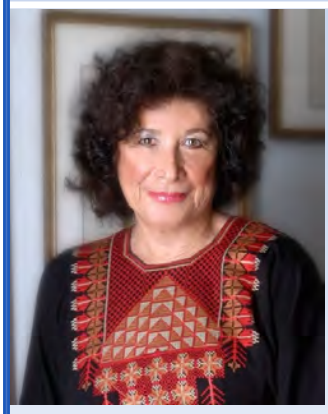
Volume 112, No. 2 February 2025

THE CHEMICAL BULLETIN

Chicago Section of the American Chemical Society Newsletter

February Monthly Meeting (In-person)

Friday, February 21, 2025 5:30 PM – 8:30 PM CST



Human Rights and Peace: A Personal Odyssey

Dr. Zafra Lerman

Scientist, Educator and Humanitarian
President, The Malta Conferences Foundation

ABSTRACT

Dr. Zafra Lerman will speak about her new book, *Personal Rights and Peace: A Personal Odyssey*, which was published in 2024 by Routledge. In it, Lerman recounts her life, from growing up in Israel to her time in the Soviet Union, Peru, China, and Cuba, where she fought for peace and for dissidents being denied basic human rights. She also conceived, coordinated, and launched the Malta Conferences—the biennial, international meetings of scientists, Noble Laureates and political leaders from the Middle East that use science diplomacy as a bridge to peace. Her memoir has been called "genre busting" because there is no equivalent, competing work. It should provide inspiration to educators, scientists, policymakers, and the general readers. This is a book-signing event.

COST OF DINNER
$45 for ACS members
$50 for nonmembers
$25 for students & postdocs
No charge to attend lecture only*

COLVIN HOUSE Directions
5940 N. Sheridan Road, Chicago, IL 60660
Chicago historical landmark

REGISTRATION
By phone (847-391-9091), email (chicagoacs@ameritech.net) or online:
REGISTER HERE

DEADLINE TO REGISTER
Friday, February 14 at Noon (for Dinner)
*No deadline to attend lecture only but pre-registration is encouraged.

IN THIS ISSUE

PROGRAM AGENDA

5:30–6:20	Check-In and Social Hour
6:20–7:15	Buffet Dinner
7:15–7:30	Announcements
7:30–8:25	Presentation, Q&A
8:25–8:30	Closing Remarks

DINNER

Buffet style menu:

- BBQ Pulled Pork
- BBQ Chicken
- Mac and Cheese
- Sauteed Vegetables
- Mashed Potatoes
- Coleslaw
- Brownies
- Assorted Soda/Sparkling Water

MEET THE SPEAKER

Zafra Margolin Lerman received her PhD in Chemistry from the Weizmann Institute of Science. She has developed an innovative approach to teaching science at all levels using art, music, dance, drama, animation, and rap. These methods, which were successful with underprivileged students around the world, have received international recognition. In Chicago's low-income neighborhoods, Lerman worked with students, teachers and parents and had a tremendous impact on their attitudes towards science. She worked with homeless students and taught them scientific concepts through dance; many of them later graduated from college. Over 16,000 Chicago public school students and more than 1,000 teachers participated in her programs.

From 1986 to 2011, Zafra chaired the American Chemical Society's Subcommittee on Scientific Freedom and Human Rights. She worked on human rights cases in the former Soviet Union, Russia, China, Guatemala, Cuba, Peru, South Africa, and Iran. She also met with dissidents in many of these countries. At great risk to her own personal safety, she succeeded in preventing executions, releasing prisoners of conscience from jail, and bringing dissidents to freedom.

Since 2001, she has been using Science Diplomacy as a Bridge to Peace in the Middle East and is the President of the Malta Conferences Foundation. The Malta Conferences are the only platform in the world which brings together Nobel Laureates and scientists from Middle East countries to work on solving regional problems, establishing cross-border collaborations, and forging relationships that bridge chasms of distrust and intolerance.

Lerman has received over 40 international awards for her work, including the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring from President Clinton (1999); the American Institute of Chemists Joseph Hyman Ethics Award (2000); the American Chemical Society (ACS) Parsons Award for outstanding public service to society through chemistry (2003); the Royal Society of Chemistry Nyholm Education Award (2005); the New York Academy of Sciences Pagels Human Rights for Scientists Award (2005); the George Brown Award for International Scientific Cooperation from CRDF Global (2007); the ACS Pimentel Award for Excellence in Chemical Education (2010); the International Conference on Chemistry for Mankind (India) Award for Stimulating Collaborations and Ensuring Human Rights (2011); the American Association for the Advancement of Science (AAAS) Award for Science Diplomacy (2015); the American Physical Society Andrei Sakharov Prize for human rights (2016); the Peace and Justice Prize from the UN NOVUS summit (2016), and the Distinguished Women in Chemistry or Chemical Engineering Award from the International Union of Pure and Applied Chemistry (2017). She was honored by the U.S. Congress with speeches about her work in 2002, 2004, 2013, and 2019. Her book "Human Rights and Peace: A Personal Odyssey" was published in August 2024. (See also page 5.)

PAST PROGRAM

Omar Farha Hits the MOF Mark

The Chicago Sections of the American Chemical Society (ACS) and the American Institute of Chemical Engineers (AIChE) joined forces for an evening program meeting on Thursday, January 16, 2025. Thirty-eight persons were in attendance for this annual event, with others watching online. The event, which was hosted by the Chicago ACS Section, took place at an historic Cook County Forest Preserve pavilion.

First up on the agenda was a presentation by Janet Werner, who shared the 100-year history of the Chicago AIChE Section. The first regular meeting was held on the same date as this program, namely, January 16, 1925. Continuing with the history theme, Janet led participants through a series of trivia questions, while Margaret Schott presented trivia questions prepared by Chicago ACS Section historian Josh Kurutz. Margaret also highlighted aspects of the section's 130-year history since being chartered in 1895.

The evening's main speaker was Prof. Omar Farha of Northwestern University's Department of Chemistry. Farha dedicated his presentation to the late Sir Fraser Stoddart, also of Northwestern, who passed away on December 30.

Dr. Farha is an inorganic chemist and a master of scientific storytelling. He related his academic research journey over the past 12 years, beginning with the discovery that certain zinc-coordinated metal-organic framework (MOF) materials can detoxify chemical warfare agent simulants. (The U.S. Army lab carries out tests on the real ones.)

Over time, Farha's research group—aka Farhomies or the MOFia—was able to speed up the reaction kinetics enough to meet the specifications of the U.S. Army. Recently, during the past few years, Farha's MOFs have been incorporated into the fabric of prototype Army combat uniforms, with the idea of providing warfighters with whole-body protection in the event of a chemical attack. Farha's presentation was clear, concise, cogent, and convincing and generated many thoughtful questions from participants in the room and on Zoom.

We were delighted to have in attendance two future speakers, namely Dr. Zafra Lerman, founder of the Malta Conferences, who will talk about her new book in February, and Dr. Lee Polite, founder of Axion Analytical Labs and Training Institute, who will discuss contemporary issues in chromatography in March.

From left: Margaret Schott (ACS), Omar Farha (speaker) and Matt Walters (AIChE Section Chair)

FROM THE ARCHIVE

Return of the Alchemist

Our scientific journals will soon be legible only to the initiated, when each month brings forth a new litter of trade names. An article in the December *J. I. E. C.* extols the virtues of "Paraflow" (a modern *elixir vitae* for lubricating oils) without revealing the secret of what this mystic substance is! —X. LENS

The Chemical Bulletin Vol. 20 (March 1933)

The American Chemical Society began publishing the *Journal of Industrial and Engineering Chemistry* (*J. I. E. C.*) in 1909. According to an earlier article in the journal (1931, 9, 322), Paraflow was "a pure hydrocarbon, which mixes and blends with lubricating oil in all proportions" while eliminating the requirement for dewaxing processes. It was introduced by the Standard Oil Development Co. of New Jersey and scaled up at the company's Bayonne Refinery for use with motor and transmission oils to improve fluidity even at low temperatures. Evidently, the product flew off the shelves once it hit the marketplace.

New Office Space for the Chicago Section

After many months of discussion by the Board of Directors, the Chicago ACS Section decided to move its headquarters from an office park in Park Ridge to the Krasa Student Center on the campus of Benedictine University in Lisle, IL. Rental of the new space began January 1, 2025.

In recent years, both during and after the pandemic, the board has been meeting virtually over Zoom. It was recognized that we no longer require a space for the board to gather in person, and that our existing space made for cramped quarters.

The material holdings in the section office were significantly "downsized" in 2023 in an effort organized by Tim Marin, faculty member and contact with Benedictine. As part of the purge, the section got rid of unneeded files, outdated pieces of technology, and various objects that had simply accumulated over the years. When the time came in June and July of 2023, a team of volunteer members met at the old office and made quite a few trips to the dumpster. They also put many like-themed physical documents and items together for future scrutiny.

Special thanks also to Herb Golinkin (then comptroller), Josh Kurutz (section historian), and Gail Wilkening (former office manager) for their help in deciding which files and artifacts could be tossed (or recycled); their thorough knowledge of the section's history, financial documents, and physical objects proved extremely valuable. Committee chairs also provided input. Thanks also to our current office manager, Josie Alexander, for her help during the process.

The new office space consists of two adjacent rooms on the lower level of the Krasa building, one room for a desk and office machines, and the other for files and equipment storage. The space is equipped with wifi. The section will be able to use other larger spaces on the campus for events, including program meetings and board meetings, when the need arises. Thanks to Vivian Sullivan (2024 Chair), Tim and the entire board for the significant effort and the negotiations that went into making this arrangement possible.

The new address is: Krasa 035B and C, 5700 College Road, Lisle, IL 60532. The email address will remain the same: office@chicagoacs.org. The phone number will remain the same for the time being: (847) 391-9091.

Facts about 2025

A perfect square

$2025 = 45^2 = (20 + 25)^2$
$= ((20 \times 2) + 5))^2$

Sum of consecutive integers squared

$(1+2+3+4+5+6+7+8+9)^2$

Sum of cubes

$1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3$
$+ 8^3 + 9^3$

Sum of two perfect squares

$27^2 + 36^2$

Product of perfect squares

$5^2 \times 3^4 = 25 \times 81$

AWARDS

Zafra Lerman to Receive International Award

Scientist, educator, and humanitarian Zafra M. Lerman will receive Cardozo School of Law's International Advocate for Peace Award on March 6, 2025. The award is presented annually by the *Journal of Conflict Resolution*. The law school, which is located at Yeshiva University in New York City, is home to one of the nation's leading dispute resolution programs.

As president of the Malta Conferences Foundation, Lerman promotes peace by bringing together scientists from 15 otherwise hostile countries in the Middle East to discuss issues and foster international scientific and technical collaboration. The five-day conferences cover a variety of topics, including science education, air and water quality, and alternative energy sources.

"We are thrilled to be able to highlight the important work of Zafra Lerman," said Professor Andrea Schneider, director of the Kukin Program for Conflict Resolution. "This award celebrates her innovation in international peacemaking in creating the Malta Conferences. Her work to bring people together in this region is more crucial today than ever."

Lerman, chair of the American Chemical Society's Subcommittee on Scientific Freedom and Human Rights from 1986 to 2011, has worked on human-rights cases worldwide. She has also published numerous works on science diplomacy.

Previous recipients of the award include President Bill Clinton for his role in the Oslo Accords; President Jimmy Carter for negotiating a treaty between Egypt and Israel; Sir Paul McCartney for the global impact of his music; Archbishop Desmond Tutu for his work with the Truth and Reconciliation Commission in South Africa; Leymah Gbowee, the 2011 Nobel Peace Laureate for her work promoting peace in Liberia; and Gloria Steinem, writer, activist, and organizer for her work advocating for women's rights and equality around the world.

Adapted from: https://cardozo.yu.edu/news/scientist-zafra-lerman-receive-cardozos-24th-annual-international-advocate-peace-award-march

FROM THE EDITOR'S DESK

Readers will find a variety of topics along with job resources and learning opportunities in this issue. Highlights include the move of the Chicago Section office to Benedictine University, a ChemShorts experiment on the science of siphons, a chemistry infographic by UK scientist Andy Brunning, and special recognition of section member Zafra Lerman for her work in peace advocacy. First-time contributor Kshitish Patankar provides a helpful summary on the "X-odus" of scientists leaving Twitter and going over to a new social media platform called BlueSky. Looking for jobs? The Kavli Foundation might be worth checking out. This organization is growing in esteem because of the annual prizes it bestows in the fields of astrophysics, nanoscience, and neuroscience (i.e., non-Nobel topics). In addition, a story about chemistry and art, based on a poster created by Paul Brandt for an ACS meeting, is drawn from our archival bulletin information. As there is a wealth of talent and expertise—chemical and otherwise—represented in the Chicago Section, wouldn't it be fitting to offer additional content in these pages based on past meeting presentations? Send your ideas for stories to editor-at-chicagoacs.org. Thanks for reading!

—MARGARET E. SCHOTT

The Fine Art of Chemistry*

Over the past hundred-plus years, *The Chemical Bulletin* has showcased the different talents of chemical professionals. In the 1950's, the National ACS Meetings held in Chicago began to host photo and artwork contests at the expos. The calls for submissions and the winning entries were displayed in the pages of the bulletin. Here is a sampling.

(Possibly) Poetry

In 1949 (October 1949, #829 p9) *The Chemical Bulletin* announced its first Chemical Limerick Contest. As an example of this poetical form, the contest managers supplied a limerick from UC-Berkeley Chemistry Professor Joel H. Hildebrand's book of poetry entitled *The Lowdown on Higher Education*—

An intelligent youth from Manassas
Tried to get higher marks in his classes,
He thought of a trick
To make ideas stick
By shampooing his head with molasses.

The winner of the limerick contest was John H. Pomeroy, who was awarded a copy of *The Book of Humorous Verse* by Carolyn Wells. Here is Pomeroy's ridiculous entry—

There once was a chemist named Green
Who swallowed a pH machine;
His belches carbonic
When drinking a tonic*
All registered 5.16.

Several other entries received Honorable Mentions, and their creators were ceremoniously inducted into the Rough and Ready Rhymers' Club by Carl S. Miner, who declared himself Founder and Poo-Bah (March 1950, #91 p11). Certificates for this dubitable Mention took the following form (January 1950, #9 p9)—

Since you did a good job tho you didn't win
In the contest staged by the *Bulletin*,
You receive this honor; you're elevated
To a high estate. Henceforth you're rated
Of the grade that's known as Promising Cub
In the Rough and Ready Rhymers' Club.
This is a status few attain.
It connotes a fertile and nimble brain;
Courage to disregard the rules
Of poetic art as taught in schools;
The will to kick hell out of meter
If the end result seems a wee bit neater;
And ability in time of need
To turn out rhymes with lightning speed;
Plus a firm resolve for the better or worse
To express oneself in the form of verse.

Not long afterwards, the editors responded to criticism of the *Bulletin* for running such frivolous contests (May 1950, #175 p7), commentary on modern art (November 1949, #871 p11 and January 1950, #13 p13) and even a chef column.

limerick = a nonsense verse of five anapestic lines, of which the first, second, and fifth lines are three-stress and rime and the third and fourth lines are two-stress and rime. (Dictionary entry ca. 1950)

anapest = a metrical foot consisting of two unaccented syllables followed by an accented syllable. For example, the words "underfoot" and "overcome" are anapestic. (The Poetry Foundation)

tonic = Bostonese for carbonated beverage

Art and Photography

The January 1950 issue depicts artwork by Harry N. Holmes, president of ACS in 1942 and professor of chemistry at Oberlin College. The article suggests that ACS should follow in the footsteps of the American Medical Association by holding an art exhibition at an upcoming national meeting. And so in March 1950 there was an official "Call to the Brush" inviting the submission of paintings for the September meeting in Chicago (March 1950, #95 p15).

In May 1954, a call went out soliciting photographs to be exhibited at the October National Meeting and Exposition in Chicago. The exhibit was entitled CHEM-PHOT-EX and had a $1 entry fee (May 1954, #670, p23)

(continued from previous page)

Ribbons and prizes were awarded. Apparently, art exhibits were popular enough that there was a fear of having too many entries in the absence of some kind of limitation. Thus, all photographs were required to contain some "chemical phase" to them.

A full write-up of the Art Exhibit was published in the November *Bulletin* (November 1954, # 850 p15). Around this time, the *Bulletin* began to incorporate sketches by James A. Wuellner, chemist-artist at the Standard Oil Company; he also served as Assistant Editor of the bulletin.

In 1958, an Art Exhibit at the National ACS Meeting and Exposition included works in several media: oils, tempera, water color, drawings, prints, sculpture, ceramics and hand-crafted glass. In addition, a Photo Show was accompanied by numerous lectures, including one on photographic techniques in the study of crystal structures given by Walter McCrone – founder of McCrone Associates in Chicago, a world leader in microscopy.

Other attractions included a film illustrating crystal growth as viewed through a polarizing microscope; images of crystals used as artwork for advertising purposes; a photographic method for the determination of fluorescent material on the skin; and an exhibit of art in science hosted by the General Electric Research Laboratory (September 1958, #243 p13).

All the sketches in this article are from a collection of rubber stamps found in the Chicago ACS Section office.

These stamps were the subject of a series of articles written for *The Chemical Bulletin* in the period 2018–2019. The sketch at left was used in advertisements. Indeed, close inspection of the bulletin archives revealed that it first appeared in 1920 in an ad placed by Dr. Carl Miner for consulting services (November 1920, #310 p310). The stamp continued to be used until at least December 1958 for advertisements by Arthur D. Little Inc., the Midwest Division of Miner Laboratories.

—PAUL BRANDT & MARGARET SCHOTT

* This article is based on a poster presented by Dr. Brandt at the National ACS Meeting in Chicago in August 2022.

Scientists Migrating to Bluesky Platform

After recent changes to Elon Musk's X, the online platform formerly known as Twitter, discontent among its users has given rise to a mass migration to a social media platform called Bluesky in search of the "old Twitter" ambiance.

In the two weeks after the US presidential election in November 2024, San Francisco based Bluesky (bsky.social) grew from 14 million to over 20 million users. The site has broad appeal in large part because "it looks and feels a lot like X", according to Smiriti Mallapaty writing for the journal *Nature*. This appeal refers to a sense of familiarity with the online features scientists use to share research findings, initiate collaborations, and grow their professional networks.

It is probably no coincidence that the largest influx of users on Bluesky occurred after the election, when Musk appeared to become closely allied with then-president-elect Donald Trump, suggesting a preference among users to distance themselves from the political affiliations and ideology that Musk represents.

After Musk's takeover of X in early 2022, researchers observed reduced content moderation, decreased community protection, proliferation of spam, bots and pornography, and racially charged and misogynistic feeds, among other issues. "Bluesky, by contrast, offers users control over the content they see and the people they engage with," says Mallapaty, "through content moderation and protections such as blocking and muting features." In addition, it has an open architecture, giving users access to its data free of charge; X charges for such access.

Bluesky originated as a project at Twitter but went solo—severed ties—after Musk bought the company in 2022. It launched as an app in February 2023.

Hands-on experience is revealing that Bluesky offers higher quality interactions and collaborations amongst scientists and other like-minded professionals.

To become a contributor to the Science feed, for example, an individual must first show that they are involved professionally in research and be vetted by the content moderator. This approach also provides an opportunity for the moderator to broaden their horizons—be it learning a new skill, accessing the research of contributors, or engaging in open discussions of ongoing critical challenges in their respective fields.

Bluesky offers a feature often referred to as the 'nuclear block', which prevents interactions with blocked accounts. Another useful feature is called the 'starter pack, a collection of topic-specific accounts that newcomers might want to access. As with X, the ability to post images, short videos, and hotlinks can often enhance the written word.

One growing concern among the Bluesky community is that, as the platform grows, "the problems that plague X could come to haunt it as well," says Mallapaty. This concern has prompted many users to keep their X accounts active. Bluesky is gearing up to tackle these challenges: it has hired more content moderators and built up the team responsible for safety and trust.

Overall, Bluesky appears to provide a trustworthy online venue where researchers can grow professionally and personally.

—KSHITISH PATANKAR

Image: pexels-fuchs-mulder-9065662.jpg.

Kai Kupferschmidt, "Researchers and scientific institutions flock to Bluesky", *Science* (2024) *386*,950–951.
Smiriti Mallapaty, "Why scientists are joining the rush to Bluesky", *Nature* (2024) *636*, 15–16.

Follow: @chicagoacs.bsky.social

What is a mole in chemistry?

COMPOUND INTEREST

What is a mole?

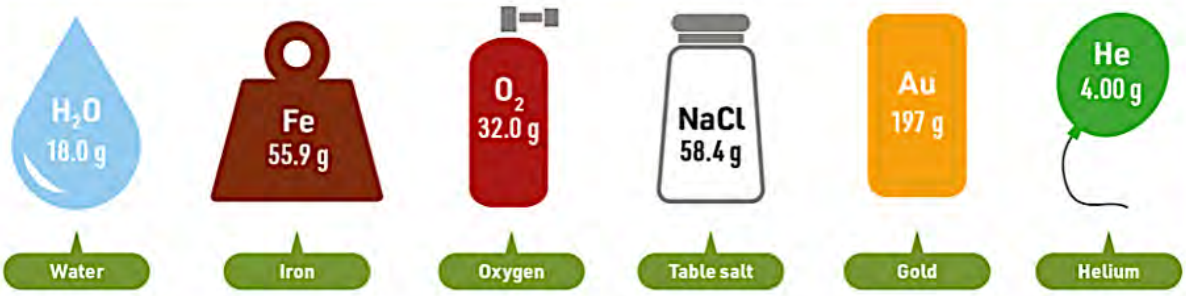
One mole is the amount of substance that contains exactly $6.02214076 \times 10^{23}$ atoms, molecules or ions. This number is also known as 'Avogadro's number'. It's named after Italian scientist Amedeo Avogadro (left), a suggestion put forward by French scientist Jean Perrin to recognise Avogadro's work. 'Mole' derives from molecule – it's not related to the animal.

602,214,076,000,000,000,000,000

The number of atoms, molecules or ions in one mole of a substance

Atoms, molecules and ions are very small and impossible for chemists to count. Using the mole makes it easier to talk about amounts of substances involved in reactions, by relating the mass of a substance to its atomic or molecular mass.

Amount of substance = mass (g) ÷ mass of 1 mole (g mol^{-1})



One mole contains a different mass for different substances

This makes sense if you think about it. Different substances will have atoms, molecules or ions which have different masses. Gold atoms have a greater mass than iron atoms, so the mass contained in one mole of gold atoms is greater.

Coins and moles: A useful analogy

Using moles to express amount of substance is analogous to weighing coin rolls to estimate the number of coins. In this analogy, the value of the coins is like mass (different for different coins), the number of coins is like number of atoms, and the rolls of coins are like moles of atoms.

Straw Siphon

One of my hobbies is fixing up my house, so I watch "This Old House" on PBS frequently. This week's episode showed how toilets work and that a siphon is necessary for their plumbing. I've used a siphon many times before but realized that I hadn't relayed the excitement of how this works to my kids, so here it is!

Materials:

- Tall container (like a glass)
- Short container (it can be the same size but it helps to visualize the point)
- Flexible straws
- Water
- Scissors
- Food coloring (optional)

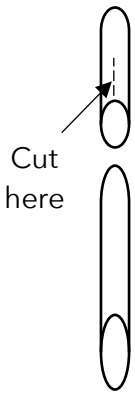
Caution: This can be messy, but it is just water!

Experiment:
Fill the tall container with water and add food coloring. Shorten the length of the straw by bending it, so that the long end is at the bottom of the container while the bend is at the top of the container. Place the short container next to the tall one with the short end of the straw able to pour into the short container. With the straw out of the water, plug the short end with your finger (so that no air can enter) and put the long end of the straw into the water. Once the straw is in and the bend is resting on the edge of the container, remove your finger. What happens?

What's happening?
Air pressure is pushing down on the water in the tall container and pushing the water up the straw. Initially, you've trapped a bunch of air in the straw. When you release your finger from the straw, the air rushes out and the water gets pushed up into the straw to the bend in the straw. Once the water hits the high point and begins to go over the tip, you've created the siphon.

I've written many times about how water molecules are attracted to other water molecules, and so here if we think of the water molecules as a long chain of molecules, once the flow of this chain begins, the other molecules in the chain continue to be pulled by gravity similar to this video until air comes into the siphon, breaking that chain of water molecules.

Extension:
See what happens if you lengthen the short end of the straw by attaching another straw to the end of it (using a scissors, cut the short end just a bit so that it can fit inside the other straw as shown to the right)?



Try adding a third container (tall and filled with water) next to the other tall container and put another straw (filled with water) between the two filled containers. Now repeat the original experiment as seen in this video: https://www.facebook.com/watch/?v=1888924398246267

References:
https://www.sciencebuddies.org/stem-activities/straw-siphon

To view all past "ChemShorts for Kids", go to:
https://chicagoacs.org/ChemShorts

–PAUL BRANDT

UPCOMING EVENTS

ACS Meetings

Spring 2025 National Meeting

https://www.acs.org/events/all-events/acs-spring-2025.html

March 23–27, 2025 | San Diego, CA

Join us in San Diego or online (hybrid) to get the latest research in chemistry, network and attend career events. Choose from thousands of oral presentations covering every area of chemistry, attend the poster session and visit the expo hall.

Presidential Symposium on Fentanyl

March 24, 2025, 2 PM – 6 PM at the National ACS Meeting: "Quantifying and Addressing the US Fentanyl Crisis."

Spring 2025 Digital Meeting

Not able to attend the meeting in San Diego? Join us online for keynotes, technical sessions, networking and professional development.
https://www.acs.org/meetings/acs-meetings/spring/digital-meeting.html

Great Lakes Region Meeting 2025: Chemistry for a Better Planet

https://www.acs.org/events/all-events/great-lakes-region-meeting-glrm-2025.html

June 4–6, 2025 | Appleton, WI

Hosted by the Central Wisconsin and Northeast Wisconsin Local ACS Sections.

Abstract submission is open; closes March 3.

ACS Webinars

Steeped in Science: The Chemistry Inside Your Perfect Cup of Tea

February 6, 2025

2:00 PM EST / 1:00 PM CST Register here

Plastics Circularity: Origins & New Developments in Recycling

February 13, 2025

1:00 PM EST / 12:00 PM CST Register here

Northwestern Podcast Series

Nanoscape: Exploring the Frontiers Ahead

The International Institute for Nanotechnology at Northwestern University has a new podcast series. Audio segments of 20 to 30 minutes feature Northwestern faculty. The seven topics produced so far include "Improving the World through Nanomaterials" with **Omar Farha**, "Innovating Energy Solutions through Nanotechnology" with **Dayne Swearer**, "Nano-Solutions to Black Box Problems" with **Shana Kelley**, among others. IIN Director **Chad Mirkin** provides a preview of the first season. Episodes will be posted on the IIN website, or you can listen at these podcast destinations: Apple Podcasts, Amazon Music, iHeartRadio, Spotify, and YouTube.

The 15th Annual AIChE Midwest Regional Conference will be held April 11-12, 2023 at University of Illinois in Chicago (UIC), organized by the Chicago Local Section of AIChE. The conference provides an opportunity for engineers and scientists in the region to learn about new technologies and network with others.

The Chicago Sections of ACS and AIChE traditionally hold a joint meeting in January, but that does not mean the collaboration has to stop there! Please check out the latest Chicago AIChE newsletter and consider attending future general meetings and tours of local industries including Numat on March 26.

UPCOMING EVENTS

CHICAGO SECTION BOARD MEETINGS

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

February 13	May 8
March 6	June 12
April 3	

DEADLINES FOR BULLETIN SUBMISSIONS

editor-at-chicagoacs.org

March issue	February 16
April issue	March 16
May issue	April 16
June issue	May 16

No issue in July or August

CHICAGO ACS SECTION PROGRAMS

https://chicagoacs.org/meetinginfo.php

TUESDAY, FEBRUARY 11, 2025 [In-person]
IUPAC Global Women's Breakfast – Chicago

2025 Theme: "Accelerating Equity in Science"
Time and location to be announced.
See #GWB2025 for an overview of this event.

FRIDAY, FEBRUARY 21, 2025 [In-person]
Human Rights and Peace: A Personal Odyssey

Dr. Zafra Lerman will discuss her new book.
See pages 1–2 for details and to register.

THURSDAY, MARCH 13, 2025 [In-person]
Axion Analytical Labs Tour and Lecture

Dr. Lee Polite, Founder, Axion Labs
14 N Peoria Street, Suite 100, Chicago

SATURDAY, APRIL 26, 2025 [Hybrid]
Recognizing our 50/60/70-year Members

Luncheon at The Great Escape, Schiller Park, IL

FRIDAY, MAY 16, 2025
Willard A. Gibbs Medal & Banquet

2025 Gibbs Medalist – Professor Chad Mirkin

SUNDAY, JUNE 22, 2025
Chicago Dogs Baseball Game (afternoon)

Impact Field, Rosemont, IL
This is a family friendly event!

Industrial & Engineering Chemistry News
January 10, 1925, Vol. 3, No. 1, p. 1

Metric Association Compliments A. C. S.

The Metric Association held its annual meeting in Washington on December 29 and 30. From industry, engineering, pharmacy, education, athletic sports and radio, there came encouraging reports of the increasing use of the metric system, both in this country and the British Empire. Showing that the best of improvements generally come gradually, it was pointed out that the Arabic numerals required a hundred and fifty years to displace Roman numerals after their first introduction into Europe. The Association passed a resolution thanking the American Chemical Society for its active cooperation, and particularly for the instructive illustration of what can be accomplished in seeking limited objectives as indicated by the handling of pure chemicals in standard metric packages.

The Chemical Bulletin
February 2025, Vol. 112, No. 2
Published monthly (Sept – Jun) by the Chicago Section of the American Chemical Society

EDITOR
Margaret E. Schott editor-at-chicagoacs.org

DIGITAL EDITOR
Josh Kurutz historian-at-chicagoacs.org

PROOFREADERS
Kshitish Patankar, Bethel Shekour & Adam Sussman

How to reach us

office-at-chicagoacs.org
https://chicagoacs.org
(847) 391-9091

Krasa 035B and C
5700 College Road
Lisle, IL 60532

Bluesky @chicagoacs.bsky.social NEW!
Facebook https://www.facebook.com/ChicagoACS
Instagram https://www.instagram.com/ChicagoACS