

# The Chemical Bulletin

<http://chicagoacs.org>

FEBRUARY • 2011

## CHICAGO SECTION AMERICAN CHEMICAL SOCIETY MONTHLY MEETING FEBRUARY 24, 2011 NOTE: THIS IS A THURSDAY MEETING

Zhivago Restaurant & Banquets  
9925 Gross Point Road  
Skokie, IL  
847-982-1400

### DIRECTIONS TO THE RESTAURANT:

**From Chicago:** Take Lake Shore Drive north to Sheridan Road into Evanston. Continue north on Sheridan Road and turn left on Central St. Turn left on Gross Point Rd. and proceed to the restaurant.

**From the Northwestern University Tech Institute:** Go North on Sheridan Rd. and turn left on Central St. Turn left on Gross Point Rd. and proceed to the restaurant.

**From Edens Expressway heading North:** Take Dempster exit east to Gross Point Rd. Turn left on Gross Point Rd. and proceed to the restaurant.

**From Edens Expressway heading South:** Exit on Old Orchard Road. Go east to Gross Point Rd. Turn right on Gross Point Rd. and proceed to the restaurant.

**PARKING** is free in the lot. Parking is also available at Keeler and Gross Point Road.

**RECEPTION: 5:30- 6:30 P.M.**  
Cash Bar

**JOB CLUB** will meet at Zhivago at 5:30 p.m.

**DINNER 6:30 P.M.**

Dinner reservations are required and should be received in the Section Office via phone (847-391-9091), email ([chicagoacs@ameritech.net](mailto:chicagoacs@ameritech.net)) or website (<http://chicagoacs.org>) by noon on Monday, February 21. The cost is \$35 to Section members who

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GENERAL MEETING

7:30 P.M.



**Dr. Teri W. Odom**, Associate Professor of Chemistry and Materials Science and Engineering; Dow Chemical Company Research Professor, Northwestern University, Evanston, IL

**Topic: "All Things Pyramids: New Platforms for Imaging and Sensing"**

**Abstract:** Nanofabricated pyramidal shells are a new class of asymmetric, metal particles that offers new opportunities to manipulate light in confined volumes. This talk will discuss how 3D, anisotropic structures exhibit wave-length and polarization-dependent optical properties tunable from visible to near-infrared wavelengths. These surface plasmon characteristics enable light to be bent or focused directionally. Next, we will describe the design rules

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for assembling the nanopyrramids into hierarchical structures and how different nanoparticle assemblies exhibit different electromagnetic hot spot volumes that produce different SERS signals. Finally, we will show how these pyramidal particles can act both as a probe to identify the spatial locations of specific biomarkers on cells and as a therapeutic agent to ablate cancer cells by localized heating.

**Biography:** Teri W. Odom is an associate professor and Dow Chemical Company Research Professor in the Department of Chemistry and Materials Science and Engineering at Northwestern University. She received her B.S. degree from Stanford University in 1996 and her Ph.D. from Harvard University in 2001.

Odom's research focuses on controlling materials at the 100-nanometer scale and investigating their size and shape-dependent properties. She has developed multi-scale nanopatterning tools that can generate noble metal (plasmonic) structures with exceptional optical properties. For example, arrays of nanoholes and nanopyrramids are new plasmonic metamaterials also capable of ultra-sensitive molecular detection. Pyramidal nanoparticles can be used in imaging and therapeutic applications.

Odom has also pioneered an approach for assembling functional nanomaterials, called chemical nanofabrication.

Odom has received numerous awards and honors, including an NIH Director's Pioneer Award from the National Institutes of Health; the Materials Research Society Outstanding Young Investigator Award; the National Fresenius Award from Phi Lambda Upsilon and the American Chemical Society; the Rohm and Haas New Faculty Award; an Alfred P. Sloan Research Fellowship; a DuPont Young Investigator Grant; a National Science Foundation CAREER Award; a Dow Teacher-Scholar Award; the Exxon-Mobil Solid State Chemistry Faculty Fellowship; and a David and Lucile Packard Fellowship in Science and Engineering.

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**DINNER**

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-Section members is \$37. The cost to students and unemployed members is \$20. Seating will be available for those who wish to attend the meeting without dinner. PLEASE HONOR YOUR RESERVATIONS. The Section must pay for all dinner orders. No-shows will be billed.

**Menu**

**APPETIZER COURSE - SERVED FAMILY STYLE:** Fresh tomato and mozzarella salad, breads, fire cracker meat rolls with Asian sauce, calamari and fresh vegetables

**SOUP COURSE:** Cream of Mushroom

**DINNER COURSE:** Choice of entrée: Beef Brochette (skewered beef tenderloin filet marinated in house marinade and grilled with an array of vegetables), Salmon (broiled on a bed of spinach with Sonoma Curtier Russian River Sauce), or Vegetarian Pasta

**DESSERT COURSE - SERVED FAMILY STYLE:** Assorted pastries and fresh fruit

**BEVERAGE:** Coffee, Tea, Soft Drinks

**DEADLINES FOR  
CHEMICAL BULLETIN**

Please submit all Chemical Bulletin copy to the editor before the deadlines listed below for each issue. Articles can be emailed to the editor, Cherlyn Bradley, [cbrad1027@aol.com](mailto:cbrad1027@aol.com). Please submit your articles as a Word doc, docx, txt, or rft file. Any photos should be jpg, tif, pdf, Photo Shop, or InDesign files.

Since we like the Bulletin to be as timely as possible, we need the lead time indicated. You can help by early planning and submission of your information or articles.

2011 Issue	Deadline
April	March 4
May	April 1
June	May 6
September	July 15
October	September 2
November	September 30
December	October 21

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**HIGH SCHOOL TEACHERS  
CAMPS**

A teacher's camp for high school general science, chemistry, physics, math and technology teachers and middle school science teachers will be conducted during the summer. The camp is sponsored by the Materials Information Society (ASM) and is a one-week workshop to show how to use low-cost or no-cost, simple labs and experiments using everyday materials that can be integrated into existing lesson plans. Camps are scheduled throughout the summer at various locations in the United States and Canada. View the schedule at [www.asmfoundation.org](http://www.asmfoundation.org).

The program is free and includes lunch and supplies. Housing is provided for non-local participants at residential camps only. Schedule is 8 am to 5 pm for five days. Late afternoon or evening field trips may be scheduled.

Primary faculty conducting the camps are two experienced high school Master Teachers who have taught materials science courses for many years and helped develop this innovative approach to hands-on learning of applied science principles.

Apply online at <http://www.zoomerang.com/Survey/WEB22BHQFA6KXB/>.

## "CHEM SHORTS" For Kids

The Elementary Education Committee of the Chicago Section ACS presents this column. They hope that 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.

### DNA Extraction

Kids, would you like to see DNA extracted from your very own mouth? Deoxyribonucleic acid, or DNA, is present in all living things from bacteria to plants to animals. In animals, it is found in almost all cell types: muscles, reproductive cells, hair roots, and skin cells -- anything that has a nucleus. The basic procedure for extracting DNA in a laboratory is:

- Collect cells
- Split cells open and release their contents (proteins, fats and carbohydrates)
- Destroy enzymes which break apart DNA
- Separate DNA from other cell components (proteins, fats and carbohydrates)
- DNA
- Resuspend DNA in solution so it can be studied

Many of these steps can be accomplished in a simple experiment at home. You will need a bottle of clear Gatorade, Dixie cups, dishwashing liquid, rubbing alcohol and a clear vial with a screwcap (20 ml is a good size).

First, chill the bottle of rubbing alcohol on ice. Pour a small squirt of dishwashing liquid into the vial and add water (1 part detergent to 3 parts water). Put 15-20 ml of Gatorade in your mouth and swish it around for 30 seconds, gently rubbing the inside of your cheeks against your teeth. Spit this into a clean Dixie cup. Pour this into the vial of detergent until nearly full. Gently rock the vial back and forth for a few minutes. Do not agitate – you don't want to make foam or bubbles. Now add a teaspoon of the chilled rubbing alcohol to the vial and let sit for a few minutes. You should see the DNA separate out as white strands.

What's happening? The Gatorade keeps the cells from lysing, or splitting open, too soon. The detergent releases DNA from the nuclei by breaking open the fatty molecules that make up the cell membranes and helps remove proteins

associated with DNA. DNA doesn't dissolve in rubbing alcohol, so it precipitates out as white strands. If you took all of the DNA from a single cell and laid it end to end, it would be almost 2 meters long!

**TIPS:** A 0.9% saline solution will also work (9 gm NaCl in 1 liter distilled water) but Gatorade tastes better; clear Gatorade is best but if you can't find it then the yellow lemon-lime should work. Powder doesn't have enough salt to work.

**References:** Elizabeth Neis and also the California ScienCenter at <http://www.californiasciencecenter.org> (a direct link to a pdf file for this activity is: <http://www.californiasciencecenter.org/Education/GroupPrograms/HomeSchool/docs/DNA.pdf>)

Submitted by DR. KATHLEEN CARRADO GREGAR

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

### **WCC ARTICLES NEEDED**

The Chicago Section's Women Chemists Committee has a project to highlight women, both current and historical, and topics of interest to women. The project is called the "WCC Column" in the *Chemical Bulletin* and the project has been very successful.

We invite anyone, women or men, to join us in this endeavor of writing an article for the column. The article needs to be about 500 words long and will also be put on the Chicago Section website. The author also needs to design a poster for the corresponding monthly meeting. Our office manager, Gail Wilkening, will help with the poster, which can be primarily a large font version of what you wrote, if you wish. We welcome new authors and those who have already discovered what a pleasure this project is.

CO-CHAIRS MARGY LEVENBERG  
AND SUSAN SHIH

February, 2011 Vol. 98, No. 2. Published by the Chicago Section of The American Chemical Society, Editorial Staff: Cherlyn Bradley, Editor; Fran Kravitz, Associate Editor; Richard Treptow, Proofreader; Frank Jarzembowski, Publications Business Manager. Address: 1400 Renaissance Dr., Suite 312, Park Ridge, Illinois 60068; 847/391-9091. Subscription rates: \$15 per year. Frequency: monthly-September through June.

### **DUPAGE ENGINEERS WEEK EXPO**

The DuPage Engineers Week Expo will be held on **Saturday, February 26, 2011** at the Daniel F. and Ada L. Rice Campus of the Illinois Institute of Technology at 201 East Loop Drive in Wheaton. The event, which is free and open to all, will be from 11:00 AM to 3:30 PM. This year the theme is "Engineering: A Gateway to Tomorrow's Technology."

The Expo provides children and adults an opportunity to experience and explore many fields of science and engineering through a series of interactive displays and presentations. Currently displays on cryogenics, lasers and robots, among others are expected. The Chicago section of the American Chemical Society will be performing demonstrations on water as part of our celebration of the International Year of Chemistry.

For the most up-to-date information on participants and demonstrations, see the website: [www.dupageeweek.iit.edu](http://www.dupageeweek.iit.edu) or call (630) 682-6000.

**Note:** The section's aluminum soda can pull-tabs collection drive has been quite successful! Approximately 80 gallons of aluminum pull-tabs have been collected. Thanks to all of you who turn in your pull-tabs for this worthy McDonalds House cause.

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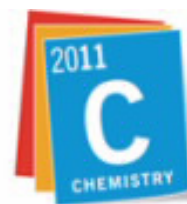
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## REPORT ON "WHO IS TEACHING WHOM" IN CHEMISTRY PROGRAMS

A recent report on the status of chemistry faculty released by the ACS Committee on Professional Training (CPT) is the first of its kind to provide categorical data on how faculty and instructional staff are used in chemistry programs offering a bachelor's degree in chemistry. Among the significant findings:

- Tenure-track faculty represent 68.5% of the instructional staff teaching chemistry
- Only 22% of tenure-track chemistry faculty are women, but women constitute 48% of non-tenure track faculty
- The percentage of students who see non-tenure-track faculty in courses suitable for majors is 33%
- 60% of programs reported that the proportion of undergraduate chemistry courses taught by tenure-track faculty has not changed in the past five years

For the full report, go to [www.acs.org](http://www.acs.org) and search "cpt".



International Year of  
**CHEMISTRY**  
2011

What is "365: Chemistry for Life"?

For every day of 2011, ACS plans to highlight on the ACS National website a different aspect of chemistry covering the categories of environment, energy, materials and health.

See which ideas have been suggested!

Contact

Email questions about IYC-2011 and 365: Chemistry for Life to: [IYC2011@acs.org](mailto:IYC2011@acs.org).

## PUBLIC AFFAIRS COLUMN

### Moving into 2011

As the year 2010 passes into history, I have several things in mind that I would like to share with you. We citizens of Illinois just had a serious change in our ranks of representatives from Illinois to the U.S. Congress. We are scheduled to lose one congressman to the redistricting that will take place later, and we just finished a very busy congressional session when we did not really have a single serious piece of science legislation passed. The congressman we met with last year, Bill Foster, lost in a very close race, and has vowed to stay involved.

Now that is my opinion, but I think I would get some significant agreement on that evaluation without doing any serious recruiting (see C&EN, 12/20/10, p.34). I have put together about a dozen bills that got passed having some relationship to science and/or education -- most of them very necessary in the issues they address, but none of them seem to get much mention or attention. Right now, I am going to include them in the year-end report for our Public Affairs Committee and hope to go into some detail where needed later. One of them, the "America Competes Act ---", while very important, is hardly new, having been passed in its original version 4 years ago. It is my understanding that it has been significantly upgraded and revised.\*\* We will consider some of that later.


And, of course, it is noteworthy that we have a new U.S. senator, which we were bound to have as a result of some of the events that occurred in our political environment over the past several years. I won't say anymore about that, since it has taken up too much of our time and effort already. I do hope that we are embarking on a period of stability and reliability with regard to this important office. When you see this article, we'll be well into 2011.

Happy New Year Anyway!!

JIM SHOFFNER

**\*\*How New COMPETES Science Law Broadens NSF Education Programs**

go to website: <http://news.sciencemag.org/scienceinsider/2011/01/how-new-competes-science-law.html?etoc>



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## SCIFINDER ENHANCEMENTS

Chemical Abstracts Service (CAS), the world's leading provider of chemical information, announces new time-saving advancements and usability improvements to SciFinder, its premier research and discovery tool. The enhancements will accelerate researchers' workflow and are especially valuable for synthetic chemists and other researchers who are engaged in lab preparations and synthesis planning.

In addition to presenting cleaner, more streamlined layouts, CAS chemists incorporated new features that enable researchers to:

--View experimental procedures in context with a reaction.

Access experimental procedures from six American Chemical Society journals and patents from USPTO, EPO, and WIPO patents—all released between 2005 and 2009. Examine, sort, and analyze experimental procedures for applicability to synthetic research needs.

-- Search structures using SMILES and InChI strings.

Enter SMILES (Simplified Molecular Input Line Entry Specification) or InChI (International Chemical Identifier) text strings into SciFinder's drawing editor to conveniently generate structures.


-- Rank reactions by relevance. Bring the most relevant reactions to the top of your answer set, improving retrieval quality and speed.

"SciFinder has the most thorough, accurate, and largest combined collection of patent and journal reaction procedures available in the world," said Christine McCue, vice president of marketing, CAS. "This is part of our ongoing commitment to leadership in publicly disclosed chemical information."

Related links

<http://www.cas.org/products/scifinder/index.html>

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*(continued from page 5)*About SciFinder

SciFinder is the first choice of scientists conducting research in chemistry and related fields. It has been developed by CAS, an organization with more than 100 years of experience in chemical indexing and curation. CAS scientists and colleagues around the world curate, quality-control, and optimize chemical information for intuitive retrieval. Globally, top Fortune 500 corporations, more than 1,700 universities, and major government agencies depend on SciFinder for the comprehensive, current, reliable information they need to enable scientific discovery. The award-winning application offers access to the CAS REGISTRYSM database, known as the gold standard of chemical substance collections. In addition, SciFinder retrieves more references than any other scientific search service, including relevant patent documents, journal article information, and reliable web sources. Finally, SciFinder is secure; its confidential research results are guaranteed and protected by CAS security systems.

About CAS

Chemical Abstracts Service (CAS), a division of the American Chemical Society, is the world's authority for chemical information. Our databases are curated and quality-controlled by CAS scientists, and recognized by chemical and pharmaceutical companies, universities, government organizations, and patent offices around the world as authoritative. By combining these databases with advanced search and analysis technologies (SciFinder®, STN®, and Science IP® products and services), CAS delivers the most current, complete, and cross-linked secure digital information environment for scientific discovery. Learn more at [www.cas.org](http://www.cas.org).

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## APPLY TO THE ACS SCHOLARS PROGRAM

The ACS Scholars Program, a scholarship program for underrepresented minorities, is now accepting applications for the 2011–2012 academic year. African American, Hispanic, or American Indian high school seniors or college freshman, sophomores, or juniors pursuing a college degree in the chemical sciences or chemical technology are eligible to apply. Applications are due March 2, 2011. For further information, go to [www.acs.org](http://www.acs.org) and search “scholars program”.

# THE UN-COMFORT ZONE

with Robert Wilson

Change Please

“Security is mostly a superstition. It does not exist in nature, nor do the children of men as a whole experience it. Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure, or nothing.”

These are the words of the woman who became the poster child for overcoming adversity -- a woman who was isolated into the two dimensional world of touch and smell at the age of 19 months. Yet, she went on to inspire millions around the world. Sightless and deaf, Helen Keller resolved to make something of her life. She lived with a keen understanding that change is inevitable, but growth is intentional. Unwilling to give in to her blindness, she chose to strive for a normal life.

Motivation is all about motion or movement. In other words, if you are comfortable, if you are happy and content, then you DO NOT move. You do not change. Why would you? On the other hand, if you are uncomfortable, if you're unhappy, then you want to change. You want to move back toward your comfort zone. There are millions of motivators in the world and all of us at any one time are being motivated by a dozen or more: Hunger, Safety, Sex, Love, Enlightenment to name just a few.

Interestingly, you can take all those motivators and boil them down to a variation of two basic emotions: Fear and Desire. You are either moving toward something you desire; or you are moving away from something you fear.

Fear, however, can become paralyzing and will keep us in one un-comfort zone because we fear the perceived discomfort that comes with change. We fear that change could open a Pandora's Box of more and scarier changes. I've seen it in relationships and in business.

I know a married couple who over the years have drifted apart and their marriage has become stagnant. I know they both desire greater intimacy with the other, but they both fear rejection and so they do nothing.

I know a small business owner who watched his business shrink in the

recent recession. His self-esteem is closely tied to his success and his falling income triggered fears of inadequacy. Frozen by fear into doing the same thing over and over again and expecting different results, he has not adapted to the changes going on in his market.

Helen Keller once again has wise words for such situations, “When one door of happiness closes, another opens; but often we look so long at the closed door that we do not see the one which has been opened for us.”

When couples try new things together they actually stimulate the receptors in their brains that invoke the feelings of romance. Taking a class or starting a new hobby together is a great way for couples to renew their feelings for each other and discover a greater depth of intimacy.

For small business owners, a recession is a great time to try out a new idea or innovation. It attracts renewed interest in the business and can even create new customers and open new markets.

The trick is getting comfortable with change a little at a time. Start engaging in simple changes at home. Low risk changes will generate immediate rewards. Here are a few you can make that will help you get into a habit of adapting to change:

If you drink coffee every day, switch to tea for a week. If you always listen to rock music on the radio, switch to country, jazz, or classical for a week. Rearrange one piece of furniture in your house. Read a section of the newspaper that you've never read before. Take a continuing education class in a subject not related to your career. Join a hobby group on MeetUp.com. Taste an ethnic food that you've never tried before, (as an alternative revisit a food you think you hate).

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Robert Evans Wilson, Jr. is a motivational speaker and humorist. He works with companies that want to be more competitive and with people who want to think like innovators. For more information on Robert's programs please visit [www.jumpstartyourmeeting.com](http://www.jumpstartyourmeeting.com).

**The Chicago Section's  
e-mail address  
is  
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## FEBRUARY HISTORICAL EVENTS IN CHEMISTRY

- February 5, 1914** Alan L. Hodgkin, who in 1963 shared the Nobel Prize in Physiology or Medicine with J. C. Eccles and A. F. Huxley for ionic mechanisms involved in excitation and inhibition in the peripheral and central portions of the nerve cell membrane, was born.
- February 8, 1777** Bernard Courtois, who discovered iodine in the liquor from the lixiviation of kelp, was born.
- February 11, 1894** Izaak M. Kolthoff, whose book on analytical chemistry, written with E. B. Sandell, is a standard reference in this field, was born.
- February 14, 1961** Lawrencium (element 103) was produced at the University of California, Berkeley.
- February 16, 1886** Robert R. Williams, Jr., who was a telephone company researcher and developed ways to synthesize vitamins in his spare time, was born. He was made a member of the Hall of Fame of Inventors for the Process for Obtaining Vitamins, Patent Number 2,049,988. He isolated thiamine in crystalline form in 1933 and synthesized vitamin B.
- February 17, 1838** Friedrich K. Beilstein, who published what is now known as the standard reference work on organic chemistry which has been updated ever since 1880, was born. This reference work can now be accessed on line.
- February 19, 1764** Gottlieb Sigismund Kirchoff, who in 1811 applied the first controlled catalytic reaction to produce glucose from starch, was born. He developed a method for refining vegetable oil and established a factory in St. Petersburg, Russia capable of producing two tons per day. He also experimented with brewing and fermentation.
- February 20, 1836** Isaac Adams, Jr., who was a pioneer inventor in nickel plating, was born.
- February 23, 1886** Charles M. Hall was the first to produce electrolytic aluminum in his woodshed laboratory at his family's home.
- February 26, 1903** Giulio Natta, who discovered and elucidated stereospecific polymerization and stereoregular polymers, was born.
- February 28, 1814** Philip Hench, who shared the Nobel Prize in Medicine in 1950 with Edward Calvin Kendall and Tadeus Reichstein for their discoveries relating to the hormones of the adrenal cortex, their structure and biological effects, was born.

### LEOPOLD MAY

Professor Emeritus of Chemistry  
The Catholic University of America  
Washington, DC

Additional historical events can be found at Dr. May's website, <http://faculty.cua.edu/may/Chemistrycalendar.htm>

### IYC 2011

The International Year of Chemistry 2011 (IYC 2011) is a worldwide celebration for the achievements of chemistry and its contributions to the well-being of humankind.

Under the unifying theme "Chemistry—our life, our future," IYC 2011 will offer a range of interactive, entertaining, and educational activities for all ages.

The Year of Chemistry will extend across the globe with opportunities for public participation at the local, regional, and national level.

To keep in touch with the happenings of IYC 2011, go to [www.chemistry2011.org](http://www.chemistry2011.org) for the latest news, activities listings and ideas.

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### ACT4CHEMISTRY.ORG

- The new home of the ACS Legislative Action Network (LAN) to:
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### ASSISTANT PROFESSOR OF CHEMISTRY

North Park University, a Christian liberal arts school of over 3,000 students located in Chicago invites applicants for a tenure-track position in **Analytical** or **Bioanalytical** chemistry, beginning August 2011. Ph.D. required. Visit [www.northpark.edu/facultyjobs](http://www.northpark.edu/facultyjobs) for application details and instructions. An equal opportunity employer.

# CALENDAR

**February 24:** Chicago Section ACS Dinner Meeting. This is a Thursday meeting.

**February 26:** DuPage Area Engineers Week Expo 2011 will be held at the Daniel F. and Ada L. Rice Campus of the Illinois Institute of Technology, 201 East Loop Drive in Wheaton from 11:00 a.m. to 3:30 p.m. For further information, visit the website [www.dupageeweek.iit.edu](http://www.dupageeweek.iit.edu).

**March 13-18:** Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (Pittcon 2011), Georgia World Congress Center, Atlanta, GA. For additional information, visit the Pittcon website at [www.pittcon.org](http://www.pittcon.org).

**March:** Chicago Section ACS Public Affairs Dinner Meeting. Date to be determined.

**March 27-31:** ACS National Meeting in Anaheim, CA.

**April 27:** Chicago Section ACS Dinner Meeting. This is a Wednesday meeting, the Kilpatrick Lecture, and will be hosted at IIT.

**May 20:** Chicago Section ACS Gibbs Award Banquet and Lecture.

**June 8-10:** 42nd Central Regional ACS Meeting (CERM 2011), IUPUI, University Place Conference Center, Indianapolis, Indiana. For additional information, visit [cerm\\_regional.sites.acs.org/](http://cerm_regional.sites.acs.org/).

**June 21-23:** The ACS Green Chemistry Institute's joint event: 15th Annual Green Chemistry & Engineering Conference + 5th International Conference on Green and Sustainable Chemistry, Washington, D.C. Visit [www.gcande.org](http://www.gcande.org) to learn more about this premiere event.

**June 23:** Chicago Section ACS Distinguished Service Award Meeting; 50 & 60-year members honored.

**August 12-21:** ACS Illinois Sections' cooperative tent project at the Illinois State Fair in Springfield. For further information on this fun and worthwhile outreach activity, contact the section office at (847) 391-9091. Also, visit website <http://chicagoacs.org/state-fair/index.html>

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

## C&EN ARCHIVES IS NOW ONLINE

C&EN Archives, the new digital collection of 85+ years of *Chemical & Engineering News* (C&EN), is now online at [pubs.acs.org/cen-archives](http://pubs.acs.org/cen-archives). Fully searchable and accessible on the same platform as ACS journals and books, C&EN Archives provides instant access to more than 500,000 pages of quality journalism from C&EN. C&EN Archives consists of all-new high-resolution PDF pages from the original C&EN articles -- it's every page from every issue, from cover to cover. At its initial launch, C&EN Archives includes all content from 1923 through 2009; content from 2010 will also be added in early 2011.

## CGDNETWORK

Crystal Growth & Design has recently launched the CGD Network, a new forum within the ACS Network that enables researchers to keep up with the latest research and discussions from the crystal science and engineering community. Content includes discussion groups on controversial topics, weekly highlights of papers/patents, structure of the week competition and much more!

View the network at [communities.acs.org/community/cgdnetwork](http://communities.acs.org/community/cgdnetwork)

## ADVERTISING INDEX

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Micron Inc.	5	302-998-1184	<a href="http://www.micronanalytical.com">www.micronanalytical.com</a>
North Park University	7		<a href="http://www.northpark.edu/facultyjobs">www.northpark.edu/facultyjobs</a>

## JOB CLUB

The next meeting of the **Chicago Section ACS Job Club** will be held on **Thursday, February 24 at 5:30 p.m. at Zhivago Restaurant**. 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, the cost is \$20 and you can continue your networking activities.** Please call the Section office for reservations and indicate that you are eligible for a discount.

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.

## 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.