. We thank Roald Hoffmann (Nobel Prize 1981), Jean-Marie Lehn (1987), Barry Sharpless (2001), Kurt Wüthrich (2002), Peter Agre (2003), Robert H. Grubbs (2005), Martin Chalfie (2008), Ada Yonath (2009), Robert J. Lefkowitz (2012), Ben Feringa (2016), Sir Fraser Stoddart (2016), Joachim Frank (2017), Frances Arnold (2018) for their support!

Winners of the 2021 IUPAC-Solvay International Award For Young Chemists

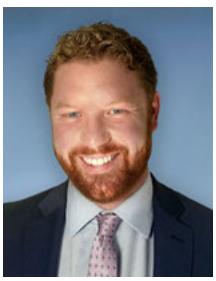
The International Union of Pure and Applied Chemistry and Solvay announce the winners of the 2021 IUPAC-Solvay International Award for Young Chemists, presented for the best Ph.D. theses in the chemical sciences, as described in 1000-word essays.


Gabriele Laudadio


Justin Andrews


Kaibo Feng


Kelly Brown


Austin Michael Evans

The five winners are:

- Gabriele Laudadio (Italy), Ph.D., Eindhoven University of Technology (NL); *New synthetic methods enabled by photochemistry and electrochemistry in flow*
- Justin Andrews (USA), Ph.D., Texas A&M University; *Corralling Electrons in Metastable Vanadium Oxides: Implications for Neuromorphic Computing, Electrical Energy Storage, and Photocatalysis*
- Kaibo Feng (China/Beijing), Ph.D., University of Illinois at Urbana-Champaign; *Late-Stage C(sp3)–H Hydroxylation, Amination, and Methylation in Nitrogen-Containing Molecules*
- Kelly Brown (UK), Ph.D., University of Strathclyde; *Development of Electrochemiluminescent Sensors as Screening Tools for the Identification of Drug Species within Complex Matrices for Forensic Investigations*
- Austin Michael Evans (USA), Ph.D., Northwestern University; *Two-dimensional polymers and polymerizations*

The winners will each receive a cash prize of USD 1000 and are invited to present a poster at the 48th IUPAC World Chemistry Congress describing his/her award-winning work. Because this year the IUPAC Congress is planned as a virtual event, the winners will also be invited the 2023 IUPAC Congress to be held in The Netherlands. Each winner is invited to submit a short critical review on aspects of his/her research topic, to be published in *Pure and Applied Chemistry.*

There were 46 applications from individuals receiving their Ph.D. degrees from institutions in 18 countries. The award selection committee, chaired by Qi-Feng Zhou, IUPAC Past President, comprised members of the IUPAC Bureau and a senior science advisor from Solvay, all of whom have a wide range of experience in chemistry.

In view of the many high-quality applications, the Committee also decided to award three Honorable Mentions to:

- Irene Regeni (Germany), Ph.D., TU Dortmund University (Germany)
- Ni Kaiyuan (China/Beijing), Ph.D., The University of Chicago
- Dusan P. Kolarski (Serbia), Ph.D., University of Groningen

The call for applications for the 2022 IUPAC-Solvay International Award for Young Chemists will open soon. Eligible candidates must have received a Ph.D. or equivalent degree in any of the countries that have National Adhering Organizations or Associate National Adhering Organizations in IUPAC during the year 2021.

Winners of the Inaugural 2021 IUPAC Analytical Chemistry Awards

In 2019, the IUPAC Analytical Chemistry Division established two awards:

- The IUPAC Analytical Chemistry Medal—an award to recognize significant lifetime contribution to analytical chemistry and for researchers who have a substantial record of achievements demonstrated by the number and quality of their publications, by being actively involved in international partnerships as well as by their commitment in the training of the next generation of analytical chemists.
- The Emerging Innovator Award in Analytical Chemistry—an award to recognize outstanding work undertaken by researchers who are at the early stage of their independent career.

The inaugural 2021 IUPAC Analytical Chemistry Medal recipient is Joseph Wang.

Wang is a Distinguished Professor of Nanoengineering and SAIC Endowed Chair at the University of California San Diego (UCSD). He also serves as the Director of the UCSD Center of Wearable Sensors.

Wang obtained his higher education at the Israel Institute of Technology (Haifa), being awarded his D.Sc. in 1978. From 1978 to 1980 he served as a research associate at the University of Wisconsin (Madison). Between 1980 and 2004 he was a member of the Chemistry department at NMSU where he held a Regents Professor and a Manasse Chair between 2001 and 2004, and between 2004 and 2008 he served as the Director of the Center for Bioelectronics and Biosensors and a Professor of Chemical Engineering and Chemistry at Arizona State University, and as Chair