

The Chemical Bulletin

100th Anniversary 1914 – 2014

<http://chicagoacs.org>

FEBRUARY • 2014

CHICAGO SECTION AMERICAN CHEMICAL SOCIETY Joint Meeting with the Joliet Section THURSDAY, FEBRUARY 20, 2014

Lewis University
One University Parkway
Arts and Science Building
Room AS158-A
Romeoville, IL 60446
815-838-0500

DIRECTIONS TO THE MEETING

From the Southeast/Southwest

- Take I-80 east to the Larkin Avenue (Route 7) exit in Joliet.
- Go north on Larkin Avenue (it joins Weber Road) to Renwick Road.
- Turn right (east) onto Renwick Road and proceed to Route 53.
- Turn left onto Route 53 north. The Lewis University campus is 1/2 mile on your left.

From Joliet

- Take Larkin Avenue north (which joins Weber Road).
- Continue north on Weber Road to Renwick Road. Turn right (east) onto Renwick Road.
- Turn left onto ROUTE 53 north. The Lewis University campus is 1/2 mile on your left.

From the North

- Take the I-355 tollway going south until you reach I-55.
- Take I-55 south to Weber Road.
- Continue south on Weber Road to Renwick Road.
- Turn left (east) onto Renwick Road, and continue to Route 53.
- Turn left onto Route 53 north. The Lewis University campus is 1/2 mile on your left.

PARKING: Park in Lot D

JOB CLUB 5:00 - 6:00 P.M.

SOCIAL HOUR 5:30 - 6:30 P.M.

POSTER SESSION 5:00-7:00 PM

DINNER 5:00-7:00 PM.
Dinner is ala carte in the cafeteria

GENERAL MEETING 7:00 P.M.



Dr. John Flanyak, President of Flanyak Scientific, LLC; Food, Confectionery & Pharmafoods Consulting, Glen Ellyn, IL.

“Alternative Careers in Food Chemistry”

Abstract: Dr. John Flanyak will relate his 40 years of industrial experience as a chemist and as a executive in the food industry. Highlights in his career include developing pet food products, cereals, meat analogs such as sausage patties for the Morning Star Breakfast line, various candies, chocolates, confections, and snack foods.

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He will be sharing his insights and experience in R&D, Product Development, Quality Systems, and Manufacturing as a help to those chemists looking to secure employment in the food industry. Interviewing and job opportunities will be part of the discussion.

The talk will also include the science of reaction chemistry, water activity, and crystallization as it applies to confectionery technology.

A tasting and sensory evaluation of select confectionery and chocolate items will conclude the evening's presentation.

Biography: Dr. John Flanyak has a B.S. in chemistry from Lewis University, a Ph.D. in organic chemistry from Loyola University and over 41 years of well-versed experience in the food industry. He is a Certified Food Scientist, as recognized by the Institute of Food Technology.

He has held a number of industrial positions starting as a scientist and progressing to Vice-President of R&D and of Manufacturing with companies including Farleys and Sathers Confections, Goelitz Confections (Jelly Belly Co), Brach & Brock Confections, Miles Laboratories, and Quaker Oats. He retired from these successful corporate positions in 2011 and established Flanyak Scientific, LLC.

He has a number of patents and many published technical articles.

John has been active in various trade organizations including being elected to Chairman of the Chicago Section of the American Association of Candy Technologists (AACT) and Chairman of the National Confectioner's Association (NCA). He served as lecturer at the University of Wisconsin Confectionery Course from 1991 to 2000 and represented The Brach Candy Company on the National Confectioners Association Board of Trustees.

SECTION MEETING DATES 2014

Thursday, February 20
Friday, March 28
Thursday, April 24
Friday, May 16
Thursday, June 19
Friday, September 19
Friday, October 24
Thursday, November 20
Friday, December 12

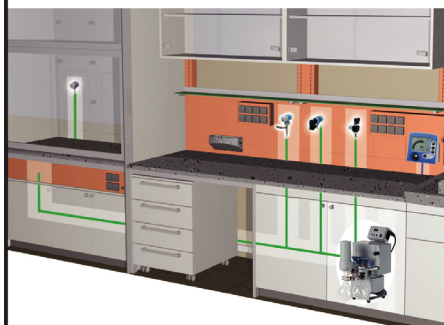
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A HOLIDAY THANK YOU

The Chicago Section of the American Chemical Society would like to thank members who participated in the 2013 December dinner meeting food and toy drive.

Your generosity provided several bags of toys and 340 pounds of food and \$125 in donations. The food and money was donated to the local Loaves & Fishes Community Pantry which is a community based, non-profit organization established to provide food and personal care essentials to residents in need. This year the toys were donated to the Adoption Center of Illinois at Family Resource Center in Chicago, an adoption agency providing services for couples seeking to adopt children in the US or overseas. This agency also provides services for birth parents and foster children. The toys were given to birth mothers who have placed children for adoption or who are considering a placement and are often raising other children. The toys provide joy to children whose birth parents are struggling and do not have extra money for the holidays.

FRAN KRAVITZ

DINNER INFORMATION

Dinner will be served cafeteria style in the dining hall

While there is no charge upfront for the meal, dinner reservations are required due to limited space and should be received in the Section Office via phone (847-391-9091), email (chicagoacs@ameritech.net) or website (<http://www.chicagoacs.net/meetings/14feb.php>) by noon on Tuesday, February 18. Seating will be available for those who wish to attend the meeting without dinner.

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.

ACS OFFERS SPECIAL BENEFITS FOR UNEMPLOYED MEMBERS

During these tough economic times it is more important than ever to be a member of the American Chemical Society. Unemployed members can tap into a host of valuable benefits and services that help them get back in the workforce. In addition, members in good standing may qualify for an **unemployed member dues waiver**, allowing them to renew their memberships and keep their member benefits at **no cost**. Contact ACS at service@acs.org, 800-333-9511 or 614-447-3671 for complete details.



Register ONLINE for
Chicago Section
monthly meetings



<http://www.chicagoacs.net/register.php>

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The Chemical Bulletin**

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**For more information, call
the Section office
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or email at
chicagoacs@ameritech.net**

"CHEM SHORTS" For Kids

The Elementary 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.

Blow Frozen Bubbles

Kids, there are some incredible frozen bubble photos online that are amazing. You also can blow bubbles that freeze into delicate frost patterns. You can even pick up the bubbles and examine them before they pop. All you need is bubble solution, a bubble wand, and a cold winter day with a temperature that is below freezing.

It helps if you blow the bubbles close to a cold surface, so they don't freeze in the air and break upon landing. You can catch bubbles on mittens/gloves or on snow or ice. You should see a frost pattern that forms on the bubble surface. The bubbles will eventually pop, but with a bit of practice you should be able to pick them up and examine them first.

The frost creates magical patterns in the freezing bubbles. The smaller bubbles may freeze momentarily in mid-air, and then fall down and scatter like thin glass chips. The bigger bubbles may freeze more slowly on the surface. Photographer Angela Kelly noted "...how they would freeze completely before the sun rose but that once the sun was in view they would defrost along the tops or cease freezing altogether. We also noted how they would begin to deflate and implode in on themselves making them look like alien shapes or in some cases shatter completely leaving them to look like a cracked egg."

Any bubble solution will work. You can make your own detergent and water solution. Strong bubbles can be made using glycerin or corn syrup. See the June 2013 issue of ChemShorts for Kids for the best recipes. If you don't have a seriously cold winter, your other option is to blow bubbles over dry ice (see the last reference below for a link with directions on how to do this).

References:

--Angela Kelly, <http://www.boredpanda.com/frozen-bubbles-winter-photography-angela-kelly/>
--Anne Marie Helmenstine, About.com Chemistry, <http://chemistry.about.com/od/bubbles/fl/Frozen-Bubbles-Blow-Bubbles-in-Winter.htm>

--ChemShorts June 2013 bubble recipes: <http://chicagoacs.net/ChmShort/CS13.html>

--Make frozen bubbles using dry ice: <http://chemistry.about.com/cs/howtos/a/aa012004.htm>

Submitted by DR. KATHLEEN CARRADO GREGAR

To view all past "ChemShorts for Kids," go to:
<http://www.chicagoacs.net/ChmShort/kidindex.html>

FLAME CHALLENGE

Can you explain science to an 11-year old?

This year the Flame Challenge dares scientists to answer a fundamental question about the world around us in a way that an 11-year old can understand and appreciate. This year's question is, "What is color?" Answers will be screened for accuracy by scientists and then judged by a panel of 11-year olds. **The entry deadline is March 1, 2014.**

Two winners — in written and visual categories — will receive a trip plus VIP tickets to the World Science Festival, May 28 to June 1, in New York City. For rules and other details, visit www.flamechallenge.org.

Scientists may submit their answers in writing, video or graphics.

The Flame Challenge is sponsored by the American Chemical Society (ACS) and the American Association for the Advancement of Science (AAAS).

KIDS AND CHEMISTRY PROGRAM

The Chicago Section of the American Chemical Society is in the process of reviving the "Kids & Chemistry" program. The "Kids & Chemistry" is a community-based program that brings together scientists and children to do hands-on science activities at local schools. The Section will provide kits and supplies for the classroom. Each kit must be checked out and returned to the section within one week of the classroom presentation. Current kits that will be available are: "Buno the Elephant's Toothpaste" (grades 1st-5th) contributed by Elizabeth College Student Chapter; "Chemistry is More Than Hot Air!" (Grades 3rd & 4th) contributed by Northwestern State University Student Chapter; and "Lava Lamp" (Grades 2nd-5th) contributed by Chi Epsilon Mu (XEM) Chemistry Club at Austin Peay State University. Future kits available in 2014 will be "Jiggle Gels: (Grades 3rd-5th); "What's New, CO₂? (Grades 4th-6th); and "Chemistry Rainbow" (Grades 5th-8th).

We are currently looking for individuals who would like participate in this program. The section will match volunteers to a school requesting the "Kids & Chemistry" program or you may directly contact a school in your area. Volunteers can be from the industrial, government or academic sectors or can be from a student chapter at local colleges or universities or science clubs at local high schools. Please contact Fran Kravitz if you are interested in becoming a volunteer presenter in our "Kids & Chemistry" program at fk1456@sbcglobal.net. Indicate "Kids & Chemistry" in the subject title.

PARTICIPATE IN THE 2014 U.S. NATIONAL CHEMISTRY OLYMPIAD

High school teachers and students are invited to participate in the 2014 Chemistry Olympiad competition. This program is a multi-tiered competition that promotes excellence in high school chemistry. Local qualifying competitions will be organized by Local Sections in March 2014 to select nominees to sit for the National Exam, which will be held April 22-28, 2014. Four students will represent the U.S. at the 46th International Chemistry Olympiad held in Hanoi, Vietnam, July 20-29, 2014. More information is available at www.acs.org/olympiad. To participate, contact the U.S. National Chemistry Olympiad office at usnco@acs.org or 202-872-6328.

NEW RESOURCES FOR CHEMISTS ON [CHICAGOACS.NET](http://chicagoacs.net)

Three useful new tools have been added to the Chicago Section website:

- **Two Google Calendars** (see http://chicagoacs.net/meetings/calendar_subscribable.php).

Importantly, you can SUBSCRIBE to these calendars with your PC, tablet, or I-phone so when we update the calendar, your subscribed device will automatically update with the most current event information. No muss, no fuss! Let US do the work for YOUR benefit!

- One calendar, "Chicago ACS," is for Chicago ACS events like monthly meetings, board meetings, Chemistry Day, and other events where the Section has a presence.

- The other, "chicago chemistry," is for promoting events of interest to chemists throughout the region, including relevant seminars at all major research universities in the area, events held by colleague organizations like the Illinois Science Council, the Museum of Science and Industry, and the Chicago Council on Science and Technology, among others.

Step-by-step instructions for subscribing are available at the URL above.

- **Google Map: "Chemical Industry in Chicagoland"** (see <http://chicagoacs.net/home/map-industry.php>).

Ever want to know which chemistry employers are close to where you live? We have answers! Using GoogleMaps we've created a map of over 110 companies that employ chemists in greater Chicagoland. Every pin on the map below represents a company presence, and everyone has a link to the company's "Careers" page (or equivalent). The pins are color-coded to distinguish research sites from corporate headquarters and nonprofit entities. Click on the native Google link to get the full version with its complete alphabetical legend of companies. We're endeavoring to be as complete as possible, so if you know of a chemist-employing company that's not on this map, please email me at jkurutz@alumni.caltech.edu and I'll add it post-haste.

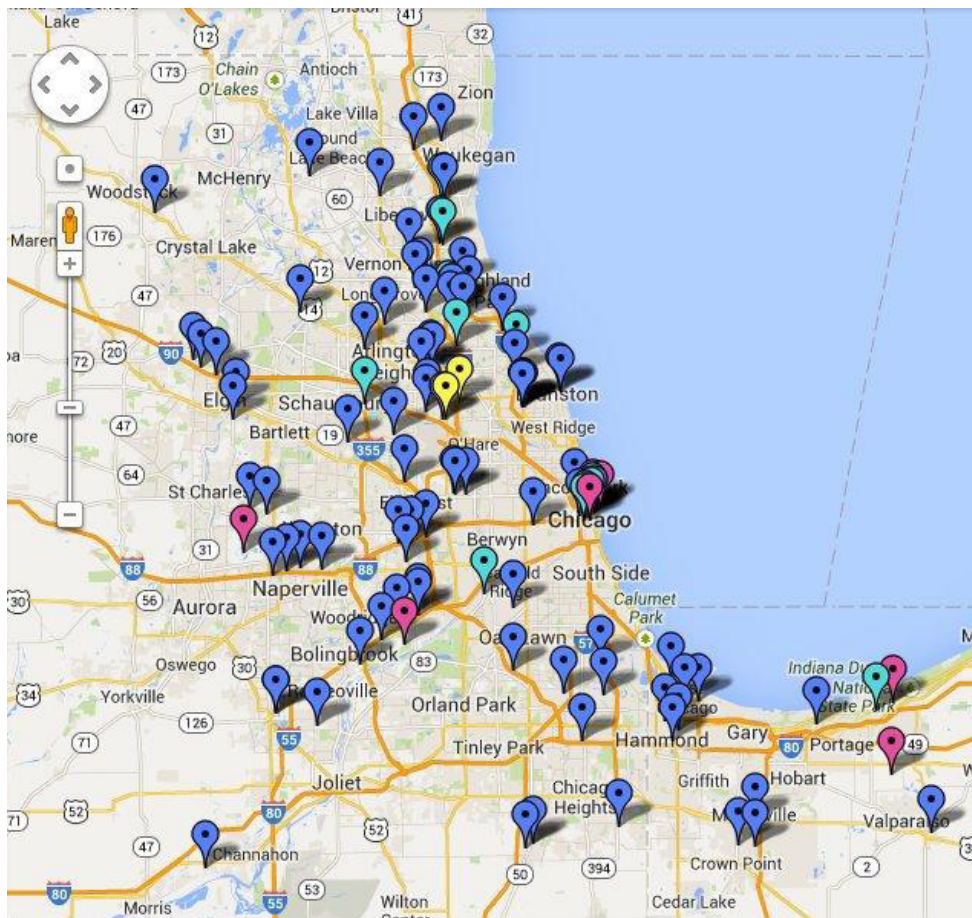
- **Google Map: "Chicagoland Academia"** (see <http://chicagoacs.net/home/map-academia.php>).

Which academic institutions in greater Chicago might hire you for a faculty position? Where might you find a ready supply of students who will pay for tutoring? This map will tell you! We've included all the universities and colleges in the area that have Chemistry programs, and we've provided links to their Chemistry departments. Click on one where you'd like to work and see if they're hiring! ...Psst...Like the **College of DuPage**, for example ;) If you see a college or university we've somehow missed, please email me at jkurutz@alumni.caltech.edu.

We'll be adding more resources in the future, so please stay tuned!

JOSH KURUTZ

Chicago Section Chair



Map color-coding:

Blue = Company site with labs

Light blue = Corporate headquarters/offices

Magenta = Government or non-profit organization

Yellow = Professional or trade organization (including the ACS Chicago Section)

CAREER SHORTS

for Chemical Professionals

This is a monthly column devoted to providing career tips for chemical professionals. They are a summary of current views and opinions from several industry sources. The information presented should be used as suggestions only and is not the viewpoint or opinion of either the Chicago Section ACS or National ACS.

Thank You Letters

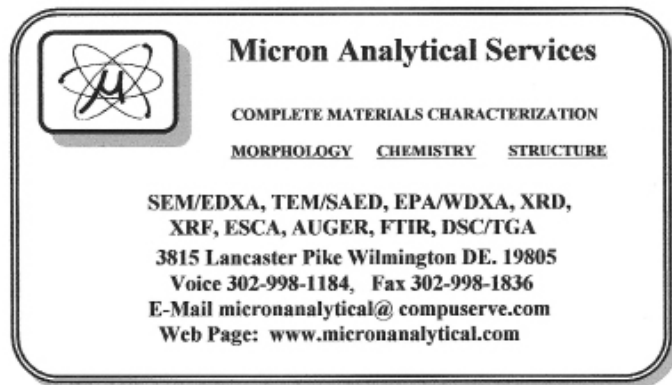
Thank you letters are a common practice after either meeting someone through networking or after a job interview. The question which still plagues experts throughout the industry: "Is it better to send thank you letters as a hard copy through the US mail or as an email?" There are pros and cons in either case.

A hard copy thank you letter through the US mail is a thoughtful way of expressing your gratitude. Some experts feel that this method gets the attention of the individual since in most cases it is handwritten or at least has your signature. It takes the recipient time to open and is harder to discard without opening it. Other experts remind us that US mail is slow and time is important when thanking someone.

An email thank you letter is sometimes viewed as informal and is easier for the recipient to hit the delete button before reading it or ending up in their spam. Other experts suggest time is crucial when getting someone's attention after an interview or networking.

In either case, it is very important to send out thank notes or letters after networking or interviewing to keep your name fresh with that individual. Thank you letters send a statement that you care and make an impact with the recipient. Remember in thank you letters after a job interviews to reiterate how your qualifications will help their company. The choice of delivery is yours and will continue to be debated by experts.

Submitted by Fran Kravitz, ACS Career Consultant and Workshop Presenter



WCC/ELI LILLY TRAVEL GRANT

The ACS Women Chemists Committee (WCC) and Eli Lilly and Company sponsor a program providing funding for undergraduate, graduate, and postdoctoral female chemists to travel to meetings to present the results of their research. Through this program, WCC and Eli Lilly and Company continue to increase the participation of women in the chemical sciences.

This offers a great way to get funds to travel to a National ACS meeting and present your research. Don't miss this opportunity to receive up to \$1,000 to present at an ACS meeting between Jan. 1 and June 30. The deadlines for receipt of applications are:

- September 15 for meeting between January 1st and June 30th
- February 15 for meetings between July 1st and December 31st

If you travel to an ACS National Meeting, you will be among elite women chemists where you may network with them and learn firsthand about their experiences. Visit the www.acs.org/diversity for more information and details about applying.

ACS EDITORS' CHOICE: EXCEPTIONAL RESEARCH FROM ACS PUBLICATIONS IS NOW FREELY AVAILABLE

On January 1, 2014 ACS Publications introduced ACS Editors' Choice. This program offers free public access to new research of importance to the global scientific community. These peer-reviewed, open access articles consist of research that exemplifies the Society's commitment to improving people's lives through the transforming power of chemistry.

One new article will be designated as ACS Editors' Choice each day, and these articles will remain open for all to access and read. Find out more about ACS Editors' Choice by going to the link <http://pubs.acs.org/editorschoice/>. Check out the features and policies on the program overview page or start reading designated articles today.

SCIENCE NEWS AT THE ACS PRESSROOM BLOG

Check out the new weekly ACS Pressroom Blog, your source for science news based on reports from the Society's 40+ peer-reviewed journals. It features four categories of stories. The Medical Bond covers topics in health and medicine. The Food Court highlights food and nutrition. Flowers & Power describes innovations in environmental science and energy. Finally, Pressroom Perspectives describes ACS' Science communications activities. The blog is on the ACS Network at http://communities.acs.org/community/science/science_news.

CELEBRATE AFRICAN AMERICAN CHEMISTS

Share the inspirational achievements and contributions of African American scientists with students and colleagues using ACS' commemorative website. Learn about famed agricultural chemist George Washington Carver, blood bank pioneer Charles Drew, and lesser known scientists such as Lloyd August Hall who invented a number of ways to preserve food and amassed numerous patents used today. Visit: <http://tinyurl.com/pftucdg>

CHEMICAL BULLETIN EDITORS

The Chicago Section American Chemical Society was founded on March 8, 1895 and little more than nineteen years later, in October of 1914, the first *Chemical Bulletin* was published. This local publication has been a gem of the Section, put together by the dedicated leadership of individuals whose meticulous and careful style is shown in every issue.

It is said that a local section newsletter editor is a tireless volunteer who spends many patient hours waiting for articles to be submitted (yes, even late submissions) and then writes additional articles to complete an issue. He or she, in the old days, typed up handwritten articles and then submitted these to the typesetter (later called the pre-press department). Of course, with the advent of the computer, everything became electronic, including the editing, proofing and finalizing the final copy. All of this done in a very short period of time to meet the deadlines established by the editor so that section members can receive the newsletter, hopefully, in plenty of time before a section meeting and other events of interest occur and while news items are still fresh.

Here is a list of all of our outstanding, dedicated individuals who have contributed to the Chicago Section as editor of *The Chemical Bulletin*.

Otto Eisenschiml	October 1914 - July 1915
W. D. Harkins	September 1915 - May 1916
Otto Eisenschiml	June 1916 - July 1917
C. S. Miner	September 1917 - June 1920
Paul Van Cleef	July 1920 - July 1922
E. H. Volwiler	September 1922 - June 1924
Howard G. Walker	September 1924 - June 1926
W. R. Fetzer	September 1926 - June 1926
W. A. Noyes	September 1928 - June 1929
David Klein	September 1929 - June 1931
C. D. Hurd	September 1931 - December 1931
W. F. Henderson	January 1933 - December 1934
Bruce K. Brown	January 1935 - December 1935
George L. Parkhurst	January 1936 - May 1941
Marvin C. Rogers	June 1941 - April 1942
George E. Dewey	May 1942 - October 1942
A. E. Sidwell	November 1942 - January 1946
W. S. Guthmann	February 1946 - June 1947
E. L. Gordy	September 1947 - December 1948
Mary Alexander	January 1949 - December 1950
Barbara M. Parker	January 1951 - December 1952
Harry E. Whitmore	January 1953 - October 1953
Robert N. Feinstein	November 1953 - December 1955
John H. Pomeroy	January 1956 - December 1959
Charles Stevens	January 1960 - December 1961
Thomas J. Kucera	January 1962 - December 1964
F. K. Broome	January 1965 - December 1967
S. M. Cash	January 1968 - December 1970
Louis L. Lerner	January 1971 - December 1976
Thomas P. Whaley	January 1977 - December 1981
Robert Murray	January 1982 - December 1986
Sanford Angelos	January 1987 - June 1990
Larry E. Thielen	September 1990 - December 1990
Louis L. Lerner	January 1991 - December 1991
Fran Karen Kravitz	January 1992 - December 1999
Sanford Angelos & Barbara Moriarty	January 2000 - January 2001
Cherlyn Bradley	February 2001 -

ONLINE RESOURCES FOR EDUCATORS

With technology widely integrated into the classroom, ACS Webinars has created a special collection of recorded sessions, selected with the intention of helping educators connect with their students and teach skills beyond the pages of a textbook. The goal of the ACS Webinars Education Resources mini-site at <http://acswebinars.org/for-educators> is to be the destination for educators endeavoring to connect students with chemistry in new ways. With input from educators across America, ACS Webinars has created a few resources to help you transform your classroom. As additional resources are created, please share your questions and feedback. Also, tell ACS your story (ACS Webinars love stories)! Visit the ACS Webinars Education Resources at <http://acswebinars.org/for-educators> to share your story, see what other educators are saying about ACS Webinars, and access a list of the 10 ACS Webinars most commonly used in the classroom.

DUPAGE AREA ENGINEERS WEEK EXPO 2014

The 30th Annual DuPage Area Engineers Week Expo is being celebrated in 2014 on Saturday, February 22, 2014 at Illinois Institute of Technology's Daniel F. and Ada L. Rice Campus at 201 East Loop Road in Wheaton from 10:30 AM to 3:30 PM. Events are free and open to the public. The event celebrates the fun that math, science and engineering provides to learners of all ages.

The goal of the Expo is to ensure a dedicated, diverse and well-educated future engineering workforce by promoting pre-college literacy in math and science. While the Expo's target age group is middle school, people of all ages will enjoy the displays and presentations.

The Engineers Week Expo features a building full of hands-on activities and demonstrations to allow young people to experience and explore the fields of engineering. Presentations introduce students of all ages and their parents to the current state of technology and advances being made throughout industry. The cooperation of the professional engineering societies, academic organizations and industry provide a comprehensive overview of the current state-of-the-art as well as generating an interest in the sciences among the program's visitors.

The first DuPage Area Engineers' Week Open House was held in 1985 at Midwest College of Engineering in Lombard, Illinois. In 1986 Midwest College merged with Illinois Institute of Technology to form a new, west-suburban campus called IIT West, now the Daniel F. and Ada L. Rice Campus. Over the last approximately twenty years, the west suburban campus of Illinois Institute of Technology has hosted the annual Engineers Week celebration.

Please join us for one or more of the Expo activities. And check out the following Web site from time to time to see what's new: <http://dupageeweek.iit.edu>.

The mission of the Chicago Section of the ACS is to encourage the advancement of chemical sciences and their practitioners.

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FREE EDUCATIONAL RESOURCES FOR HIGH SCHOOL TEACHERS

The American Chemical Society offers a wide variety of materials online at www.acs.org/highschool. Here are just a few:

- **ChemMatters** is an educational magazine containing articles on popular topics for teenagers. By demystifying the chemistry behind a subject—be it barbecue, perfume, or nutrition labels—articles explain the connection between classroom topics and the real world. Each issue offers one free article online and an extensive free teacher's guide with activities, reading strategies, materials, background information and much more. Annual subscriptions for the hard-copy magazine cost \$16, and bulk rates are available.
- The **ACS ChemClub program** provides students with a unique opportunity to experience chemistry beyond the classroom. Students participate in after-school activities, get involved in community building, learn about chemistry careers, enjoy social events, and better understand how chemistry plays a role in our everyday lives. ChemClub advisors receive a handbook of information and resources for starting a club. Quarterly resource packets and occasional bonus items help with ongoing club activities.
- **Landmark Lesson Plans** are high school lesson plans based on subjects in the history of chemistry. Topics include the discovery of fullerenes, development of baking powder, and Joseph Priestley's discovery of oxygen. Each lesson is complete with reading material, a video and activities for high school students. Lessons are written by high school chemistry teachers and reviewed by subject matter experts.

BECOME A SCIENCE COACH

Share your expertise and enthusiasm for science with an elementary, middle, or high school teacher - become an ACS Science Coach. In this year-long volunteer role, you may find yourself planning and presenting demonstrations, helping students with lab, answering content questions, or providing real-world examples. Together, you and the teacher decide how to best combine your time and talents. If approved, ACS will donate \$500 to the school to support your efforts. Find out more at www.acs.org/ScienceCoaches.

CALENDAR

February 13-17: AAAS National Meeting in Chicago. There will be a free Family Day event open to the public on February 15 and 16 at the Hyatt Regency which is open to the public.

February 20: Chicago Section dinner meeting will be held jointly with the Joliet Section at Lewis University. Dr. John Flanyak will be the speaker. **See information in this issue.**

February 21: Chicagoland Engineering Awards Benefit, The Palmer House Hilton, 17 East Monroe Street, Chicago; Reception at 5:30 pm Dinner and Award Presentations at 6:30 pm. Featuring the 101st presentation of the Washington Award to Bill Nye the Science Guy for helping to foster a scientifically literate society making science entertaining and accessible. For future information and sponsorship visit <http://www.chicagolandeweek.org/>

February 22: Dupage Area eWEEK Expo 30th Anniversary, IIT Rice Campus, <http://www.dupageeweek.iit.edu/>

March 2-6: PittCon 2014 will be in Chicago and co-programmed with the ACS Division of Analytical Chemistry. For further information, go to <http://pittcon.org/>.

March 16-20: National ACS Meeting in Dallas

March 28: Chicago Section dinner meeting

April 24: Chicago Section dinner meeting

THE CHEMICAL BULLETIN ADVERTISING RATE SCHEDULE

The official newsletter of the Chicago Section American Chemical Society, *The Chemical Bulletin*, publishes news and information of interest to the Section's 4,420 members, who are professional chemists and others in related professions in industry, academia and government throughout greater Chicago.

SIZE	DIMENSIONS	RATE
Full Page	7.5" wide x10" depth	\$700
2/3 Page (2 columns)	4.917" wide x 10" depth	\$530
1/2 Page	3.75" wide x 10" depth	\$500
1/3 Page (1) column)	2.333" wide x 10" depth	\$360
1/2 Column	2.333" wide x 5" depth	\$190
Business Card	3.5" wide x 2" depth	\$95

We accept ads sent in jpg, tif, Photo Shop, Indesign and pdf files. For more information, contact chicagoacs@ameritech.net or call 847-391-9091.

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ADVERTISING INDEX

Company	Page	Telephone	URL/E-Mail
Vacuubrand, Inc.	2	888-882-6730	www.vacuubrand.com
Micron Inc.	5	302-998-1184	www.micronanalytical.com
Mass-Vac., Inc.	7	978-667-2393	www.massvac.com

JOB CLUB

The next meeting of the **Chicago Section ACS Job Club** will be held on **Thursday, February 20 at 5:00 p.m. at Lewis University**. The meeting will include a review and discussion of some of the tools that a chemist can use to conduct a job search.

The Job Club provides a continuing opportunity for unemployed members of the Section to meet with one another, share their experiences and develop a network that may help in identifying employment opportunities. Bring plenty of resumes and business cards to distribute to your colleagues. Be prepared to talk about the kind of job you are seeking.

Several participants have received outsource help with resume preparation and marketing strategies to present their best attributes to prospective employers. The group has critiqued some individual resumes and made suggestions for improvements in a positive way!

The Job Club is also for employers seeking chemists. Employers need to be prepared to describe the positions to be filled and requirements for these positions.

Should you wish to attend the Section's dinner meeting following the Job Club, dinner is in the cafeteria and you can continue your networking activities. Please call the Section office for reservations.

Also, the Chicago Section's website has a link to the Job Club's yahoo job forum group. If you can't attend the Job Club, you can still find out about job openings and other information.

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!