

# The Chemical Bulletin

<http://chicagoacs.org>

FEBRUARY • 2009

## CHICAGO SECTION AMERICAN CHEMICAL SOCIETY

### Joint Meeting of the Illinois Institute of Technology

### Department of Chemistry and The Chicago Section ACS

### Kilpatrick Lecture and Banquet

**FRIDAY, FEBRUARY 27, 2009**

Illinois Institute of Technology  
McCormick Tribune Campus Center  
Auditorium and Ballroom MTCC  
3201 South State Street  
Chicago, IL

#### DIRECTIONS TO THE MEETING

The IIT McCormick Tribune Campus Center (MTCC) is at the NE corner of 33rd and State Street. Our meeting space is in the SW corner.

#### From the North:

Take Dan Ryan Expressway (I-90/I-94) east to 31st Street exit, continue south on Wentworth Ave. to 33rd Street, turn left (east) onto 33rd Street and go 1/4 mile to State Street.

#### From the South:

Take Dan Ryan Expressway (I-90/I-94) west to 35th Street exit, continue north on LaSalle St. to 33rd Street, turn right (east) onto 33rd Street and go to State Street.

#### From Lake Shore Drive:

Exit at 31st Street, go inland (west) 3/4 mile to State Street, turn left (south) and go to 33rd Street.

#### From the West:

Take Ronald Reagan Tollway (I-88) to I-290 east (Eisenhower Expressway). Merge onto Dan Ryan Expressway. (I-90/I-94) east to 31st Street exit, continue south on Wentworth Ave. to 33rd Street, turn left (west) onto State Street.

#### By Public Transportation:

Both the Red and Green Lines serve IIT with stations at 35th street. Several CTA buses running on State Street

stop at the MTCC. The MTCC is served directly by CTA Bus #29.

**PARKING:** The closest parking lots are the Visitor's Parking Lot A4 immediately north of the MTCC and Lot D1 immediately south (across 33rd Street) of the MTCC. Parking is free after 7 p.m. in Lots A4 and D1. Before 7 p.m., parking is metered. Parking in Lot A4 is \$1 per hour (prepaid at a self service station).

There is free street parking on both sides of 30th Street (for a block west from State Street) and on State street north of 30th and south of 35th Street with rush hour restrictions on the west side (for south bound traffic from 4:30 to 6:30 p.m.)

Please check the Chicago section website for parking updates. Also visit [www.parking.iit.edu](http://www.parking.iit.edu) for parking information.

**PRE-DINNER TALK 4:30 - 5:30 P.M.**  
**"The Practicing Scientist and K-12 Science Education" presented by Dr. Susan V. Olesik**, Dow Professor, Department of Chemistry and the Nanoscience and Engineering Center, The Ohio State University

*(continued on page 2)*

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

#### 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 4 CPDU's.

**RECEPTION: 5:30 – 6:30 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 23.

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**KILPATRICK LECTURE 7:30 P.M.**



**Dr. Susan V. Olesik**, Dow Professor, Department of Chemistry and the Nanoscience and Engineering Center, The Ohio State University, Columbus, OH

**Title: "Unique Carbon Chemistry: Applications in Space Science and Nanoscience"**

*(continued on page 2)*

(continued from page 1)

**Abstract:** The synthesis of unique unsaturated precursor polymers has allowed the development of glassy carbon-based micro and nanofabricated devices for a broad range of applications. These polymers typically are soluble in common organic solvents and also have minimal weight loss when heated and converted to glassy carbon. Accordingly, micro and nanofabrication techniques can be used to generate structures with highly levels of nanoscale integrity. Applications that we are currently working on include carbon media that eventually may be able to detect early stages of lung cancer as well as carbon media for nanoscale biosensors. Similar precursor polymers were also previous used to make a carbon separation device to characterize the atmosphere of Titan, Saturn's largest moon. How can carbon do all this? This presentation will include a discussion of the unique properties of the precursor polymers and the resultant carbon materials.

**Biography:** Susan Olesik received her A.S. from Vincennes University, B.A. from DePauw University in 1977 and her Ph.D. in 1982 from the University of Wisconsin-Madison, working with James Taylor. She was also a postdoctoral fellow for Milos Novotny at Indiana University from 1982-1984 and for Tomas Baer at University of North Carolina-Chapel Hill from 1984-1986. She has been a faculty member at The Ohio State University since 1986, being promoted to Associate Professor in 1992 and Professor in 1997. In 1987, she received the American Society for Mass Spectrometry Research Award; in 1990 she received the Eli Lilly Research Award; in 1998 she received a Commendation from NASA for work on Cassini-Huygen's Probe; and in 2000 she received the AWISCO Woman in Science Award from the Association for Women in Science in Central Ohio. She has an extensive publication record, has served on numerous editorial advisory boards, as well as review boards. She is most known for work in two areas of separation science — Enhanced-fluidity Liquid Chromatography and Low temperature Glassy Carbon Chromatography. Most recently her research has expanded polymer synthesis in supercritical fluids, new separation science for high complicated mixtures and the synthesis of carbon micron and nanoparticles and fibers.

In 1999 Olesik started a science outreach program entitled, Wonders of Our World or W.O.W. It is a science education outreach project for elementary schools. The project involves the close collaboration of Ohio State University faculty members and students, the entire

faculty of elementary schools, middle school science teachers, and local area scientists. Through the collaboration with elementary school teachers, the program intends to 1) enhance the science literacy of elementary students and elementary school teachers, 2) increase the science material that K-8 science teachers are comfortable presenting to their students, 3) increase the involvement of local scientists, parents and undergraduate science students in important community projects, and 4) generate a model that can be used by scientists across the United States to assist science programs in other elementary schools.

W.O.W. will be finishing its tenth year of operation in the spring 2009. It serves over 2000 K-8 students every year through the strong efforts of more than 450 volunteer scientists. To date, the program has served over 10,000 elementary school students. The improvement in the students' content knowledge through this program is well documented through significant improvement in standardized test data for all students who have been involved in the program. However, the positive impact of this collaborative effort on the K-8 teachers and volunteers is also significant. While scientists often prefer to shun the lime light, their enthusiasm for their profession should be shared with others. This program is an example of how active scientists support K-12 science education on a continuing basis.

## WCC ARTICLE AUTHORS 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. Whether you interview a current chemist or research an historical chemist on the web, please join us in this stimulating activity.

CO-CHAIRS MARGY LEVENBERG AND SUSAN SHIH

## PRE-DINNER TALK

**Abstract:** The United States science and technology (S&T) enterprise is a key contributor to the world economy. According to the 2008 Science Indicators of the National Science Board, since 2003 the United States has been the world leader in science and technology value-added manufacturing, providing over 40% of the global S&T production. As manufacturing activity continues to leave the U.S., S&T innovation is becoming increasingly critical to our economic well-being. These facts clearly illustrate the need to keep the U.S. science and technology enterprise advancing forward. Continued innovations in S&T require a scientifically literate workforce, as well as a populace that appreciates the importance of science education to our place in the world economy.

This presentation will highlight a science outreach program that allows active scientists to productively collaborate with K-12 science teachers to advance K-12 science education. Ten years ago, the Wonders of Our World (W.O.W.) program was initiated as an alliance between scientists and teachers to improve K-5 science education. Today, this has expanded to include involvement in science outreach efforts that span K-16 science. The structure of these programs will be highlighted along with data illustrating their remarkable impact.

**Speaker's Bio:** See Kilpatrick Lecturer's information on this page.

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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 cut 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.

### Fried Green Egg

Kids, how can adding something purple to something white make something green? Red cabbage juice contains a natural pH indicator that changes color from purple to green under basic (alkaline) conditions. You can use this reaction to make a fried green egg.

First, with the help of an adult partner, prepare the red cabbage pH indicator:

1. Coarsely chop about a half cup of red cabbage.
2. Microwave the cabbage in a bowl until it is soft (about 4 minutes).
3. Allow the cabbage to cool in the bowl.
4. When cool, collect the juice in a cup. You can get more juice by wrapping the cabbage in a coffee filter or paper towel and squeezing.

Now, have your adult partner fry an egg:

1. Spray a pan with cooking spray. Heat the pan over medium-high heat.
2. Crack an egg and separate the egg white from the yolk. Set the yolk aside.
3. In a small bowl, mix the egg white with a small amount of red cabbage juice.

Did you see the color change? The more you mix, the more uniform the green color will be.

4. Add the egg white mixture to the hot pan. Set the egg yolk in the middle of the egg. Fry it and eat it like you would any other egg. Yum!

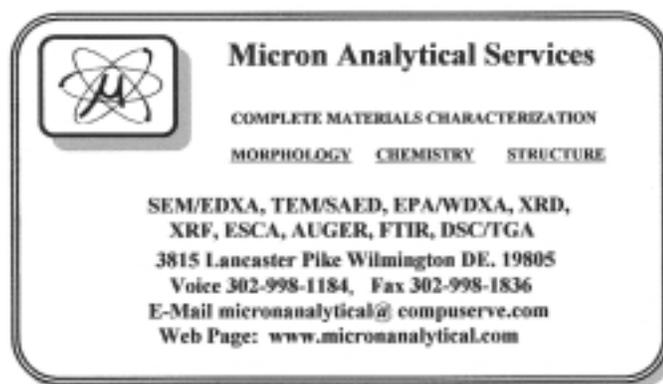
Here is how it works. The pigments in red cabbage are called anthocyanins. These pigments change color in response to changes in pH, which is a measure of how acidic or basic something is. Red cabbage juice is purplish-red under acidic conditions (pH less than 7), but changes to a blue-green color under alkaline conditions (pH greater than 7). Egg whites are alkaline (pH ~9) so when you mix the red cabbage juice into the egg white the pigment changes

color. The pH does not change as the egg is cooked so the color is stable. It's also edible, so you can eat the fruits of your labor!

References: Dr. Anne Marie Helmenstine at <http://chemistry.about.com/od/chemistryhowtoguide/a/friedgreenegg.htm>. For a video, see [http://www.metacafe.com/watch/938777/green\\_egg\\_trick/](http://www.metacafe.com/watch/938777/green_egg_trick/).

Edited by K. A. CARRADO, Argonne National Laboratory

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



### DINNER INFORMATION

(continued from page 1)

The cost for the banquet dinner 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.

**Banquet Menu:** Salad of mixed greens with candied walnuts, raisins, goat cheese and pomegranate vinaigrette. Assorted dinner rolls with butter.

**Choice of entrée:** Grilled salmon with chili lime sauce, served with wild rice pilaf and asparagus; Fire-roasted Angus beef filet with blue cheese friter atop herbed mash potatoes with chanterelle mushrooms, white corn and heirloom tomatoes; or Pappardelle pasta with roasted eggplant, zucchini squash and mushrooms served in a creamy tomato sauce and topped with shredded parmesan cheese.

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Dessert will be Tiramisu, served with coffee or hot tea.

### DINNER MEAL ALTERNATIVES

Those attending the meeting may wish to use the student cafeteria that features various buffet stations on an all-you-can-eat basis for \$10 (plus tax) per person. The student cafeteria is located in the McCormick Tribune Campus Center (MTCC) which is the same building as where the lectures will be held.

The student cafeteria opens at 4:30 P.M. and closes at 7:00 P.M. sharp for dinner. You should plan to be there prior to 6:30 P.M.

**Please inform the Section Office if you plan to use the cafeteria option so that we can inform the staff there to expect additional people.**

Also in the same building is a small convenience store which offers sandwiches and soft drinks.

### 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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## JOB CLUB

The next meeting of the Chicago Section ACS Job Club will be held on **Friday, February 27 at 5:00 p.m.** at the Illinois Institute of Technology's McCormick Tribune Conference Center. 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 (Banquet meal) or \$10 (plus tax) in the student cafeteria. 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.

## 25 YEARS OF CHEMMATTERS ON ONE CD!

ChemMatters is the ACS magazine for high school chemistry students. Are you missing some back issues? Complete your classroom *ChemMatters* set with the new 25-year CD. You will find every issue from February 1983 through April 2008 along with their corresponding *ChemMatters* Teacher's Guide ever published (since February 1990). There is also a search engine that helps you look for articles by keyword and an index that sorts the articles by title, author, and keyword. The price is \$30. Site licenses are available for whole-school use for \$105. Call 1-800-227-5558 or order online at [http://portal.acs.org/portal/acs/corg/content?\\_nfpb=true&\\_pageLabel=PP\\_TRANSITIONMAIN&node\\_id=1090&use\\_sec=false&sec\\_url\\_var=region1](http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_TRANSITIONMAIN&node_id=1090&use_sec=false&sec_url_var=region1).

## AS THE CHANGING OF THE GUARD – OBAMA ASSUMES THE PRESIDENCY

As I am filing this story while at the same time beginning the new year of 2009, I can't help reflecting on the fact that we are about to witness a change in our U.S. presidential office such as has not happened before in this country's history. I must confess that it has been quite some time since I can recall that there has been as much interest in the changing of the office as we are now witnessing. And never before have I seen the opportunity to observe the change as vividly as I have on this occasion. To a certain degree, it is because of the new technology that is now available. But it is also wrapped up and involved with the new president himself and his family.

I won't try to say anymore about his family, although they certainly are major contributors to the overall transformation we are observing. But the president-elect is the one we are involved with and whose leadership, policy declarations and governmental practices will lead us over the next 4 years. He has finished choosing his cabinet officers weeks before his inauguration, and indeed, will be looking to start offering up legislation to improve the financial state of the country as soon as he takes office on January 20. As I am writing this, he has already gone to DC, and has started scheduling preparatory meetings with congressional leaders in order to present economy-repair legislation as soon as he is sworn in. Given the present state of the economy, indications are that this will be welcomed by the nation and supported by congress.

I have followed some of the preparation and planning from Obama – Biden at <http://change.gov> since the election. It will be interesting to see if this interim site stays active after the swearing in. If so, it will be the first time an administration has had such a site. Certainly, it is the establishment of the incoming administration website as a first.

By the time you read this, he will already be sworn in and I am sure that significant activity and actions will have already taken place. But there will still be much to get done. I am going to point out a couple of areas that we must be looking for early in the new administration. One is science education. He has appointed Arne Duncan, Chicago Supt of Schools, to lead the Education Department, and we will watch closely to see how this transpires. There is an excellent article in "Education Week," Nov 12, by David J. Hoff which describes some of the challenges ahead for the education secretary.

Finally, let me point out that there is an extended description of the incoming

administration's proposals for science and technology (S&T) on the website. One can get a lot of information from observing the president-elect's website as given above, then look under the various categories; especially Education, Energy & Environment, and Technology. The need for and the increased use and emphasis on S&T comes through in all of the proposals given under these categories. There is much that needs to be done in all of these areas, and I wish the new administration much success as it tackles these challenging issues during some very difficult and challenging times.

JIM SHOFFNER

Co-Chair, Public Affairs Committee

## BP'S EDUCATIONAL SERVICES

The oil company, BP, is doing a lot of work to support schools. Go to the BP educational service website at: [www.bp.com/bpes](http://www.bp.com/bpes). It contains a carbon footprint calculator for schools, online science experiments, climate change materials, and even kits allowing pupils to experiment with solar energy or investigate rocks and fossils.

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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 groups. The committee will publish this list and distribute it into 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".

FRAN KRAVITZ

PRIMARY EDUCATION COMMITTEE CHAIR

## NEW ENERGY RESOURCE FROM THE NATIONAL ACADEMIES

The National Academies has just released a new publication entitled "What You Need to Know About Energy". This free booklet is geared toward a general audience and provides basic and reliable information about energy, including an account of our main sources of energy and a survey of the nation's energy demand versus the world's available supply. It then looks ahead to the quest for greater energy efficiency and to a portfolio of emerging technologies. A PDF of the booklet is available at <http://www7.nationalacademies.org/energy/energybooklet.html>. More information (including a widget to post on a Web site) can be found on the National Academies Press catalog page [http://www.nap.edu/catalog.php?record\\_id=12204](http://www.nap.edu/catalog.php?record_id=12204).

## DUPAGE AREA ENGINEERS WEEK EXPO 2009: 25TH ANNIVERSARY

The DuPage Area Engineers Week is celebrating its 25th anniversary this year on Thursday, February 19 and Saturday, February 21 at Illinois Institute of Technology's Daniel F. and Ada L. Rice Campus at 201 East Loop Road in Wheaton. Events are free and open to the public. Celebrate the fun that math, science and engineering provide to learners of all ages.

The theme for the 2009 Expo is "Sustainability and Alternate Energy Resources." With the demand for natural resources currently at unprecedented levels, engineers are at the forefront of applying new and sustainable ways in which the world can function. 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. The 2009 Expo will be Saturday February 21st, from 11:00 a.m. to 3:30 p.m. at Illinois Institute of Technology's Daniel F. and Ada L. Rice Campus. Presentations are directed toward introducing 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.

In addition, there will be a presentation and discussion on Thursday evening, February 19, 2009 at Illinois Institute of Technology's Rice Campus in Wheaton, beginning at 6:30 p.m. Rosemarie Andolino, Executive Director of the O'Hare Modernization Program, will address not only the logistics and timeline of the project, but also the surprisingly "green" aspects of this modernization and expansion effort. A brief reception will precede the presentation, which will then be followed by a question and answer period.

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 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 these activities. And check out the Web site from time to time to see what's new: <http://danada.rice.iit.edu/eweek>. For more information on the DuPage program, call 630.682.6040 or email [kozi@iit.edu](mailto:kozi@iit.edu).

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## PITTCON IS COMING TO CHICAGO MARCH 8-13, 2009

Pittcon is the most comprehensive annual meeting on laboratory science in the world, offering a first class lab product exposition, a diverse, high quality technical program, unparalleled educational programs, and invaluable peer to peer networking opportunities. The 2009 conference will be March 8-13 in Chicago at McCormick Place. The Science Week Program which accompanies the conference offers extensive teacher and student programs, which are FREE. Even better, there are GRANTS for equipment and more.

Your best source of information is the Pittcon 2009 Science Week webpage. Go to the Pittcon webpage <http://www.pittcon.org/> and then select "Science Week". It will take you to the Science Week webpage from which you can select information regarding Student Workshops, Teacher Workshops and a High School Lecture/Demo.

## IIT ALUM WINS GRANDE MEDAILLE

U. S. atmospheric scientist, **Susan Solomon**, who received her B.S. in Chemistry from IIT, won this year's Grande Medaille from the Institute of France's Academy of Science for her contributions to both the ozone in atmospheric chemistry and to the Inter-governmental Panel on Climate Change (IPCC) Science Working Group. Solomon, a senior scientist with the U. S. National Oceanic and Atmospheric Administration in Boulder, Colorado, helped link the growing ozone hole to the man-made chlorofluorocarbon pollutants. This seminal chemical kinetics mechanistic analysis led to an internationally agreed upon ban on the manufacture of such compounds.

In addition, her work as co-chair of the IPCC Science Working Group laid the foundation for Al Gore's *An Inconvenient Truth* that in turn led to the Nobel Prize being shared equally by Mr. Gore and the IPCC. *The Report of the Science Working Group* of the IPCC is one of the required reference works in the new cross-campus senior level course at IIT, Chemistry 410, Science of Climate Change.

PETER LYKOS

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## FEBRUARY HISTORICAL EVENTS IN CHEMISTRY

**February 1, 1905** Emilio Segré, who shared the Nobel Prize in Physics (1959) with Owen Chamberlain for their discovery of the antiproton, was born. He co-discovered Technetium with C. Perrier in 1937 and Astatine with D. R. Corson and R. MacKenzie in 1940.

**February 2, 1802** Jean Baptiste Bous-singault, who demonstrated that plants absorb nitrogen from soil in the form of nitrates and not from air as previously believed, was born.

**February 6, 1892** William P. Murphy, who shared the Nobel Prize in Physiology or Medicine (1934) with George R. Minot & George H. Whipple for their discoveries concerning liver therapy in cases of anemia, was born.

**February 7, 1834** Dimitri I. Mendeleev, who discovered the Periodic Law and created the first Periodic Table, was born.

**February 8, 1795** Friedlieb F. Runge, who discovered carbolic acid (phenol) and ani-line in coal tar, was born.

**February 12, 1826** Moritz Traube, who researched semipermeable membranes, sugars, respiration, fermentation, oxidation, protoplasm, and muscle, was born.

**February 14, 1917** Herbert A. Hauptman, who developed methods for the determination of crystal structures and received the Nobel Prize in 1985 with Jerome Karle for their outstanding achievements in the development of direct methods for the determination of crystal structures, was born.

**February 16, 1955** F. P. Bundy, H. T. Hall, H. M. Strong and R. H. O. Wentoff announced the artificial synthesis of diamonds at General Electric Research Laboratories.

**February 19, 1859** Svante A. Arrhenius, who devised a theory of electrolytic dissociation and was a researcher in viscosity and reaction rates, was born. In 1903, he was awarded the Nobel Prize in Chemistry in recognition of the extraordinary services he has rendered to the advancement of chemistry by his electrolytic theory of dissociation.

**February 23, 1884** Casimir Funk, who isolated nicotinic acid from rice polishing and used it against pellagra, was born. He pursued the idea that diseases such as beriberi, scurvy, rickets and pellagra were caused by lack of

vital substances in the diet.

**February 25, 1880** Arthur B. Lamb, editor of the Journal of the American Chemical Society (1917-1949), was born.

**February 28, 1901** Linus C. Pauling, who received the Nobel Prize for Chemistry in 1954 for his research into the nature of the chemical bond and its application to the elucidation of the structure of complex substances and the Nobel Prize Peace in 1962, was born.

LEOPOLD MAY

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>

**NEXT ISSUE is**  
for  
**March 18**  
**Public Affairs Award**  
**And Meeting**

### CONTACT THE CHAIR

Do you have any questions, suggestions, ideas, gripes, or complaints relating to the Chicago Section? Do you want to volunteer, help out, or lend a hand with Section programs or activities? Then contact your Chair. Simply log onto the Section's Web Page at <http://chicagoacs.org>, find the green button "Contact the Chair", and send me an e-mail. If I can answer your query I will respond personally. If I can't I will forward your e-mail to someone who can, or try to provide you with a contact — all in a timely manner. The Section belongs to you and the other 4,600 ACS members who reside in the Chicago area (northeast Illinois and northwest Indiana). Only you can make it work for you by being involved. But you can also make it fail by not being involved. I look forward to hearing from you.

AMBER ARZADON  
CHICAGO SECTION CHAIR

### Advertising Index

Company	Page	Telephone	URL
Micron Inc.	3	302-998-1184	<a href="http://www.micronanalytical.com">www.micronanalytical.com</a>
Mass-Vac, Inc.	4	978-667-2393	<a href="http://www.massvac.com">www.massvac.com</a>
Columbia Analytical Services	5	520-573-1061	<a href="http://www.caslab.com">www.caslab.com</a>
Northup RTS	6	847-579-0049	<a href="http://www.toxconsultants.com">www.toxconsultants.com</a>
Pro Tech Engineering	6	847-714-9214	<a href="http://www.processtechnologyengineering.com">www.processtechnologyengineering.com</a>

## GREAT LAKES REGIONAL MEETING

The 38th Great Lakes Regional meeting (GLRM) will be held **May 13-16, 2009** at the Lincolnshire Marriott in Lincolnshire, IL. The theme for this meeting is "A Better Environment Through Chemistry." Symposia planned for the meeting include sessions on small chemical business, medicinal chemistry, plant biochemistry, material science, polymer chemistry, non-crystalline X-ray structural chemistry and the environment, molecular simulation and the environment, environmental chemistry and the Great Lakes, food chemistry, issues and resources in chemical health and safety and general sessions in organic chemistry, inorganic chemistry, physical chemistry, analytical chemistry and biochemistry.

In addition, a number of workshops and other events are planned including career workshops, ethics workshops, a Botanic Garden tour and attendance at the Lincolnshire Marriott dinner theater show "Spelling Bee", and the Willard Gibbs Award Banquet to publicly recognize an eminent chemist who, through years of application and devotion, has brought to the world developments that enable everyone to live more comfortably and to understand this world better.

Lincolnshire is a suburb of Chicago and so many activities located in Chicago are available by train from the location.

The call for papers opened on November 15, 2008. Please go to our website at [www.glr2009.org](http://www.glr2009.org) for the latest information on the meeting, including the paper abstract submission process and meeting registration.

Put your ad here  
Reach prospective clients  
by advertising in  
*The Chemical Bulletin*  
.....  
For more information,  
contact the Section office  
Phone: (847) 391-9091

## CALENDAR

**February 1:** Lederman Science Center: Ask-a-Scientist Guided Tour of Fermilab: "A Quantum Journey" by Peter Skands, Theory Department, Fermilab. 1 - 4 pm at Wildon Hall, 1st Floor, One West Conference Room, Fermilab. Free. Register at [http://ed.fnal.gov/lasso/registration/register\\_add.lasso?session\\_id=722](http://ed.fnal.gov/lasso/registration/register_add.lasso?session_id=722) or contact Nancy Lanning, [edreg@fnal.gov](mailto:edreg@fnal.gov), (630) 840-5588 by noon, Jan. 30.

**February 12-16:** Annual meeting of The American Association for the Advancement of Science, Hyatt Regency Chicago, 151 E. Wacker Dr., Chicago. Register at [www.aaas.org/meetings/2009/registration/](http://www.aaas.org/meetings/2009/registration/). Special rates available until Jan. 19. Visit website [www.aaas.org/meetings/](http://www.aaas.org/meetings/).

**February 19 & 21:** DuPage Area Engineers Week's 25th anniversary celebration on Thursday, February 19 and Saturday, February 21 at Illinois Institute of Technology's Daniel F. and Ada L. Rice Campus at 201 East Loop Road in Wheaton, IL. **See article in this issue.**

**February 27:** Chicago Section ACS Dinner meeting held jointly with IIT. This is the Kilpatrick Lecture. **See this issue.**

**March 2:** The Chicago Chapter of ChemPharma will meet from 6 - 9 p.m. at Pompei Restaurant, Oakbrook Terrace, IL. The speaker will be Michael L. Hetzel, Vice President Americas, Pro QC International. The topic is "Emerging Trends in Global Manufacturing". For more details and registration, visit the website <http://www.chempharma.net/>.

**March 8-13:** PittCon 2009 Conference and Expo and Science Week, McCormick Place, Chicago. Visit [www.pittcon.org](http://www.pittcon.org) for more information.

**March 18:** Chicago Section ACS Public Affairs Meeting.

**March 22-26:** ACS National Meeting in Salt Lake City, Utah.

**May 13-16:** The 38th Great Lakes Regional meeting (GLRM) will be held at the Lincolnshire Marriott in Lincolnshire, IL. The theme is "A Better Environment Through Chemistry." The call for papers opened November 15, 2008. Please go to our website at [www.glr2009.org](http://www.glr2009.org) for the latest information on the meeting. **See article in this issue.**

**June 22-26:** National Plastics Expo 2009 in Chicago. Contact Phyllis Hortie, (202) 974-5295, [phortie@plasticsindustry.org](mailto:phortie@plasticsindustry.org); website:[www.npe.org](http://www.npe.org).

### NOTE:

**The ACS Chicago Section Office  
has moved to :**

**1400 Renaissance Dr.**

**Suite 312**

**Park Ridge, IL 60068**

**The New Phone # is 847-391-9091**

## ARE YOU UNEMPLOYED?

Are you seeking a better job? Are you looking to improve your career? The place to start is with your resume. That is the single tool that will get you an interview, illustrate your professional strengths, and show how you can improve your importance to your employer.

You can get help improving your resume through the Career Consultants. These are volunteers trained by the American Chemical Society to assist its members with writing resumes, contacting prospective employers, and providing tips on interviews.

There are several Career Consultants in the Chicago Section who are willing to meet with you and help improve your resume. **Simply call the Section office at 847-391-9091 and set up an appointment. Fifteen to thirty-minute sessions will be arranged at our monthly meetings.** Should you require more time arrangements can be made with your consultant to continue discussions by telephone, by e-mail or by additional face-to-face sessions. **You also can attend the Section's Job Club where you can network with other people having similar concerns.**

We are here to help. All you need to do is pick up the telephone and bring copies of your resume to the next monthly meeting.

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

## BYTESIZE SCIENCE PODCASTS

The ACS Office of Communications has launched Bytesize Science, an educational, entertaining podcast for young listeners. Bytesize Science translates cutting-edge scientific discoveries from ACS' 36 peer-reviewed journals into stories for young listeners about science, health, medicine, energy, food, and other topics. New installments of Bytesize Science are posted every Monday and available without charge. Some episodes are available in Spanish. For more information and to listen to the podcasts, please visit: [http://portal.acs.org/portal/acs/corg/content?\\_nfpb=true&\\_pageLabel=PP\\_SUPERARTICLE&node\\_id=2096&use\\_sec=false&sec\\_url\\_var=region1](http://portal.acs.org/portal/acs/corg/content?_nfpb=true&_pageLabel=PP_SUPERARTICLE&node_id=2096&use_sec=false&sec_url_var=region1)