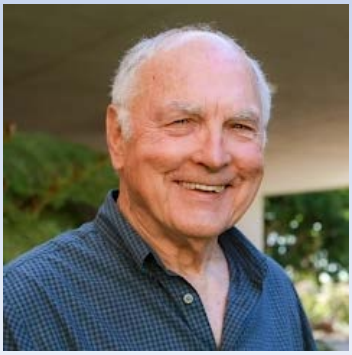
Volume 111, No. 9 November 2024

THE CHEMICAL BULLETIN

Chicago Section of the American Chemical Society Newsletter

Fred Basolo Medal Event (In-person)

Friday, November 8, 2024 4:15 PM – 8:30 PM CST



Reflections on the Synergistic Role of Nanostructured Inorganics in Biological Processes

Professor Galen Stucky
University of California
Santa Barbara

The lecture is free and open to the public – See next page for more information.

November Virtual Meeting

Thursday, November 21, 2024 12 Noon – 1:10 PM CST

$^{53}I^{15}P$ – Career Opportunities for Young Chemists in Intellectual Property

Adam Sussman
Patent Attorney
Crowell & Moring LLP

There is no charge for this program – See page 3 for more information. Register by phone (847-391-9091) or email (chicagoacs-at-ameritech.net) or online:
REGISTER HERE TO RECEIVE ZOOM LINK

IN THIS ISSUE

BASOLO MEDAL LECTURE

4:30 PM CST – The lecture is free and open to the public (in person only)
Refreshments at 4:15 PM
Technological Institute, Room LR3
Northwestern University
2145 Sheridan Road, Evanston
Parking across the street is free after 4 PM

BASOLO MEDAL DINNER

5:30 PM CST – Social hour and self-guided tour of museum
6:30 PM – Dinner
Advance registration and payment are required to attend the dinner. (deadline has passed)
Halim Time and Glass Museum
1560 Oak Avenue, Evanston

* Image of foam is from "Blood Clot Initiation by Mesocellular Foams", *Langmuir* **24**, 14254 (2008)

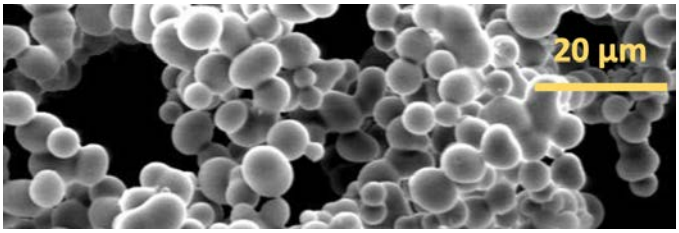
Fred Basolo Medal Event

Friday, November 8, 2024 (In-person)

"Reflections on the Synergistic Role of Nanostructured Inorganics in Biological Processes"

ABSTRACT

This talk will give an overview of efforts to develop simple, low-cost inorganic agents to promote or inhibit blood clotting. The goals are 1) point-of-care therapeutic hemostasis treatment of external arterial bleeding, and 2) the targeted hemostasis of internal bleeding that results from traumatic injuries. The primary functions of the human blood-clotting system are to induce controlled localized clot formation, using both coagulation and anti-coagulation, and to regulate fibrinolytic formation to prevent excessive blood loss. It is a complex, extensive system with over 230 components and 13 clotting factors. The presentation will describe our search for inorganic agents that have the appropriate biocompatibility and interfacial interactions with the blood-clotting system to direct the blood-clotting process.*



MEET THE SPEAKER

Galen D. Stucky obtained his Ph.D. degree in Physical Chemistry with Robert E. Rundle at Iowa State University in 1962. Now at the University of California, Santa Barbara (UCSB), he is a Professor in the Department of Chemistry & Biochemistry and in the Materials Department and is a member of the inter-departmental graduate program in Biomolecular Science & Engineering. He currently holds the UCSB Khashoggi Chair in Materials Chemistry. Before joining UCSB in 1985, he was on the faculty of the University of Illinois at Urbana-Champaign, where he was promoted to Full Professor in 1972. Stucky also held positions at Sandia National Laboratory as a research group leader and at DuPont Central Research & Development. His honors include the American Chemical Society Award in the Chemistry of Materials (2002), the International Mesostructured Materials Association Award (2004), the Advanced Technology Applications for Combat Casualty Care Award (2008), and the Princess of Asturias Award for Technical and Scientific Research (2014). He is a Fellow of the American Academy of Arts and Sciences (2005) and a member of the U.S. National Academy of Sciences (2013). He has published over 800 refereed scientific articles and has been awarded over three dozen U. S. patents.

UPCOMING EVENT

November Virtual Meeting

Thursday, November 21, 2024

$^{53}I^{15}P$ – Career Opportunities for Young Chemists in Intellectual Property

AGENDA	
12 Noon	Introductory Remarks
12:05	Virtual presentation
1:00 PM	Q&A
1:10 PM	Wrap-up

This meeting is being co-hosted by the Senior Chemists Committee. Members are encouraged gather with others to view and participate.

Register by phone (847-391-9091) or email (chicagoacs-at-ameritech.net) or online:
REGISTER HERE TO RECEIVE ZOOM LINK

ABSTRACT

Regrettably, one career path that many young chemists do not know about is an option for a career in intellectual property. In this presentation, Adam Sussman of Crowell & Moring LLP will talk about his own career path from Ph.D. research in chemistry to work as a patent lawyer specializing in chemistry and pharmaceuticals. He will provide examples of how he has fallen back on his chemistry knowledge every day to help clients achieve their goals. The presentation will detail the various options in intellectual property law that are available to young chemists and will include an opportunity for questions to be answered.

MEET THE SPEAKER

Adam D. Sussman is a patent attorney in Chicago and currently Counsel at Crowell & Moring LLP. In addition, he is active in the Chicago ACS Section and the Illinois State Bar Association. He also has a weekly article series on LinkedIn that profiles world-changing inventors. Adam earned his B.A. in Chemistry from the University of Pennsylvania and, in 2010, his Ph.D. in Chemistry from the University of Illinois, Chicago, where he performed organic synthetic methodology research on nitrenium ion cyclization in the laboratory of Duncan Wardrop. Professor Wardrop inspired Adam to consider patent law, and Adam earned his J.D. in 2014 from The John Marshall Law School in Chicago (now UIC). For the past decade, Adam has both litigated on behalf of generic pharmaceutical manufacturers and prepared and prosecuted patent applications in territories around the world. He has protected inventions in numerous technology areas including chemistry, pharmaceuticals, materials, applied chemistry, polymers, plastics, mechanical devices, medical devices, and crystal forms. He lives with his wife and two young sons in Deerfield, Illinois.

ELECTION

Election of 2025 Chicago Section Officers

Please remember to vote in the election for the 2025 Chicago Section officers! Election slate and candidate information may be found on the section website. The election for Chicago ACS officers began on Monday, October 14th and will run until 12 Noon on Wednesday, November 6th. Members should have received an email or postcard with specific details about how to participate and vote in the section election.

If you did not receive your election materials, sent by email from AssociationVoting.com along with a personal election-only password, contact us at chicagoacs-at-ameritech.net. Election winners will be notified by email and the results will be announced on our website as well as at our monthly meeting on November 21st (virtual) and the holiday party on December 13th.

Chemistry at the Illinois State Fair

Although last year's chemistry outreach event at the Illinois State Fair had to be cancelled for lack of enough volunteers, this past August children and their families had an opportunity to once again visit the activities tent hosted by ACS Local Sections from around the state. One group of around 20 children and their counselors were from YNOT Outdoors, which stands for Youth Need Opportunities Today. The giant, colorful cubes turned up again, letting kids use their imagination to construct large whimsical shapes and play spaces. There were demonstrations and experiments for fair-goers of every age to watch or try out. For example, wooden frog instruments could be tapped or rubbed with mallets to produce unusual sounds. Colored markers could be applied to coffee filters to investigate chromatographic separations—and make butterflies. Chemistry and engineering students and their instructors had a chance to hone their outreach skills. Young scientists were invited to show off their finished creations or "hide" inside a giant Hoberman sphere. Enjoy these photos taken by Milt Levenberg. And thank you to all our volunteers!

Prof. Doris Espiritu (Wright College)

Prof. Ali Hearn (Illinois State University)

Student volunteers from Wright & North Central Colleges

Margy Levenberg

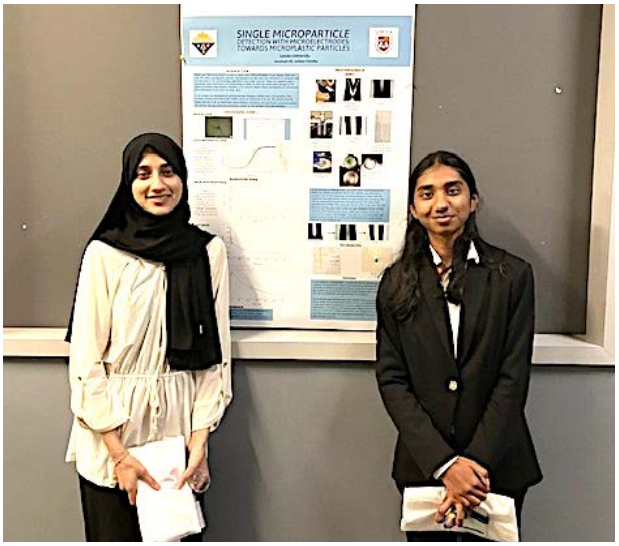
Prof. Paul Brandt
(North Central College)

PAST EVENT

Education Night at North Park

On the evening of September 19, the Chicago Section was treated to a dynamic and heartfelt presentation by Libertyville High School teacher Sherri Rukes, who specializes in chemistry, physics, and AP courses. Sherri is also active in the American Association of Chemistry Teachers (AACT). Speaking on the topic "Communicating My Passion for Chemistry", Sherri presented the story of her developing interest in chemistry and the mentors who influenced her choices along the way. Sherri summed up her tremendous influence in the arenas of teaching and outreach by saying, "This is who I am!" Even despite having self-doubts at times, she has followed her lifelong passion and, as a result, has been hugely influential in communicating chemistry—and her enthusiasm for all things chemical—not only in the Chicago area but across the country as well. As is her custom, Sherri brought chemistry-themed gifts, including decorative shot glasses with letters spelling out CHICAgO.

Section Chair Vivian Sullivan and High School Education Committee member Russ Kohnken presided over the annual awards portion of the evening. Jamie Stasiorowski of Deerfield High School was present to receive the 2024 Teacher Excellence Award (see also October issue). Two scholarship winners were also present to accept their awards: Mandal Dayita of William Fremd High School and Eloise Khoury of Walter Payton College Prep. The presence of family members of some of the awardees enriched the proceedings. In addition, handsome plaques were presented to section members being recognized for their many contributions. The Chicago Section 2024 Distinguished Service Award went to Sherri Rukes, and the Emerging Star Award went to Nicolas Gerst. Thanks go to Matt Van Duzor, a chemistry faculty member at North Park University, and Program Arrangements Chair Tanya Hunter for coordinating the venue and buffet dinner, and to Bob Chapman for overseeing the poster session.



From left: Project SEED summer interns Junainah Ali and Jediael Chintha with their poster on "Single Microparticle Detection with Microelectrodes towards Microplastic Particles". Their research was conducted at Loyola University in Chicago under the direction of Professor Christophe Renault in the Department of Chemistry and Biochemistry; scholarship winners Mandal Dayita and Eloise Khoury; Vivian Sullivan, and Jamie Stasiorowski. (Image credits: Josie Alexander and Margaret Schott)

PAST EVENT

Women Astronomers at Yerkes Observatory

On the evening of Thursday, October 17, the Chicago Section hosted a virtual program titled "Capturing the Stars: The Untold History of Women at Yerkes Observatory." Our presenter was Andrea Twiss-Brooks, Director of Humanities and Area Studies for the University of Chicago Library. The talk was based on archival materials that were assembled for an exhibition in 2023.

Yerkes Observatory, which opened in 1897 in Lake Geneva, Illinois, proved to be a welcoming place for women scientists. During the early 20th century, women contributed to all aspects of observatory-based investigations in the fields of astronomy and astrophysics.

According to Andrea, "Not only were they calculators or assistants, but women also earned degrees, conducted their own research, collaborated on projects, and worked on publications."

Several resources are available for further reading or viewing: (i) Capturing the Stars website project information, including digitized logbooks, glass plates collection, and publications, (ii) the Women at Yerkes materials, (iii) a Web version of the 2023 exhibition, (iv) a photo essay in *Physics Today*, and (v) an AIP History Newsletter article. In addition, the Yerkes landmark was recently restored for visitors. Start booking your tour!

Donate online here Loaves & Fishes provides food and support to over 9,000 people a week. Help create a future where families have access to the resources they need to help them overcome barriers, improve their lives, and become self-sufficient.

American Chemical Society
Division of Analytical Chemistry
Discovery and Measurement Science

- Did you know the *Journal of Analytical Chemistry* was founded in 1887?

You are invited to join a world-class, global group that aims to shape the future by advancing the science of chemical characterization and measurement.

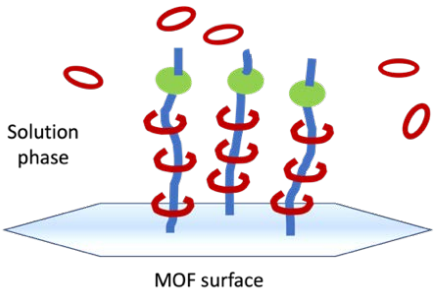
The Division offers travel awards for Younger Chemists to travel to a meeting to present their research (oral or poster). Eligible meetings include National and Regional ACS meetings, the Eastern Analytical Symposium, Pittcon, SciX, and others.

The Division organizes programs for the Spring and Fall ACS Meetings. Please join us and/or get involved by volunteering to help with one or more activities. Join the division, share your work, learn from experts, and build your career!
@ACS_ANYL Facebook LinkedIn

MEMBER RECOGNITION

Chicago chemist makes global "Top Ten"

Research carried out by a Chicago-area scientist has been selected as one of IUPAC's Top Ten Emerging Technologies in Chemistry for 2024. IUPAC is the International Union of Pure and Applied Chemistry. Dr. Liang Feng, now an Assistant Professor at Duke University, was recognized for his development of a completely new type of adsorption. Traditional adsorption modes include chemisorption and physisorption. Now, thanks to Dr. Feng's research, there is a third mode called *active mechanisorption* wherein macrocyclic rings from the bulk solution are collected onto a molecular thread, or axle, which is itself attached to a 2D metal-organic framework surface. By using a sequence of steps involving redox chemistry, the macrocyclic rings effectively become adsorbed to the surface through mechanical bonds. This process creates an out-of-equilibrium situation and is reversible.



The work was reported in *Science* by Dr. Feng while he was a postdoc in the laboratory of Sir Fraser Stoddart at Northwestern University. Professor Omar Farha is a co-author on the paper. A summary highlight of this work appeared in *Chemical & Engineering News* in 2021.

The cartoon gives a rough sketch of the end result of active mechanisorption.

According to IUPAC, in 2019 an international group of experts was tasked with identifying the "Top Ten" most interesting emerging discoveries in the chemical and related sciences. This initiative of scoping out field-changing innovations has continued each year since then. Entries are submitted by chemists from around the globe. Some other technologies in this year's Top Ten include: frustrated Lewis pairs (of electrons), triboelectric nanogenerators for use in sensing and energy harvesting, shape-shifting single-stranded nucleic acids called aptamers, 2D layered inorganic materials called MXenes, KRAS-binding molecules for inhibiting cancer-causing oncogenes, and an electrochemical nitrogen cycle for the sustainable synthesis of ammonia (move over, Haber-Bosch!).

FROM THE EDITOR'S DESK

There are some curious terms in the online urban dictionary: *GLADITUDE*, *TUDE*, and even *BADITUDE*. As we prepare to celebrate Thanksgiving, certainly *GRATITUDE* is the attitude to lean into. I had a welcome reminder about this positive disposition recently when a piece of embroidery in a local sewing shop caught my eye.

Things I am grateful for this season include the many Chicago Section members who volunteer their time to welcome younger chemists at programs and outreach events, administer scholarship and Olympiad exams, serve on the board of directors, and create social media posts. The talent, hard work and goodwill that go into each of these projects is quite remarkable – thank you, volunteers!

One of our scholarship winners wrote a note that reads, in part, "I am incredibly honored and grateful to have been selected as a recipient of [a] Chicago Section Project SEED scholarship … With your support, I am more motivated than ever to succeed and give back to the community."

This bulletin issue includes recaps of some recent Chicago Section happenings – thank you to our members who worked to bring these events to fruition.

My recent quest to discover the origin of the phrase "Safety First" quickly became a deep dive into railroad and industrial safety, government initiatives, and the beginnings of safety in academic labs. Look for more information about some of these topics in future bulletin issues, along with the references to key sources. Surely, we can all be grateful for our predecessors in all areas of safety practice!

Finally, I am grateful for all who helped in some way to create this month's issue: Paul Brandt, Bethel Shekour, Adam Sussman, Andrea Twiss-Brooks, Josie Alexander, Sherri Rukes, and Milt Levenberg.

—MARGARET E. SCHOTT

Origins of the "Safety First" Movement in the U.S.

RAILROADS **GOVERNMENT** **INDUSTRY** **ACADEMIA**

1830 First steam locomotive operates on a public railway

1838 First use of a train whistle for accident prevention

1856 Erie Railroad develops safety rules for engineers

1868 George Westinghouse invents and patents air brake

1870 First automatic signal system is patented; air brakes are adopted

1873 Westinghouse develops faster triple-valve air brake

1874 Lorenzo Coffin observes train car-coupling injury in Iowa

1881 Coffin is appointed right-of-way agent in IA ; later commissioner

1882 NY Central uses manual system, telegraph signaling for train spacing

1883 – Standard time is adopted

1885 First test of automatic coupling

1886 Coffin witnesses rapid train stoppage at Burlington brake trials

1893 Federal Safety Appliance Act passes

1903 First steel train car is constructed

1908 Locomotive Inspection Act passes

1910 Ralph Richards launches **"Safety First"** movement on Chicago & NW Railroad

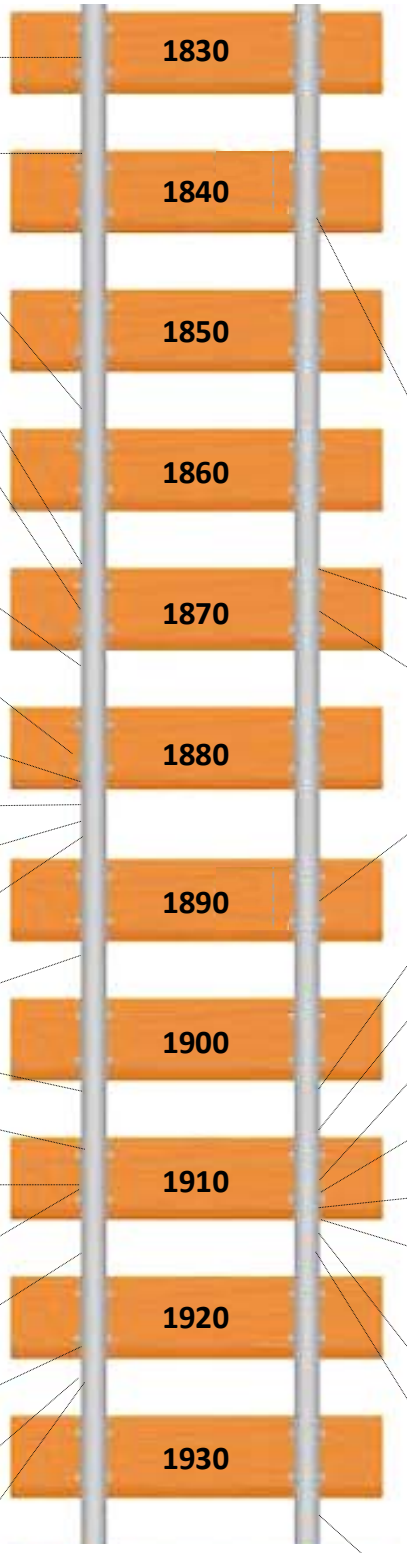
1910 *J. Ind. Eng. Chem.* publishes "Hygiene of the small chemical laboratory"

1916 **Safety First** train tours U.S.

1922 American Railway Association inaugurates Careful Crossing Campaign

1924 One railroad company reports 90% casualty reduction over 10 years

1925 *J. Chem. Educ.* publishes suggestions for teachers on poison antidotes and "**Safety First** in storing chemicals"



1900s US Steel logo

1840s Justus von Liebig develops first "modern" research laboratory

1868 First factory safeguard barrier is patented

1870 Massachusetts Factory Act passes; first such safety law in U.S.

1890 Illinois Steel Company (Joliet) applies the slogan "Get the **Safety First H**abit"

1907 Association of Iron & Steel Electrical Engineers forms, sets up safety committee

1908 Federal Employer's Liability Act passes

1910 Congress establishes Bureau of Mines to reduce accidents, conduct research

1911 John McDowell's speech at AISEE meeting is dubbed the "Gospel of Safety"

1912 First industry / government Cooperative Safety Congress meets in Milwaukee

1913 Department of Labor is formed

1913 National Council of Industrial Safety* is formed, with headquarters in Chicago

1914 **Safety First** Society is founded by NY businessmen; expands to national federation

1916 Museum of Safety opens in NYC**

1916 W. T. Nichols publishes a novel, *The **Safety First** Club*, about a group of boys

1934 *J. Chem. Educ.* Publishes industry-authored piece on chemical safety

Image (undated): www.sechicagohistory.org
* Later renamed National Safety Council
** Concept originated in 1909–1910 at the American Museum of Natural History.
Graphic timeline created by Margaret Schott

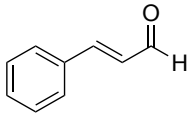
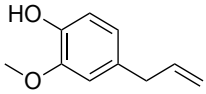
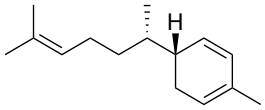
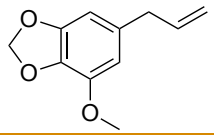
FOOD CHEMISTRY

The Chemistry of Pumpkin Pie Spice

With Thanksgiving at the end of the month it seemed appropriate to spice up this bulletin issue with some aromatic chemistry. Some readers will recall the song called "Over the River and Through the Wood" (yes, singular wood!) from our younger days. It was originally written as a poem in 1844 by Lydia Maria Child and published in *Flowers for Children* (vol. 2). One of the 12 stanzas in the long form of the song conjures up the delightful taste and aroma of pumpkin pie.

Over the river, and through the wood—Now Grandmother's cap I spy!
Hurrah for the fun! Is the pudding done? Hurrah for the pumpkin pie!

Is pumpkin pie filling considered a colloid? The answer is yes, because it contains small particles of pumpkin puree dispersed throughout a liquid medium (like eggs, milk, and spices), which is the defining characteristic of a colloid.

Spice	Characteristic Flavor Compound*	Structure
Cinnamon	Cinnamaldehyde	
Clove & Allspice	Eugenol	
Ginger	Zingiberne	
Nutmeg	Myristcin	

Adapted from an App Note at www.spex.com/Blog/Blog/29

HISTORY OF CHEMISTRY

"Colloiditis" Prevalent in Britain

From the September 1, 1920, issue of *Chemical and Metallurgical Engineering* (accessed via www.HathiTrust.org)

The use of the word "colloid" is at present being made an excuse and a catchword in the chemical industry and elsewhere, the uninstructed public having heard so much recently of progress in colloidal chemistry that any new project connected or presumed connected with it attracts undue attention. Even in the realm of "colloidal" fuel methods in which the fuel and oil are merely blended without the aid of a peptizing agent are being exploited by companies under names such as the Colloid Trust. Dr. [Alfred] Searle's recent book on "The Use of Colloids in Health and Disease" also suffers from the craze of applying the term "colloid" indiscriminately and the book was trenchantly and amusingly criticized in the *Journal of the Society of Chemical Industry* of June 30, by H. H. Dale. Thus Dr. Searle states that all products of digestion are essentially colloidal and, after previously stating that solutions of colloids do not pass through membranes, assumes that in the presence of common salt their passage is considerably increased. From this Dr. Searle deduces "the advisability of eating salt with so typical a colloidal gel as a boiled egg," but to quote Dr. Dale's criticism, "if salt will get a boiled egg through the alimentary mucous membranes, digestion becomes a mere hobby."

Cleaning Silver

It's nearly Thanksgiving time and that means a big meal with all the fancy china and silverware coming out of the cupboard. And then when you look at the silverware, you see that it is tarnished, so there is work to be done to make it shine. Luckily, we can use our knowledge of chemistry to clean it.

Materials:

- Tarnished Silver (tableware, jewelry, platters, etc.)
- Aluminum Roasting Pan or Foil (or both)
- Baking Soda
- Salt
- Stove or Boiling Water
- Tongs

Caution: Using the stove always requires the supervision of an adult.

Experiment:
You can either heat the roasting pan on the stove or you can use a different container and pour boiling water into it (like your sink or a plastic or glass pan). Begin by placing the silver onto an aluminum surface (foil or pan) making sure that the silver is touching the aluminum. Add some baking soda to the pan (about a heaping tablespoon for every quart of water) along with a teaspoon of salt. You will need to add enough water to cover the silver. Either boil the water and then add it to the pan or heat the pan on the stove to boiling. You can use tongs to turn the silver over so that the reverse side can be in contact with the aluminum. This process should not take more than 5 minutes. You can now remove the silver from the pan and rinse it in cold water. Your tarnished silver should now be clean!

What's happening?
Tarnished silver is caused by the silver reacting with sulfur impurities in the air; these are mostly due to fossil fuel combustion. In becoming tarnished, the silver has donated some electrons to the sulfur and is now positive silver ions attached to negative sulfur ions. Because aluminum is a more reactive metal than silver, the aluminum can donate its electrons to the silver, causing the silver to once again become neutral (having no charge) and the aluminum to be present as positive ions—as shown in this chemical equation:

$$3\,Ag_2S + 2\,Al \rightarrow 6\,Ag + Al_2S_3$$

black → silver

The baking soda is there to help with the transfer of electrons as it makes an ionic solution. We use table salt, sodium chloride, to attack the oxide coating that is on the aluminum. This will accelerate the process.

Now, enjoy that lovely dinner!

Extension:
If you don't have any tarnished silver, you can tarnish it yourself by hard boiling an egg, peeling it, putting it in a plastic bag with your silver, and smashing the egg in the bag. The longer they are together in the bag, the more tarnished the silver will be.

References:
https://www.17apart.com/2013/09/how-to-polish-silver-in-baking-soda.html
To view all past "ChemShorts for Kids", go to:
https://chicagoacs.org/ChemShorts

–PAUL BRANDT

UPCOMING EVENTS

The Biochemistry of Love

Thursday, November 14 at 7:30 pm – 9:00 pm EST (6:30 pm – 8:00 pm CST) What is love? Is it a feeling, a physiological response, or a series of chemical reactions? The answer is complex and still being debated by the scientific community. Join us and contribute to the conversation. **Dr. Eric Chang**, Associate Professor, Chemistry and Physical Sciences at Dyson College of Arts and Sciences at Pace University, NY, NY, will present a ZOOM-only lecture discussing the Biological and Chemical aspects of love through a mix of lecture and audience participation. This is a program is being hosted by the NY – NJ Local ACS Section. Click the hyperlink above for more information. To obtain the Zoom link or if you have any questions, please contact Peter Corfield at pcorfield-at-fordham.edu.

ACS Local Section
New York
Westchester Chemical Society

Wednesday, December 4 at 6:30 – 8:30 PM CST, Fatty's Pub & Grille in Dekalb, IL – A free STEM Café hosted by Northern Illinois University. Registration is encouraged. Past programs are available for viewing on NIU's YouTube channel.

Thanksgiving Chemistry Featuring Diane Bunce

Does tryptophan really cause the bleary-eyed daze after a Thanksgiving meal? Why does that timer pop up from the Thanksgiving turkey at just the right moment? For the answers to these questions and more, we're serving up a Bytesize Science classic on YouTube: an entertaining holiday lecture from **Dr. Diane Bunce,** [retired] professor of chemistry at The Catholic University of America, that uncovers the chemistry behind Thanksgiving. Produced by the American Chemical Society in 2012.

IUPAC Global Women's Breakfast (#GWB2025)

The IUPAC-sponsored GWB event for 2025 will take place on February 11, with the theme of "Accelerating Equity in Science". All are welcome to attend. Chicago-area event details will be provided later. Held in conjunction with the U.N. Day of Women and Girls in Science, the goal of the GWB is to establish an active network of all genders to overcome the barriers to gender equality in science. Groups from science organizations such as high schools, science societies, universities, companies, governments, and non-governmental organizations, are invited to host

UPCOMING EVENTS

CHICAGO SECTION BOARD MEETINGS

For Zoom link contact: office-at-chicagoacs.org

November 10	March 6
December 7	April 3
January 9	May 8
February 13	June 12

DEADLINES FOR BULLETIN SUBMISSIONS

editor-at-chicagoacs.org

November 16	March 16
December 16	April 16
January 16	May 16
February 16	June 16

CHICAGO ACS SECTION PROGRAMS

https://chicagoacs.org

FRIDAY, NOVEMBER 8 [In-person]
Basolo Medal Lecture and Dinner (pages 1, 2)

4:30 – 5:30 PM Lecture by Prof. Galen Stucky
5:30 – 8:30 PM Social / Museum tour / Dinner

THURSDAY, NOVEMBER 21 [Virtual]
$^{53}I^{15}P$: Career Opportunities for Young Chemists in Intellectual Property (pages 1, 3)

12 NOON – 1:00 PM on Zoom
Presentation by Adam D. Sussman

FRIDAY, DECEMBER 13 [In-person]
Holiday Party / "My Path as a Blind Chemist"

5:30 – 8:45 PM at Jameson's Charhouse in Bloomingdale
Invited speaker is Dr Cary Supalo

THURSDAY, JANUARY 16, 2025 [Hybrid]
Smart and Programmable Crystalline Sponges

5:30 – 8:30 PM at Matthew Bieszczak Volunteer Resource Center, 6100 N. Central Ave, Chicago
Prof. Omar Farha (Northwestern University)
Joint Meeting with Chicago AIChE

FRIDAY, FEBRUARY 21, 2025 [Hybrid]
Human Rights and Peace: A Personal Odyssey

Dr. Zafra Lerman will discuss her new book
(Location to be decided)

The Chemical Bulletin
November 2024, Vol. 111, No. 9
Published by the
Chicago Section of the American Chemical Society
EDITOR
Margaret E. Schott editor-at-chicagoacs.org
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Adam Sussman and Bethel Shekour

2024 Chicago ACS Section Officers

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Vice Chair	Paul Brandt	vice-chair-at-chicagoacs.org
Chair-Elect	Anita Mehta	chair-elect-at-chicagoacs.org
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