Future Implications of Open-Access & FAIR Data Practices on Chemistry and Chemical Engineering Publications – A Workshop

Committee

Robert E. Maleczka, Jr.

Chair

Robert E. Maleczka, Jr., is a Professor of Chemistry at Michigan State University and served as Department Chair from 2010–2021. The Maleczka group's research interests include the invention of "green" reactions and strategies for organic synthesis. C—H borylations, Wittig rearrangements, and silsesquioxane chemistry are among their specific area of investigation. Maleczka is an American Chemical Society (ACS) Fellow, a Fellow of the American Association for the Advancement of Science, and has received the Merck Technology Collaboration Award, the U.S. Environmental Protection Agency's (EPA) 2008 Presidential Green Chemistry Challenge Award, the Astellas USA Foundation Faculty Award, and the Anslyn, Iverson, Sessler Lecturer at the University of Texas. He has served as a Diversity Scholar in the Center for the Integration of Research, Teaching, and Learning, as an invited participant of the ACS/EPA Green Chemistry Market Roundtable and White House Forum, and as Treasurer and elected member of the Executive Committee of the ACS Division of Organic Chemistry. Maleczka received a B.S. in chemistry from the University of Illinois, a Ph.D. in chemistry from the Ohio State University, and was an American Cancer Society postdoctoral fellow at the. University of Pennsylvania. He has been a member of the Chemical Sciences Roundtable since 2018.

Brian D. Crawford

Member

Brian Crawford is an independent consultant and strategist skilled in building successful scientific, technical, and medical publishing enterprises, and experienced in the biochemical sciences and biomedicine. He previously served as President of the Publications Division of the American Chemical Society (ACS) where he held general management responsibility for the ACS's collection of peer-reviewed scientific journals, as well as the multimedia publishing operations of its news periodical, Chemical & Engineering News. Before joining the ACS, Crawford was Vice President and STM Publishing Director for the Scientific, Technical, and Medical (STM) publishing operations of US-headquartered John Wiley & Sons, Inc. An innovator in professional journal, book, and digital publishing, he has more than 30 years of experience in the STM information industry, with both not-for-profit professional society and commercial publishers. He is currently a member of the Board of Directors of the Copyright Clearance Center (CCC), as well as the Dean's Health Advisory Board for the Johns Hopkins Bloomberg School of Public Health. Crawford previously served on the Board of Directors of the Association of American Publishers (AAP), as President of the American Medical Publishers Association (AMPA), and a member and chair of the Executive Council of the Professional and Scholarly Publishing Division of the Association of American Publishers Crawford received a B.S. Cum Laude with High Honors in chemistry from the University of Maryland, College Park and a Ph.D. in biochemical and biophysical sciences at the Johns Hopkins University School of Public Health.

Michael Forster

Member

Michael Forster is a recently retired publishing industry executive with long experience leading and formulating strategy for both commercial and membership society organizations. In senior roles with Elsevier, Wiley, and IEEE he was responsible for journals, books, lab protocols, A&I services, databases, publishing technology, platform, and software development activities, living and working in the UK, the US, and Germany. Accomplishments include the deployment of searchable chemistry in online journal articles, automation of chemical taxonomy use, integration of software preservation in article publication, and launch of AI-based synthetic pathway planning. He is focused on ensuring that publishers understand the research workflow and provide tools and products that integrate with it successfully; for more than 10 years this has meant providing leadership around research reproducibility, data preservation, and open access. He has served as chair of CHORUS, with the board of CrossRef and GlobalSpec, and on committees of the STM Association and AAP-PSP, as well as engaging directly with the White House / OSTP on Open Access issues, and numerous organizing or presenting roles for NSF, NASEM, and other workshops and conferences.

Leah R. McEwen

Member

Leah McEwen is Chemistry Librarian at Cornell University, based in the Clark Physical Sciences Library. She received her MS in Nutritional Biochemistry from Cornell and her MLS in Library Science from Emporia State. Leah is responsible for managing chemical information collections and services, including discovery, digital tools and data management. She is an international leader in chemistry data standards development and has served on Boards and contributed to a number of chemistry resources, including SciFinder-n, the CRC Handbook of Chemistry and Physics and Chemistry & Engineering News, the ACS Style Guide and the PubChem Database, among others.

Fatima M. Mustafa

Member

Fatima Mustafa is the Project Coordinator of the IUPAC (International Union of Pure and Applied Chemistry) WorldFAIR Chemistry project and a Lecturer at the University of Texas, San Antonio. WorldFAIR is a multidisciplinary initiative funded by the European Union and directed by CODATA (Committee on Data of the International Science Council) and RDA (Research Data Alliance), WorldFAIR seeks to strengthen international cooperation around FAIR data (Findable, Accessible Interoperable, Reusable) and to connect diverse activities across disciplines and geographies. As the coordinator for WorldFAIR Chemistry, she helps with project management and coordinates community outreach activities. Mustafa received a Ph.D. in analytical chemistry from Clarkson University.

Jacob S. Yeston

Member

Jake Yeston joined the Staff at Science Magazine in 2004, with responsibilities to edit and coordinate review for original research submissions in chemistry and overlapping segments of biochemistry and applied physics. In his current role as an editor at the journal, he now oversees the editorial group handling all research content in the physical sciences. Previously, he conducted postdoctoral research in ultrafast spectroscopy at the Max Planck Institute for Quantum Optics in Garching, Germany on a Humboldt fellowship (under Karl Kompa), and then worked as a National Research Council fellow at the National Institute of Standards and Technology in Gaithersburg, Maryland (under Edwin Heilweil). Dr. Yeston earned his Ph.D. in chemistry from the University of California, Berkeley in 2001, with a focus at the interface of synthetic organometallic chemistry and vibrational spectroscopy (working jointly under Robert Bergman and C. Bradley Moore).

Linda Nhon

Staff Officer

Dr. Linda Nhon is a program officer with the Board in Chemical Sciences and Technology in the Division of Earth and Life Studies at the National Academies. In her current role she oversees various convening activities ranging from consensus studies to roundtables. She directed two major reports Advancing Chemistry and Quantum Information Science and Chemical Terrorism: Assessing Strategies in the Era of Great Power Competition. Dr. Nhon also manages the Chemical Sciences Roundtable, which is composed of 15 thought leaders spanning the chemistry enterprise. She has organized several workshops focused on different chemistry topics including innovations in catalysis, indoor chemistry, pharmaceutical manufacturing, and laboratory automation. Her portfolio also involves managing webinars on anticipatory issues like herbicide development, future of food science, hydrogen technologies, battery recycling, and many others. Dr. Nhon holds a Ph.D. in Chemistry and Biochemistry from the Georgia Institute of Technology, where she was a collaborator in the DOE's Energy Frontier Research Center – UNC Chapel Hill developing organic chromophores for solar fuel cell applications. As a material chemist, Dr. Nhon also synthesized and characterized families of small molecules for electrochromic devices under the support of the Air Force Office of Scientific Research. During her time at Georgia Tech, she served as a fellow with the Sam Nunn National Security Program. In that capacity, she studied US deterrence strategies and presented policy proposals to the US Special Operations Command. Dr. Nhon received her bachelor's in Microbiology and Cell Science from the University of Florida, where she first cultivated her passion for science policymaking.