

The Chemical Bulletin

100th Anniversary 1914 – 2014

<http://chicagoacs.org>

November • 2014

CHICAGO SECTION AMERICAN CHEMICAL SOCIETY MONTHLY MEETING FRIDAY, NOVEMBER 21, 2014

LOCATION

The Parthenon Restaurant
314 South Halsted Street
Chicago, IL
(312) 726-2407

DIRECTIONS TO THE MEETING

From Kennedy (I-90) or Edens (I-94): Drive downtown and exit at Adams Street. Turn right and go to Halsted. Turn left onto Halsted. Restaurant is approximately 1.5 blocks on the west side of the street.

From Eisenhower (I-290): Drive east to Chicago. Exit at Racine and turn left. Go to Jackson Boulevard and turn right. Take Jackson to Halsted. Turn right onto Halsted. Restaurant is approximately 1/2 block on the west side of the street.

PARKING: Free valet parking. Parking is also available on the nearby streets or in a nearby lot for a charge.

REGISTRATION 5:00-6:30 P.M.

PRE-DINNER TALK: 5:30-6:00 P.M.

“ACS CHAS: Where Chemistry and Safety Meet” by Ken Fivizzani retired from Nalco Company

DINNER 6:30-7:30 P.M.

Dinner reservations are required and should be received in the Section Office via **phone** (847-391-9091), **email** (chicagoacs@ameritech.net), or **website** (<http://chicagoacs.org/meetinginfo.php?id=76&ts=1413168397>) by noon on Tuesday, November 18. PLEASE HONOR YOUR RESERVATIONS. The Section must pay for all dinner orders. No-shows will be billed.

General Meeting

7:30-8:30 P.M.



Brad Harbaugh, Director of Marketing & Communications, Editor of the EH&S Blog, MSDSonline

“The Present and Future of Chemical Safety”

Abstract: OSHA's revision of the HazCom Standard to align with GHS is in full swing. Everyone in the lifecycle of hazardous chemicals has responsibilities they must meet to ensure worker safety and compliance. Important deadlines are on the horizon, meaning now is the time to take action to ensure best practices are in place for communicating hazard information to downstream users

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and for meeting compliance obligations around chemical classification, safety data sheets, labels and training.

Biography: Brad Harbaugh is editor of the environmental health and safety (EH&S) blog for MSDSonline — a leading provider of sustainable cloud-based compliance solutions that help businesses of all sizes cost-effectively manage a variety of global EH&S regulatory requirements. In addition to researching and reporting on current EH&S issues, Brad is the creator of MSDSonline's popular GHS Answer Center and GHS Webinar series. He has presented at over 100 national and regional conferences on topics ranging from education to safety, including events for OSC, NSC, ASSE, and VPPPA among others. Brad is a graduate of DePaul University and holds an MBA from the Kellstadt Graduate School of Business.

PRE-DINNER TALK

Abstract: The American Chemical Society Division of Chemical Health and Safety (CHAS) provides expertise in laboratory safety, chemical management, and safe chemical work practices to the Society and the general public. The division organizes technical symposia at ACS National and Regional Meetings and offers workshops in specific areas of chemical safety. Two CHAS Awards recognize outstanding contributions to the field of chemical health and safety; a third award recognizes comprehensive lab safety programs in higher education. The CHAS Website and Listserv offer on-line information and discussion of relevant topics. The division publishes the *Journal of Chemical Health and Safety* six times per year.

Biography: Ken Fivizzani retired from Nalco Company in 2009. He received B.S. and M.S. degrees in Chemistry from Loyola. He received a Ph.D. in Inorganic Chemistry from the University of Wisconsin, Madison. He has been active

in CHAS for over two decades, serving as Chair in 2000, 2011, and 2014. He also served on the ACS Committee on Chemical Safety (CCS) for ten years and was CCS Chair from 2002 to 2004. In the Chicago Section, Ken has been Chair in 2007 and 2010. He is currently a Councilor and a Trustee for the Section. He is an ACS Fellow.

MENU: Greek Family Style Dinner-Appetizers: Saganaki (Kaseri cheese flamed in brandy), Gyros (roasted slices of lamb and beef), Taramosalata (fish roe blended with lemon and olive oil); traditional Greek salad. Main course: Vegetarian Spinach-Cheese Pie, Vegetarian Pastitsio (Macaroni baked with broccoli, Bechamel sauce and Kefalotiri), Dolmades (vine leaves stuffed with rice, meats and herbs), Rotisserie-roasted lamb served with rice pilaf and roasted potatoes. Desserts: Baklava (flaky layers of Phyllo baked with nuts and honey) and Galaktobouriko (flaky layers of Phyllo with vanilla custard and baked with syrup. Beverages, bread and butter. The cost is \$37 to Section members who have paid their local section dues, members' families, and visiting ACS members. The cost to members who have NOT paid their local section dues and to non-members is \$39. The cost to students and unemployed members is \$20. Seating will be available for those who wish to attend the meeting without dinner.

Section Meeting Dates

Friday, November 21, 2014
Friday, December 12, 2014
Thursday, January 15, 2015
Thursday, February 12, 2015
Friday, March 12, 2015
Thursday, April 23, 2015
Friday, May 15, 2015
Thursday, June 18, 2015
Thursday, September 17, 2015
Friday, October 23, 2015
Thursday, November 19, 2015
Friday, December 11, 2015

REMEMBRANCES OF THINGS PAST

Thirty-eight Years Ago

In the June 1976 issue, Louis L. Lerner was the editor of the *Chemical Bulletin*. Here is an editorial written by him on the importance of our advertisers.

The Hand that Feeds You! Our Advertisers!

On several other occasions we have exhorted, cajoled, almost begged you, to patronize our advertisers. Your response, at best, has been sporadic. Every now and then, when the spirit is upon you, you purchase something from our advertisers.

You must understand that an advertiser is a long-suffering but ever-hopeful biological conglomerate that, in our society, rarely reaches a critical mass (a state created by a response to their ads). Fortunately, advertisers do not solely depend on our patronage for their existence. Otherwise, patience would never receive its just reward!

It is time that we recognize the importance of advertising to THE CHEMICAL BULLETIN. It is not heresy to admit that advertising income helps to keep our publication's budget from being a total fiscal disaster. As it is, the publication's budget is a model of deficit spending; our methods have been studied by financial experts from the Government. On many occasions, while sitting on the steps of the Chicago Public Library, I have seen examiners leave 86 East Randolph¹ disheveled, distraught, brief cases askew, shaking their heads in total disbelief.

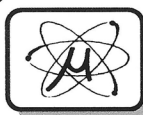
Do I exaggerate? Only a bit. It is a sad fact of life that the Bulletin operates on a deficit budget. But it does operate with the help of advertising revenue.

For the record, our fiscal plight is the result of our recent recession, which is still in existence (contrary to Washingtonian pronouncements). Just ask the unemployed! But despite all the above our commentary, our very faithful advertisers have not deserted us. In a tremendous demonstration of confidence, they have helped create our Advertisers' Directory for The Bulletin. Indeed, if their response to our Business Manager's pleas is an indication of National confidence, maybe the recession IS receding.

You and your companies must "keep the faith" that our advertisers have expressed in the Bulletin. Why not send them a letter of thanks, on your company letterhead, if you cannot send them an order! Let them know that you exist. Let them know that you appreciate their confidence in the purchasing potential of our Chicago Section. Our advertisers have not let US down. You should do the same for THEM.

Louis L. Lerner, 1976

¹Where the section office was located in 1976



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"CHEM SHORTS" For Kids

The Primary Education Committee of the Chicago Section ACS presents this column and hopes it will reach young children and help increase their interest in science. Please print it out and pass it on to your children, grandchildren, or elementary school teachers. Teachers are encouraged to incorporate the projects in this column into their lesson plans.

Homemade Vinegar

Kids, what is vinegar? Vinegar is a product of the fermentation of alcohol by bacteria for the purpose of producing acetic acid. Acetic acid has a tangy taste and it is also useful for household cleaning. Vinegar can be produced slowly from fruit juice or fermented juice. It can be produced quickly by using a culture called Mother of Vinegar which is a slimy, harmless substance of acetic acid bacteria (*Mycoderma aceti*) and cellulose.

Slow Method (requires 3 weeks to 6 months)

Start with apple cider or fermented fruit juice that contains 0-10% real fruit juice and no added sugar. Either fresh or hard cider will work. Fresh cider takes a few weeks to convert to vinegar because it first ferments into hard cider before becoming vinegar.

Pour the starting liquid into a dark bottle. Fermentation occurs in the dark so you either need a dark container or you need to keep the liquid in a dark place. A clear bottle lets you see what is happening but you need to keep it in the dark the rest of the time. The fermentation process requires air. Cover the mouth of the bottle with a few layers of cheesecloth and secure them with a rubber band, so you don't get insects or dust getting into your recipe.

Place the container in a dark, warm place at 60-80°F (15-27°C). Fermentation occurs more quickly at a warmer temperature. Initially the bacteria will cloud the liquid, eventually forming a gelatinous layer on the top of starting material.

Avoid disturbing or stirring the mixture. After 3-4 weeks, smell the covered bottle. Unwrap the cheesecloth if it smells like strong vinegar and then draw off a little liquid, and taste it. Go to the next step if the vinegar passes the taste test. Replace the cheesecloth if you don't like the taste and allow the solution to sit longer. Note: a bottle with a spigot at the bottom makes the taste test much easier, since you can remove a little liquid without disturbing the Mother of Vinegar forming at the top of the container.

Filter the liquid by pouring it through a

coffee filter or cheesecloth. The slimy material on the filter is called Mother of Vinegar and can be used to speed the production of future batches. The liquid is the vinegar. Have an adult partner boil the vinegar at 170°F for 10 minutes to kill any undesirable microorganisms and remove residual alcohol (this is called pasteurization). Unpasteurized vinegar is safe but it will have a shorter shelf life (4-6 weeks) and needs to be refrigerated. Pasteurized vinegar may be stored in sealed, sterilized containers for several months at room temperature.

Fast Method (requires days to weeks)

Add some Mother of Vinegar to the bottle containing the fermented liquid and proceed as before. You can buy unfiltered cider vinegar that contains Mother of Vinegar. Any vinegar you make will contain Mother of Vinegar and can be used to produce subsequent batches of vinegar more quickly.

Reference:

Anne Marie Helmenstine at Chemistry. About.com

<http://chemistry.about.com/od/foodscienceprojects/a/How-To-Make-Homemade-Vinegar.htm?nl=1>

Submitted by DR. KATHLEEN CARRADO GREGAR

To view all past "ChemShorts for Kids" go to:

http://chicagoacs.org/articles.php?article_category=1

NOTICE TO ILLINOIS TEACHERS

The Chicago Section ACS is an ISBE provider for professional development units for Illinois teachers. Teachers who register for this month's meeting will have the opportunity to earn CPDU's.

DO YOU REMEMBER?

Nineteen Years Ago

This is from the June 1995 issue of the Chemical Bulletin.

Chicago Section Shines on TV

On March 18 [1995], members and friends of the Chicago Section helped PBS Channel 11 with their "Phonathon" Pledge night for the second time. After the first time last year, the national ACS Public Relations manager told me that our endeavor would be utilized by them as an example for all local section PR activities.

Not only was this Phonathon successful

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for Channel 11, but I believe it was successful in projecting a better image of chemists, as well. The station staff with whom we worked expressed disappointment when told that the Chicago Section wouldn't return for a repeat until next year.

I think everyone had an enjoyable time and the more than 30 Chicago Section representatives deserve a vote of THANKS! If you think you would like to join us in this event next March '96, please call the Section Office and volunteer.

Again, THANKS A BUNCH TO THOSE WHO HELPED MAKE IT A SUCCESS!

Larry Berman
Public Relations Chair, 1995

CHICAGO SECTION'S ELECTION RESULTS

The Tellers Committee met on Friday, October 10, 2014 at the Chicago Section ACS office. There were 522 ballots were counted. The following persons were elected and will assume their positions January 2015:

Chair-Elect: Mary Jo Boldingh

Vice-Chair: Ken Fivizzani

Secretary: Nicole Shoshenskiy


Treasurer: Amber Arzadon

Director: Shelby Hatch
Ilana Lemberger
Jozef Stec
Carmen Marquez
Beau Wangtrakuldee
Lou Defilippi

Councilors: Charles Cannon
Susan Shih
Russ Johnson


Alternate Councilors:
Margaret Levenberg
Amber Arzadon
Tom Higgins
Avrom Litin

Thanks to all the candidates for participating and congratulations to the winners!



Register ONLINE for
Chicago Section
monthly meetings

<http://www.chicagoacs.org/meetinginfo.php>



DECEMBER HOLIDAY PARTY

Get those fingers ready to make reservations for the annual Chicago Section's ACS holiday party on Friday, December 12 at the Fountain Blue Banquets. Raffle gifts will be numbered randomly and placed on side tables in the dining room. Each attendee will draw a number when they register that evening for the meeting.

Gifts will be handed out throughout the evening by calling up groups of individuals having a series of numbers. Meeting attendees are asked to claim their gift only during the time their numbers have been announced. Those individuals who do not claim their gift will have another opportunity to claim them at the end of the evening. Individuals must present their number in order to pick up their gift.

Door prizes of wine will only be handed out to those 21 or older. A substitute prize will be handed out to students under the age of 21. As always, please do not open your wine at the table.

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CALENDAR

November 4-7: Laboratory Management Conference sponsored by The Association of Laboratory Managers (ALMA) will meet in Annapolis, Maryland. See details at <http://labmanagers.org>.

November 13: Chicago Section ACS Board Meeting, 1400 Renaissance Drive, Suite 312, Park Ridge, IL 60068. Call the Section office at (847) 391-9091 for information.

November 18: The Chicago Mass Spectrometry Discussion Group will hold its monthly meeting at the University of Illinois at Chicago. Dr. Jeffrey N. Savas from Northwestern University will speak on "The Oldest Protein Structures in the Mammalian Brain." See details at <http://www.cmsdg.org/>

November 21: Chicago Section ACS Dinner Meeting. Brad Harbaugh, Director of Marketing & Communications and Editor of the EH&S Blog, MSDSonline will discuss "The Present and Future of Chemical Safety." See details in this issue.

December 4: Chicago Section ACS Board Meeting, 1400 Renaissance Drive, Suite 312, Park Ridge, IL 60068. Call the Section office at (847) 391-9091 for information.

December 12: Chicago Section ACS Holiday Party and Dinner Meeting at the Fountain Blue Banquets. The speaker will be Perry Romanowski.

March 8-12: The Pittcon will hold its annual conference and exposition in New Orleans, LA. For further details, visit <http://pittcon.org/exposition/>

March 12-15: National Science Teachers Association will hold its annual meeting in Chicago. For further information, visit <http://www.nsta.org/conferences/#future>

March 22-26: 249th ACS National Meeting & Exposition will be held in Denver. The theme will be "Chemistry of National Resources." See details at <http://www.acs.org/content/acs/en/meetings/spring-2015.html>

FREE T-SHIRTS

The Hospitality Committee raffles one T-shirt at each monthly dinner meeting. The shirt has CHICAgO spelled out using the periodic table. So come to a monthly meeting and maybe you'll win one!

AACT – GET SET, READY, LAUNCH!

Just in case you have not heard, the acronym AACT represents, the **A**merican **A**ssociation of **C**hemistry **T**eachers. It is a new organization sponsored by the American Chemical Society. It was launched in September. Creation of this organization further demonstrates the support ACS provides for the teaching and learning of chemistry during the 138+ years of the Society's existence. I became a charter member of AACT at the 148th National meeting in San Francisco. I appeal to ALL of the Chicago metropolitan area teachers of chemistry to become actively engaged in AACT. For many years, the Chicago Local Section-ACS has put forth efforts to encourage area chemistry teachers to become active at the local level. The Section sponsors monthly dinner meeting throughout the Chicagoland area (including locations in close proximity to downtown, north, western, and northwestern suburban areas).

AACT is a membership organization for K–12 teachers of chemistry. Log on to www.teachchemistry.org/content/aaact/en.html and read all of the details about AACT. ACS labels itself as the home created for K-12 teachers of chemistry. It promises to "offer specialized resources, opportunities for networking and a means of interfacing with the broader ACS community." Anyone interested in chemistry may become a member of AACT, just as I, a college professor of 22+ years, joined as staunch supporter. However, "AACT will primarily serve K–12 teachers."

ACS lists the goals of AACT as:

- Serve as a trusted source of chemistry teaching resources
- Provide networking opportunities
- Disseminate effective teaching and learning practices at the K–12 level

Discussions pertaining to such an organization were started in 2009 by an ACS task force on education charged with addressing the question: "What can the world's largest scientific society do to transform science education in the United States?" Among their recommendations was to explore the formation of a K–12 association of chemistry teachers. After extensive discussion, market research, and planning, AACT was approved by the ACS Board of Directors and set to be launched on September 2014.

I am excited about the future prospects of AACT and the impact I anticipate it will have on K-12 teachers of chemistry in the Chicago Local Section area. In celebration of this new program, I would like to sponsor five area teachers from five different schools as members. I invite self-nominations from K-12 teachers of chemistry. Please include your contact information and a statement of your experience teaching chemistry at the high school level. Submission should be sent to ccannon@colum.edu by November 21, 2014.

CHARLES E. CANNON, PHD (ACS Fellow, Class of 2013)
Columbia College Chicago
Chicago ACS Local Section Councilor &
Chair of Committee of Minority Affairs

FOOD AND TOY DRIVE

We will be collecting nonperishable food items (no glass containers) for charity at the December Holiday Party again. The food will be donated to the local Loaves and Fishes Community Pantry for distribution. Loaves & Fishes Community Pantry is a community-based, non-profit organization established to provide food and personal care essentials to residents in need.

We will also continue our toy drive to collect children's toys for toddlers to 12 year olds. The toys will be donated to a local Silent Santa program.

Please open your heart to these two programs and bring a nonperishable food item and a new toy to the holiday party.

Please, do NOT donate any clothing -- Thanks

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