

# The Chemical Bulletin

<http://chicagoacs.org>

DECEMBER • 2009

## CHICAGO SECTION AMERICAN CHEMICAL SOCIETY

### Joint Meeting with CHICAGO CHEMISTS' CLUB AND IOTA SIGMA PI HOLIDAY PARTY/MEETING

FRIDAY, DECEMBER 4, 2009

**Holiday Inn Willowbrook**  
7800 Kingery Highway (Route 83)  
Willowbrook, IL  
630-325-6400

#### DIRECTIONS TO THE MEETING

Take Interstate 55 (Stevenson Expressway) south to IL-83 (Kingery Rd) exit. Keep right at the fork in the ramp and merge onto IL-83 north. Proceed to the Holiday Inn. It is on the east side of Route 83, just 0.5 block north of Interstate 55.

#### PARKING: Free

This is the Chicago Section ACS/Chicago Chemists' Club/Iota Sigma Pi Annual Holiday party/meeting.

Come join in the celebration with all your fellow chemists and friends. In addition to our technical program, Santa will be bringing gifts! ENJOY!

We are asking you to also bring a gift!!! Please bring some canned food or other non-perishable food item (in non-glass containers), clothing, or toy that we, as the ACS, can donate to charities for needy people in the Chicagoland area. See article on page 3. Let's share our good fortune in the spirit of the season. THANK YOU!!

**JOB CLUB** 5:30 - 6:30 P.M.

**SOCIAL HOUR** 6:00- 7:00 P.M.

Cash Bar  
Complimentary Hors D'oeuvres

**DINNER** 7:00 P.M.

Dinner reservations are required and should be received in the Section Office

via phone (847-647-8405), email ([chicagoacs@ameritech.net](mailto:chicagoacs@ameritech.net)) or website (<http://chicagoacs.org>) by noon on Tuesday, December 1.

The cost is \$35 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-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.**

**Holiday Menu:** Fresh Fruit Cup, Tomato Florentine Soup, Tossed garden salad with choice of dressing; Entrée choices: Vegetarian rolled Verdi Ricotta, Baked Salmon with cucumber/dill sauce, or Filet Mignon with mushroom cap and Béarnaise sauce on the side; Baked potato and Prince Albert blend of wax beans, green beans and carrots; Breads and butter; Apple Cobbler; Beverage

#### 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 up to 3 CPDU's.

**CHANGING OF THE GAVEL 8:10 P.M.**  
Outgoing Chair Amber Arzadon will turn over the gavel to the incoming 2010 Chair, Ken Fivizzani.

**GENERAL MEETING 8:15 P.M.**

#### After-Dinner Speaker



**Dr. Wendy S. Wolbach**, Professor of Chemistry, DePaul University

**Topic:** "Carbon, Meteorites, and Extinctions"

**Abstract:** The dinosaurs and thousands of other species of plants and animals became extinct about 65 mil-

(continued on page 2)

*(continued from page 1)*

lion years ago as a result of environmental changes triggered by the impact of a giant meteorite. While trying to determine what type of meteorite that struck the Earth, we instead found evidence of large-scale fires, presumably ignited by the impact. This evidence took the form of large enrichments of elemental carbon (soot), overwhelming any meteoritic carbon. My work has since expanded to include the study of other forms of elemental carbon associated with various impacts and extinctions in an attempt to understand the nature of environmental changes associated with large impacts.

**Biography:** Wendy S. Wolbach earned her A.B. in chemistry at Franklin and Marshall College in 1984 and her Ph.D. in chemistry from the University of Chicago in 1990. Following a two-year physics post-doc at the University of Chicago, she served as Associate Professor and Chair of Chemistry at Illinois Wesleyan University before returning to Chicago in 1999 to chair the Chemistry Department at DePaul University. She is currently Professor of Chemistry at DePaul, where she continues her study of elemental carbon in sedimentary rocks associated with impacts and mass extinctions.

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## TWO 2009 NOBEL PRIZES AWARDED IN BIOCHEMISTRY

Two Nobel Prizes were awarded this year in the field of biochemistry. The first, the Nobel Prize in Chemistry, for studies of the structure and function of the ribosome was awarded to Venkatraman Ramakrishnan (MRC Laboratory of Molecular Biology Cambridge, UK), Thomas A. Steitz (Yale University, New Haven, CT and Howard Hughes Medical Institute), and Ada E. Yon (Weizmann Institute of Science, Rehovot, Israel). The ribosome is an organelle in the living cell whose size is about 200 Angstroms, composed of protein and ribosomal RNA that is the site of protein synthesis in the cytoplasm. They contain tRNA (transfer RNA) and mRNA (messenger RNA) that are used in the synthesis of proteins. Using x-ray crystallography, the awardees determined the molecular structure of the ribosome and generated three-dimensional models that show how different antibiotics bind to ribosomes.

The second, the Nobel Prize in Physiology or Medicine, was awarded to Elizabeth H. Blackburn (University of California, San Francisco), Carol W. Greider (Johns Hopkins University School of Medicine, Baltimore, MD) and Jack W. Szostak (Harvard Medical School, MA General Hospital in Boston, and Howard Hughes Medical Institute) for the discovery of how chromosomes are protected by telomeres and the enzyme telomerase. Their research revealed that DNA in the chromosomes is copied by the DNA polymerase enzyme during cell division. The ends are capped by telomeres, without which the chromosomes would be shortened during each cell division, a key part of the cell's ageing mechanism. The telomerase contains a key RNA sequence that acts as a template for the telomere DNA, which attracts proteins to form a protective cap around the ends of the DNA strands.

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

## HOLIDAY PARTY

Get those fingers ready to make reservations for the annual Chicago Section's ACS holiday party on Friday, December 4. Gifts for the raffle 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. Please attach that number to your name badge.

Gifts will be handed out by volunteers 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 forget to 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.

RICHARD CORNELL  
HOSPITALITY CHAIR

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## "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 science literacy. Please print it out and pass it on to your children, grandchildren, or elementary school teachers. It is hoped that teachers will incorporate some of the projects in this column into their lesson plans.

### Peachy Keen

Kids, did you ever think of freezing a whole peach or even one cut up into pieces? Why not? If you tried it, you'd find that all of the flavor was gone and that the perfectly peachy texture became mush upon thawing. So what can be done to save peaches beyond their growing season?

First, let's demonstrate why simply freezing a peeled and diced peach is a bad idea. Fill a plastic zip-top bag with water and seal shut. Have an adult partner find a pointy object such as a knitting needle. Imagine that the bag filled with water is a pulp cell inside the peach. Imagine that the needle is an ice crystal. Holding the bag over a sink, have your adult partner puncture the bag several times making holes for the water to leak out. This is what happens when ice crystals puncture pulp cells during the freezing process.

What scientific trick can be used to prevent this? The substance that we call sugar is actually sucrose, a disaccharide, or double sugar. Sucrose is famous for being hygroscopic, meaning that it loves to grab hold of water and hold it at the molecular level. By adding some sucrose to diced peaches, some of the water is pulled out of the peaches and creates a syrup with the sucrose. The trick is that when the syrup freezes, the sucrose holds onto some of the water, and that prevents the ice crystals from getting so big that they poke holes in all the cells, which makes all of the moisture leak out when the peaches thaw.

For one pound of diced peaches you would like to freeze, add about ½ cup of sugar. Before doing that, though, know that neither sucrose nor freezing temperatures will stop peaches from turning brown. For that, more science is needed, in the form of an acid. Since browning is really an oxidative process, what's needed is an antioxidant. For this ascorbic acid works well, which is good old vitamin C. About 500 milligrams (mg)

will do. Crush up a vitamin C tablet between two spoons, dissolve in 3 tablespoons of water, and mix into the peaches before the sugar.

Once the peaches, vitamin C, and sucrose are mixed, let the mixture sit for 15 minutes until a thick syrup forms. Transfer the peach mixture to zip-top freezer bags for long-term storage. Enjoy your kitchen chemistry all winter long!

#### Acknowledgment:

Alton Brown of "Good Eats" tv show on The Food Network:

[http://www.goodeatsfanpage.com/Season10/peaches/peachy\\_keen\\_tran.htm](http://www.goodeatsfanpage.com/Season10/peaches/peachy_keen_tran.htm)

Submitted by Dr. Kathleen Carrado

All past "ChemShorts for Kids": <http://membership.acs.org/C/Chicago/ChmShort/kidindex.html>

## CHICAGO SECTION'S ELECTION RESULTS

The ACS Chicago Section's Tellers Committee met on Friday, October 16 to count the ballots for the 2009 election. There were 373 ballots received as of noon on that day. Of these, 371 ballots were counted and two ballots were invalid. The results are as follows:

<b>Chair-Elect:</b>	Keith KostECKA
<b>Vice-Chair:</b>	Barbara Moriarty
<b>Secretary:</b>	Josh Kurutz
<b>Treasurer:</b>	Mark Kaiser
<b>Directors:</b>	Cherlyn Bradley Margaret Levenberg  Sharon Northup Peter Lykos Mark Cesa Milt Levenberg
<b>Councilors:</b>	Fran Kravitz David Crumrine Milt Levenberg Inessa Gorelik
<b>Alternate Councilors:</b>	Laura Li Avrom Litin

Officers, directors, councilors, and alternate councilors take office January 2010.

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

TELLERS COMMITTEE, 2009

December, 2009 Vol. 96, No. 10. Published by the Chicago Section of The American Chemical Society, Editorial Staff: Cherlyn Bradley, Editor; Fran Kravitz, Associate Editor; Fadwa Al-Taher and Richard Treptow, Proofreaders; Frank Jarzembowski, Publications Business Manager. Address: 1400 Renaissance Dr., Park Ridge, Illinois 60068; 847/391-9091. Subscription rates: \$15 per year. Frequency: monthly-September through June.

You might be a chemist if... you pronounce the word unionized as "union-ized", instead of "union-ion-ized".

## FOOD, CLOTHING AND TOY DRIVE

We will be collecting nonperishable food items (no glass containers) for charity at the December Holiday Party again. The food is donated to the local Loaves & 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.

This year we would like to again increase our generosity to another good cause. Ada S. McKinley Community Services, Inc. is a social agency in Chicago and Oak Park serving individuals with disabilities or other limiting conditions that need help in finding and pursuing paths leading to healthy, productive and fulfilling lives. They need our help in two programs: a collection of adult and children's clothing and a collection of new children's toys.

The collection of adult men and women's clothing is for their clients to use for job interviews. The collection of children's clothing is for their emergency foster care program serving children who have been removed from their homes because of neglect or abuse or from a foster home that was disrupted. Most of these children will be coming from their homes after being taken from their family; often with nothing but the clothes they are wearing. They are requesting boys' and girls' clothing for the age range from infant to 17 years old.

**Please open your heart to both of these programs and bring a nonperishable food item and a piece of gently used or new clothing or a new toy to the holiday party.**

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## CALLING ALL CHEMISTRY UNDERGRADS!

Now that undergraduate students can be full members of ACS, ACS has developed a new resource, <http://undergrad.acs.org>, to make it easier to recruit new undergraduate student members. The site describes some of the benefits of ACS membership, which are intended specifically for undergraduates.

As ACS President Tom Lane has indicated in his recent message to section and division officers and to councilors, by joining the ACS, undergraduates add their voice to over 154,000 other professionals; focused on improving people's lives through the transforming power of chemistry. He also reminded all of us that the Society operates under a Congressional Charter (granted in 1937), which clearly states the purpose of the Society:

SEC. 2. That the objects of the incorporation shall be to encourage in the broadest and most liberal manner the advancement of chemistry in all its branches; the promotion of research in chemical science and industry; the improvement of the qualifications and usefulness of chemists through high standards of professional ethics, education, and attainments; the increase and diffusion of chemical knowledge; and by its meetings, professional contacts, reports, papers, discussions, and publications, to promote scientific interests and inquiry, thereby fostering public welfare and education, aiding the development of our country's industries, and adding to the material prosperity and happiness of our people.

By bringing in new undergraduate student members, the hope is that local sections and divisions will benefit from an increase in participation and contributions from the next generation of chemical scientists.

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## WCC COLUMN

Members of the Chicago Section's Women Chemists Committee (WCC) continue to develop outreach plans for Chicago Area section members and the community. These plans include a column in *The Chemical Bulletin* covering topics such as networking, career development, and vignettes of women in science, particularly chemistry. This month's topic is about **Joan P. Lambros**.

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**Joan P. Lambros**, pioneering woman in chemicals and marketing, died on May 28, 2009 at the age of 88. This 64-year member of the Fluorine Chapter of Iota Sigma Pi was respected and loved by chemists locally and nationally. Joan also was the first recipient of the Professional Excellence Award\* in 1984. This chemist truly broke the chemical glass ceiling for women chemists.

She was a woman who made outstanding contributions to chemistry and related fields at national and local levels. Several Iota Sigma Pi National Presidents recognized Joan's role as their mentor. She edited the *IOTAN* from 1963-66, served as Iota Sigma Pi's National President 1972-75, and served as Parliamentarian for the 1984 and 1987 conventions. The Fluorine Chapter created a Joan P. Lambros Outstanding Service Award in her honor. In 1974 she was the first woman elected chair of the Cleveland (Ohio) Section of the American Chemical Society (ACS) and was the first female national councilor. She also served on the ACS Women Chemists Committee.

Joan earned her B.S. and M.S. degrees from Case Western Reserve University, but for Joan, education was a continuous process. She took courses in marketing and economics at Western Reserve, University of Houston, and the University of Athens in Greece.

Joan had to quit researching chemi-

cals because of dermatitis. In 1968, she briefly researched coatings at Sherwin-Williams Co. and taught at Miami University of Florida. She spent a couple of decades at Lubrizol Corp., moving from lab work to marketing, and a couple more as a leading marketer at SCM Corp. She joined Glidden as a marketing research associate. Her job involved controlling and directing market research on coatings and resins, including site selection for stores. During her 15 years at Glidden, she did 75 technical and financial market analyses.

Joan brought a scientist's perspective to marketing. She used statistical analysis to discover the potential of fuel lubricants and additives for Lubrizol, to find good locations for SCM's Glidden stores and to sell Glidden paints, adhesives and sealants.

Joan "retired" in 1983 to form a consulting company, Lambros and Associates, offering marketing and strategic planning to clients. "For a woman, especially," she once said, "the more fields you have, the better."

Joan held important positions in her church, community, and profession and has received many honors. She was a realistic and talented woman whose actions were effective. She started the Sunday school at St. Demetrios Greek Orthodox Church. She often visited military and civilian clients around the country, especially in Texas. She also spoke at many universities and civic sites. For fun, she flew planes.

Among her several awards, Joan received the Archdiocese award for the Western Hemisphere of the Greek Orthodox Church, the YWCA Business Woman Leader's Achievement Award for Distinguished Service and Leadership, and an honorary doctorate for religious and relief efforts from the University of Athens. She also created several local scholarships. Joan had tea once with Queen Elizabeth and a couple of times at the White House.

Over the years she consistently had been willing to speak on careers and encouraged many young women to

enter non-traditional fields. In her 1984 Professional Excellence Award\* address entitled "Excellence: What Is It", Joan stressed the importance of recognizing our peers and especially the need to express appreciation to other women. She found that Websters' dictionary was not particularly helpful in defining a professional, so she made her own list of attributes. She concluded that professional excellence meant dedication to life: the outcome of genuine involvement is outstanding performance. Joan described her career, especially her experience at Glidden, by stressing the importance of becoming the only person able to do the job and of networking with peers, secretaries and librarians. She quipped that if you have not learned to type, you can avoid being stereotyped, and if you arrive a little late at meetings you will not be asked to make the coffee! She said that she enjoyed working with people, and accepted some needling without getting a chip on her shoulder.

It has been said that this versatile woman was "vocal and no-nonsense and... she would correct you, but you could always count on her."

\*Iota Sigma Pi Award renamed the Violet Diller Award for Professional Excellence in 2006.

ANNE SHERREN

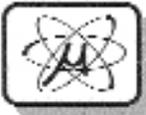
### Iota Sigma Pi

Iota Sigma Pi is a national honor society for women in chemistry. Its major objectives are:

- to promote interest in chemistry among women students
- to foster mutual advancement in academic, business, and social life
- to stimulate personal accomplishment in chemical fields

It was founded in 1902 and was organized on a nation-wide basis in 1916. Over 10,000 members have been initiated into this organization. More than 40 local chapters have been established in various colleges, universities, and metropolitan areas. The Aurum Iodide chapter in Chicago was established in 1939.

Iota Sigma Pi serves to promote the advancement of women in chemistry by granting recognition to women who have demonstrated superior scholastic achievement and high professional competence by election into the honor society.



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## THE UN-COMFORT ZONE with Robert Wilson

### What Drives Your Desire?

It was love at first sight. I was a 15 year old working as a parking lot cashier, when a brand new car pulled up to the booth. I'd never seen anything like it; it was a new model from Toyota called Celica. Approaching the legal driving age, I dreamed of owning a car. Now my dream had a form. For the next two years, I saved all my money and during that time a Celica couldn't come within my peripheral vision without my noticing it. It was the only car I wanted. I went to the showroom dozens of times to sit in it, feel it, smell it. I talked with every owner of one who passed through my parking lot. I was driven.

Unfortunately, a new one was too expensive, so I looked in the newspaper every day for a used one, but I was always more than \$1,000 short. At 17 and half years old, borrowing my parents' car was painful. The desire and the peer pressure to own a car – any car – was nearly overwhelming, and my dream was wavering. My friends began suggesting cars that I could afford. Then my Dad introduced me to a car wholesaler. When I met with him, I reluctantly gave him a list of cars I thought I could afford. As we talked about them, he seemed to sense my lack of enthusiasm. He pressed me, "Are there any others you're interested in?" "Well... there's the Toyota Celica," I replied, "but I know I can't afford it." He jotted it down and said, "You let me worry about that." My eyes lit up as he asked me about colors and options. Then he drew a big circle around the word Celica. Less than a week later, he phoned me. He found one I could afford. It had a small dent in the fender which I could fix for under \$100. Cha-ching Desire satisfied.

When was the last time you were obsessed with something? Desire is a powerful motivator, but unlike Fear it cannot be easily triggered. Oh, sure, I can create a television ad depicting a thick juicy steak sizzling on a grill and make your mouth water. Maybe I can even get you off the couch and into your car to go get one. As a marketer, an employer, or even as a parent, I can plant the seeds of desire, but in order for it to blossom, it must develop from within. Once it takes root, Desire has the amazing ability to drive itself. When it becomes very powerful, we call it Ambition. So few people reach this level that we use the word Hunger to describe it because that is a Desire that everyone can understand.

When you observe the world's most

successful people - - in business, sports, or politics - - you see that Desire takes precedence over every other aspect of their lives. As Frank Sinatra sings in I've Got You Under My Skin: "I'd sacrifice anything come what might." Most of us have many things we are unwilling to sacrifice. Family and friends are two of the most common. Winners give their Desire complete attention, focus and energy. Michael Jordan is an excellent example; he became one of the greatest basketball players by making 2000 practice shots every day. Are you that dedicated to your dream?

On the other hand, perhaps you gain more satisfaction from your hobbies than your work. In that case, you probably wish you could spend more time pursuing them instead of your job. That is because pleasure is the force that fans the flames of Desire. Marsha Sinetar in her book Do What You Love the Money Will Follow writes: "When you study people who are successful...it is abundantly clear that their achievements are directly related to the enjoyment they derive from their work." Are you ready to give up everything for your Desire?

--

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).

### 2010 Section Dinner Meeting Dates

- |                     |   |
|---------------------|---|
| <b>January 21</b>   | - Jointly with AIChE  |
| <b>February 19</b>  | - Jointly with IIT-Kilpatrick Lecture                         |
| <b>March 12</b>     | - Public Affairs Meeting                                      |
| <b>April 20</b>     | -   |
| <b>May 21</b>       | - Gibbs Award Banquet   |
| <b>June 24</b>      | - Distinguished Service Award; 50 & 60-year members           |
| <b>September 24</b> | - Education Night at Loyola                                   |
| <b>October 22</b>   | - Basolo Award Dinner with Northwestern                       |
| <b>November 18</b>  | - Stieglitz Lecture with University of Chicago                |
| <b>December 10</b>  | - Holiday Party - Jointly with Chemists' Club & Iota Sigma Pi |

### JOB CLUB

The next meeting of the **Chicago Section ACS Job Club** will be held on Friday, **December 4 at 5:30 p.m. at Holiday Inn Willowbrook**. 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 party/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.

REGISTER ONLINE for  
Chicago Section  
monthly meetings  
[www.ChicagoACS.org](http://www.ChicagoACS.org)

### WCC Lectureships

The Women Chemists Committee offers lectureships that support early and mid-career female chemists and chemical engineers to present invited technical talks at doctoral degree granting institutions.

Find out more about WCC programs on website <http://membership.acs.org/W/WCC/> and opt in for the WCC's electronic newsletter.

## LOOKING BACK AT GREAT LAKES REGIONAL MEETING

The 2009 ACS Great Lakes Regional Meeting (GLRM) on May 13-16 was hosted by the Chicago Section at the Lincolnshire Marriott Resort. Russ Johnson and Susan Shih were the General Co-Chairs of the meeting; they put together an organizing committee and kept everyone on track with regular conference calls. Dave Crumrine and Mark Cesa, Program Co-Chairs, put together an excellent technical program with 23 symposia, four poster sessions, and six workshops. Marilyn Kouba was Treasurer for the meeting. Milt Levenberg and Richard Cornell handled the audio and video aspects of the sessions. In loaning the conference several computer projectors, Loyola University saved GLRM several thousand dollars in equipment rental costs. Milt Levenberg also served as webmaster for the meeting and handled mass e-mailings. Robin Zavod organized the exposition and related activity; the exposition hall was full and the Thursday evening mixer was an enjoyable event. Frank Jarzembowski worked with the Marriott staff to ensure that the meeting and exposition space was appropriate for conference needs. A handy yet convenient program booklet was prepared by Mark Kaiser. Local information about the Chicago area was published in the

program booklet; additional material was displayed in a binder for attendees' use, organized by Ken Fivizzani. Chris Dunlap coordinated the various awards symposia and luncheons. Linda Bennett arranged activities for the high school teachers. Margy Levenberg handled Gibbs arrangements, and Barb Moriarty provided publicity. Fran Kravitz worked on fund raising. Gail Wilkening helped in many different ways throughout the meeting. Amber Arzadon, Chicago Section Chair, represented the section at several activities during the meeting.

The timing of GLRM was a concern for the organizing committee. The meeting had significant hotel, food, and beverage guarantees. The troubled economy limited attendance, especially from people coming from outside the Chicago area. GLRM met the financial goals and produced a small profit, in large part due to the efforts of John Michael Sophos of the ACS staff. The cumulative work of the organizing committee resulted in a well-organized meeting that was enjoyed by the attendees. It was great to see everything come together! The Chicago Section wishes to thank all of our volunteers who met the challenges facing GLRM. This was certainly one of the highlights of our section's 2009 activities.

KEN FIVIZZANI

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**NEXT ISSUE is  
for the  
January 21  
Chicago Section ACS  
Joint Meeting with the  
Chicago Section AIChE**

## 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 4,600 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 x 10" depth	\$700
2/3 Page (2 columns)	4.917" wide x 10" depth	\$530
1/2 Page	3.75" wide x 10" depth	\$500
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## SCIENCE FAIR JUDGES NEEDED

The Primary Education Committee is seeking ACS members, nonmembers, Undergraduates and graduate students and industrial companies who would be interested in being science fair judges and demonstrators for grades Pre-K through 8 in Chicago and surrounding suburban area schools and libraries. If you are interested please send your name, address, phone number with area code, e-mail address and whether you would like to be a science fair judge or demonstrator or both to the Section office at: [chicagoacs@ameritech.net](mailto:chicagoacs@ameritech.net). Please make sure to mark the subject line with "Science Fair Judges."

FRANK KRAVITZ  
PRIMARY EDUCATION COMMITTEE  
CHAIR

## December Historical Events In Chemistry

**December 1, 1909** The first production of calcium cyanamide in North America was started by American Cyanamide Co.

**December 2, 1859** Ludwig Knorr, who synthesized heterocyclic compounds, was born.

**December 6, 1778** Joseph L. Gay-Lussac, discoverer of the law of combining volumes of gases, was born.

**December 7, 1909** The patent for the first thermosetting man-made plastic from a reaction of phenol with formaldehyde was granted.

**December 9, 1919** William N. Lipscomb, researcher on boranes, was born. He was among the first to describe the 3-dimensional structure of enzymes and proteins. In 1976, he received the Nobel Prize in Chemistry for his studies on the structure of boranes illuminating problems of chemical bonding.

**December 12, 1866** Alfred Werner, a researcher in coordination chemistry, was born. He was awarded the Nobel Prize in Chemistry in 1913 for linkage of atoms in molecules, complex inorganic compounds, stereochemistry, and coordination theory of valency.

**December 14, 1909** Edward L. Tatum, who discovered the genes that regulate certain chemical processes, was born. He shared the Nobel Prize in Physiology or Medicine (1958) with George W. Beadle for their discovery that genes act by regulating definite chemical events and with Joshua Lederberg for his discoveries concerning genetic recombination and the organization of the genetic material of bacteria.

**December 17, 1920** Allied Chemical and Dye Corp. incorporated.

**December 19, 1813** Thomas Andrews, who discovered that every gas has a critical temperature above which it cannot be liquefied, was born.

**December 20, 1890** Jaroslav Heyrovsky, who received the Nobel Prize in Chemistry for his discovery and development of the polarographic methods of analysis, was born.

**December 22, 1884** St. Elmo Brady, the first black man to earn a Ph. D. in chemistry, was born. He received his degree in 1916 from the University of

Illinois and authored three monographs on Household Chemistry for Girls.

**December 24, 1834** Augustus G. Vernon-Harcourt invented the standard lamp of 10 candle-power using pentane.

**December 26, 1838** Clemens A. Winkler, who discovered germanium in 1886 and also researched the analyses of gases, was born.

**December 29, 1800** Charles Goodyear, who invented the vulcanization of rubber, was born. In the year 1839, by an accident, he discovered the true process of vulcanization, which cured not the surface alone but the whole mass. He was trying to harden the gum by boiling it with sulphur on his wife's cook stove when he let fall a lump of it on the red-hot iron top. It vulcanized instantly.

**December 31, 1921** Gilbert Stock, who did research in alkylation, acylation and vinyl ring radical cyclization, was born. He also developed the theory of concerted polyene cyclization.

### 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>

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

### Did You Know?

Since 1959 the Chicago Section Scholarship Program has awarded \$206,601 in scholarships.

## Chicago Chemists' Club

### Club History

The Chicago Chemists' Club was chartered December 30, 1919 as a social organization to promote good fellowship among Chicago-area chemists. Through the years, the Club roster has included many prominent members of the chemical profession.

### Social Events

The social calendar of the Chemists' Club includes ten dinner meetings per year where spouses and/or guests are welcome to attend. Meetings are usually on the second Wednesday of the month at various restaurants in the Chicago area featuring a variety of cuisines. We present timely, stimulating speakers in fields such as science, politics, medicine, etc., and also folk-singers, artisans and world travelers. In the spring the Club has a dinner-theater party. Each year, jointly with the ACS Chicago Section's Education Meeting, we present the Bernard Schaar Memorial Award to the first-place winner of the ACS high-school chemistry examination. The Club is also a co-sponsor of the ACS Chicago Section's annual Holiday Party in December.

### Membership Benefits

Membership dues are \$25 per year. As a non-profit organization, the Club returns a portion of these dues to its members in the form of dinner price reductions.

### Joining the Club

Membership is open to chemists, chemical engineers and allied scientists.

## 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!

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## CALENDAR

**December 3:** Chicago Section ACS Board meeting, 1400 Renaissance Dr., Suite 312, Park Ridge, IL 60068; 847-391-9091.

**December 4:** Chicago Section ACS Holiday Party and Meeting at the Holiday Inn Willowbrook. The speaker is Wendy Wolbach of DePaul University. **See this issue for details.**

**January 21, 2010:** Chicago Section ACS Dinner Meeting held jointly with AIChE. This is a Thursday meeting.

**February 12-16:** Annual meeting of The American Association for the Advancement of Science, Chicago. For more information, go to website [www.aaas.org](http://www.aaas.org).

**February 19:** Chicago Section ACS Dinner Meeting held jointly with IIT. This is the Kilpatrick Lecture.

**February 22-24:** Northwestern University Department of Chemistry's annual Charles D. Hurd Lecture Series. Further details pending.

**February 28-March 5:** PittCon 2010 Conference and Expo, Orlando, FL. Visit [www.pittcon.org](http://www.pittcon.org) for more information.

**March 12:** Chicago Section ACS Public Affairs Dinner Meeting.

**March 21-25:** ACS National Meeting in San Francisco, CA.

**April 20:** Chicago Section ACS Dinner Meeting. This is a Tuesday meeting.

**May 21:** Chicago Section ACS Gibbs Award Banquet and Lecture.

**June 24:** Chicago Section ACS Distinguished Service Award and 50 & 60-year member awards presentations.

## HIGH SCHOOL CHEMISTRY CLUBS PROGRAM IS GROWING

The ACS High School Chemistry Club Program provides fun, authentic, and hands-on opportunities for students to:

- Experience chemistry beyond what is taught in the classroom
- Learn about post-secondary and career opportunities in chemistry
- Get involved in community building and service

At over 150 clubs across United States and Puerto Rico, students plan and enjoy experiences such as science shows for local elementary schools, field trips to chemical laboratories fundraisers. ACS provides a handbook of information for starting a club and resource packets which include tips and suggestions for club activities. If you are interested in finding out more about this exciting program, or you wish to join it check out the ChemClub website at [www.acs.org/chemclub](http://www.acs.org/chemclub) or e-mail us at [hschemclubs@acs.org](mailto:hschemclubs@acs.org).

*Have a Happy  
and Safe  
Holiday Season*

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