

The Chemical Bulletin

<http://chicagoacs.org>

JANUARY • 2010

CHICAGO SECTION AMERICAN CHEMICAL SOCIETY

Joint Meeting with the American Institute of
Chemical Engineers and ChemPharma

THURSDAY, JANUARY 21, 2010

European Crystal Banquet & Conference Center
519 W. Algonquin Road
Arlington Heights, IL 60005
Parlor BC
847-437-5590

cagoacs@ameritech.net) or **website**
(<http://chicagoacs.org>) by noon on Tuesday, January 19.

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GENERAL MEETING 7:30 P.M.

case. When the case involves science or engineering, the courts rely on experts, who by virtue of their education, training and technical experience in the forensics sciences and the law, can help establish the scientific facts of

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DIRECTIONS TO THE MEETING

From Chicago:

Take I-90 West. Exit at Arlington Heights Road and turn right (north). Go to the first stoplight, which is Algonquin Road. Turn left onto Algonquin and go ½ mile to European Crystal.

From Northern Indiana and South Suburbs:

Take I-294 North to I-90 West. Exit at Arlington Heights Road and turn right (north). Then follow the directions given above.

From I-290/I-355 or Route 53:

Northbound I-290 & I-355 merge with Route 53. Take these combined roads to Higgins Road exit. Merge onto East Frontage Road and turn right onto Golf Road. Go 2 miles and turn right onto Algonquin Road. Go 1/3 mile to European Crystal.

PARKING: Free

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

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

DINNER 6:30 P.M.

Dinner reservations are required and should be received in the Section Office via **phone** (847-391-9091), **email** (chi-



Dr. Michael G. Koehler
CEO
Packer Engineering
Naperville, IL

Topic: "Chemists and Engineers in the Courtroom"

Abstract: Imagine yourself as a juror faced with the responsibility of deciding the fate of a case brought before the courts involving a product failure, a chemical explosion, an environmental contamination, or a toxic fatality. You spend days hearing from both sides, plaintiff and defense, presenting their

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the case and provide the courts with opinions regarding the evidence. While the role of courtroom experts and forensic scientists has gained much attention on television shows such as *Crime Scene Investigators* (CSI), the real life of scientific experts in the courtroom requires a unique set of technical, legal and communication skills. Evidence and scene preservation techniques, sample collection and analysis, documentation and demonstrations are essential elements of the fact finding process. Chain of custody, spoliation of evidence and the Daubert standard are challenged throughout the process. This talk will highlight many of the approaches and techniques used in the forensic sciences and the legal obligations associated with the role of expert witness. We will conclude with a look into how technology is impacting the role of chemists and engineers in the courtroom.

Biography: Dr. Koehler is the CEO of Packer Engineering, Inc., a multi-disciplinary engineering consulting and technical services company, offers engineering investigation and analysis, customized and routine testing, accident investigation and reconstruction, and pretrial and courtroom testimony. Prior to coming to Packer Engineering as CEO, Dr. Koehler was involved in a broad range of chemical and process research projects at both Honeywell and Searle Labs including the development and toxicological evaluation of fluorocarbon refrigerants, blowing agents and solvents; polymers and composites; aerospace environmental control systems, air quality technology, aerospace life support systems; advanced coatings; advanced aviation fuels; catalysts; separation membranes; fuel cell technologies, chemical demilitarization, chem./bio protection, as well as environment and sustainability programs.

He has published extensively on subject areas which include drug design techniques, chemical structure-property relationships, polymer theories, indoor air quality, chemical simulations, fuels properties, and coatings.

He received his B.S. in Chemistry, Mathematics and Computer Sciences from Loyola University in 1982 and his Ph.D. from the University of Illinois in 1986.

**REGISTER ONLINE for
Chicago Section
monthly meetings
www.ChicagoACS.org**

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DINNER

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.**

Menu: Entrée choice of Brochette of Beef on Bed of Rice with Peppercorn Sauce, Orange Roughy with Rice Pilaf, or Vegetarian (Sautéed vegetables in phyllo with vegetable puree); dinner includes vegetable medley of broccoli, baby carrots & rutabaga, rolls and butter, beverage, and Apple Crumb Cake.

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.

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!

JOB CLUB

The next meeting of the Chicago Section ACS Job Club will be held on **Thursday, January 21 at 5:00 p.m. at the European Crystal Banquet & 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 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.

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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.

Popcorn Experiments

Kids, what makes popcorn pop? This activity requires a bag of unpopped popcorn kernels divided into three parts. Perform the following three set-up steps:

1. Put 1/3 of the original unpopped kernels in a plastic container with two tablespoons of water. Put the lid on and shake the kernels so that they are all coated with water. Shake from time to time over a 2-day period. After 2 days the corn will absorb all of the water and the kernels will appear dry.

2. Spread 1/3 of the original unpopped kernels on a cookie sheet and have an adult partner warm them in an oven at 200° F for 2-3 hours to **roast** them.

3. Keep the last 1/3 of the original unpopped kernels aside as your **control** sample.

Next, put 1 tablespoon of oil in a corn popper with the **control** unpopped popcorn and turn the popper on. Listen and watch as the corn pops. Notice the condensation that forms on the inside of the popper. That condensation is proof that moisture in the seeds is responsible for the explosion. As that moisture inside the seeds changes into a gas, it makes the corn pop. Put the popped corn into one of 3 equal-size bowls labeled "control" or "regular popcorn."

Next, pop the 1/3 **roasted** popcorn with 1 tablespoon of oil. Guess what will happen? Do they pop a lot more quietly than the control popcorn? Put this popcorn into a bowl labeled "dried popcorn."

Now pop 1/3 of the popcorn that has water added. You are in for a surprise! The popcorn is explosively loud, and the popped corn is fragmented and very small. Put it in a bowl labeled "water-added popcorn."

Next, determine which popcorn popped best. Do this by counting 20

popped kernels of each type into a clear glass and measuring the height of the column of the popcorn with a ruler. The results should be:

The regular, control popcorn is the largest.

The dried popcorn is slightly smaller.

The wet popcorn is very much smaller.

What's going on here? Popcorn is created by an explosion. Water inside a popcorn kernel must be heated to about 450°F (232°C), at which point the vapor pressure is about 135 pounds per square inch (or 9 times atmospheric pressure). The tough outside hull is a watertight container, keeping the steam confined. Since the water is spread throughout the soft starch of the kernel, the expanding steam makes tiny bubbles in the hot starch. Pent-up steam builds up in pressure, putting more and more force on the hull until it can't take it anymore and it ruptures. This kernel cools quickly to become the firm white mass that we like to eat. Eating your results is perfectly fine — bon appétit!

References:

Vicki Cobb's book *Junk Food*, which is part of her "Where's the Science Here?" series published by Millbrook Press.

http://www.educationworld.com/a_lesson/showbiz/science/showbiz/science054.shtml/od/chemistrymagic/a/liquid-science-magic-trick.htm

SUBMITTED BY DR. KATHLEEN CARRADO

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

Celebrating 15 Years of ACS Scholars

In 2010, the ACS Scholars Program, which provides renewable scholarships to underrepresented minority students who want to enter the fields of chemistry or chemistry-related fields, will celebrate 15 years and more than 2200 scholarship recipients. The anniversary will be celebrated with special symposia at both ACS national meetings in 2010, including a technical symposium featuring current and graduated ACS Scholars on Monday, March 22, 2010, at the ACS Spring National Meeting in San Francisco.

Applications are now being accepted from prospective ACS Scholars for the 2010-2011 academic year; further details and online application materials are available at www.acs.org/scholars.

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JANUARY HISTORICAL EVENTS IN CHEMISTRY

January 1, 1998 Rhodia was established from the merger of Rhône-Poulenc's divisions of chemicals, fibers and polymers. It was originally founded as the Société Chimique des Usines du Rhône in 1895.

January 3, 1871 Henry Bradley, Binghamton, NY, was granted the first patent on oleomargarine (U.S. Patent No. 110,626).

January 5, 1943 George Washington Carver, who isolated and synthesized over 400 products from peanuts and sweet potatoes, died.

January 9, 1922 H. Gobind Khorana, first to synthesize an artificial gene, was born. He did research on the interpretation of genetic code and protein synthesis function. In 1968, he shared the Nobel Prize in Physiology or Medicine with Marshall W. Nirenberg and Robert W. Holley for their interpretation of the genetic code and its function in protein synthesis.

January 12, 1579 Jan Baptist Van Helmont, an alchemist who proposed two basic elements, air and water, was a founder of pneumatic chemistry and coined the term "gas", was born.

January 15, 1785 William Prout, who suggested that all atomic weights were multiples of the weight of hydrogen (Prout's Hypothesis) and identified hydrochloric acid in the stomach, was born.

January 16, 1817 Thomas Antisell, the first president of the Chemical Society of Washington, was born.

January 17, 1910 Frederick W. G. Kohlrausch, a researcher on electrical conductivity, dilution of strong electrolytes and conductivity (Kohlrausch's equation), died.

January 19, 1885 Harry L. Fisher, an inventor in the field of rubber technology and synthetic rubber, was born.

January 22, 1917 William D. McElroy, who discovered the enzyme that makes fireflies glow (while he was at Johns Hopkins University, where he served as Chairman of the Biology Department), was born. He was also the head of the National Science Foundation from 1969 to 1972.

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PUBLIC AFFAIRS COLUMN

Keeping up with Science and Technology Policy Issues

It is part of my responsibility as co-chair of the Public Affairs Committee to keep our section aware of what is going on in the area of science policy. I personally have been involved in this area for nearly 40 years now, long before I became officially involved for the section. Barb Moriarty has been serving with me as co-chair for the past ten years or so. I know that part of the reason is my interest in those areas of politics and policy which relate to how we live and work. My interest goes back to the time I was growing up in Missouri. I was exposed to newspapers early and of course, when I became interested in science, I began to follow the science and technology relationship with regard to government and public policy.

There were, of course, huge events such as the science & technology that was developed during WWII, nuclear energy, the development of materials that became useful consumer products, the development of many medicinal products, and the technological developments that accompanied our industries and happened along the way during the time I was growing up and coming of age. We, that is, our country, led the way in much of the science and technology that took place over the past 75 years that brought on these technological advances.

What I want to do right now is share with you access to an article which shows a timeline of just how the federal government has tried to keep pace with some of the involvements of industrial technology in our society, and where necessary, act to protect the public. There, are of course, other laws that are of interest, especially in the areas of food and health. But this collection is certainly a good place to start.

The article appeared in Congress.org, one of the many public interest websites that are now available on the web. I have listed below the address in Congress.org that will get you to the article of interest that presents a list of the most important environmental laws and organizations. They are listed starting from 1948, when the first of the important environmental laws was passed, the Federal Water Pollution Control Act (1948). This act was followed by the Air Pollution Control Act (1955), the Clean Air Act (1963) and the Air Quality Act (1967). These initial acts were not very restrictive on the whole, and although

they were mostly about regulating manufacturing and production, they were an indication of what had to come, as we saw in the following years. The list of environmental laws listed may be accessed by using the email address given below.

Of course, the list of issues in this instance were all mainly about our air and water environment. There has been much that has been done in the area of food safety, work environment, transportation etc.; all of which have been worked on, and significantly improved and modified over the past years. Go to http://www.congress.org/news/2009/11/25/the_notsodirty_two_dozen?all=1

JIM SHOFFNER
Co-Chair, Public Affairs Committee

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Announcement

The recipient of the 2010 **Willard Gibbs Medal** is **Professor Maurice Brookhart**, the William R. Kenan, Jr. Professor of Chemistry, University of North Carolina. Professor Brookhart will receive the Gibbs Medal and present his award address at the May 14 meeting of the Chicago Section.

GREETINGS FROM THE CHAIR

It is the beginning of a new year, and that means the Chicago Section adjusts to a new chair. This will be my second term as chair; my first was in 2007. Our thanks go to Amber Arzadon for leading the section as the 2009 chair. She has been very enthusiastic and generous with her time supporting the various section activities. The support of our volunteers is the major factor in maintaining the section's service to our members and our outreach to the general public. I am looking forward to an exciting and active year.

You probably are aware that our section has a monthly dinner meeting with an interesting presentation by a speaker with ties to the world of chemistry. Some meetings will have a topical speaker before dinner; and our Job Club meets before most of the monthly meetings. You can find the details of each meeting in the *Chemical Bulletin* or on the ACS Chicago Section Website: <http://chicagoacs.org>. The Section sponsors activities for Earth Day, National Chemistry Week, and the Illinois State Fair. All of these events need help from section members.

Please consider volunteering for some of these activities or other section programs! Do you have any questions, comments, or suggestions? Visit the section website, click on Contact Us, find the green "Contact the Chair" link, and send me an email. You will get a timely response and whatever information you need. The section belongs to the 4,600 ACS members who reside in the Chicago area. Get involved and make our section activities even better! I look forward to hearing from you.

KEN FIVIZZANI
CHICAGO SECTION CHAIR

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the Section office
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January 23, 1929 John C. Polanyi, who did research using infrared chemiluminescence to follow the excited reaction products, was born. He shared the Nobel Prize with Dudley R. Herschbach and Yuan T. Lee in 1986 for their contributions concerning the dynamics of chemical elementary processes.

January 24, 1935 Beer was first sold in cans.

January 25, 1917 Ilya Prigogine, a researcher in irreversible processes, was born. He was awarded the Nobel Prize in Chemistry in 1977 for his contributions to non-equilibrium thermodynamics, particularly the theory of dissipative structures.

January 29, 1838 Edward Morley, who performed ether drift experiments with Albert A. Mickelson and made extremely accurate determination of the combining weights of hydrogen and oxygen, was born.

January 30, 1891 Harold Booth, who was a researcher in inorganic chemistry, particularly with fluoride gases, 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>

DEATH NOTICE

Long-time Chicago Section member, **Joseph S. Mihina**, passed away August 19, 2009 at the age of 91. Joe was an emeritus ACS member and had served on a number of committees. He earned a bachelor's degree in chemistry from New York University, a M.S. in physical chemistry and a Ph.D. in organic chemistry, both from Michigan State University. He then did post-doctorate work at Northwestern University prior to joining G.D.Searle in Skokie in 1951. At Searle, he worked as a research chemist and, later, as a manager in the chemical manufacturing department. He is survived by his wife, Bettye, a daughter and a son.

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

THE UN-COMFORT ZONE WITH ROBERT WILSON

Thrown into the Driver's Seat

On June 29, 1863, a 23 year old First Lieutenant received an unexpected promotion. The freckle faced, strawberry blonde, who graduated at the bottom of his class at West Point, was elevated directly to the rank of Brigadier General in the Union Army. He completely skipped over the traditional ranks in between of Captain, Major, and Colonel. As you can imagine such a promotion was met with skepticism, dismay, and envy by his former peers and superiors. Especially at a time when the South was winning against the North during the American Civil War.

Major General Alfred Pleasonton, who promoted the boy, saw his gamble put to the test just four days later in the Battle of Gettysburg. The young general was put in charge of the Michigan Cavalry and tasked with keeping Confederate General Jeb Stuart from attacking the Union Army's rear.

Was he up to the task? Could he keep that dubious star on his shoulder that so many wanted removed? Motivated by the desire to prove himself, George Armstrong Custer, his gleaming saber outstretched in front of him, led the cavalry charge and held the Union line. His successful leadership served as a crucial contribution to the battle that was the turning point in the North winning the war.

When leadership is thrust upon us, many of us are motivated to rise to the occasion. Sometimes, however, leadership must rise in a vacuum. What motivates us to become leaders when there are none?

A few years ago, five friends and I went white water rafting for the very first time. We went on the upper Ocoee River in Tennessee where the rapids are rated Class Four. Not exactly the best choice for beginners, but we had a competent guide, who gave us plenty of instructions on when and how to paddle. He was so good that we were the only rafters in a group of ten rafts that did not capsize and get soaked.

Then halfway through our trip, we went over a small waterfall. When our rubber raft hit the bottom it bent in the middle and folded up like a book. When it sprung back apart our guide was catapulted from the boat and landed several feet behind us. As our leaderless raft sped forward, getting further and further away from our guide, five of us thought, "Uh, oh, what are we going to do!" Before we could panic, my friend Bill started barking commands, "Left side four strokes! Right side two strokes!"

With great relief we followed his orders and within minutes he had us safely out of the rushing white water and into the calmer water by the river bank where our guide was able to catch up to us.

A leadership role can jump start motivation. When you have the responsibility of guiding others, it forces you to guide yourself first. I have found that volunteering for leadership roles at work and for non-profit organizations to be self-motivating. Back in the early 1990's, I had a particularly bad year. My mother passed away, a business venture failed, and I had a falling out with my best friend. Needless to say, I was in a funk, and seriously needed something to move me out of it. That's when I learned that my community association needed a new President. It was a huge job with a two year commitment that required fund raising, event planning, managing several committees, and supervising dozens of volunteers. It consumed tons of my time, but it also taught me that I could do more in a day than I ever knew. During that same two year period, I launched two new businesses both of which became success stories.

As a manager, you can motivate your employees (or your volunteers) by giving them a mantle of leadership. Suddenly he or she will no longer be just another disaffected cog in the wheel. But with a position of responsibility, those persons will be empowered to do more and be more. Sure, it may require a greater effort on your part, but you will challenge their minds, expand their abilities, and imbue them with a sense of accomplishment.

--

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.

ACS NOW MORE THAN EVER

Check out <http://acsnow.org> now, a new innovative and paperless electronic online experience for ACS members and potential members. Called ACS Now More than Ever, it's the next generation ACS e-annual report plus an overview of ACS member benefits.

The site not only offers access to the ACS e-annual report, it also showcases many of the ACS resources that can help you further your research, jumpstart your career and plan your professional future.

ASTRA STATEMENT ON PRESIDENT OBAMA'S COMMITMENT TO DOUBLING OF SCIENCE FUNDING AND STEM EDUCATION

The following statement was issued by Dr. Mary L. Good, Chairman of ASTRA, The Alliance for Science & Technology Research in America, following President Obama's "Necessity of Science" speech before the National Academies of Science on April 27, 2009:

ASTRA commends President Obama for the outstanding goals articulated in his "Necessity of Science" Speech before the National Academies of Science on April 27, 2009. We believe the President's words say it all:

"At such a difficult moment, there are those who say we cannot afford to invest in science, that support for research is somehow a luxury at moments defined by necessities. I fundamentally disagree. Science is more essential for our prosperity, our security, our health, our environment and our quality of life than it has ever been before."

ASTRA applauds and enthusiastically embraces what the President himself has called "the largest commitment to scientific research and innovation in American history."

Specifically, ASTRA supports the goal to devote more than 3 percent of GDP to research and development and bolster efforts to improve math and science education. This will help America to exceed the level achieved at the height of the Space Race, create new incentives for revitalizing America's competitiveness, and restore U.S. science, engineering and innovation leadership.

We urge all Americans to get behind the President and support this bold new vision for our country.

#####

The full text of the president's address may be found at the [Science.gov Website](http://www.science.gov), <http://www.science.gov> Web-site, <http://www.sciencedebate2008.com/www/index.php?id=65>.

ASTRA, The Alliance for Science & Technology Research in America (www.usinnovation.org and www.aboutastra.org) is a collaboration of 127 leading science and engineering companies, trade and professional organizations, universities and colleges whose mission is to increase federal investment in the physical, engineering, mathematical and computational sciences and to restore balance within the federal research portfolio. ASTRA includes

more than 41,000 individual scientists, engineers, teachers, business owners, entrepreneurs and technologists worldwide. ASTRA estimates that the underlying memberships of its own members include more than 2.5 million individual Americans.

ACS Vision - "Improving people's lives through the transforming power of chemistry"

**NEXT MONTH:
the
February 19
Joint Meeting
with IIT
for the Kilpatrick Lecture**

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

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
1/3 Page (1 column)	2.333" wide x 10" depth	\$360
1/2 Column	2.333" wide x 5" depth	\$190
Business Card	3.5" wide x 2" depth	\$95

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Northup RTS	5	847-579-0049	www.toxconsultants.com
Micron Inc.	8	302-998-1184	www.micronanalytical.com

CALENDAR

January 7-8, 2010: McCrone Research Institute Course: Microscope Cleaning, Maintenance and Adjustment; 2820 S. Michigan Ave., Chicago. Students will be introduced to how the microscope works, various schools of thought on lens cleaning, how to adjust for proper illumination and tricks of the trade. Register at <https://www.mcri.org/home/buy/10-15-456-472/>

January 21: Chicago Section ACS Dinner Meeting held jointly with AIChE. This is a Thursday meeting. **See this issue for details.**

February 12-16: Annual meeting of The American Association for the Advancement of Science, Chicago. For more information, go to website 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 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 14: Chicago Section ACS Gibbs Award Banquet and Lecture. The medalist is Dr. Maurice Brookhart, University of North Carolina.

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

August 13-22: 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://membership.acs.org/C/Chicago/statefair/index.html>



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DUPAGE AREA ENGINEERS WEEK EXPO 2010

The DuPage Area Engineers Week will be celebrated on **Saturday, February 20, 2010** 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. The event celebrates the fun that math, science and engineering provide to learners of all ages.

The theme for the 2010 event is "Engineering Today's Play with Tomorrow's Careers." 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 event will take place from 11:00 a.m. to 3:30 p.m. Presentations will be 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.

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. Since that time, 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://dupageeweek.iit.edu>. For more information on the DuPage program, call 630-682-6040 or kozi@iit.edu.

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