

SILICON VALLEY CHEMIST

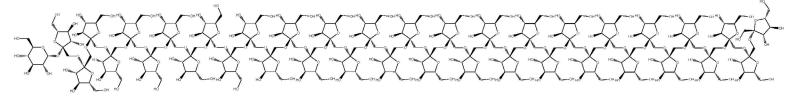


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Join Us in the 2025 SVACS Leadership Group



We know you want to do more to support our section but don't know how or what you can do. Every autumn we elect members to the Silicon Valley Local ACS Section Executive Committee. This is the leadership group that represents our section at the National level and governs our local section.

We want you to run for a position! We have six open positions on the ballot:

• Chair-Elect to run the rotation through Chair and then immediate past Chair

- two Councilors
- two Alternate-councilors
- Secretary with a 2-year term

On behalf of the current Silicon Valley ACS Executive Committee, the Nominations Committee is pleased to request any and all interested candidates to make yourselves known. Email *chair@siliconvalleyacs.org* with your desire to run for a position or to *get more information* about the open positions.

ACS National Fall Meeting 2024: Elevating Chemistry

Denver, Colorado & Hybrid, August 18-22, 2024

https://www.acs.org/meetings/acs-meetings/fall.html



Registration & Pricing	Schedule Overview Technical Program
Hotels Hotel Map Shuttle Bus Map	Keynote Events Presidential Events (Download Flyer)
Travel Ways to Attend 1st Time Attendee Orientation	Industry Recommended Program
Attendee Resources Presenter Tips SciMeetings	Student Programming
Frequently Asked Questions Policies	Career Development Job Seekers
Exposition Hours Floor Plan Exhibitor Directory	ChemLuminary Awards Governance Activities
Registration Statistics Meeting Demographics	Virtual Platform Mobile App



Tuesday, August 20, 8PM Sheraton Denver Downtown Plaza Ballroom A-C

You're invited to the *ACS ChemLuminary Awards* ceremony at the Sheraton Denver
Downtown, Plaza Ballroom A-C, on Tuesday,
August 20. The ceremony includes a keynote
address by *V. Michael Mautino*, the recipient
of the 2024 Award for Volunteer Service to
the American Chemical Society. The event also
features presentations of awards given by 20
committees of the Society.

Silicon Valley ACS was selected as a finalist for two ACS ChemLuminary Awards in these categories:

- Outstanding Local Section Career Program Award
- Outstanding NCW Event for a Specific Audience See pages 4-5 of the July 2024 SVACS newsletter for more details.

This year's ChemLuminary event theme is "Elevating the Dedication of Our Volunteers" celebrating the work of ACS volunteers in improving all people's lives through the transforming power of chemistry. The ChemLuminary event is open to all meeting registrants.

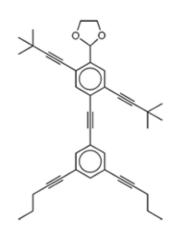
The schedule for the evening:

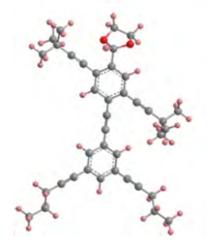
- 8:00 pm 9:00 pm MT: Poster Session & Reception
- 9:00 pm 10:00 pm MT: ACS ChemLuminary Awards Ceremony
- 10:00 pm 12:00 am MT: Dance Social If you are in Denver, please join us!

CHEMISTRY



We're having fun with organic synthesis!
What molecules are we?

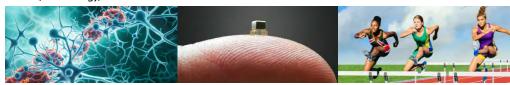




CAS Insights

https://www.cas.org/resources/cas-insights

Accelerating scientific progress by revealing unique connections and perspectives at the intersection of science, technology, and innovation.



Rare diseases: Impact, landscape, and possibilities (August 1, 2024)

Rare diseases and orphan diseases: Can combination therapy treat them? (August 1, 2024)

Identifying emerging trends in nanotechnology research (July 26, 2024)

The latest sports technology innovations enhancing athletic performance (July 19, 2024)

The data-first approach: can drug discovery teams maximize efficiency by prioritizing data? (July 17, 2024)

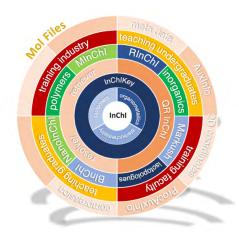
Can we use existing drugs to cure Parkinson's disease? (July 12, 2024)

Decoding neurodegenerative diseases like Alzheimer's, Parkinson's, and Huntington's (July 12, 2024)

Innovating the chemical recycling of plastics (July 5, 2024)

Scientific search engines: Why designing them takes art plus science (June 28, 2024)

Answer



InChl Version 1.07 Approved

IUPAC InChI moves to GitHub to support sustainable chemical standards development

"The InChI (International Chemical Identifier) is a widely used standard chemical identifier that enables the connection and interoperability of chemistry data across the web. The core code and development framework of the InChI has now been migrated to GitHub, providing a foundation to support future extensions of the standard and associated applications, and to broaden the expertise supporting the standard. The first milestone of this work is the 1.07 version, recently approved by IUPAC (International Union for Pure and Applied Chemistry) and the InChI Trust and available for download at *GitHub.*"

2:00-3:00 pm, In person for ages 9-12, RCPL Downtown Location, 1044 Middlefield Road, Redwood City, Free, *Learn more*

Read more: InChi Trust News Release, July 16, 2024.

CALENDAR OF EVENTS

https://www.siliconvalleyacs.org/events/

- August 2024 -- September 2024 -Aug 10 **Kid Makers: Pop Up Chemistry** Imaging the Invisible: Pushing the Limits of Polymer Electron Sep 4 Sponsored by Silicon Valley ACS and Redwood City Public Library (RCPL) Microscopy Prof. Enrique Gomez, Pennsylvania State University; Prof. Ned Thomas, 2:00-3:00 pm, in person for ages 9-12, RCPL Downtown Location, 1044 Middlefield Road, Redwood City, Free, Learn more Texas A&M; Prof. Dominik Konkolewicz, Miami University Sponsored by ACS Webinars and ACS Division of Polymeric Materials: Aug 14 Emerging Areas in Biomaterials: Reshaping Medicine and Human Health Science & Engineering Angela Zhou, CAS; Jian Yang, Westlake University, China; 11:00 am-Noon, Online, Free, Registration required Benjamin Cooper, Ortholevo **Polymeric Foams and Latticed Architectures Enabling** Sponsored by ACS Webinars and CAS Sep 9-11 8:00-9:30 am, Online, Free, Registration required Dematerialization with Performance: A 2.5-day Virtual **Short Course** Biological Phase Transitions: Where Chemistry and Physics Meet Aug 15 Prof. Tim Long, Arizona State University; Prof. Bob Moore, Virginia Tech; **Biology** Prof. Joe DeSimone, Stanford; Prof. Rayne Zhang, UC Berkeley Prof. Samrat Mukhopadhyay, IISER Mohali Sponsored by the Golden Gate Polymer Forum Sponsored by Stanford Department of Chemistry Sept. 9-10, 8AM-5PM, Sept. 11, 8AM-1PM. Online, \$450 until 8/26; 3:00-4:00 pm, In-person, Stanford University, Sapp Center Lecture \$550 until 9/6 if space is still available. Learn more and register Hall 114, Learn more Sep 11 What's New in CAS SciFinder Aug 18-24 ACS Fall 2024 Meeting Sponsored by CAS Denver, Colorado & Hybrid, Learn more 11:00 am-Noon, Online, Free, Registration required The Composite Factory of the Future: Utilizing Process Simulation Aug 19 ACS Virtual Office Hours: Academia vs. Industry Sep 12 and Real-time Material Characterization Sponsored by ACS Careers Dr. Alec Redmann, Polymer Composites & Thermosets of The NETZSCH 9:00-10:30 am, Online, Free, Registration required Sponsored by the Golden Gate Polymer Forum Sep 12 The 34th First Annual Ig Nobel Prize Ceremony 6:00-7:00 pm, Online, Free/\$5 donation, Registration required by Sponsored by Improbable Research Webcast 3:00-4:30 pm Pacific Time, Learn more Aug. 18th @ 1pm Aug 21 Career Pathways Virtual Workshop: Opportunities for Chemists in Sep 14 **Designing Tomorrow** the Federal Government Prof. Julie Beth Zimmerman Sponsored by California Section ACS, Women Chemists Committee Sponsored by ACS Careers 9:00-10:30 am, Online, Free, Registration required 10:30 am-Noon, Online, Free, *Registration required by Sept. 12th at* Noon, Download flyer (PDF) Sep 14 **Kid Makers: Pop Up Chemistry** Sponsored by Silicon Valley ACS and Redwood City Public Library (RCPL)

2024 Ottenberg Award Recipient - Madalyn R. Radlauer

https://www.siliconvalleyacs.org/awards-funding/ottenberg/

By Peter Rusch, Chair Ottenberg Award Committee

Professor Radlauer is a dedicated, talented, and hard-working member of the Silicon Valley ACS Section. She joined the SVACS Executive Committee as an Alternate Councilor (2018-2019) and has served as a Councilor from 2020 to present. She chaired or co-chaired the SVACS Nomination Committee for about five years. She also led two rounds of strategic planning for our Section, which laid the groundwork for more engagement by newer members of the Executive Committee. Madalyn championed the SVACS Paving the Path initiative, a mentoring program for community college students transferring to 4-year institutions. She has led numerous YCC (Younger Chemist) efforts to collaborate with the California ACS local section and with San Jose State University Chemistry and Chemical Engineering clubs to offer programming such as trivia nights, networking events, and escape room activities aimed at younger chemists.

At the ACS National level, Madalyn has served on the Women Chemists Committee (WCC) since 2021 where her efforts have centered on promoting diversity, equity, inclusion, and respect (DEIR). Within WCC, she served as liaison to the International Activities Committee on the Women Chemists of Color Sub-committee. She also organized events and symposia around the WCC 95th Anniversary (2022), Women Entrepreneurs (2023), and Celebrating Chemistry Beyond the Binary (2024).

In addition to authoring an honors thesis and a doctoral dissertation, Professor Radlauer has co-authored 14 peer reviewed journal articles and one patent. She has co-authored 40 abstracts for oral presentations given at ACS conferences including PacifiChem.

At the Fall 2023 ACS National Meeting, Professor Radlauer gave a presentation titled "Lessons from the lab: The nut doesn't fall far from the academic tree" referring to her time as an undergraduate when she was mentored by Bob Waymouth, Stanford University chemistry professor. In her abstract, she said, "When I was an undergraduate, Bob Waymouth taught me



Madalyn receives Ottenmeyer Award from Peter while Amanda and Todd look on

that polymers and catalysts are really cool, so I have studied them at every stage in my academic career. Now on the faculty at San José State University with my primarily undergraduate research group, my students are learning that same lesson. Our research focuses on the use of polymeric scaffolds to alter the microenvironment around a catalytic center."

In recognition of her research and mentoring efforts at SJSU, Professor Radlauer received an Early Career Investigator Award from the San Jose State University Research Foundation in 2021. Read more about her winning this award in the May 2022 SVACS newsletter *Silicon Valley Chemist, page 5*.

Silicon Valley ACS Members with 50+ Years of ACS Membership ACS Silicon Valley Members celebrating fifty or more years of ACS membership in 2024 received certificates of recognition from the ACS Board of Directors in grateful recognition of their long-standing support and involvement in the in the American Chemical Society. 50-Year Members Dr. David Morgans, Jr. Mr. Akihiro Nishimura Mr. Dan Blunk Dr. Michael Pleiss Dr. David Schooley Dr. Paul Simon Dr. Po Jun Cheng Ms. Sally Swanson Dr. Stephen Cramer Dr. Thomas Tarnowski Mr. Frank Tao Ms. Janet Finer-Moor Ms. Marjorie Winkler Dr. Laszlo Tokes Dr. William Garland ** Dr. Fred Hajduk **60-Year Members** 70-Year Members Dr. Michael Jennings Dr. Melvin Auerbach Mr. Edward Gipstein Dr Ronald Milburn Ms. May D. Ming Lu Lee Dr. Klaus Dahl Dr. Natalie McClure Dr. James Heung-Fan Ho Dr. Thomas Passell Dr. Lawrence McGee Mr. R.G. Johanson Dr. Anthony Tsuchien Tu

2024 Annual Picnic & Awards Photo Album



Contented picnic-ers



Anais chats with members of our newest chem club chapter from Hartnell College



SVACS Chair-Elect Amanda Nelson presents to Natalie McClure certificate celebrating 50-years of ACS membership



Amanda presents to Stephen Cramer ACS certificate for 50-years of ACS membership



BeerMaster Matt Greaney keeps attendees well supplied at the periodic table



All eyes on the Ottenberg Award winner, Madalyn Radlauer - see page 4



Immersed in stories told by the celebrated long-time ACS Members listed on page 4.

ACS Funding and Award Opportunities

Deadlines August-September 2024

Name of Grant or Award	Recipient	Amount	Deadline	
CCS High School Chemical Safety Grant	K-12 Teacher	Up to \$3,000	August 1, 2024	
Stanley C. Israel Regional Award for Advancing Diversity in the Chemical Sciences	Industry, Institution, Faculty, Chemistry Professional	\$1,000 + Travel Reimbursement up to \$1500	August 1, 2024	
CTA Leadership Development System Course Award	Chemistry Professional, Early Career	Variable	August 9, 2024	
Latin American Women in Chemistry Awards	International	\$2,000	August 4, 2024	
Local Section Diversity, Equity, Inclusion and Respect (DEIR) Grant	Volunteer	Up to \$3,000	September 15, 2024	
ACS PrepareCTP Seed Grant	Industry, Institution (Community Colleges), Faculty	Up to \$20,000	September 16, 2024	
Teaching Green Fellowship	Faculty	\$15,000 + travel	September 20, 2024	
Principal Investigator Development in Sustainability Grant	Faculty	\$50,000	September 20, 2024	
Early Career Postdoctoral-Faculty Bridge Grant	Faculty, Early Career	\$125,000	September 20, 2024	
Rising Stars in Green Chemistry Education Award	Faculty, Early Career	\$1,000 + travel	September 20, 2024	
Career Achievement in Green Chemistry Education	Faculty	\$5,000 + travel	September 20, 2024	
Science Café Mini-Grant	Chemistry Professional, Volunteer	\$500	September 30, 2024	
National Chemical Technician Award	Industry, Chemistry Professional	\$1,000 + expenses	September 30, 2024	



Each month, our Silicon Valley local ACS section receives a spreadsheet from national ACS with the names of members new to our section. The members are either new to ACS, have transferred in from other areas, or are the newest members - students. As a welcoming gesture, the SVACS Executive Committee offers new members free attendance at a catered SVACS event. Come join us at our in-person gatherings! To register as our guest for a catered event, *contact us* directly to receive complimentary admission for you and a friend. This month's picnic is one such opportunity to meet us. See page 1 for details.

We hope you will also join us for an outreach event, like judging a science fair, proctoring the high school Chemistry Olympiad or participating in a National Chemistry Week hands-on experiment event. The local section is a volunteer organization. Attend an event, volunteer to help, and get to know your local fellow chemists.

New SVACS Members

Dalia Cruz Tristan Heck Hannah Elisabeth Holmes Chih-Chieh Hsieh Ahamed Irshad Uran Valentino Iwata Jeremy Jones Xinyu Liu Lukas Michalek Masaki Minato Ian Van Voorhees Niles Sachi Ottoes Junkun Pan Mindy Robinson Serena Sanulli Jiaming Shi Christopher Tegley Kindle Shea Williams Kyra Yap

What the heck is electroadhesion? Superglue? (video)



Watch Video on YouTube

"How would you stick a slice of banana to a sheet of copper? Until a few months ago, you couldn't. But a new discovery called "hard-soft electroadhesion" enables chemists to stick almost any hydrogel to almost any metal, using nothing but an electric current. And you can unstick the materials simply by reversing the current. Recently reported in ACS Central Science, this astonishingly general phenomenon works with a wide variety of gels (including fruits, vegetables, meat and fish) and conductors (including metals and graphite). Join our host George as he attempts to replicate electroadhesion in his basement and tries to discover what — if anything — this remarkable phenomenon shares with superglue."

Advancing Laboratory Safety through Diversity, Equity, Inclusion, and Respect

By Sammye Sigmann, Chair of the ACS Committee on Chemical Safety

Over the past three years, our DEIR (Diversity, Equity, Inclusion, and Respect) Task Force in the ACS Committee of Chemical Safety (CCS), under the leadership of Anna Dunn and Debbie Decker, has worked to meet the original charge from the CCS Chair to meet their goals. The original charge of this Task Force was:

- To explore how DEIR concerns expressed in the ACS' Statement on DEIR uniquely affect the ability for chemists to function safely when working in academic and industrial laboratories.
- To consider both academic and industrial settings.
- The outcome will be a report that includes a review of relevant literature findings related to issues related to both DEIR and chemical safety and actionable efforts and strategies on making chemistry laboratories safe, inclusive, and welcoming environments.

I am thrilled to announce that the CCS DEIR Task Force has completed their charge (and then some). Anna and Debbie had a vision from the start to aim high and have this work published in a high visibility location rather than simply creating a report. As such, they worked with the Editor of the Journal of the American Chemical Society to make it happen in a series of three editorials. Congratulations to all!

Be sure to read and promote our JACS editorial series on how to create safer work environments in laboratories where chemicals are used by embracing the tenets of DEIR. All three articles are free to read.

May 2023

Reducing Risk: Strategies to Advance Laboratory Safety through Diversity, Equity, Inclusion, and Respect

July 2024

"How Can I Help?" How Laboratory Workers and Supervisors Can Promote Laboratory Safety through Diversity, Equity, Inclusion, and Respect

"How Can I Help?" How Safety Professionals and Institutional Leaders Can Promote Laboratory Safety through Diversity, Equity, Inclusion, and Respect

WCC Celebrates Chemistry Beyond the Binary

By Prof. Madalyn Radlauer

The ACS Women Chemists Committee (WCC) is hosting a Presidential event at the ACS Fall 2024 National Meeting in Denver: WCC Celebrates Chemistry Beyond the Binary. The *symposium* is in-person (Colorado Convention Center room 201) and hybrid on Tuesday, August 20, 2PM-6PM MT with 7 in-person speakers followed by a hybrid panel. Refreshments are available during the breaks.

This symposium celebrates chemistry performed by LGBTQIA+ and non-binary individuals as the Women Chemists Committee works to build intentional spaces for any chemist who has faced gender discrimination. Presentations include time for both science and discussion of challenges faced by LGBTQIA+ and non-binary chemists. The symposium includes invited speakers and an open poster session and is tied to programming for the Women in the Chemical Enterprise Breakfast (ticketed event).

This ACS Presidential Symposium is co-sponsored by PRES, ACS PRIDE, and 23 technical divisions: ANYL, BIOL, BMGT, CARB, CATL, CELL, CHAS, CHED, CINF, COMP, DIC, ENVR, HIST, I&EC, MEDI, MUCL, ORGN, PHYS, PMSE, POLY, PROF. RUBB. TOXI.

The WCC would like to thank Anne McNeil and Daniel Quasar for the use of the Progress Pride Flag - "You are welcome here" Periodic Table by Anne McNeil and the "Progress" Pride Flag design by Daniel Quasar licensed under CC BY-NC-SA 4.0.









ACS Fall 2024 Meeting Denver, CO

Social

Zumba

Sunday, August 18 | 7:00 a.m. - 8:00 a.m.

YCC Social @ Ghost Donkey

Sunday, August 18 | 7:00 p.m. - 10:00 p.m.

YCC Yoga Monday, August 19 | 7:00 a.m. – 8:00 a.m.

Line Dancing

Monday, August 19 | 4:30 p.m. - 6:00 p.m.

All times in MDT

Meet YCC at the **ACS Fall 2024 Meeting** Denver, CO

YCC Coffee Break

Sunday, August 18 | 10:00 a.m. - 11:30 a.m.

Committee Row at SciMix

Monday, August 19 | 8:00 p.m. - 10:00 p.m.





All times in MDT





ACS Fall 2024 **AUGUST 18-22, 2024 • DENVER, CO**

Elevating Chemistry

WOMEN CHEMISTS COMMITTEE EVENTS SCHEDULE

WCC Chair: Lorena Tribe • **Programming Chair:** Danniebelle Haase

SUNDAY, AUGUST 18, 2024

WCC Merck Research Award Symposium

8:00 am - 12:00 pm Colorado Convention Center, Room 105 Hybrid



MONDAY, AUGUST 19, 2024

Women Chemists in the Chemical Enterprise Networking Breakfast (Ticketed Event)

Keynote Speaker – Kelly Chacón Arthur F. Scott Associate Professor of Chemistry, Reed College 7:30 am - 9:00 am



Hyatt Regency Denver Hotel, Capitol Ballroom 1-4

TUESDAY, AUGUST 20, 2024

WCC Eli Lilly Travel Award Poster Session

11:00 am - 12:00 pm Hyatt Regency Denver Hotel, Capitol Foyer Lill In-Person



Women Chemists Committee Luncheon

(Ticketed Event)

12:00-1:30 pm Hyatt Regency Denver Hotel, Capitol Ballroom 1-4 In-Person

KEYNOTE SPEAKER



Colleen Kellev Creator and Founder of **Kids Solutions**

WCC Celebrates Chemistry Beyond the Binary Symposium

2:00 pm - 6:00 pm Colorado Convention Center, Room 201 Hybrid



WCC 'Just Cocktails' Reception - Open Meeting

5:00 pm - 6:00 pm

Hyatt Regency Denver Hotel, Capitol Ballroom 1-4 In-Person

WCC Celebrates Chemistry Beyond the Binary Poster Session

7:00 pm - 9:00 pm Colorado Convention Center, Hall A-C In-Person

WEDNESDAY, AUGUST 21, 2024

Inclusive Hiring Practices Symposium

8:00 am - 12:00 pm Colorado Convention Center, Room 201 Hybrid



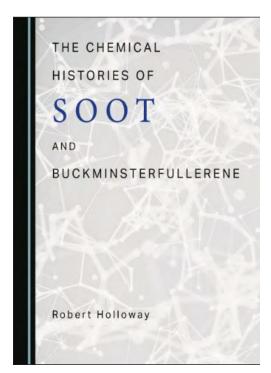
All meeting times are noted in the Mountain Time Zone.

Please be sure to check the ACS Meeting Mobile App for the most updated information. Send an email to WCC@acs.org if you have any questions.

Chemical Histories of Soot and Buckminsterfullerene

Review by Robert Buntrock

Buntrock Associates, Orono, ME, buntrock16@roadrunner.com



Reprinted with permission, this book review is being published in the Fall 2024 issue of the **Chemical Information Bulletin**, a publication by the ACS Division of Chemical Information.

The book's author teaches chemistry at Merritt College in Oakland, CA, and has been researching these subjects for some time.

The introduction to this book, Fake News and True Stories, discusses the acquisition of information and characteristics of successful nonfiction stories. Stories of scientific discoveries have a way of breaking out into scientific and even popular journalism. The stories described in this book deal with the spectacular – buckminsterfullerene – and the mundane – soot – and the interaction of the two.

If these stories can be regarded as a drama, the cast of characters includes four scientists and one journalist. Three of the scientists who jointly won a Nobel prize for the discovery and synthesis of buckminsterfullerene are Rick Smalley, Harry Kroto, and Robert Curl. The fourth is the much lesser-known Michael Frenklach, an expert in the study of combustion and the formation of soot. The journalist is Rudy Baum, well known to ACS members as the editor-in-chief of *Chemical and Engineering News (C&EN)*.

The book (31 chapters) discusses the history of the chemical species and includes detailed biographies of the cast members and how they

became involved in the drama.

After brief biographies of Frenklach, Michael Faraday (the father of combustion science), and Humphrey Davy, several chapters cover combustion science and the structure of soot, a solid product of combustion containing polycyclic aromatic hydrocarbons (PAHs). The following chapters further describe Frenklach's education and his work on combustion chemistry. In chapter 11. the topics shift to buckminsterfullerene. C60. an allotrope of carbon, with the announcement of the preparation of the molecule (aka "soccerballene" or "footballene") by laser ablation of graphite, another allotrope of carbon, by Kroto, James Heath, Sean O'Brien, Curl, and Smalley. Smalley, Kroto, and Curl later received the Nobel Prize for their discovery in 1996. The molecule had been detected earlier in outer space (1).

However, before the 1996 Nobel Prize, Kroto at the University of Sussex and Smalley at Rice University previously published papers. Biographies and the work of Kroto, Smalley, and Curl are described with interpretations of their discoveries, both in the original research articles and science journalism.

Controversies ensued on several fronts, including mechanisms of formation of C60 from "curled carbon sheets" and other mechanisms from soot. Others in the very well-developed combustion science community, including scientists from Exxon, weighed in on the structure of soot. The scientific study of combustion is extensive, including the establishment of the Combustion Institute in 1954, which organized the International Symposium on Combustion where Frenklach published much of his work on the formation and structure of soot. His work led to knowledge of the mechanisms of formation of PAHs from the pyrolysis of soot, which involves elemental hydrogen. This work became controversial. Among the critics was the Rice University group, who instead maintained that soot was formed by an alternative mechanism from "curled carbon sheets," the same ones they said produced C60.

Instead of remaining a relatively obscure discussion among researchers, this controversy was publicized by *C&EN*'s Baum when he announced the discovery of C60. He named the Rice University group as the discoverers, led by Smalley as the "director of the group," and did

not include any other names. This discrepancy continued throughout the rest of the discussions in *C&EN*.

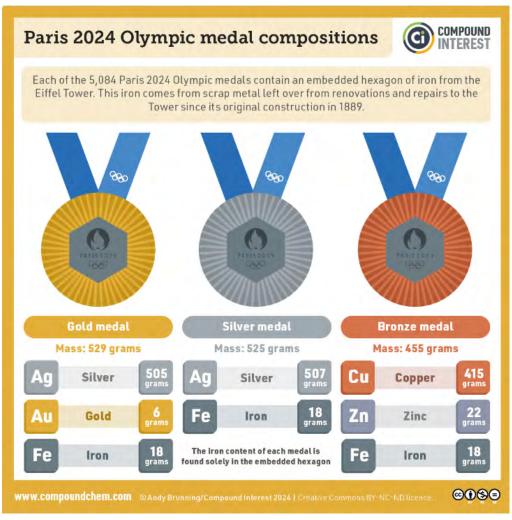
The remaining chapters cover the details of the formation of soot and the controversies. Suppose we fast-forward (spoiler alert) to the conclusions (covered in the epilogue) that can be made in this drama. Others established that spherical particles in soot can be formed in combustion but at a slower rate than the formation of PAH. Fullerenes and soot are formed separately and by different mechanisms. Holloway reprimands Baum for journalistic subjectivity (he described Frenklach and others as "name callers") rather than being objective, championing Smalley et al. as correct. Kroto, Smalley, and Baum are deceased, and I was unable to determine whether Frenklach is still living. Combustion and soot formation are complicated issues that are still being studied.

This book should be read in conjunction with reading "The Most Beautiful Molecule" (1). One paragraph (p. 188) describes the work of Frenklach (Pennsylvania State University) and Ebert (Exxon). It includes more detail on the discovery of fullerenes and additional topics, such as studying organic chemicals in space. Holloway's writing style is more journalistic than scientific. This reviewer gives it a mild recommendation but considers the book rather expensive.

1. Aldersey-Williams, H. *The Most Beautiful Molecule*; Wiley, 1995.

Author Bio: Robert Holloway has taught college chemistry in California, Texas, and Pennsylvania. He began while employed full-time as a Member of the Technical Staff at Hewlett-Packard Laboratories in Palo Alto, California, and moved to teaching at Schreiner University, USA, where he was Atkission Professor of Sciences and Mathematics, before continuing teaching at St. Joseph's University, USA. He currently teaches at Merritt College in Oakland, California and is a member of the Silicon Valley ACS Section.

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