CHICAGO SECTION AMERICAN CHEMICAL SOCIETY

Joint Meeting of the Northwestern University
Department of Chemistry and the Chicago Section ACS
Basolo Medal Award Lecture, Dinner and Presentation
FRIDAY, OCTOBER 17, 2008

BASOLO MEDAL LECTURE
Northwestern University
Technological Institute
2145 Sheridan Road
Evanston, IL
Lecture Room 3

DIRECTIONS TO THE TECH INSTITUTE

From the city: Take Lake Shore Drive North to Sheridan Road into Evanston. Continue on Sheridan Road to the Tech Institute at Noyes Street.

From the west: Take I-88 east to I-294 north to Dempster east. Proceed east on Dempster into Evanston. Turn left onto Chicago Ave. and proceed to Sheridan Road. Take Sheridan Road north to the Tech Institute. The Technological Institute is at the intersection of Sheridan Road and Noyes Street in Evanston.

To those attending the Basolo Medal lecture, parking after 4:00 p.m. is available in the lot across from the Technological Institute at the corner of Noyes Street and Sheridan Road. Parking is also available on the side streets just west of this lot--however, observe the posted signs. Car-pooling is always encouraged.

Lecture room 3 is on the first floor of the Technological Institute and is most easily reached by entering through the main doors facing Sheridan Road. The lecture room is clearly marked and there will be signs at the entrance to guide you to the room.

Basolo Medal Lecture: 4:30 P.M.
The Medallist Lecture is open to the public and admission is free to all those wishing to attend.

2008 Fred Basolo Medalist

Dr. Robert H. Grubbs, Victor and Elizabeth Atkins Professor of Chemistry, California Institute of Technology, Pasadena, California

Title: "The synthesis of large and small molecules using olefin metathesis catalysts"

Abstract: Ruthenium-based olefin metathesis catalysts have provided new routes to olefins that appear in a variety of structures. Their functional group tolerance and ease of use allow their application in the synthesis of multifunctional bioactive molecules. The same systems are also useful for the synthesis of an array of new materials from multifunctional polymers to supramolecular systems. Underlying these developments has been the discovery of active catalysts with controlled selectivity through the synthesis of new ligands that control the geometry of the intermediate carbene and metallacycle.

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

DIRECTIONS TO THE RESTAURANT:
From the Tech Institute in Evanston: Go North on Sheridan Rd. and turn left on Central St. Turn left on Gross Point Rd. and proceed to the restaurant.

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

(PFOR DETAILS, SEE SECTION’S WEBSITE)

PARKING: Free in the lot. Parking is also available at Keeler Avenue and Gross Point Road.

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

Reception for Dr. Richard H. Grubbs 6:15 P.M.
Complementary wine, soft drinks, and hors d’oeuvres

(continued on page 2, column 1)

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.
complexes.

Biography: Dr. Robert H. Grubbs received his B.S. in Chemistry in from the University of Florida in 1963 and his Ph.D. in Chemistry from Columbia University in 1968. He is currently the Victor and Elizabeth Atkins Professor of Chemistry at the California Institute of Technology, Pasadena, California, USA, where he has been a faculty member since 1978. Before moving to Caltech, he was at Michigan State University from 1969 to 1978 achieving the rank of Associate Professor.

The research group of Grubbs is involved in the design, synthesis, and mechanistic studies of complexes that catalyze basic organic transformations. The major focus of the group over the past few years has been on the olefin metathesis reaction. To optimize the utility of this reaction, new catalysts have been developed that are extremely tolerant of organic functional groups. Due to their high-activity, functional group tolerance, and ease of use, these ruthenium based catalysts have found wide applications in organic and polymer synthesis. He has 450+ publications and 90+ patents based on his research.


DEADLINES FOR CHEMICAL BULLETIN

Please submit all Chemical Bulletin copy to the editor before the deadlines listed below for each issue. Articles should be emailed to the editor, Cherelyn Bradley, cbrad1027@aol.com. Since we like the Bulletin to be as timely as possible, we need the lead time indicated. You can help by early planning and submission of your information or articles. Thank you!

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The dinner 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 $18. PLEASE HONOR YOUR RESERVATIONS. The Section must pay for all dinner orders. No-shows will be billed.

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

SOUP COURSE: Cream of Mushroom

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

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

BEVERAGE: Coffee, Tea, Soft Drinks

General Meeting: 8:30 P.M.

• Opening remarks and announcements: Dr. David Crumrine, Chair, Chicago Section American Chemical Society

• Presentation of the 2008 Basolo Medal: Dr. Joseph Hupp, Chair, Department of Chemistry, Northwestern University

• Acceptance: Dr. Robert H. Grubbs, 2008 Basolo Medalist for Outstanding Research in Inorganic Chemistry

• Closing Remarks: Dr. David Crumrine
"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.

Evaporation Envy

Kids, when you’re ready to play your favorite sport do you consider what you’re wearing? Cotton clothes get wet, sticky, and heavy because they hold onto sweat. New high-tech fabrics are different—they pull moisture away from you and through the fabric where it evaporates quickly—and cool you off. Here you’ll compare evaporation rates for cotton and a paper towel as the stand-in for a high-tech material.

Cut two pieces each of 3” x 3” brown paper towels and cotton fabric swatches. Fill a small glass half-full with water. Mark two quart-size Ziploc bags as “room temp water” and two others as “hot water.” Add 1 cup of room temp and hot water to each appropriate bag (have an adult partner handle the hot water). Use an eyedropper to squirt one drop of water from the glass on the center of each towel and fabric square. Try to do this quickly so that they each get their drop at about the same time. Let the drops spread quickly so that they each get their drop at the towel and fabric square. Try to do this as much air out as possible then zip and a paper towel as the stand-in for a high-tech material.

Get as much air out as possible then zip closed and lay flat. Use an eyedropper to squirt one drop of water from the glass on the center of each towel and fabric square. Try to do this quickly so that they each get their drop at about the same time. Let the drops spread for about 15 seconds or until they stop spreading. Place one towel and one fabric swatch each on top of the “room temp” and “hot water” baggies. Observe every three minutes and compare the amount of water on each spot. Record your results. What do you observe? The paper towel should have much larger pores than the cotton fabric, and it behaves like the high-tech fabric would in this test.

Where’s the chemistry? High-tech fabrics in modern sports clothes have pores to move water away from the skin and to the outer surface of the fabric. These pores provide a way for sweat to evaporate faster, keeping you dry and comfortable. Evaporation happens when water is heated and goes into the air. It takes energy to evaporate water. Heat is a form of energy, and water evaporates more quickly at warmer temperatures. Materials that soak up water (like cotton) hold onto it longer due to a slower evaporation rate. Materials with pores allow faster evaporation, like those used in high-tech clothing. Check out triathlon suits (“trisuits”) as just one example.

Reference:
National Chemistry Week is October 19-25, 2008. The theme this year is “Having a Ball With Chemistry” and is all about the chemistry of sports. The American Chemical Society has published a newspaper called “Celebrating Chemistry” for National Chemistry Week that contains several activities, one of which is called “Evaporation Exploration” and used for this article. The editor is Judith Jankowski. See www.acs.org, click on “Education”, and look for the Community Outreach section. Or inquire at ACS, 1155 16th St. NW, Washington, DC 20036.

Edited by K. A. CARRADO, Argonne National Laboratory
All past “ChemShorts for Kids”: http://membership.acs.org/C/Chicago/ChemShort/kidindex.html

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.

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Looking for ways to make high school students excited by the fascinating chemistry of their everyday lives? Explore the extensive 25-year archive of ChemMatters, the award-winning magazine for high school students. All the issues of ChemMatters published through April 2008 are available on one CD! Search for your favorite chemistry topics by browsing through the various issues of ChemMatters and their corresponding ChemMatters Teacher’s Guides. The price of the CD is $30. You can order it by calling 1-800 227-5558 or by visiting ChemMatters’ Web site: http://www.acs.org/chemmatters.

For more information about this resource and other ACS high school chemistry resources, please visit the ACS Education website at www.acs.org/education (under “Educational Resources,” then “High School”) or e-mail Marta Gmurczyk at m_gmurczyk@acs.org.

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An Employee-Owned Company
The next meeting of the Chicago Section ACS Job Club will be held on Friday, October 17 at 5:30 p.m. at Zhivago Restaurant. The meeting will include a review and discussion of some of the tools that a chemist can use to conduct a job search.

The Job Club provides a continuing opportunity for unemployed members of the Section to meet with one another, share their experiences and develop a network that may help in identifying employment opportunities. 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 $18 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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Lecture Series for Fall 2008
Fred Basolo Medal and Lecture for Outstanding Research in Inorganic Chemistry
Professor Robert Grubbs, California Institute of Technology
October 17, 2008

The Aldrich Inorganic Chemistry Lecture
Professor Ken Raymond, University of California, Berkeley
October 24, 2008

Malcolm Dole Distinguished Lectures in Physical Chemistry
Professor Stuart Rice, University of Chicago
October 28-30, 2008

For more information contact:
Teri Collins@theresa-collins@northwestern.edu or call 847-467-3946

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BASOLO MEDAL

The Fred Basolo Medal is given for outstanding research in inorganic chemistry. It was established by the former students of Dr. Fred Basolo in appreciation of his contributions to inorganic chemistry at Northwestern University. Basolo arrived at Northwestern in 1946 and was able to help make the Department of Chemistry one of the very best in inorganic chemistry in the U.S., a position it still maintains today.

Basolo, who passed away in 2007, was internationally recognized for his original contributions to the syntheses and reaction mechanisms of transition-metal Werner complexes. He also did innovative work in the developing fields of organometallic and bioinorganic chemistry.

Many of his former students occupy prominent academic and industrial positions. He influenced students worldwide to study inorganic chemistry and received the 1992 ACS Pimental Award in Chemical Education.

Among his numerous awards were the 1996 Chicago Section Willard Gibbs Medal and the ACS 2001 Priestley Medal. As part of his huge contribution to chemistry, Fred Basolo served on numerous ACS editorial boards, launched the ACS journal Inorganic Chemistry in 1962 and held various ACS offices. He was elected to and served as National ACS President in 1983. For further information see www.fredbasolo.com. The ACS Chicago Section is proud to have had Fred Basolo as a member.

Previous Basolo Medalists:
- Ralph G. Pearson 1991
- Henry Taube 1992
- Jack Halpern 1993
- Harry Gray 1994
- Lawrence Dah 1995
- Richard H. Holm 1996
- Kenneth N. Raymond 1997
- Malcolm Green 1998
- Thomas J. Meyer 1999
- James P. Collman 2000
- M. Frederick Hawthorne 2001
- Stephen J. Lippard 2002
- Daryle H. Busch 2003
- Malcolm H. Chisholm 2004
- John E. Bercaw 2005
- Ivano Bertini 2006
- Richard R. Schrock 2007

Chemistry Day is on Saturday, October 25th at Loyola University. The theme is "Having a Ball with Chemistry". For more information, visit http://membership.acs.org/C/Chicago/ChemDay/chemday08.html

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LOOKING FOR A PROFESSIONAL NETWORKING ORGANIZATION WITHIN THE CHEMISTRY AND PHARMACEUTICAL INDUSTRIES?

The Chicago Chapter of ChemPharma® Professional Association regularly meets on the 2nd Saturday of the month from 7:30am-10am at the Panera Bread in Wheaton — 25 Rice Lake Square, Wheaton, IL 60187. ChemPharma also holds Monday evening meetings designed to share information about current industry trends. For more details and registration see the following schedule and the ChemPharma® website http://www.chempharma.net/

2nd Saturday Networking:
- October 11 Dr. Susan Mayfield - "Career Coaching During the Transition"
- November 8 Jeff Timm — "How to Get Started in Consulting as a Career"

Monday evening meetings:
- November 3 Dr. Panos Constantinides - "Biomedical Nanotechnology: Applications in Drug Delivery and Pharmaceutical Development"
- Dec or Jan - TBA:
  -- Mark Beal - "Chemical Industry Council of Illinois (CICI) Science Policy and Lobbying"  
  -- Tour of the Illinois Science + Tech Park in Skokie, IL

ILLINOIS STATE FAIR PROJECT A SUCCESS!

We had another great success with the joint project at the Illinois State Fair August 8-17. This was our fifth year having a tent there and we had over 14,600 visitors (a record!), including 360 teachers.

There were 33 volunteers covering the time from the pre-Fair tent set-up through the actual 10 days of the Fair. Volunteers included members of 9 of the Illinois sections (Chicago, Decatur-Springfield, East Central Illinois, Illinois Heartland, Illinois-Iowa, Joliet, Mark Twain, Southern Illinois, and St. Louis).

We again had the popular hand fans as the main give-away throughout each day and the first teacher that visited the tent each day received a toy mole. This year we had three computers set up, one with the science quiz, one for teacher registration, and one for the visitor survey.

A big THANK YOU to our volunteers who worked diligently this summer to make our "chemistry tent" project a real attraction at the State Fair. Our Chicago Section's volunteers this year were Dave Crumrine, Cherlyn Bradley, Charles Cannon, Steven Edelman, Chantel Kamm, Fran Kravitz, Milt Levenberg, Margaret Levenberg, Andrew Lang, and Avrom Litin.

Also, a big THANK YOU to all our sponsors: BP, Chicago section, East Central Illinois section, Ingredient Source Corporation, NorthStar Credit Union, Northup RTS, Fran Kravitz, Rock River Section, and Wizardcraft. Contributors of materials and/or talent included ACS National, Avrom Litin, BP Volunteers-Naperville chapter, Cherlyn Bradley, Continental Cement, Dan Edelman and Fran Kravitz, Flinn Scientific, IL Dept. of Natural Resources, Illinois State University-Dept. of Chemistry, John Burke, Richard Cornell, and Bob Hickerson.

We are already planning for next year. The planning committee's wrap-up meeting will be scheduled before the end of the year. Plan to volunteer with us next year!!

For further information about this project, including a description of some of the demonstrations, go to http://membership.acs.org/c/chicago/statefair/index.html

FRAN KRAVITZ
CHERLYN BRADLEY
CO-CHAIRS, IL STATE FAIR CO-OP PROJECT

PLEASE VOTE in the Section's election when you receive your ballot in the mail.
HAVE YOU MAILED YOUR BALLOT?

Just a reminder that ballots are due in the Section office no later than noon, October 17. They were mailed early September.

WCC COLUMN

Members of the Chicago Section’s Women Chemists Committee (WCC) are developing 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 Jeanette Gescy Grasselli Brown.

Jeanette Gescy Grasselli Brown, prominent analytical chemist, successful infrared and Raman spectroscopist, world renowned authority on its applications, and excellent laboratory manager, was inspired by her high school chemistry teacher to secure an education in chemistry. She “fell in love with chemistry”. Jeanette recalls that “chemistry presented an opportunity to learn about the world around us: What happens when the sun comes up in the morning, what happens when you put a cake in the oven, what happens when you mix A and B and get C. With chemistry, you could unravel these mysteries and also have the opportunity to do something that might impact mankind.” Her chemistry teacher suggested she consider majoring in chemistry at her alma mater, Ohio University.

Jeanette’s education was in the Cleveland school systems, followed by a B.S. in chemistry from Ohio University (she was the only woman in her chemistry class) and M.S. from Western Reserve University. Her career was with Standard Oil of Ohio (now BP), in Cleveland. She started as a junior chemist in 1950 and by 1985 was director of corporate research of BP America. At the time of her hiring, the facility had about 25% women scientists, most recruited from Western Reserve (now Case Western) chemistry department. Even by today’s standards, the laboratory employed many women scientists. Jeanette was given the task of looking for use of the infrared spectrometer in an industrial laboratory for problem solving. The spectrometer was perfected by the military during World War II and was made available for commercial use. Her work included being a member of a team that developed the Sohio Acrylonitrile Process for making the world’s acrylonitrile, a monomer for polymers for synthetics used in clothing, carpeting and other products.

Jeanette has received numerous awards for her accomplishments during her more than thirty-eight years in analytical chemistry. She received the Garvan Medal (1968), Fisher Award in Analytical Chemistry (1993), and the Award for Encouraging Women into Careers in the Chemical Sciences (1999). She is the first woman inducted in the Hungarian and Austrian Chemical Societies. Jeanette is also the first woman elected to the Ohio Science and Technology Hall of Fame (1991). Though recently retired, Jeanette continues to support careers in the sciences, especially for women. In addition, she continues to inform the public about the value of science and technology.

She is the author of about eighty articles and eight books, in vibrational spectroscopy and analytical problem solving. She has received twelve honorary doctorates, been a speaker at numerous scientific conferences and has spoken to the general public about science, no less than about 500 times, discussing the application analytical science to problem solving, especially in forensics.

Jeanette is rooted in Cleveland. She grew up in a predominantly Hungarian neighborhood, born to parents who had come to the United States from Hungary. Her father worked in a foundry making sand castings using steel for parts for equipment—she was fascinated by the intricacies of the process. During high school, Jeanette had the opportunity to accompany her father many times to watch the casting process. Her parents valued education — the door to opportunities. From both parents, especially her father, Jeanette got the message: “Cultivate your curiosity and do your best and good things, good opportunities, will happen to you” and from her mother she received “along with appreciation of learning, an appreciation for art and music.”

Sources:
Scott Stephens, Cleveland Plain Dealer: Immigrants’ kids: Nation’s brainy superstars, Tuesday, July 20, 2004


CWRU Magazine, Kristin Ohlson, Winter 1999, p. 28

INARA BRUBAKER

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!
REPORT OF THE FALL ACS COUNCIL MEETING

The 236th National Meeting of the ACS was held in Philadelphia, PA from August 17 – 21, 2008. The Chicago section was represented by ten councilors and three alternate councilors. The councilors who attended for the section were: Cherlyn Bradley (Committee on Committees), Charles Cannon (Committee on Economic and Professional Affairs), Mark Cesa (Committee on Chemical Safety, Committee on Science), David Crumrine (Committee on Chemical Safety), Herb Golinkin, Russell Johnson (Committee on Public Relations and Communications), Fran Kravitz (Committee on Project SEED), Inessa Gorelik and Ken Fivizzani (Committee on Chemical Safety, Committee on Science), Herb Golinkin, Russell Johnson (Committee on Public Relations and Communications), Fran Kravitz (Committee on Project SEED), Inessa Gorelik and Ken Fivizzani (Committee on Chemical Safety, Committee on Science) and Susan Shih. The alternate councilors representing the section were Irene Cesa, Inessa Gorelik and Ken Fivizzani (Committee on Chemical Safety). I have also listed national committee assignments, for your information.

The council recognized Roy Bible for his 45 years of service as a councilor, Claude Lucchesi for his 35 years of service as a councilor, and Herb Golinkin for his 15 years of service.

Financial: The Committee on Budget and Finance reported 2008 Probable Year End projections for the Society. At this point, the expectation is that the ACS will end the year with net contributions from Operations of $9.1 million, which is $24,000 favorable to the budget. This is even though investment losses have been $24 million. There is concern that one criterion (the Fund Balance ratio, a measure of the reserve adequacy) of the board’s financial guidelines will not be met.

Governance: The Council elected members to the Committee on Committees, the Council Policy Committee and the Committee on Nominations and Elections. Cherlyn Bradley was reelected to the Committee on Committees. Congratulations are also due to Andrea Twiss-Brooks (councilor for CINF and Chicago section member), for her election to the Committee on Nominations and Elections.

Local Section Activities: The winners of Chemluminary awards were named. Outstanding Local section awards were presented to the following local sections: Pensacola, Illinois-Heartland, Midland, Detroit, Delaware and New York.

Divisional Activities: A revised divisional funding formula was approved by council. This has no impact on the funding received by local sections. In addition, the Council voted to approve the creation of a new probationary division of Catalysis Science and Technology (CATL).

Meetings and Expositions: As of August 20, 2008, the fall ACS national meeting had attracted 13,800 registrants as follows: Regular attendees 8,196; Students 3,087; Exhibitors 1,490; Exhibition only 546; and Guests 481. This was noted to be the largest exposition.

Economic and Professional Affairs: As of the end of Tuesday, there were 1260 job seekers at the ACS Career Fair and 515 posted positions available from 84 employers.

The latest draft of the Professional Employment Guidelines was presented for consideration and will be voted on at the Spring 2009 meeting. If you are interested in this document, see the draft document on the Chicago section website: http://membership.acs.org/C/Chicago/Incoming/ProfEmployGuidelinesV8draft.pdf

If you have comments, send them directly to careers@acs.org before November 30.

If you have any questions and/or comments about the above actions, please contact me or one of your other representatives. You may contact me by email at bmoriarty@nalco.com

BARBARA MORIARTY

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 areas. We are looking for eager, energetic individuals who love chemistry and would like to present demonstrations in school, or partner with an elementary teacher or give talks. 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 demonstrator or partner with a teacher or provide talks or any combination to the Section office at: chicagocs@ameritech.net or by mail at: Chicago Section, ACS, 7173 N. Austin Ave., Niles, IL 60714. Please make sure to mark the subject line with “Speakers and Demonstrations”.

FRAN KRAVITZ
PRIMARY EDUCATION COMMITTEE CHAIR

SPEAKERS AND DEMONSTRATORS NEEDED

The Primary Education Committee is seeking ACS members, nonmembers, undergraduates and graduate students and industrial companies who would be interested in working with elementary schools (pre-K through 8th) in Chicago and surrounding suburban areas. We are looking for eager, energetic individuals who love chemistry and would like to present demonstrations in school, or partner with an elementary teacher or give talks. 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 demonstrator or partner with a teacher or provide talks or any combination to the Section office at: chicagocs@ameritech.net or by mail at: Chicago Section, ACS, 7173 N. Austin Ave., Niles, IL 60714. Please make sure to mark the subject line with “Speakers and Demonstrations”.

FRAN KRAVITZ
PRIMARY EDUCATION COMMITTEE CHAIR

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OCTOBER HISTORICAL EVENTS IN CHEMISTRY

October 2, 1908 Walter Baird, an analytical instrument maker who founded the Baird Corporation, was born.

October 5, 1889 Dirk Coster, who discovered hafnium with Georg von Hevesy in 1923, was born.

October 6, 1783 François Magendie, who performed studies in nutrition and experimental pharmacology and did research on the importance of proteins and the effects of morphine, strychnine, and other chemical agents on human beings, was born.

October 8, 1883 Otto H. Warburg, a researcher on respiration and cancer who received the Nobel Prize in Physiology or Medicine in 1931 for his discovery of the nature and mode of action of the respiratory enzyme, was born.

October 13, 1916 GM was incorporated.

October 15, 1608 Evangelista Torricelli, the first man to create a sustained vacuum, was born. He discovered the principle of the barometer.

October 16, 1846 William T. G. Morton, who demonstrated the use of ether as an anesthetic at the Massachusetts General Hospital, was born.

October 18, 1844 Harvey W. Wiley, "The Father of Pure Food Law", was born.

October 19, 1909 Maguerite Perey, who discovered francium in 1939, was born.

October 21, 1833 Alfred Nobel, who invented dynamite, was born. On November 27, 1895, Nobel signed his last will providing for the establishment of the Nobel Prize. He later constructed companies and laboratories in more than 20 countries all over the world.

October 22, 1903 George Beadle, a researcher in chemical genetics, was born. He received the Nobel Prize in Physiology or Medicine with Edward L. Tatum and Joshua Lederberg for the discovery that genes act by regulating definite chemical events.

October 23, Any Year Mole Day, http://www.moleday.org/, 6:02 a.m. through 6:02 p.m. (Mole time); Mole Moment: 50.453 seconds after 6:42 p.m.

October 24, 1842 Nikolai A. Men-shutkin, a researcher on the kinetics of nucleophilic substitution events of amines and quaternary ammonium ions, was born.

October 28, 1893 Christopher K. Ingold, a researcher in mechanisms of organic reactions and naming stereoisomers (Cahn-Ingold-Prelog system), was born.

October 30, 1817 Hermann F. M. Kopp, a researcher on atomic and molecular volume, crystallography, boiling points, specific heats, and dissociation, was born. He was also a historian of physical chemistry.

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

“SID THE SCIENCE KID”

A new science show has entered the scene on PBS every weekday morning at 8:30 a.m. The show is called “Sid the Science Kid” which is an introductory science program for preschoolers. The series is hosted by Sid who is animated by digital puppetry by the Jim Henson Company. It is quick paced for the short attention spans of young children. Check it out on your PBS channel every weekday morning at 8:30 a.m. and spread the word to families with preschoolers.

FRAN KRAVITZ

SHARE ACS EDUCATIONAL RESOURCES WITH YOUR FAVORITE TEACHER THIS FALL

As a chemist, you are in a unique position to help teachers and students learn and love science. After all, you enjoyed learning science so much that you chose to devote your career to it! Help the teachers you know by introducing them to the outstanding resources developed by the American Chemical Society.

To help you spread the word, ACS has created a flyer you can give to teachers describing education resources, some of which are at a discount during October. Your favorite middle school teacher might benefit from Inquiry in Action, a teacher’s guide to inquiry-based investigations that teaches chemistry principles through experimentation and hands-on learning. Or, a local high school chemistry teacher in your area might benefit from a gift subscription to ChemMatters, a publication that investigates the chemistry of everyday phenomena for high school students. Other resources can be accessed for free! Consult the table below for more information on other ACS educational resources and the grade levels they serve.

In addition to sharing resources, you can improve science education by offering your time and expertise. You could volunteer to give a presentation about science in a local classroom or answer chemistry questions from a class throughout the year. Visit the Kids & Chemistry section of the ACS website for presentation ideas and sample activities that you can use to introduce chemistry to students in your community. Your gifts and time will definitely be appreciated by teachers and students alike this year and for years to come!

Ways you can help K-12 teachers with ACS resources:

- Give a teacher the flyer summarizing ACS resources
- Purchase a book or magazine subscription and give it to a teacher
- Introduce a teacher to free online resources
- Answer science questions from a class throughout the year
- Teach a science lesson
- Give a career talk
- Suggest a high school textbook
- Mentor a high school chemistry club
- Sponsor a professional development workshop for local elementary and middle school teachers

Pre-K to 2
- Apples, Bubbles, and Crystals
- Sunlight, Skyscrapers, and Soda Pop

Grades 3-6
- Science for Kids (www.acs.org/kids)
- The Best of WonderScience

Grades 3-8
- Inquiry in Action (inquiryinaction.org)
- Inquiry Matters

Grades 9-12
- ChemMatters Magazine
- ACS Chemistry Clubs
- Green Chemistry
- ACS textbook Chemistry in the Community
- Workshops for teachers
- Exams Institute
- Chemistry Olympiad
- Project SEED
PROJECT SEED - A PROGRAM THAT WORKS

You and your college or company are invited to apply to participate in Project SEED, the American Chemical Society’s social action program that places economically disadvantaged high school students in academic, industrial, and governmental research laboratories for eight-to-ten weeks during the summer.

Project SEED offers high school students two exciting research opportunities:

* The Summer I program provides first-time participants (rising juniors and seniors) a fellowship award of $2,500.

* A second-year program, Summer II, provides Project SEED Summer I students an additional summer of scientific research. These students will receive a fellowship award of $3,000. Additionally, Summer II students will be eligible for a travel grant of up to $100 to present their research at an ACS or other scientific meeting.

Each student does a scientific research project in chemistry or related field under the direct supervision of a scientist/mentor. The students must be economically disadvantaged and must be enrolled in high school or be recent high school graduates; no student who has matriculated in college is eligible. The students must have taken one year of high school chemistry.

In addition to hands-on research, Project SEED students receive guidance on their career and personal development. SEED I students who have completed a Summer I program and have not matriculated in college can return for a second summer and do more research. On completion of a SEED II research program, the students also have the opportunity to apply for one of the Project SEED college scholarships.

You need not have a student yet in order to apply to be a mentor. Apply now to sponsor a student and the local Project SEED Committee will work with you to obtain a student. Funding for the student will come from the National Project SEED office and some funds from the local Section.

Be sure to visit the Project SEED website for more information: www.acs.org/education/SEED.html

You can also obtain an application form, program guidelines, and other information from your local Section Project SEED co-chair, Cherlyn Bradley (cbrad1027@aol.com) or from the National ACS Committee on Project SEED staff at 1-800-227-5558, ext. 4380.

APPLICATIONS FOR THE 2009 SUMMER PROGRAM WILL BE AVAILABLE IN NOVEMBER.

THE APPLICATION DEADLINE IS FEBRUARY 2009.

If you are NEW to the Project SEED program, your willingness to expose students to a scientific environment is one of several steps that will allow students to discover the world of chemistry. The Council Committee on Project SEED office looks forward to reviewing your application.

Project SEED celebrates its 40th anniversary this year. Since its inception in 1968, more than 9,000 talented high school students nationwide have spent the summer conducting research in 91 institutions from 30 states through the support of volunteer scientists/mentors. Both students and the community benefit from the program. The students, while earning a stipend, find out what chemistry research or development is about and whether it might interest them as a career. These students become role models for younger students and almost all attend college.

In order to get more Chicagoland students involved in the program, we need two things: 1) more scientists willing to participate as mentors/preceptors to foster the successful continuation and growth of this worthy program in the Chicago area for scientifically promising, but economically disadvantaged high school students and 2) more funding from Chicagoland corporations, foundations, and individuals to sponsor our students.

Scientists who are NSF, NIH, or PRF grant holders can get funding to sponsor a Project SEED student within their proposed research programs. Check with the ACS National SEED office at 1-800-227-5558, ext. 4380.

If you or your company would like to donate to your Chicago Section’s Project SEED program to sponsor a local student, contact the Chicago Section office at (847) 647-8405.

CHERLYN BRADLEY

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IOTA SIGMA PI

Iota Sigma Pi is a National Honor Society for Women in Chemistry, with an active chapter in the Chicago area (Aurum Iodide Chapter). The Chicago chapter supports the National Iota Sigma Pi goal of making awards to qualified women in chemistry and has a variety of programs that include monthly professional talks by members and invited speakers, field trips, social gatherings, and a December joint meeting with the Chicago Section of ACS. Monthly meetings are held from September to June each year. Held annually is the Iota Sigma Pi Aurum Iodide Chapter Undergraduate Women Student Chemistry Symposium at DePaul University in the spring.

A benefit to membership in Iota Sigma Pi is the networking that occurs between the members. The chapter has a mixture of women with a variety of chemical interests: members are from industry, government and academia and include both faculty and students. The size of the chapter is small enough for everyone to get to know one another. Professional members also serve in a one-on-one mentorship role with student affiliates.

Aurum Iodide Chapter conducts an annual membership drive and would like you to help us identify qualified female chemists including undergraduate students, graduate students and professional chemists. Listed below are the qualifications required for new student inductees. Please see the website (www.iotasigmapi.info) for details on qualification requirements for professional members.

Undergraduate students: junior and senior women who have an overall 3.0 GPA and either 6 semesters of chemistry courses with a 3.0 chemistry GPA, or 4 semesters of chemistry courses with a 3.5 chemistry GPA.

Graduate students: female graduate students in chemistry-related fields with at least 9 semester hours (or equivalent) with a 3.0 GPA and meet the undergraduate requirements listed above.

The initial fee for students is $30. This fee is

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You’ll find the whole laboratory science community here.

**ACS/DAC Co-Programming at Pittcon 2009**

**INVITED SYMPOSIA**
- Biological Applications of Capillary Electrophoresis
- Evolution of Modern Chromatography: Celebration of 25 years of the Subdivision on Chromatography and Separation Chemistry
- The Future of HPLC-Method Development: Quality by Design—Evaluating the Control Space of Robust HPLC Methods
- New Dimensions in Multidimensional Separations
- Young Investigator Award from Subdivision on Chromatography and Separation Chemistry
- Pressurized Fluids in Separations Technology

**ORGANIZED CONTRIBUTED SESSIONS**
- Validation of Bioanalytical Methods: Addressing matrix effects, ion, suppression and ISR (incurred sample reanalysis)
- New Concepts and Instruments for Electrochemical Sensors
- Multi-residue Pesticide Analysis for Food Testing
- Understanding Chromatography with Sub-2 μm Particles
- Quality Assurance of Measurements and Proficiency Testing

Visit [www.pittcon.org](http://www.pittcon.org) for the complete technical program.

Welcome to Pittcon—your once-a-year opportunity to get together with just about everyone in the laboratory science community. There’s no better place to network with colleagues from all over the world, or to meet one-on-one with experts in every discipline.
(continued from page 9)

fee covers the initiation fee and annual dues until July 1, 2009. The initial fee for Professional Chemists is $50.00. Our initiation meeting will be held on Friday, November 14, 2008 at DePaul University.

Contact Dr. Niina J. Ronkainen, Membership Affairs Coordinator for Aurum Iodide Chapter at nronkainen@ben.edu or 630-829-6549 for further information regarding nominations, membership applications, or other details.

Additionally, there are annual Iota Sigma Pi Awards for excellence in chemistry at both student and professional levels. If you would like to nominate a student or a professional colleague for an Award, please refer to the Iota Sigma Pi website for further details (http://www.iotasigmapi.info).

Below are the Aurum Iodide 2008-2009 meeting dates. Meetings are typically held on Fridays unless otherwise noted. The cost for dinner varies depending on the location of the meeting and is usually between $15 and $30. If you or some of your students wish to attend a meeting, please contact Cheryl Mascarenhas (630-829-6587, cmascarenhas@ben.edu) with reservations by the Monday before the meeting.

Aurum Iodide 2008-2009 Meeting Dates

October 10, 2008
November 14, 2008
December 12, 2008
February 6, 2009
March 7, 2009 SATURDAY
April 3, 2009
May 1, 2009

CHEMISTRY DAY

The Chicago Section ACS will hold this year’s Chemistry Day on October 25 at Loyola University. This year’s theme is “Having a Ball with Chemistry”. The Chicago Section is doing an environmental recycling project for National Chemistry Week called the “Nike Reuse-a-Shoe Project”. Please bring all used athletic shoes of any brand to either the October 17 Dinner meeting or Chemistry Day at Loyola. The used athletic shoes will be sent to NIKE to be ground up and recycled into new sports surfaces like playgrounds. Nike donates these surfaces to communities who wouldn’t otherwise have access to high-performance surfaces. Please watch the Chicago Section website for further details on Chemistry Day. Remember to bring us your used athletic shoes!

FRAN KRAVITZ

CHEMISTRY NOBEL LAUREATE HEADLINES NANOTECHNOLOGY SYMPOSIUM

Alan Heeger, the 2000 Nobel Prize winner in chemistry, is the keynote speaker at the 2008 International Institute for Nanotechnology (IIN) Symposium on Thursday, November 20, at the Hotel Orrington, 1710 Orrington Ave., Evanston, IL. He is an adjunct professor of physics at the University of Utah, chief scientist at the UNIAX Corporation, and director of the Heeger Center for Advanced Materials at the Gwangju Institute of Science and Technology in the Republic of Korea. His presentation is titled “Low Cost Plastic Solar Cells: Self-Assembly of Bulk Heterojunction Materials by Spontaneous Phase Separation”.

Additional symposium speakers and their topics:

Congressman Daniel Lipinski, 3rd District, IL: “Nanotechnology in the US Congress - Update on the National Nanotechnology Initiative”

Paul McEuen, Goldwin Smith Professor of Physics, Cornell University: “Nano Carbon - from Ballistic Transistors to Atomic Drumheads”

Donald Eigler, Physicist and IBM Fellow, IBM Almaden Research Center: “The Quest for Spin-Cascade Logic Circuits”

J. Fraser Stoddart, Board of Trustees, Professor of Chemistry, Northwestern University: “Mechanized Nanoparticles”

David Leigh, Forbes Professor of Organic Chemistry & EPSRC Senior Research Fellow, University of Edinburgh, Scotland: “Synthetic Molecular Motors and Machines”

Julius Rebek, Jr., Professor & Director, Skaggs Institute for Chemical Biology, The Scripps Research Institute: “Expandable Capsules”

Lars Samuelson, Professor, Semiconductor Electronics, and Director, Nanometer Structure Consortium, Lund University, Sweden: “Self-Assembling Nanowires in Electronics, Photonics, and Life Sciences”

Jeffrey Moore, Murchison-Mallory Professor of Chemistry, Professor of Materials Science and Engineering, University of Illinois, Urbana-Champaign: “Self-healing Polymers”

Cherry Murray, Principal Associate Director, Science & Technology, Lawrence Livermore National Laboratory

The symposium, which runs from 7:45 am to 6:45 pm, is free but advance online registration is required.

For further information and to register, go to http://iinano.org/symposium/2008/index.htm or http://iinano.org/symposium/2008/registration.htm

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October 7: Nuclear Chemistry Lecture Series, 7 - 9 pm each Tuesday October 7-November 18, Benedictine University, Lisle, IL, Birck Hall of Science, Room 112. Contact Dr. Douglas Armstrong, darmstrg@olivet.edu. See information on this page.

October 8-11: The 43rd Midwest Regional ACS Meeting (MWRM 2008), Ramada Inn, Kearney, Nebraska. The theme is "Pioneering the Future through Chemistry." For further information, go to the meeting's website at http://mwrm2008.unk.edu/index.htm.

October 11: The Chicago Chapter of ChemPharma will meet from 7:30am-10am at Panera Bread in Wheaton: 25 Rice Lake Square, Wheaton, IL 60178. The speaker, Dr. Susan Mayfield, will give a talk on "Career Coaching During the Transition". For more details and registration, visit the website http://www.chempharma.net/.


October 13: Chicago Section's Institute of Food Technologist meeting, Edelweiss Restaurant, Norridge, IL. The speakers will review consumer trends and products in the beer and malt beverage category. For more information, call (630) 916-4960 or visit www.chicagoift.org.

October 13-15: The Chicago Section Society of Plastics Engineers will have the Vinylltec Conference at the Crowne Plaza Chicago O'Hare. For more information, go to www.SPEChicago.org.


October 16: Chicago Section's Board Meeting, 7173 N. Austin Ave., Niles, IL. Call the Section office at 847-647-8405 for information.

October 17: Basolo Medalist Lecture at Northwestern University and dinner at Zhivago's. See this issue.

November 3: The Chicago Chapter of ChemPharma will meet from 7:30am-10am at Panera Bread in Wheaton: 25 Rice Lake Square, Wheaton, IL 60178. The speaker, Dr. Panos Constantinides, will talk on "Biomedical Nanotechnology: Applications in Drug Delivery and Pharmaceutical Development" For more details and registration, visit the website http://www.chempharma.net/.

November 8: The Chicago Chapter of ChemPharma will meet from 7:30am-10am at Panera Bread in Wheaton: 25 Rice Lake Square, Wheaton, IL 60178. The speaker, Jeff Timm, will give a talk on "How to Get Started in Consulting as a Career". For more details and registration, visit the website http://www.chempharma.net/.

November 13: Chicago Section's Board Meeting, 7173 N. Austin Ave., Niles, IL. Call the Section office at 847-647-8405.

November 19: Stieglitz Lecture and Chicago Section Dinner Meeting at the Parthenon Restaurant jointly with University of Chicago.


December 4: Chicago Section's Board Meeting, 7173 N. Austin Ave., Niles, IL. Call the Section office at 847-647-8405 for information.

December 12: Chicago Section's Holiday Party jointly with the Chemists' Club and Iota Sigma Pi at the Fountain Blue Banquets.


NUCLEAR CHEMISTRY LECTURE SERIES

The Associated Colleges of the Chicago Area this fall are presenting a series of 10 public lectures on various aspects of nuclear chemistry. The series started September 16 and continues each Tuesday through November 18. Graduate credit is available for the course (CHEM 646) offered through Olivet Nazarene University. Students may receive graduate credit by attending any eight of the lectures and writing a summary of each one attended. Lectures run from 7 - 9 pm Tuesdays at Benedictine University, Lisle, IL, Birck Hall of Science, Room 112. Contact Dr. Douglas Armstrong, darmstrg@olivet.edu, email him at darmstrg@olivet.edu or call (815) 939-5393.

Speakers, affiliation, and topics listed in chronological order:

- Michael Welch, Washington University in St. Louis, Introduction to the Use of Radioactive Tracers in Medical Diagnosis and Therapy
- Mark Jensen, ANL, Comparative Solutions of Actinides & Lanthanides
- George Mosho, ANL, Radiation Safety Principles
- Jim Truran, University of Chicago, Cosmic Chemistry
- Romualdo de Souza, Indiana University, Nuclear Chemistry: Studying the Behavior of Microscopic Droplets

- Nov. 11 & 18 speakers and topics to be determined