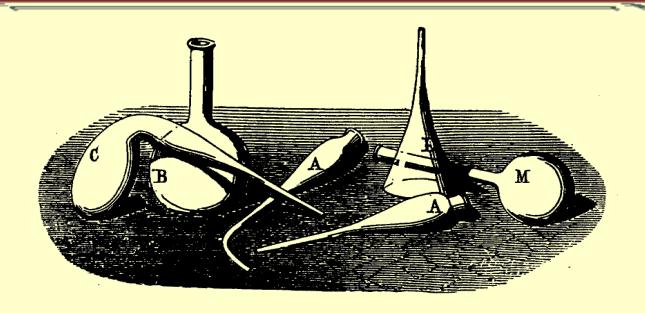




# **American Chemical Society**

# DIVISION OF THE HISTORY OF CHEMISTRY



# NEWSLETTER

Fall 2023 ACS National Meeting San Francisco, CA (Hybrid) August 13-17, 2023

Nicolay V. Tsarevsky, Program Chair

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## **Mission Statement**

The Division of the History of Chemistry (<u>HIST</u>) of the American Chemical Society (ACS) seeks to advance knowledge and appreciation of the history of the chemical sciences among chemists, students, historians of science, and the broader public by

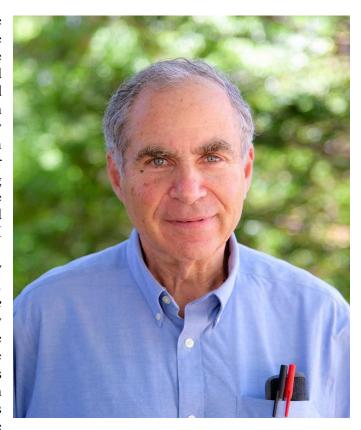
- Encouraging research and scholarship in history of the chemical sciences;
- Providing a welcoming environment for the discussion of history of chemistry in a variety of venues, particularly in symposia at national ACS meetings;
- Serving as a resource for chemical scientists in general, and members of the ACS in particular, who seek to understand the roots of their discipline, sub-discipline, or interdisciplinary subject;
- Recognizing major achievements from the past in the chemical sciences and the individuals who made those achievements;
- Publishing a scholarly journal in history of chemistry;
- Interacting with other organizations interested in the history of science; and
- Adding value to the ACS by helping it achieve its vision and missions.

# **Division Governance**

## Message from the HIST Division Chair

This is both an exciting and a challenging time for our HIST Division. We are very proud that the 2023 Joseph B. Lambert HIST Award will be shared by the amazing team of Geoffrey and Marelene Rayner-Canham for their valuable and comprehensive studies of the history of women in chemistry. On Tuesday, August 15, 2023 a full-day symposium, at the New Orleans meeting, on women and chemistry will further honor their career-long work. It will be an exciting symposium; please consider signing up for the dinner that evening. If you have not recently visited the HIST website (<a href="http://acshist.scs.illinois.edu/">http://acshist.scs.illinois.edu/</a>) I encourage you to do so. It is an amazing resource.

Thanks for the dedication of those who recently served and are currently serving on the Paul R. Jones Outstanding Paper Award (*Bulletin for the History of Chemistry*). Their hard work finally brought the OPA Award up to date. The last three awards, preceding the most recent two, were presented to: Seth Rasmussen (2018), David Lewis (2019) and William Streifer (2020). Recall each award considers the three most recent years together, e.g., 2018, 2019, 2020 as a group for the 2020 award. The two most recent awards are:



2021: Dean F. Martin, Vera V. Mainz, and Gregory S. Girolami, "St. Elmo Brady (1884-1966): The First African American Chemistry Doctoral Recipient", *Bull. Hist. Chem.* **2021**, *46*, 83-107.

2022: Charles S. Weinert, *Die Chemie ist Schwierig*: Winkler and the Discovery of Germanium," *Bull. Hist. Chem.* **2020**, *45*, 8-15.

Special thanks to Professor Natalie Foster, Ned Heindel's Lehigh University colleague, requested on short notice by Ned, from his hospital bed, to replace him on the OPA Committee. (More on Ned later).

Jeff Seeman initiated the Citation for Chemical Breakthroughs Award in 2006. The 2023 plaques were awarded for Johannes Nicolaus Brønsted's 1923 paper defining acids and bases, the 1939 paper by Otto Hahn and Fritz Strassmann reporting nuclear fission, and the 1939 paper by Lise Meitner and Otto Robert Frisch describing the nature of nuclear fission. Readers are encouraged to visit the HIST website that lists previous awards and consider submitting nominations.

Our Division is embarking on its first formal Strategic Planning activity since 2008. Preceded by a few Zoom sessions, a full-day meeting of the Strategic Planning Committee is scheduled for March 15, 2024 in New Orleans prior to the National ACS Meeting. This is a slight departure from the standard one and one half day meeting, thanks to the ability to employ Zoom pre- and post-meeting. It is an opportune moment as ACS itself evolves, has concerns about diminishing enrollments, and seeks to encourage more interdivisional activities and symposia as well as additional industrial participation. Our division has just endured the loss of one of our two councilor positions and we seek new inter-divisional collaborations and new members willing to take leadership positions and organize symposia. Our Strategic Planning Committee includes Ana Bettencourt-Dias, Sibrina Collins, Roger Egolf, Carmen Giunta, Art Greenberg, Christine Hahn, Joe Jeffers, Kristine Konkol, Dave Lewis, Vera Mainz, Seth Rasmussen, Mihaela Stefan, and Nick Tsarevsky.

With sadness and great respect, we note the passing of Dr. Ned Heindel (September 4, 1937- June 27, 2023). Ned spent most of his career as a faculty member at Lehigh University, starting in 1966 and appointed Emeritus Professor in 2018. He supervised 40 Ph.D. students (including our own Roger Egolf), 168 M.S. students, generating over 300 refereed papers and 20 patents, serving as HIST Chair (1978 and 2013-14), a member of the ACS Board of Directors, ACS President (1994), as well as on other prestigious boards. But numbers do not come close to characterizing the man- a kind, gentle yet driving "force of Nature". He and Linda donated 128 acres of preservation land to Northampton County in Pennsylvania as part of their environmental activism. We wish Linda and the extended family peace and strength.

Given our August venue, I note the recent passing of Tony Bennett whose masterpiece "I Left My Heart in San Francisco" was released sixty years ago. He gained early advice from Frank Sinatra and performed toward the end of his career with Lady Gaga. We look forward to seeing you in the "City on the Bay". Safe travels.

Arthur Greenberg, HIST Chair

# Report of Councilors, Division of the History of Chemistry Spring 2023 ACS National Meeting, Indianapolis, IN – Hybrid Council Meeting (March 29, 2023)

#### **Actions of the Council**

1. Elections Results

Candidates for President-Elect, 2024

By electronic ballot, the Council selected **Dorothy J. Phillips** and **Florian J. Schattenmann** as candidates for 2024 President-Elect. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall 2023 National Election.

#### Candidates for District III and VI

The Committee on Nominations and Elections announced the results of the election held prior to the hybrid Council meeting; to select candidates from the list of nominees for Directors from District III and District VI on the Board of Directors for the term 2024-2026. By internet ballot, the Councilors from these districts selected **Diane Krone** and **Helen (Bonnie) A. Lawlor** as District III candidates, and **Janet L. Bryant** and **Jeanette M. Van Emon** as District VI candidates. Ballots will be distributed to members residing in District III and District VI around October 1, 2023, for election of a Director from each District.

#### Candidates for Directors-at-Large

The Committee on Nominations and Elections announced the selection of the following candidates for Directors-at-Large for the 2024-2026 term: **Wayne E. Jones, Jr., Daniel Rabinovich, Carolyn Ribes,** and **Joseph P. Stoner.** The election of two Directors-at-Large from among these four candidates and any selected via petition will be conducted in the fall. Ballots will be distributed to the Council around October 1, 2023.

#### Committee on Committees (ConC) Election

By electronic ballot, the Council elected **Daniel Rabinovich** for a two-year term (2023-2024) on the Committee on Committees (ConC).

#### 2. Other Council Actions

#### Highlights from Committee Reports and Key Actions

- On the recommendation of the Council Policy Committee (CPC), Council approved the Petition to Amend the Duties of the Council Policy Committee to authorize CPC to review the conduct of Councilors.
- As required by the ACS Governing Documents, CPC has set the divisor for Local Section and Division representation at Council for the period 2024-2027. The formula is based on membership numbers as of December 31, 2022. Notification will be sent by the Secretary to all affected units by May 1, with details on how they will be impacted.
- CPC reviewed the Councilor Expense Program and voted to approve a streamlined process for fall 2023. The committee also voted to review further streamlining options for the program going forward.
- On the recommendation of the Committee on Committees (ConC), and with the concurrence of the Council Policy Committee, Council approved the Petition to Amend the Duties of the Committee on Environmental Improvement to change the name of the committee to the Committee on Environment and Sustainability.
- ConC announced that the opening of the online preference form to all ACS members begins on April 3 and will run through July 3. Councilors interested in serving on an ACS Committee in 2024 should go to CMTE.acs.org to complete their preferences.
- On the recommendation of the Committee on Nominations and Elections (N&E), and with the concurrence of the Council Policy Committee, Council approved the Petition to Add Plan B to Council Meetings, which authorizes the postponement of voting at Council in case of technology failures or natural disasters.
- N&E reminded Councilors that any petition candidates to ACS National Office must certified by the July 15 deadline to be placed on the ballot this fall.
- On the recommendation of the Committee on Membership Affairs (MAC), Council approved the 2024 Schedule of Membership.
- The Committee on Local Section Activities (LSAC) announced the launch of the ACS Speaker Directory, a new resource for our component group leaders to access a wide range of speakers for their in-person, hybrid, and asynchronous events.

• The Committee on Meetings and Expositions (M&E) is actively engaged in collaborative efforts to reimagine ACS meetings, targeting increased value and relevancy. Councilors can expect to receive more information on the Future of Meetings project in the coming weeks, starting next month with the M&E Chair comment in C&EN.

#### Council Special Discussion

President Giordan introduced and led a special discussion on the ongoing review of Society Committees. She sought Councilor input of positive ideas, key issues, and opportunities to improve the structure of committees.

Four specific prompts were posed to Councilors for their input and suggestions:

- 1. Ideally, for ACS to have a committee structure that is forward thinking and able to address opportunities for members, ACS and the chemistry enterprise, we would...
- 2. Current and future key issues impacting ACS, the chemistry enterprise and our committees include...
- 3. I wonder what the positive impact on committees, member involvement, and ACS would be if we were to...
- 4. I wish that committees at ACS could...

Councilors provided their ideas and thoughts, and relevant Society units will receive this input within the next several weeks.

#### 3. Resolutions

- In memory of deceased Presidents Brian M. Rushton and Dr. S. Allen Heininger.
- In memory of deceased Councilors Yorke E. Rhodes and Maurice M. Bursey.
- In sincere appreciation of the Indiana Local Section, host Section for the spring 2023 ACS meeting The spring 2023 meeting was held in a hybrid manner from March 26-30. As of March 29, there were 12,623 registrations (10,792 in-person and 1,831 virtual). Note: 6.6% of the participants were virtual in comparison with 19.5% virtual participants for the previous ACS National Meeting.

#### **HIST Councilors**

Mary Virginia Orna is serving as a member of the Senior Chemists Committee (SCC) and of its Executive Committee. She serves as the Champion on Tutorials for the SCC Inreach Subcommittee. She also serves as Co-Chair of the Partnerships Subcommittee and the Co-Champion of the Undergraduate Networking Activity. (These are all newly designated divisions of labor following the fall Strategic Planning Workshop.)

Roger Egolf is serving as a member of the Meetings and Expositions Committee (M&E) and its Operations and Finance Subcommittee. This subcommittee is charged with looking at the finances of National meetings and reviewing the choice of locations for the meetings. At the San Francisco meeting, he will be participating in a strategic planning session for the full committee.

Prepared and submitted by Mary Virginia Orna and Roger Egolf, HIST Councilors

# **News and Announcements**

#### **Awards**

#### Jospeh B. Lambert HIST Award

As announced in the spring 2023 issue of the Newsletter, the winners of the *Jospeh B. Lambert* HIST Award for Excellence in the History of Chemistry for 2023 are Marelene F. and Geoffrey W. Rayner-Canham for their work on the history of women in science, with particular focus on British female chemists.



Geoffrey Rayner-Canham born was and educated England. He received his B.Sc. in Chemistry from the University London in 1966, his Diploma of Imperial College (D. I. C.) **Imperial** from College in 1969, and Ph.D. his

Inorganic Chemistry (advisor Dr. Margaret Goodgame) from the University of London in 1969. He is currently Professor Emeritus at the University of Newfoundland and Labrador.



F. Marelene Rayner-Canham was also born and educated in She England. received her B.Sc. in General Science from the University of Waterloo, Ontario in 1986. She taught laboratory physics at the University of Newfoundland.

The saga that led

to the HIST Award started in the 1980s when they noticed a remarkable Canadian woman, Harriet Brooks, while reading the classic work, *Discovery of the Elements* by Mary Elvira Weeks (and her final

collaborator Henry M. Leicester). The extensive research into her career resulted in the book: *Harriet Brooks – Pioneer Nuclear Scientist* (1992).

The research into the life and work on Harriet Brooks also revealed other neglected women scientists: Fanny Cook Gates, Ellen Gleditsch, Jadwiga Szmidt and May Sybil Leslie. This project resulted in the book: A Devotion to their Science: Pioneer Women of Radioactivity (1997). This was then followed with a more targeted focus on women in chemistry, which resulted in the book: Women in Chemistry: Their Changing Roles from Alchemical Times to the Mid-Twentieth Century (1998). Another major effort in this area produced: Chemistry was Their Life: Pioneering British Women Chemists, 1880-1949 (2008). Lastly, the Rayner-Canham team was also a major contributor to the European project and book: Women in their element: Selected women's contributions to the periodic system (2019).

The Rayner-Canhams have published a large number of papers in the *Bulletin for the History of Chemistry*. A recent paper on a pioneering female crystallographer (*Bull. Hist. Chem.* **2021**, 46(1), 68-82) is typical in that it brings to our attention the life and achievements of a woman who deserves to be remembered, but who was forgotten prior to their investigation.

A short Award biography cannot adequately present the importance of this work. The praise by the nominators can help put their accomplishments into perspective.

Anne Johnson, Ryerson University: "Geoff and Marelene should be recognized for the depth and breadth of their original research, which has often involved tracking down obscure sources, combing through school archives in attics, and reading lifetime correspondences in order to paint complete pictures of the lives of the women they researched. Their writing is remarkable in that it is engaging and easy to read. They have included quotes contemporary to their subjects to bring these forgotten women to life."

Eric Scerri, UCLA: "It is not just the comprehensiveness of their research, but also their delightful writing style which makes reading their work so appealing. Whatever the topic might be, the

Rayner-Canhams find quotations, which provide a sense of contemporary personal experience in the context of the research topic."

Annette Lykknes, NTNU (Norwegian University of Science and Technology) and Brigitte Van Tiggelen, Science History Institute: "Indeed, Marelene and Geoff's work has had an impact in the chemical community and beyond. Their successive publications (40 articles and contributions, and 8 books) and numerous lectures have made chemists aware of events and actors in the development of their field [who] were mostly unknown. In particular, these have allowed more and more chemists, even those not particularly interested or versed in history to get to know more about female chemists from the past, in a language that was close to them. The fact that ACS commissioned the volume Women in chemistry mentioned above is an acknowledgement of this influence on the chemical community. The impact however goes far beyond, as Harriet Brooks about whom hardly anything was known in the sciences and absolutely nothing in the general public in the beginning of 90's is now a well-known figure in the history of Canadian women in Canada. This is an impressive achievement which also serves the inclusion of science in the national history and heritage as well as the multiplication of feminine figures that can be referred to as role-models for girls and women in science."

Submitted by Gary Patterson

#### Bulletin of the History of Chemistry Paul R. Jones Outstanding Paper Awards

The Paul R. Jones *Bulletin for the History of Chemistry* Outstanding Paper award (OPA) is given yearly for the best paper published in the Bulletin in the award year and the two preceding years. For the 2021 award, papers from 2019, 2020, and 2021 were judged and the best paper from those three years selected as the winner. For the 2022 award, papers from 2020, 2021, and 2022 were judged.

The 2021 OPA winners are Dean F. Martin, Vera V. Mainz and Gregory S. Girolami for the paper "St, Elmo Brady (1884-1966). The First African American Chemistry Doctorate Recipient" (*Bull. Hist. Chem.* **2021**, *46* (*1*), 83–107).

Dean F. Martin, Professor of Chemistry Emeritus, at the University of South Florida received a B.A. with honors from Grinnell College in 1955, and a

Ph.D. in Chemistry from Penn State under W. Conard Fernelius in 1958. He was an NSF Post-doctoral fellow at University College London (1958-59) before joining the faculty of the University of Illinois as an instructor in inorganic chemistry (1959-61) and assistant professor of inorganic chemistry (1961-64). He became an associate professor chemistry at the University of South Florida (1964-69), and a full professor (1969-2006) before being named a distinguished university professor (1993). Prior to retirement in 2006, he taught courses in three different colleges of USF, including courses such as General Chemistry, Inorganic Chemistry, Chemical Oceanography, Environmental and Health Chemistry, Searching the Chemical Literature, and finally Historical Perspectives of Chemistry. Following retirement, he remained an active researcher studying the role of coordination chemistry in areas of environmental interest. He also serves as a fund raiser on behalf of student support. He and his wife, Barbara Bursa Martin, have created 12 endowments at USF.

The husband-and-wife team of Vera V. Mainz and Gregory S. Girolami are the other authors on the winning paper. Dr Mainz is well known to the HIST community, having continuously served HIST as Secretary-Treasurer of the Division since 1995. She took her B.S. degrees in chemistry and mathematics in 1976, and moved to the University of California at Berkeley, where she took her Ph.D. working with Prof. Richard A. Andersen. She is retired from her position as Director of the NMR Laboratory at the School of Chemical Sciences, University of Illinois at Urbana-Champaign. She received her B.S. degrees in chemistry and mathematics from Kansas Newman University and her Ph.D. degree from the University of California at Berkeley. In 2012, she was elected a member of the 2013 Class of ACS Fellows. She has been very active in organizing HIST symposia and then editing the published proceedings.

Gregory S. Girolami is the William H. and Janet G. Lycan Professor of Chemistry at the University of Illinois at Urbana-Champaign, where he has twice served as the Head of the Chemistry Department. He received his B.S. degrees in chemistry and physics summa cum laude from the University of Texas at Austin and his Ph.D. degree in 1981 from the University of California at Berkeley, working with Prof. Richard A. Andersen. Thereafter, he was a NATO postdoctoral fellow with Nobel Laureate, Sir Geoffrey Wilkinson at Imperial College of Science and Technology in South Kensington, London, and

joined the Illinois faculty in 1983. His research interests are primarily the synthesis, properties, and reactivity of new inorganic, organometallic, and solid-state species. He has published over 250 papers and several books.

The Mainz-Girolami team are collectors of rare books in chemistry.

The 2022 OPA winner is Charles S. Weinert for the paper "Die Chemie ist Schwierig: Winkler and the Discovery of Germanium" (*Bull. Hist. Chem. 45 (1)*, **2020**, pp. 8-15).

Charles Scott Weinert, Professor of Chemistry at Oklahoma State University, is originally from Detroit and did his undergraduate studies at the University of Michigan where he graduated in 1995. He went to work for Selective Technologies, Inc. which is a startup company founded at UM. He began graduate studies at the University of Chicago in 1996 where he obtained an M.S. degree in 1997 and then moved to Northwestern University. After obtaining a Ph.D. from Northwestern in 2000, he became a Postdoctoral Research Fellow at Purdue University. He joined the faculty of the Chemistry Department at Oklahoma State University in 2004. His research has focused on the synthesis and characterization of oligogermanes, including those having linear, branched, and cyclic geometries. His research group is currently focused on preparing hepta- and longer-chain oligogermanes in order to ascertain whether these molecules will exhibit new and useful optical and/or electronic properties. In addition to his chemistry work, he is a musician, and has been playing electric bass guitar for nearly 30 years. He has recorded several songs with the Detroit-based band Electric Six and has also played in a few bands of his own over the years. He lives in Edmond, Oklahoma with his wife Christa and son CJ.

Submitted by David E. Lewis and Ron Brashear

#### HIST Fellows (2023)

As previously announced, the division has recently added the designation of *HIST Fellow* to its ongoing HIST awards programs. This new award recognizes HIST members who have made a significant impact on the advancement of history in the chemical sciences, as well as dedicated service to the division. For the 2023 class, the following members have been selected as HIST Fellows:

Vera V. Mainz Seth C. Rasmussen Alan J. Rocke

The award consists of certificate and a special HIST Fellow pin. The inaugural 2022 class of HIST **Fellows** were previously announced in the Newsletter and are now listed on the website. HIST HIST Fellows will



continue to be awarded yearly and will be given out as part of the annual HIST Awards Banquet. Full information on the new award is now available via the HIST website under the Divisional Awards tab.

For those wishing to nominate members for the 2024 class, please see the HIST website for nomination details. The deadline for 2024 nominations will be December 31, 2023. Please consider nominating a deserving colleague.

#### The Partington Prize for 2023

The Society for the History of Alchemy and Chemistry is delighted to announce that the winner of the 2023 Partington Prize is Dr Armel Cornu of the Science History Institute for her entry "Senses and utility in the New Chemistry."

Armel Cornu is a postdoctoral researcher at the Science History Institute in Philadelphia. She majored in chemistry and history before graduating with a masters degree in the history of science at Université Panthéon-Sorbonne in Paris. She obtained her doctorate at the University of Uppsala in 2022 with a dissertation focusing on the market, regulation, and science of mineral waters in eighteenth-century France. Her research is characterized by a social and economic approach to the development of chemistry throughout the Enlightenment. She currently works on the uses of sensorial impressions in the practice and perception of eighteenth-century chemistry.

The Society for the History of Alchemy and Chemistry established the Partington Prize in memory of Professor James Riddick Partington, the Society's first Chairman. It is awarded every three years for an original and unpublished essay on any aspect of the history of alchemy or chemistry. The prize-winning article will appear in the Society's journal, *Ambix*, in due course.

#### **Events and Activities**

#### Making Archeological Ink

On Thursday, June 8, 2023, HIST Councilor, Mary Virginia Orna, visited the John Cardinal O'Connor School in Irvington, New York, whose mission is to empower students with learning differences. Here she conducted a "Making Archaeological Ink or Making Ink with Tea" activity with three different student groups, each containing, on average, about 16 students. These in-person sessions followed very closely the activity that she and HIST members Patricia Smith and Seth C. Rasmussen had developed for National Chemistry Week in 2019. The activity involved observing the reaction of the tannins contained in freshly brewed tea with an iron salt, iron(II) sulfate. The iron and tannins form complex compounds that are water soluble and are dark blue-black in color; upon exposure to oxygen in the air, the complex becomes darker and insoluble, producing a permanent ink.

Pliny the Elder (1st century CE) described how addition of an iron salt solution to parchment soaked with oak-galls (growths rich in tannins found on the underside of oak leaves) could darken it. Over the course of the next four or five centuries, this idea took hold as the basis for an iron-gall-based ink. From about the mid-fifth century CE on, metallic inks became the general rule particularly since parchment required a more adhesive writing medium and the iron gall ink was easy to manufacture and use. Today, the great libraries of the world contain thousands of documents written with iron gall ink, which was in common use up until the middle of the 20th century. Historically, this ink was used to produce such iconic documents as the Magna Carta, the Declaration of Independence and Milton's "Paradise Lost."

The students learned that a chemical reaction could take place when two substances are mixed together and that the evidence of reaction was a color change. In comparing the reaction vessel containing the tea plus iron salt with an identical vessel containing the unreacted tea, they learned the concept of a "control" in conducting a scientfic activity. The students then painted with the ink and noticed that it continued to darken over time and that small black grains appeared as a precipitate, thus illustrating that chemical reactions take time to reach completion.

Wearing a lab coat labeled "American Chemical Society" and a large pair of safety goggles created an

effect on the students. Emphasizing safety, especially eye safety, was an easy sell and pretty much all the students kept their own safety goggles on without much urging.

In actuality, the reaction described is quite complex: gallic acid (derived from tannic acid) reacts with iron(II) to produce a colorless, water-soluble intermediate monogallate compound, gallatoiron(II).

When this proto-ink stands for a while or is applied to paper, it subsequently is oxidized with concomitant loss of water to produce a



permanent dark-blue-black insoluble compound, bis(gallato)diiron(III).

For further reading:

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- 2. Heth, C. The Skin They Were In: Leather and Tanning in Antiquity. In Rasmussen, S. C., ed. *Chemical Technology in Antiquity*; ACS Symposium Series Volume 1211; American Chemical Society: Washington, DC, 2015; pp. 181-196
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- 4. Krekel, C. Chemische Struktur historischer Eisengallustinten. In Banik, G.; Weber, H., eds. *Tintenfrassschäden und ihre Behandlung*; Kohlhammer: Stuttgart, 1999; pp. 25-36.
- 5. Wilson, H. Analysis of the Current Research into the Chemistry of Iron Gall Ink and its Implications for Paper Conservation. Master's Thesis, St. Anne's College, Oxford, 2007; DOI: 10.13140/2.1.4803.2000.
- 6. Wunderlich, C. H.; Weber, R.; Bergerhoff, G. Über Eisengallustinte. *Z. anorg. allg. Chemie* **1991**, *598*, 371-376.

Submitted by Mary Virginia Orna

#### **HIST News**

#### Historian's Report for Fall 2023

2023 has been a busy year. One of the joys of being the HIST Historian is the frequent request to either talk or write on subjects of local interest around the world.

A major paper, "A Taxonomy of Transdictions: Medical, Crystallographic and Chemical Types," was submitted to the British Journal for the History of Science. The first author is Carmen Schmechel from the University of Berlin. This work was also presented to the AD HOC discussion group at Cambridge University on March 13, 2023.

A review of the new book by Catherine Jackson, *Molecular World: Making Modern Chemistry*, will appear in the next issue of the *Bulletin*. This groundbreaking book about the evolution of 19<sup>th</sup> century synthetic organic chemistry is well worth the effort to read it.

A chapter in the HIST History of HIST has been written about F.W. Clarke. Carmen Giunta and I are planning a full symposium about him for Fall 2025.

The current book project is called *Heat Flows* from a Hot Body to a Cold Body: A History of Heat. 20 chapters have been written and the full book should be done by the end of 2023. The scientists associated with the subject of heat are fascinating as a group. The time frame is from the 17<sup>th</sup> to the 20<sup>th</sup> century. My own favorite is Leon Brillouin. While many chemists have never heard of him, he is one of the Fathers of Chemical Physics. He was born and educated in France, but fled to America to escape the Vichy regime. He helped to found the field of Information Science and determined the number of bits associated with entropy!

While I am willing to serve as Historian for the next few years, now is a good time to think about the next person to adopt this role. There have only been two official historians. The two fixed tasks are preparing the biographies for the HIST Award winner and the Best Paper awardee. As the last decade has revealed, the HIST Historian is now a worldwide post that is known to the entire community of historians of chemistry.

Submitted by Gary Patterson

# BULLETIN FOR THE HISTORY OF CHEMISTRY

A publication of the Division of the History of Chemistry of the American Chemical Society

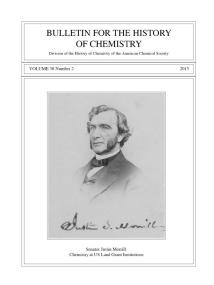
Available online: http://acshist.scs.illinois.edu/bulletin/index.php

**PAPER SUBMISSIONS:** Articles of 4-20 pages, double-spaced (excluding references) should be submitted electronically by email attachment to the Editor, Carmen Giunta, at <a href="mailto:giunta@lemoyne.edu">giunta@lemoyne.edu</a>. The title of the article should be of reasonable length (up to 15 words); a subtitle may be included if appropriate. Authors should strive to make the title descriptive of the specific scope and content of the paper. Preferred file formats for submissions are .doc, .docx, and .rtf.

Full instructions for authors can be found at http://acshist.scs.illinois.edu/info/bull-info.php

All matters relating to manuscripts, etc. should be sent to: Prof. Carmen Giunta Editor, *Bulletin for the History of Chemistry* PO Box 522 Manlius, NY 13104

Email: giunta@lemoyne.edu



# **HIST Programming**

# Message from the HIST Program Chair

Greetings, dear friends and supporters of HIST! On behalf of the Division, I welcome you to the fall 2023 ACS National Meeting – the 266<sup>th</sup> for our Society. We will meet in the beautiful city of San Francisco where there will be abundant opportunities to learn from each other, exchange ideas, expand our professional network, or just catch up with old, as well as make some new friends.

We will offer a full 4-day program and I know you will enjoy and feel inspired by the fifty-odd talks and posters that will be presented at the meeting as part of our program.

Our activities will take off on Sunday morning with general papers that cover – as you have rightfully grown accustomed to expect – a variety of topics, ranging from the history of useful compounds to the contributions of scientists and educators that you may have barely heard of (or perhaps not).

The next day and a half, starting on Sunday afternoon, is dedicated to a collaborative symposium with the Energy and Fuels Division, which is also a Presidential event. It would be



redundant to state how important fuels and energy are not only for our comfort and well-being, but also for our survival. Some of the discoveries will be presented and discussed that had a major impact on the development of new sources of energy, or the lives and careers of the scientists who made those discoveries. At noon on Monday, right after the morning session talks, as we do each fall, we will be available during the open-to-all HIST business meeting, to tell you about the business and financial side of the Division and answer any questions you may have. In the evening, visit our SciMix poster presenters as well as our table at Division Raw in the Convention Center. A number of HIST officers will participate in the event and will be thrilled to tell you about the exciting things we do. Perhaps you'd like to share your thoughts, give us some recommendations, or – even better! – get involved and work with us. Monday evening would be the perfect time to do that in a relaxed and friendly environment. You can also grab a copy of a delightful read – our peer-reviewed publication, the *Bulletin for the History of Chemistry*. Copies of the *Newsletter* will also be available with information on upcoming events, which are always subject to expansion, based on your suggestions. I say it again, all of us would be delighted to meet and converse with you.

We will continue on Tuesday (all day), when we will celebrate the contributions of our HIST Award winners – Marelene F. and Geoffrey W. Rayner-Canham, who have been prolific researchers and writers in the field of women in science. A number of inspiring and educational talks will be presented not only by the laureates, but also by their colleagues working on making this important subject more accessible to all. A poster session will take place at noon – do not miss it.

The following day, Wednesday, a full-day symposium on the very rich history of organometallic chemistry, organized by Christine Hahn, will take place. The lecturers will present many of the "faces and places," and methodologies and ideas relevant to the birth and evolution of the field.

Please stay with us till the end and you will leave San Francisco and the ACS meeting enriched in knowledge and positive impressions. All details about our program at the meeting are listed on the following pages.

Have a productive and pleasant meeting, and – above all – be well!

Nick Tsarevsky, HIST Program Chair

### HIST SYMPOSIA, Fall 2023 ACS National Meeting (August 13-17, 2023)

Schedules and abstracts are listed at the end of this Newsletter.

#### **HIST Award Banquet**

As part of its activities at the Fall 2023 ACS National Meeting, the History of Chemistry Division is pleased to host the 2023 HIST Award Banquet honoring Drs. Marelene F. and Geoffrey W. Rayner-Canham and celebrating the accomplishments of the new HIST Fellows. The Banquet will be held at Sears Fine Food (<a href="https://www.searsfinefood.com">https://www.searsfinefood.com</a>, 439 Powell Street. San Francisco, CA 94102; phone: 415-986-0700) on Tuesday, August 15. It will start at 7:30 PM and will feature a starter (a choice of Chef's daily soup or blue cheese wedge salad), entrée (a choice of petite New York steak, grilled chicken breast, shrimp scampi, or vegetarian Louie), and dessert (white chocolate cheesecake). Tickets are \$60 and can be purchased from Vera Mainz, HIST Secretary-Treasurer. The ticket covers the cost of the meal, tip, and tax. Ordinary beverages are included. Alcoholic beverages are available for additional cost from the cash bar. You can pay Vera via check or cash (exact amount preferred) at the banquet or when you see her during the meeting. If you do plan to attend, please RSVP by August 12th (Saturday) via email to Vera Mainz (<a href="mainz@illinois.edu">mainz@illinois.edu</a>).

#### **UPCOMING MEETINGS AND HIST DEADLINES**

Subject to change. Check the HIST website (http://www.scs.illinois.edu/~mainzv/HIST/) for updates.

# 2023 Southwest Regional Meeting (SWRM) of the ACS, Oklahoma City, OK, November 15-18, 2023

Lessons and Inspiration from the History of Chemistry (Invited and contributed) Nicolay V. Tsarevsky, Department of Chemistry, Southern Methodist University, Dallas, TX 75275, Phone: 214-768-3259, email: <a href="mailto:nvt@smu.edu">nvt@smu.edu</a>; Christine Hahn, Department of Chemistry, Texas A&M University Kingsville, email: <a href="mailto:Christine.Hahn@tamuk.edu">Christine.Hahn@tamuk.edu</a>. The scheduled closing for abstract submission is August 14, 2023. For more information, visit . <a href="mailto:https://swrm.org/home/f/maps-is-open-for-abstract-submission">https://swrm.org/home/f/maps-is-open-for-abstract-submission</a>.

# Spring 2024 ACS National Meeting (New Orleans, LA, March 17-21, 2024)

The Birth of the 3<sup>rd</sup> Dimension in Chemistry (Invited and contributed) Arthur Greenberg, Department of Chemistry, University of New Hampshire, Durham, New Hampshire 03824, Phone: 603-862-1180, email: <a href="mailto:art.greenberg@unh.edu">art.greenberg@unh.edu</a>; David E. Lewis, Department of Chemistry and Biochemistry, UW-Eau Claire, Eau Claire, WI 54702, Phone: 715-836-4744, email: <a href="mailto:lewisd@uwec.edu">lewisd@uwec.edu</a>

**History of Catalysis** (Invited and contributed) Christine Hahn, Department of Chemistry, Texas A&M University Kingsville, email: <a href="mailto:Christine.Hahn@tamuk.edu">Christine.Hahn@tamuk.edu</a>.

**Tutorial and General Papers** (Seeking contributions) Nicolay V. Tsarevsky, Department of Chemistry, Southern Methodist University, Dallas, TX 75275, Phone: 214-768-3259, email: <a href="mailto:nvt@smu.edu">nvt@smu.edu</a>

# Fall 2024 ACS National Meeting (Denver, CO, August 18-22, 2024)

#### **HIST Award Symposium (Invited)** TBA

**History of Forensic Chemistry** (Invited and contributed) Nicolay V. Tsarevsky, Department of Chemistry, Southern Methodist University, Dallas, TX 75275, Phone: 214-768-3259, email: <a href="mailto:nvt@smu.edu">nvt@smu.edu</a>

**150**<sup>th</sup> Anniversary of the Centennial of Chemistry Meeting (Invited and contributed) Roger Egolf, Department of Chemistry, Pennsylvania State University - Lehigh Valley, Center Valley, PA 18034, Phone: 610-285-5110, Email: <a href="mailto:rae4@psu.edu">rae4@psu.edu</a>

**Tutorial and General Papers** (Seeking contributions) Nicolay V. Tsarevsky, Department of Chemistry, Southern Methodist University, Dallas, TX 75275, Phone: 214-768-3259, email: nvt@smu.edu

# Spring 2025 ACS National Meeting (San Diego, CA, March 23-27, 2025)

Chemical Technologists (Invited and contributed) Gary Patterson, Vancouver, WA 98661, Phone: 412-480-0656, email: gp9a@andrew.cmu.edu

**Tutorial and General Papers** (Seeking contributions) Nicolay V. Tsarevsky, Department of Chemistry, Southern Methodist University, Dallas, TX 75275, Phone: 214-768-3259, email: <a href="mailto:nvt@smu.edu">nvt@smu.edu</a>

# Fall 2025 ACS National Meeting (Washington, DC, August 17-21, 2025)

#### **HIST Award Symposium (Invited)** TBA

Past ACS Presients: Frank Wigglesworth Clarke (1847-1931) (Invited and contributed) Gary Patterson, Vancouver, WA 98661, Phone: 412-480-0656, email: gp9a@andrew.cmu.edu; Carmen Giunta, PO Box 522, Manlius, NY 13104, Phone: 315-632-4992, email: giunta@lemoyne.edu.

**Tutorial and General Papers** (Seeking contributions) Nicolay V. Tsarevsky, Department of Chemistry, Southern Methodist University, Dallas, TX 75275, Phone: 214-768-3259, email: <a href="mailto:nvt@smu.edu">nvt@smu.edu</a>