

The Chemical Bulletin

<http://chicagoacs.org>

OCTOBER • 2010

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 22, 2010

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.

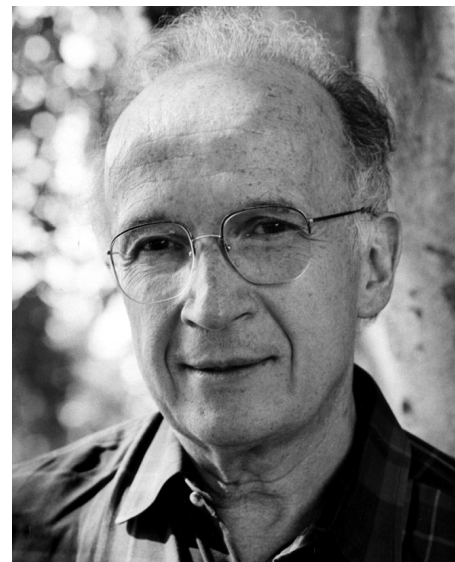
From the west: Take I-88 east to I-294 north to Dempster east. Proceed east on Dempster into Evanston. Turn left onto Chicago Ave. and proceed to Sheridan Road. Take Sheridan Road north to the Tech Institute. The Technological Institute is at the intersection of Sheridan Road and Noyes Street.

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.

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.

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2010 Fred Basolo Medalist



Dr. Roald Hoffmann, Frank H. T. Rhodes Professor of Humane Letters, Emeritus, Cornell University; Recipient of the 1981 Nobel Prize in Chemistry

Title: "The Chemical Imagination at Work in Very Tight Places"

Abstract: Diamond anvil cell and shock-wave technologies now permit the study of matter under multimegabar (i.e. several hundreds GPa) pressures. The properties of matter in this pressure regime differ drastically from those known at 1 atm. Just how different

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chemistry is at high pressure and the role that a chemical intuition for bonding and structure can have in understanding matter at high pressures will be explored in this lecture. I will discuss in detail an overlapping hierarchy of responses to increased density, consisting of (a) squeezing out van der Waals space (for molecular crystals); (b) increasing coordination; (c) decreasing the bond length of covalent bonds and the size of anions; and (d) an extreme regime of electrons moving off atoms and new modes of correlation. Examples of the startling chemistry and physics that emerge under such extreme conditions will alternate in this account with qualitative chemical ideas about the bonding involved.

Biography: Roald Hoffmann was born in 1937 in Złoczów, Poland. Having survived the war, he came to the U.S. in 1949, and studied chemistry at Columbia and Harvard (Ph.D. 1962). Since 1965, he has been at Cornell University and is currently the Frank H. T. Rhodes Professor of Humane Letters, Emeritus.

He has received many of the honors of his profession, including the 1981 Nobel Prize in Chemistry (shared with Kenichi Fukui). "Applied theoretical chemistry" is the way Roald Hoffmann likes to characterize the particular blend of computations stimulated by experiment and the construction of generalized models, of frameworks for understanding, that is his contribution to chemistry. The pedagogical perspective is very strong in his work.

Notable at the same time is his reaching out to the general public. He participated, for example, in the production of a television course in introductory chemistry titled "The World of Chemistry," shown widely since 1990. As a writer, Hoffmann has carved out a land between science, poetry, and philosophy, through many essays and three books, *Chemistry Imagined* with artist Vivian Torrence, *The Same and Not the Same* (translated into six languages) and *Old Wine, New Flasks: Reflections on Science and Jewish Tradition*, with Shira Leibowitz Schmidt.

Hoffmann is also an accomplished poet and playwright. Four collections of his poetry have been published, as well as a book of translations of his poems into Spanish. He has also written a widely produced play with fellow chemist Carl Djerassi, entitled *Oxygen*, and by himself two other plays, *Should've*, and *Something That Belongs to You*.

Unadvertised, a monthly cabaret Hoffmann runs at the Cornelia Street Café in Greenwich Village, "Entertaining

Science", has become the hot cheap ticket in NYC.

BASOLO MEDAL LECTURE 4:30 P.M.

The Medalist Lecture is open to the public and admission is free to all those wishing to attend.

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.

(FOR 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. ROALD HOFFMANN

6:15 P.M.

Complementary wine, soft drinks, and hors d'oeuvres

DINNER

7:15 P.M.

Dinner reservations are required and should be received in the Section Office via **phone** (847-391-9091), **email** (chicagoacs@ameritech.net) or **website** (<http://chicagoacs.org>) by noon on Tuesday October 19. PLEASE HONOR YOUR RESERVATIONS. The Section must pay for all dinner orders. No-shows

will be billed.

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 \$20. 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 entrée: Beef Brochette (skewered beef tenderloin filet marinated in house marinade and grilled with an array of vegetables), Salmon (broiled on a bed of spinach with Sonoma Curtier Russian River Sauce), or Vegetarian Pasta

DESSERT COURSE - SERVED FAMILY STYLE:

Assorted pastries and fresh fruit

BEVERAGE: Coffee, Tea, Soft Drinks

GENERAL MEETING: 8:30 P.M.

- Opening remarks and announcements: **Dr. Ken Fivizzani**, Chair, Chicago Section American Chemical Society
- Presentation of the 2010 Basolo Medal: **Dr. Mark Ratner**, Chair, Department of Chemistry, Northwestern University
- Acceptance: **Dr. Roald Hoffmann**, 2010 Basolo Medalist for Outstanding Research in Inorganic Chemistry.
- Closing Remarks: **Dr. Ken Fivizzani**

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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. Teachers are encouraged to incorporate the projects in this column into their lesson plans.

Refrigerator Magnet Microscopy

Kids, how are the north and south poles of a refrigerator magnet arranged? How are chemists able to "see" the atoms that they work with? In this activity you will discover how to answer these questions and also gain an understanding of a cutting-edge imaging technology.

A refrigerator magnet has many north and south poles, not just two as in a bar magnet. The magnetic poles are nearly always arranged in stripes. A thin probe strip cut along one side of the magnet will be deflected up and down when pulled across the back of the magnet perpendicular to the stripes. In this activity the magnetic force between the probe strip and the magnet depends on the distance between the two surfaces and the relative size and alignment of their magnetic fields. By scanning the surface with the probe, an entire surface image can be obtained. This activity is analogous to atomic force microscopy and is offers a view of magnetic force microscopy (MFM) used for larger-scale imaging.

Procedure:

1. Obtain a flexible-sheet refrigerator magnet.
2. Cut one 5-mm wide strip along the left edge and another along the bottom edge of the magnet.
3. Place the unprinted side of one of the magnetic strips against the unprinted side of the magnet. Drag the strip across the back of the magnet in both directions. Repeat with the second strip. The strip that is alternately attracted and repelled (bounces) should be used as the probe strip. Discard the other strip.
4. Experiment with the probe strip that you have retained by pulling it across the surface slowly, then quickly; close to the surface, then far away; at various angles, etc. What does the arrangement of magnetic poles appear to be?

Questions:

Does the magnetic force between the probe strip and the back of the magnet depend on the distance between the two surfaces, i. e., can the probe map variations when it is far from the surface? Would the size of the tip of the probe matter? If the poles are made very small, say nanometer scale, could their arrangement still be determined? Atomic-scale images of a surface can be obtained by atomic force microscopy (AFM). To produce an image, a probe is moved relative to the surface and variations in force are recorded for a series of parallel passes. This force measurement, when plotted as a function of position, provides an image of the arrangement of atoms on a surface.

References:

"A Refrigerator Magnet Analog of Scanning-Probe Microscopy" by Julie K. Lorenz, Joel A. Olson, Dean J. Campbell, George C. Lisensky, and Arthur B. Ellis in *Journal of Chemical Education*, Vol. 74 No. 9, 1032, September 1997.

Submitted by DR. KATHLEEN CARRADO

All past "ChemShorts for Kids":

<http://www.chicagoacs.net/ChmShort/kidindex.html>

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2010 ACCA GREEN CHEMISTRY LECTURE SERIES

The Associated Colleges of the Chicago Area (ACCA) is sponsoring its annual lecture series, consisting of lectures at 7:00-9:00 PM on consecutive Tuesday nights, Sept 28 to Nov. 16, 2010, at Benedictine University. The topic this year is "Green Chemistry," according to the following schedule. For graduate credit, contact Dr. Armstrong—see page 4.

Sept. 28 — Scott Brix, Director of Marketing, Textile Enzymes and Sustainable Solutions, Genecor, A Danisco Division.

Oct. 5 VIRTUAL SEMINAR: Kenneth Dorse, Associate Vice Provost for Academic Affairs, and Professor of Chemistry, University of Oregon, "Green Chemistry: Part I—Expanding Access to Experimental Science/Part II—The Elusive Principle Eleven: Undergraduate-Friendly Examples of Real-Time Analysis."

Oct. 12 1. James Renga, Senior, Chemistry Discovery Research, Dow AgroSciences LLC, "Salt-free Transformations Using Organocarbonates."

2. Gary Crouse, Dow AgroSciences LLC, "Spinetoram: Green Chemistry Made Better."

Oct. 19 Bob R. Peoples, Director, ACS Green Chemistry Institute, "Our Sustainable Future—The Role of Green Chemistry and Engineering."

Oct. 26 Larry Koskan, Global Green Products, LLC.

Nov. 2 Carlos Martinez, Senior Principal Scientist, Pfizer Worldwide Research and Development, "Applications of Biocatalysis in the Pharma Industry: Designing for Energy Efficiency."

Nov. 9 Anne Wilson, Professor of Chemistry, Butler University, "Teaching Old Dogs New Tricks: How Green

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Chemistry Can Transform Undergraduate Curricula and Research."

Nov. 16 -- Jonathan Rienstra-Kiracofe, Professor of Chemistry and Department Chair, North Park University.

All sessions will be held at Benedictine University, in the following rooms: Krasa Presentation Room in the Krasa Center, on 9/28, 10/12, 10/26, 11/2, 11/9 and 11/16; Birck Hall, 001 (in basement), on 10/5 and 10/19

For more information, please contact the series coordinator, Dr. Douglas Armstrong, Olivet Nazarene University, 815-939-5393, e-mail: darmstrg@olivet.edu

MESSAGE FROM THE CHAIR

Congratulations to Amber Arzadon and **all the Chicago Section volunteers** during 2009! At the ACS Boston National Meeting, the Chicago Section was selected as the recipient of the ChemLuminary Award for Outstanding Performance by a Local Section - Very Large Size Category (> 3200 members). The 2009 Great Lakes Regional Meeting (Chicago was the host local section) was a finalist for the outstanding regional meeting award. Also at the Boston meeting, five Chicago Section members were honored as **members of the 2010 class of ACS Fellows: Russ Johnson, Philip Eaton, Zafra Margolin Lerman, Mark Ratner, and Alfred Sattelberger**. All of these honors and the recognition of our members are well-deserved tributes to the dedication and hard work of our active section members.

The Illinois State Fair took place **August 13-22** in Springfield. The tent sponsored by the ACS Illinois Sections had more than 11,400 visitors! Thanks to those section members who spent time working in the tent and talking with our visitors.

You should have received your ballot for our 2010 election. Please take a few minutes to vote for the candidates of your choice; every vote is important.

Our dinner meeting on **October 22** features Professor Roald Hoffmann, the recipient of the 2010 Basolo Medal.

Chemistry Day will be on Saturday, **October 23** at Loyola University and we could use a few more volunteers! If you would like to be part of an award-winning group, please come to one of our dinner meetings and talk with us about how you can contribute. Check the section website for more details on our section activities.

KEN FIVIZZANI

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 Priestly 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. 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 Dahl	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
Robert H. Grubbs	2008
Peter J. Stang	2009

ILLINOIS STATE FAIR PROJECT A SUCCESS!

We had another successful summer joint project at the Illinois State Fair August 13-22. This was our sixth year having an exhibitor tent there. There were 51 volunteers (a record) covering the time from the pre-Fair tent set-up through the actual 10 days of the Fair. Planning Committee and tent volunteers included members of 6 of the Illinois sections (Chicago, Decatur-Springfield, Heartland, Illinois-Iowa, Joliet, Mark Twain).

Over 11,400 people come through the tent during the Fair to enjoy the science demos, science toys and activities for kids, and the give-aways.

We distributed wooden rulers and hand fans as the main give-aways throughout each day. The hand fans were much appreciated since it was hot most days. Still a popular item for the teachers, a plush toy mole was given each day to the first teacher that signed in to receive a special teacher's bag. Each year we have at least one different item for the teachers. This year it was a Cartesian diver kit. We also had three computers set up, one with the science quiz, one for teacher registration, and one for the visitor's survey.

A big thank-you to our section's volunteers who worked diligently this summer to again make our "chemistry tent" a real attraction at the State Fair.

Our Chicago Section's volunteers this year were Cherlyn Bradley, Charles Cannon, Karen Cochran, Chris Cochran, Steven Edelman, Ken Fivizzani, Shelby Hatch, Fran Kravitz, Katie Leach, Mark Leach, Milt Levenberg, Margy Levenberg, Avrom Litin, Mary Newberg, Steve Newberg, and three students from Northwestern: Margaret Yu, Nathan Daly, and Sravya Tumuluru.

Also, a big thank-you to all our sponsors this year: Chicago section, Mark Twain section, Rock River section, Ingredient Source Corp., HNC Products, NorthStar Credit Union, Northrup RTS, Wizardcraft, donations from individuals. Contributors of materials and/or talent included Avrom Litin, Fran Kravitz, Milt Levenberg, BP Volunteers-Naperville chapter, Continental Cement, Flinn Scientific, Fisher Scientific, AAAS, United Soybean Board, NASA, IL. Dept. of Natural Resources, ISU-Dept. of Chemistry, ISU-Center for Math, Science and Technology, ACS Committee on Chemical Safety, ACS - Education Dept., ACS Project SEED, Richard Cornell, IL. Science Teachers Association, ACS National.

We are already thinking about next year. The planning committee's wrap-up meeting will be scheduled before the

end of the year. Let us know if you would like to help in this fun and worthwhile outreach project.

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

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

NOTICE TO ILLINOIS TEACHERS

The Chicago Section ACS is an ISBE provider for professional development units for Illinois teachers. Teachers who register for this month's meeting will have the opportunity to earn CPDU's.

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Elizabeth Friedman, Ph.D.
312.567.7973 | friedman@iit.edu

www.iit.edu/csl/bcps/psm

SECTION DUES

Members are urged to pay the \$15 Section dues with your annual ACS membership dues statement. The Section needs this revenue to help support activities.

THE UN-COMFORT ZONE

with Robert Wilson

Compelled by an Idea

I was leaving my last class for the day when I saw my friend, Ken Frankel, working out in the hallway with one of those pistol-grip label makers. I stopped and asked what he was doing.

"The Dean asked me to put the room numbers up in Braille so the blind students can find their classrooms."

As I watched Ken work, I thought of some of the blind students I knew there at Georgia State University. Suddenly the devil got into me and I asked, "Does that thing do the alphabet as well?"

"Yes." Ken replied.

"Excellent! Let's take it over to the men's restroom in the Student Center and put up some graffiti in Braille!"

So we did. The next day we made a point of running into our blind friends, and asking them if they had been keeping up with the graffiti that people were putting up in the stalls.

The typical answer was, "Come on man, why are you asking me that when you know I can't see it?"

So we replied, "Next time you're in there, feel above the toilet paper dispenser."

They did, and within 48 hours every blind student on campus had heard about it. Then they were after us to put up some more! They told us, "This stuff is great!"

Feeling obligated to get some new material, we hit the bars for inspiration. One night we found the mother lode: the men's room at Moe's & Joe's, a 50 year old pub where they never painted over the witticisms scrawled on the walls.

Several mugs of beer and several trips to the restroom later, we filled several sheets of paper with funny bathroom graffiti to take back with us. As we looked at our collection, we came to two conclusions: first that we'd had way too much beer, and second that we should keep collecting graffiti until we had enough for a book.

Little did we know how long that would take! After a few days of active searching we had little to show for our

efforts. Somewhat frustrated, we made a decision to just collect new material whenever we happened upon it.

A decade passed, but it was an idea I couldn't forget. It still made me laugh every time I thought of it. I kept the idea alive, and we kept collecting. Finally, 15 years later, our collection was big enough and we found a publisher who agreed with us that it was a very funny idea.

Sometimes an idea is so exciting that we can't leave it alone. We have to see it to fruition. I've been compelled by ideas to start new businesses, erect buildings, write novels, and even create new recipes.

My friend Jordan Graye, a radio personality in Atlanta, became energized by an idea when she learned that the actual inventor of radio, Nikola Tesla, never got credit for it in his lifetime. Like many people in radio, she believed that Guglielmo Marconi was the man who discovered it.

As she read more about Tesla, she learned that he was also the inventor of alternating current electricity -- the type of electricity that powers our homes and offices. She became incensed that history had forgotten this real-life Prometheus; and made it her mission to remind the world of his gifts.

She thought the best way to restore Tesla's fame would be in a film. That she had never made a movie before (and knew next to nothing about making one), did not deter her one bit.

Jordan did her research and composed a story. She then hired writers, actors, camera operators, and lighting people. She committed her time, energy and a sizable portion of her life savings to realizing her dream. Three years later, MegaHertz was complete and Nikola Tesla's life revived.

What idea is motivating you? Are you working on it?

--

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.

DID YOU KNOW?

Northwestern University is home to the renowned International Institute of Nanotechnology (IIN) that oversees more than \$500 million in nanotechnology research reaching into virtually every industry — including health, electronics, transportation, and the environment. Dr. Chad Mirkin is the director of IIN.

ACS CIRCUIT COURSES COMING TO CHICAGO IN 2011

From October 5-9, 2011 (Tuesday-Saturday), ACS will offer technical continuing education courses in Chicago.

Below are the courses scheduled for Chicago:

- Ecological Impact of Chemicals (10/5)
- From Kitchen to Plant: Industrial Production of Processed Food Products (10/5-6)
- Introduction to Modern Mass Spectrometry (10/5-6)
- Effective Supervision of Scientists and the Technical Staff (10/5-6)
- Human Health & Toxic Impact of Chemicals (10/6)
- Critical cGMP and ICH regulations for Pharmaceutical Laboratories (10/6)
- Practical HPLC in Pharmaceutical Analysis (10/7)
- Polymeric Coatings (10/7-8)
- Dispersions in Liquids: Suspensions, Emulsions, and Foams (10/7-8)
- Formulation Development and Drug Delivery Systems for Therapeutic Proteins (10/7-9)
- Drug-like Properties: Optimizing Pharmacokinetics and Safety in Drug Discovery (10/8-9)

For details, go to www.proed.acs.org. If you have any questions, you can also contact Bryan D. Tweedy, Program Manager, ACS Office of Professional Education, 202-872-4544, b_tweedy@acs.org.

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

DUTIES OF SECTION COUNCILORS EXPLAINED

This is a reprint of an article appearing in the April 1997 issue of the Chemical Bulletin. The article is updated annually to help you with your decision in electing councilors and alternate councilors in the upcoming Chicago Section election.

Remember to cast your vote.

Have you ever wondered who and what ACS councilors and alternate councilors are and what they do for you and the Chicago Section? The two major structural components of the Society besides your national officers and Board of Directors are local sections and divisions. ACS local sections and divisions not only elect their own officers, but also elect representatives to the ACS Council, the deliberative body of the Society. This is your opportunity to have a voice in Society's governance.

The Council consists of the President, the President-Elect, the Directors, the Past Presidents, the Executive Director, the Secretary, and more than 400 voting Councilors representing Local Sections and Divisions. The Council convenes twice a year at the Society's national meetings.

Councilors provide the principal contact between local section members and governance leaders in setting policies for the ACS that directly or indirectly affect you. Councilors are elected to serve a three-year term. Alternate Councilors represent the section when a Councilor is unable to attend a Council meeting.

Councilors also serve on National committees that meet during National meetings. Councilors are appointed to these committees by the President of the Society and are eligible to serve only three consecutive terms on the same committee. A councilor who accepts an appointment to a committee

accepts an obligation to work year-round throughout that term. The Councilor is expected to attend meetings of the committee, and be willing to undertake special assignments that require time between meetings.

Committees of the Council are: 1) Standing Committees: Constitution and Bylaws, Divisional Activities, Local Section Activities, Meetings and Expositions, Membership Affairs, and Economic and Professional Affairs; 2) Society Committees: Budget and Finance, and Education; 3) Joint Board-Council Committees: Chemical Abstracts Service, Chemistry and Public Affairs, Chemists with Disabilities, Community Activities, Environmental Improvement, International Activities, Patents and Related matters, Professional Training, Public Relations and Communications, Publications, Science, Minority Affairs, Chemical Safety, Women Chemists, and Younger Chemists; 4) Other Committees of the Council: Analytical Reagents, Ethics, Nomenclature, Project SEED, and Technician Affairs; and 5) Elected Committees: Council Policy, Nominations and Elections, and Committee on Committees.

The Chicago Section is currently represented by 12 councilors elected by you. Most of these councilors are active members or associates on National ACS committees. Your Chicago Section Councilors and their current committee appointments are: **Cherlynlavaughn Bradley** (Committee on Committees), **Charles E. Cannon** (Economic and Professional Affairs), **Mark C. Cesa** (Science), **David S. Crumrine** (Chemical Safety), **Ken Fivizzani** (Chemical Safety), **Herbert Golinkin**, **Russell W. Johnson** (Chemistry and Public Affairs), **Fran K. Kravitz** (Local Section Activities), **Milt Levenberg** (Public Relations and Communications), **Inessa Gorelik Miller**, **Barbara E. Moriarty** (Divisional Activities; Meetings and Expositions), and **Susan Shih** (Education).

Alternate Councilors for the Chicago Section are: **Amber Arzadon**, **Irene Cesa**, **Fran Clifton**, **Thomas Higgins**, **Frank Jarzembowski**, **Margaret S.**

Levenberg, Laura Li, Avrom Litin, Stan Seelig, Paul Young, Robin Zavod.

Some of our Councilors are also involved in other activities related to the National Meetings. **Cherlynlavaughn Bradley** chairs the Diversity Subcommittee of the Committee on Committees and is a liaison to the Joint Subcommittee on Diversity. **Fran Kravitz**, **Charles Cannon**, and **Herb Golinkin** are career consultants who do resume reviews during each National meeting. **Charles Cannon** and **Fran Kravitz** are also career workshop instructors.

Your Councilors and Alternate Councilors ask for your help, in providing your opinions about the Society and issues relating to the Society. This will help Councilors better represent you during Council.

CHERLYN BRADLEY

INTRODUCING ACS MOBILE, THE NEW IPHONE APP

ACS has introduced the ACS Mobile application for iPad, iPhone, and iPod Touch users. Some of the features available with the ACS Mobile application include the ability to view a searchable real-time list of new articles ASAPSM from your selected ACS journals, tap through to abstracts and save your favorite listings to your device for reading offline, and read the "Latest News from C&EN Online".

ACS Mobile will make your daily commute, weekend downtime, and any other time away from your desk more productive than ever. For more information and a video demonstration about this exciting new application, search "acsmobile" on the acs.org website.

Video Podcast on Bioplastics for High School Students

The Education Division of ACS has just released a video podcast on bioplastics, which are plastics made from plants instead of fossil fuels (as most plastics). The podcast is available at: www.acs.org/chemmatters and is based on an article from the April 2010 issue of ChemMatters, a magazine for high school students published by ACS.

Teachers can use this podcast in the classroom when they teach polymers or organic chemistry. If you would like to know more about ChemMatters, please visit its web site: www.acs.org/chemmatters or contact the magazine's editor, Patrice Pages, at chemmatters@acs.org or 202-872-6164.

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REPORT OF BOSTON COUNCIL MEETING

The 240th National Meeting of the ACS was held in Boston, MA from August 22-26, 2010. The theme of this meeting was "Chemistry for Preventing and Combating Disease." The Chicago section was fully represented by councilors Cheryl Bradley, Charles Cannon, Mark Cesa, Dave Crumrine, Ken Fivizzani, Inessa (Gorelik) Miller, Herb Golinkin, Russ Johnson, Fran Kravitz, Barbara Moriarty and Susan Shih as councilors and by Irene Cesa as an alternate councilor.

Finances: The Committee on Budget and Finance reported that the Society is expected to end the year with \$2.4 million favorable to the approved budget. The Society is meeting four out of the five financial guidelines. Program funding requests were received and approved for *ACS Global Research Experiences, Exchanges and Training (GREET)*, *State Government Affairs Program* and *Department of Professional Education*.

Governance: The Council elected councilors to serve on the Committee on Committees, the Council Policy Committee and the Committee on Nominations. For the Committee on Committees -- Janet L. Bryant, H. N. Cheng, Amber S. Hinkle, V. Michael Mautino, and Yorke E. Rhodes were elected. For the Council Policy Committee -- John E. Adams, Alan M. Ehrlich, Mary Virginia Orna, and Dorothy J. Phillips were elected. For the Committee on Nominations and Elections -- Jeannette E. Brown, Martha L. Casey, D. Richard Cobb, Lissa Dulany, and Angela K. Wilson were elected.

The candidates for the fall 2010 ACS national election for President-Elect 2011 are Luis A. Echegoyen (Professor, University of Texas at El Paso, El Paso, TX) and Bassam Z. Shakhshiri (Professor, University of Wisconsin, Madison, WI). No other elections affect members of the Chicago section.

Meetings and Expositions: As of August 24, 2010, the ACS fall national meeting had attracted 14,059 registrants including 8,211 regular attendees, 3,230 students, 393 guests, 733 exhibit-only attendees and 1,492 exhibitors.

Membership: The 2010 membership numbers are on track to meet year-end goals. The Student Member community has continued to grow since creation of this new member category in June 2009 with more than 12,000 students as members of the society at the end of July.

Committee on Economic and

Professional Affairs: The career fair at the meeting had 1,066 job seekers, 40 employers and 484 jobs posted by 68 employers. The number of employers and jobs posted has improved from previous meetings. In order to provide greater access to those who are unable to travel, a virtual career fair is being planned for November 2-3, 2010.

Local Sections: The winners of the Awards for Outstanding local sections were announced. The Chicago Local Section, along with San Diego, Cincinnati, Nashville, Brazosport and Penn-Ohio Border were recognized.

The Council voted to change the territories of the Northeast Oklahoma Local Section and the Binghamton Local Section to include ACS members from sections that will dissolve at the end of 2010, due to too few members.

Petitions: The Council approved the Petition on Recorded Votes, which allows for additional voting methods when conducting recorded votes.

Should the Council meeting be moved to Tuesday? The council discussed whether Council meetings should be moved from Wednesdays to Tuesdays. Many viewpoints were expressed by councilors. A straw vote at the end of the discussion showed that 128 councilors

are supportive of the proposed move of Council to Tuesdays, 225 oppose the move, and 56 are undecided.

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

BARBARA MORIARTY

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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**Behind the Scenes with Chemistry!
Chemistry Day
Saturday, October 23, 2010
Loyola University**

Please join us!

Do you remember the first time you realized that chemistry was special? If the answer is yes, then we need your help! The ACS Chicago Section invites all local ACS members to join in the celebration of National Chemistry Week by volunteering to participate in *Chemistry Day* on Saturday, October 23, 2010, at Loyola University.

Chemistry Day is an annual, day-long event open to all students ages 10–16. It is always an exciting and popular occasion – last year, more than 750 local students attended our signature *National Chemistry Week* celebration! ACS volunteers are the vital link in this highly successful community outreach program. Featured activities for students and their parents, teachers, guardians, as well as scout and other community leaders, include magic demonstrations, wonderful hands-on chemistry lab experiments, interactive exhibits, and an inspirational Boy Scout chemistry merit badge program.

We need your help! Share your love of chemistry by meeting and greeting participants, supervising hands-on lab activities with students, sharing exhibit materials, and performing demonstrations.

The theme of *National Chemistry Week* for 2010 is "Behind the Scenes with Chemistry." Chemistry will come alive for students as we showcase the differences between what we see in television, movies, and literature and the real science behind the "magic" and mystery of special effects.

We hope you will join with your ACS friends and colleagues to continue this unforgettable tradition. Please e-mail your Community Affairs Committee co-chairs listed below to sign up now!

AVROM LITIN
IRENE CESA
DAVID CRUMRINE

alitin@comcast.net
icesa@fllnsci.com
dcrumri@luc.edu

COLLEGE OF MICROSCOPY RENAMED HOOKE COLLEGE OF APPLIED SCIENCES

The McCrone Group, Inc., announced on July 1 that its education and training division, formerly the College of Microscopy, has been renamed the Hooke College of Applied Sciences.

The College will expand its courses and programs beyond the realm of microscopy, and offer a range of hands-on, science-based, educational programs to adult professionals, college students, and advanced placement high school students. The new programs will include courses relevant to current and future technical occupations in chemistry, biology and microscopy with an emphasis on materials analysis, course tracks leading to professional certificates, as well as undergraduate and graduate degrees in collaboration with Chicagoland area colleges and universities.

The new college name honors Robert Hooke, a science pioneer who helped to shape scientific thinking in the 17th century with his contributions to microscopy, chemistry, biology, physics, engineering and astronomy. Hooke's 1665 book entitled *Micrographia* was one of his most significant works published because it established microscopy as the foundation for advancing biological science.

Since its founding in 2004, the College of Microscopy has focused on the applications of microscopy and microanalytical techniques across a wide spectrum of industries, ranging from forensic and pharmaceutical sciences to nanotechnology and conservation. The new name, Hooke College of Applied Sciences, more accurately reflects plans for comprehensive offerings in science and a curriculum that recognizes the needs of today's job market and prepares those entering or attending colleges and universities for tomorrow's job market.

Many courses will offer a Web-Classroom-Web experience that enables students to preview material via the web prior to taking a course. Then, after receiving on-campus training, students are provided unknowns to analyze in their own laboratories using their own equipment via instructor-led web-based sessions.

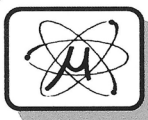
Students who attend Hooke College of Applied Sciences courses are eligible to receive International Association for Continuing Education and Training (IACET) continuing education units (CEUs), giving them the opportunity to obtain professional certificates and the ability to transfer class credits to other accredited schools and institutions.

The new 40,000 square foot learning center at Hooke College of Applied Sciences in Westmont contains classrooms and laboratories with state-of-the-art analytical instrumentation, as well as a 140-seat auditorium.

For further information, see www.hookecollege.com/

HAVE YOU MAILED YOUR BALLOT?

Just a reminder that ballots are due in the Section office no later than noon, October 22. They were mailed early September.



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How about advertising your business in the Chicago Section's *THE CHEMICAL BULLETIN*!

Each month, except for July and August, *THE CHEMICAL BULLETIN* is electronically available to more than 4600 technically aware readers. This audience constitutes a rich pool of individual chemists, chemical engineers, science teachers, and students, within the Chicago Metropolitan Area. Our members are from industry, academic institutions (both universities and high schools) and government.

Our deadlines are approximately five weeks before publication so plan ahead and include us among your media plans and advertising strategies. Ask about our special rates for a year's subscription of your ad insertion.

Contact the Section office at 847-391-9091 or email at chicagoacs@ameritech.net.

IYC 2011

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

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

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

To keep in touch with the happenings of IYC 2011, go to www.chemistry2011.org for the latest news, activities listings and ideas.

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.

CO-CHAIRS MARGY LEVENBERG
AND SUSAN SHIH

FREE MULTIMEDIA CLIMATE CHANGE ASSEMBLIES FOR HIGH SCHOOLS

The Alliance for Climate Education presents 45-60 minute interactive presentations for high school students explaining global climate change and its effect on our planet. Go to <http://www.acespace.org/>

OCTOBER HISTORICAL EVENTS IN CHEMISTRY

October 1, 1867 — Wilder D. Bancroft, who served as President of the ACS in 1910, was born. He conducted the first systematic study of oxidation cells and did research on heterogeneous equilibria, emulsions, and a theory of dyeing. In 1896, he founded the Journal of Physical Chemistry and served as editor until 1932.

October 5, 1872 — Emil Votocek, who was born on this date, was a researcher in sugars. He introduced the concept of epimerism.

October 5, 1921 — Mahlon Hoagland, a biochemist who discovered transfer RNA, was born.

October 7, 1885 — Niels Bohr, who proposed the “solar system” model of atoms based upon Planck’s quantum law in 1913 and received the Nobel Prize in Physics in 1922 for his services in the investigation of the structure of atoms and of the radiation emanating from them, was born.

October 8, 1917 — Rodney R. Porter, who researched the structure of antibodies, was born. In 1972, he shared the Nobel Prize in Physiology or Medicine with Gerald M. Edelman for their discoveries concerning the chemical structure of antibodies.

October 12, 1865 — Arthur Harden, a researcher on enzymes and fermentation, was born. In 1929, he shared the Nobel Prize in Chemistry with Hans Euler Chelplin for their investigations on the fermentation of sugar and fermentative enzymes.

October 14, 1863 — Alfred Nobel received a Swedish patent for preparing nitroglycerine, his first of 355 patents. He was born on October 21, 1833 and was the inventor of dynamite. He established the Nobel Prizes and the Nobel Foundation.

October 18, 1799 — Christian F. Schönbein, who discovered ozone in 1840, produced collodion in 1846, and did research on hydrogen peroxide and cellulose nitrate, was born.

October 19, 1872 — Jacques Brandenberger, who invented a transparent waterproof film known as cellophane, was born.

October 20, 1891 — James Chadwick, who received the Nobel Prize in 1935 for the discovery of the neutron in 1932, was born.

October 21, 1660 — Georg E. Stahl, who prepared glacial acetic acid, was born. Stahl and Johann J. Becher were responsible for the theory of phlogiston.

October 23, Any Year — Mole Day, 6.02 a.m. through 6.02 p.m. (Mole time); Mole Moment: 50.453 seconds after 6.42 p.m.

October 25, 1913 -- Marjorie Jean Young Vold, who studied the phase behavior and kinetic properties of soaps, liquid crystals and suspensions, was born.

October 31, 1835 — Johann Friedrich Wilhelm Adolf Von Baeyer, who discovered barbituric acid in 1863, was born. In 1905, he was awarded the Nobel Prize in Chemistry for advancing organic chemistry and the chemical industry through his work on organic dyes and hydroaromatic compounds.

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

Historical events can be found at Dr. May’s website, <http://faculty.cua.edu/may/Chemistrycalendar.htm> or This Week in Chemical History at the ACS website: <http://www.acs.org/whatischemistry>.

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IIT	5	312-567-7973	www.iit.edu/csl/bcps/psm
HNC Products Co.	7	217-935-6845	
Micron Inc.	9	302-998-1184	www.micronanalytical.com

CALENDAR

September 27-October 1: McCrone Research Institute course - "Pharmaceutical Microscopy"; 2820 S. Michigan Ave., Chicago. For course details, go to <http://www.mcricri.org/home/section/10/courses>

September 29 - October 13: Science History Tour of Italy: From Como to Rome, with stops in between. For information or sign-up materials, contact ytwomey@mindspring.com or Lee Marek at Lmarek@aol.com or Lmarek2@uic.edu.

September 29: Dionex half-day seminar on "Ion Chromatography Tools to Boost Water Lab Productivity", Oakbrook, IL. For details, go to <http://www.dionex.com/en-us/events/north-america/presentations/lp-87725.html>.

October 14: Chicago Section ACS Board meeting, 1400 Renaissance Dr., Suite 312, Park Ridge, IL 60068; 847-391-9091.

October 18-22: High Performance Liquid Chromatography: Fundamentals, Troubleshooting, and Method Development course will be held at Axion Analytical Laboratories, 14 N Peoria Street, Suite 100, Chicago, IL 60607. The course fee includes tuition, lecture and laboratory materials, morning and afternoon snacks, and all lunches. For further information, call 312-243-2153.

October 22: Basolo Medal Award Lecture, Dinner, and Presentation; joint Chicago Section ACS's meeting with Northwestern University's Department of Chemistry. The Basolo Medal Awardee is Roald Hoffmann.

October 23: Chemistry Day at Loyola University. The theme is "Behind the Scenes with Chemistry."

October 27 - 30: 45th ACS Midwest Regional Meeting at the Marriott Wichita, Wichita, Kansas. For further information, visit <http://2010mwrm.sites.acs.org/>. To register for the meeting, go to <http://2010mwrm.sites.acs.org/registration.htm>

November 1-5: Gas Chromatography: Fundamentals, Troubleshooting, and Method Development course will be held at Axion Analytical Laboratories, 14 N Peoria Street, Suite 100, Chicago, IL 60607. The course fee includes tuition, lecture and laboratory materials, morning and afternoon snacks, and all lunches. For further information, call 312-243-2153.

November 3-5: The 31st Annual Conference of the Association of Laboratory Managers (ALMA) will be held at the Hilton Scottsdale Resort and Villas, Scottsdale, AZ. Registration deadline is October 1. Register online at www.labmanagers.org. Visit www.labmanagers.org for further information.

November 11: Chicago Section ACS Board meeting, 1400 Renaissance Dr., Suite 312, Park Ridge, IL 60068; 847-391-9091.

November 18: Chicago Section ACS-University of Chicago joint Dinner Meeting. This is the Stieglitz Lecture.

December 2: Chicago Section ACS Board meeting, 1400 Renaissance Dr., Suite 312, Park Ridge, IL 60068; 847-391-9091.

December 10: Chicago Section ACS Holiday Party and Dinner Meeting.

JOB CLUB

The next meeting of the **Chicago Section ACS Job Club** will be held on Friday, **October 22 at 5:30 p.m.** at Zhivago Restaurant. The meeting will include a review and discussion of some of the tools that a chemist can use to conduct a job search.

The Job Club provides a continuing opportunity for unemployed members of the Section to meet with one another, share their experiences and develop a network that may help in identifying employment opportunities. Bring plenty of resumes and business cards to distribute to your colleagues. Be prepared to talk about the kind of job you are seeking.

Several participants have received outsource help with resume preparation and marketing strategies to present their best attributes to prospective employers. The group has critiqued some individual resumes and made suggestions for improvements in a positive way!

The Job Club is also for employers seeking chemists. Employers need to be prepared to describe the positions to be filled and requirements for these positions.

Should you wish to attend the Section's dinner meeting following the Job Club, the cost is \$20 and you can continue your networking activities. Please call the Section office for reservations and indicate that you are eligible for a discount.

Also, the Chicago Section's website has a link to the Job Club's yahoo job forum group. If you can't attend the Job Club, you can still find out about job openings and other information.

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