

# The Chemical Bulletin

<http://chicagoacs.org>

OCTOBER • 2013

## Chicago Section American Chemical Society Joint Meeting with the Northwestern University Department of Chemistry

### Basolo Medal Award Lecture, Dinner and Presentation Friday, October 11, 2013

#### BASOLO MEDAL LECTURE

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

#### DIRECTIONS TO THE TECHNOLOGICAL INSTITUTE

**From the city:** Take Lake Shore Drive north to Sheridan Road into Evanston. Continue north 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.

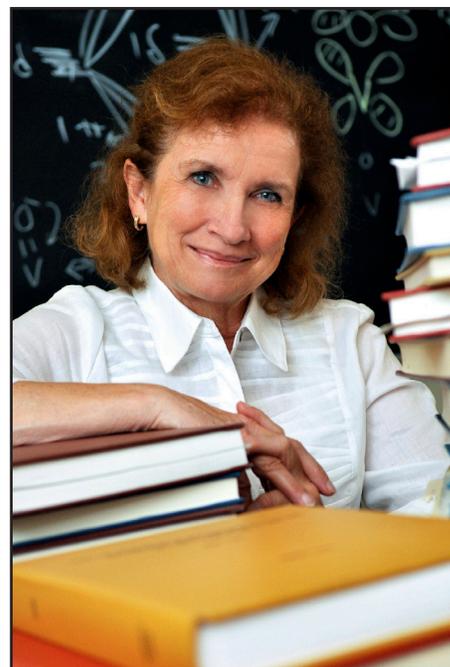
Lecture room 3 is on the first floor of the Technological Institute and is most easily reached by entering through the main doors facing Sheridan Road. The lecture room is clearly marked and there will be signs at the entrance to guide you to the room.

#### 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.

#### 2013 Fred Basolo Medalist



Dr. Marcetta Y. Darensbourg, Department of Chemistry, Texas A & M University, College Station, TX

**“Crossroads of Organometallic and Coordination Chemistry: Synthetic Analogues of the Hydrogenase Active Sites”**

**Abstract:** The enormous response of chemists to the exciting organoiron molecules found in the active sites of [NiFe]-, [FeFe]-, and [Fe]-hydrogenases has produced a new field in the area of

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bioorganometallic chemistry. Synthetic efforts directed towards structural and functional (with regards to  $2\text{H}^+ + 2\text{e}^- = \text{H}_2$ ) models of these active sites have been enriched by various spectroscopies and theoretical models. The lessons learned go beyond comparisons to the enzymes, and into fundamental new chemistries. Perhaps this is because despite the advances in synthesis and mechanistic insight that the  $\text{H}_2$ ase-inspired, base-metal catalysts have provided in the past decade, a systematic development that draws on the expected necessary features to improve performance has not produced highly active and robust molecular assemblies.

Arguably the best molecular electrocatalyst for hydrogen processing that has resulted from the hydrogenase active site inspiration is a mononuclear nickel complex with a built-in pendant nitrogen base—but with no diatomic ligands or proximal metal, the DuBois catalyst. Other monometallic  $\text{H}_2$ -evolving catalysts, with or without pendant bases, have also been reported. Nevertheless the ubiquity of bimetallic active sites in biology provides a compelling argument for investigation of features that inform on the contributions of individual metals to the overall catalytic processes. Are the metals in concert with shared molecular orbitals? Or do redox changes at one metal merely change the donor ability of the thiolate sulfurs that bridge the metals?

Such questions are addressed with a now “classic” diiron model and a new non-carbonyl complex with an obvious iron dithiolate as bidentate ligand to a second iron, a dinitrosyl iron moiety. Comparisons to the familiar [FeFe]- and [NiFe]-hydrogenase biomimetics based on iron carbonyls expand the possible base-metal electrocatalysts into the non-innocence of iron-nitrosyl chemistry.

**Biography:** Professor Marcetta Y. Darensbourg is a native of Kentucky, with a Ph.D. from the University of Illinois. Following academic posts at Vassar College and Tulane University, she joined the faculty at Texas A&M University, College Station, TX, in 1982. She holds the title of Distinguished Professor of Chemistry. Trained as an organometallic chemist and with earlier research programs in low valent transition metal hydrides, the possibility of metal hydrides in nature, specifically as intermediates in hydrogenase metalloenzymes lured her into the new field of bioorganometallic chemistry.

She has been a leader in the development of synthetic analogues of the diiron hydrogenase active site and the insight they bring to the catalytic mechanism of these natural fuel cell catalysts.

## DINNER MEETING LOCATION

**Hilton Orrington/Evanston  
Heritage Ballroom, 2nd Floor  
1710 Orrington Ave.  
Evanston, IL 60201**

### DIRECTIONS TO THE HILTON ORRINGTON

From the Northwestern Technological Institute:

The hotel is about one mile south of the Institute. Take Sheridan Road south to Chicago Ave. Stay on Chicago Ave. to Davis St. Turn right onto Davis St. and take the first right onto Orrington Ave. The hotel is on the left. Note that the streets around the hotel are one-way.

**PARKING:** Valet parking is available; vouchers will be distributed at dinner.

**Reception 6:00 P.M.**

#### Hors d' Oeuvres

Vegetable Spring Roll with Ponzu Dipping Sauce  
Crab Potsticker & Sesame Honey  
White Mushroom Stuffed with Goat Cheese Creamed Spinach Spanikopita

#### Beer, Wine and Soda Bar

**Dinner 7:00 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://www.chicagoacs.net/meetings/13oct.php>) by noon on Tuesday October 8. 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-members is \$37. The cost to students and unemployed members is \$20.

#### Menu Choice of:

##### Grilled Endive

Balsamic Roasted Asparagus, Slow Roasted Roma Tomatoes  
Candied Walnuts, Maytag Blue Cheese, Petite Peppercress  
Balsamic Reduction and Basil Oil

##### Lavender Scented Salmon

French Beans Glazed in Truffle Honey, Fingerling Potatoes and Pinot Grigio  
Beurre Blanc

##### Rosemary Chicken Breast

Parmesan Risotto, Asparagus and Wild Mushroom  
Demi Glace with Cream

##### Portobello Mushroom Ravioli with Steamed Broccolini

Roasted Roma Tomatoes and Parmesan Broth

##### Dessert -- Homemade Warm Bread Pudding with Caramel Sauce

##### Wine Served with Dinner

**General Meeting 8:00 P.M.**

- Opening remarks and announcements: **Dr. Michael Koehler**, Chair, Chicago Section American Chemical Society
- Presentation of the 2013 Basolo Medal
- Acceptance: **Dr. Marcetta Y. Darensbourg**, 2013 Basolo Medalist for Outstanding Research in Inorganic Chemistry
- Closing Remarks: **Dr. Michael Koehler**

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## "CHEM SHORTS" For Kids

The Elementary Education Committee of the Chicago Section ACS presents this column and hopes it will reach young children and help increase their interest in science. 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.

### Quick Cups of Crystals

Kids, this is a great way to quickly make a large amount of crystal needles!

In a cup or a small, deep bowl, mix 1/2 cup of Epsom salts (magnesium sulfate) with 1/2 cup of hot tap water. Stir for about a minute to dissolve the Epsom salts. There will still be some undissolved crystals at the bottom. You have made a "saturated" solution, which means the liquid has dissolved all of the salts that it can hold. Place the cup or bowl into a refrigerator. The cup or bowl will fill with needle-like crystals within three hours. If you would like to grow colored crystals, you can color the hot water first with a drop of food coloring.

Tips:

- Epsom salts can be purchased in drugstores.
- Don't use boiling water to prepare your solution. Just use water that is as hot as you can make it from a tap. If you use boiling water you will still get crystals, but they will be more threadlike and less interesting. The temperature of the water helps control the concentration of the solution.
- You can place a small object at the bottom of the cup or bowl to make it easier to remove your crystals, such as a quarter or plastic bottle cap. Otherwise, carefully scoop the crystal needles from the solution if you wish to examine them or save them.
- As always with science experiments, it's best to wear gloves and eye protection. Don't drink the crystal liquid. It's not dangerous but it's not good for you either.

Reference:

Anne Marie Helmenstine at [Chemistry.About.com](http://Chemistry.About.com),  
<http://chemistry.about.com/od/crystalrecipes/ht/cupofcrystals.htm>

Submitted by DR. KATHLEEN CARRADO GREGAR

To view all past "ChemShorts for Kids" go to:  
<http://www.chicagoacs.net/ChmShort/kidindex.html>

## Evaluate, Educate, Explore



March 2-6, 2014  
Chicago, Illinois  
[www.pittcon.org](http://www.pittcon.org)

Pittcon is the leading conference and exposition for the latest advances in Laboratory Science. To enhance your Pittcon 2014 experience, we will be co-programming with The American Chemical Society's Division of Analytical Chemistry (ACS-DAC). Attend one of the many ACS-DAC sessions such as:

- Analytical Advances in Clinical Diagnostics
- Chemometrics for Modeling and Analyzing Chemical Systems
- Interferometry in Chemistry, Biology and Medicine
- Lifelong Teaching and Learning in Separation Science

For more information on technical sessions, exhibitors and short courses, visit [www.pittcon.org](http://www.pittcon.org).

Follow Us for special announcements



## WITH YOU FROM DAY ONE: RESOURCES FOR UNDERGRAD MEMBERS

There's a tremendous amount of value that comes along with your ACS membership. In addition to special discounts on world-class information resources and technical meetings, ACS members have access to a suite of valuable professional and personal benefits, developed by colleagues in the chemical sciences and designed to meet their specialized needs.

ACS starts supporting budding chemical scientists at the earliest stages of their careers, with a broad range of resources for undergraduates that helps them find their direction, make connections, and build a solid foundation in preparation for an occupational lifetime in the chemical sciences:

- The "Get Experience" web exchange ([www.acs.org/getexperience](http://www.acs.org/getexperience)) allows undergrads to search for research experiences, internships, co-ops, and other chemistry-related opportunities
- *InChemistry*, the official ACS student member magazine, is published four times annually and focuses on graduate school options, nontraditional careers in chemistry, ACS programs, and running a successful student chapter
- "Reactions," the ACS undergrad blog, provides a forum for undergrads to share their experiences and ideas online
- ACS Student Chapters can be the first professional networks for undergrads, right on campus, where they can start getting involved, making contacts, and learning how a professional society can support them
- Grants are available to support ACS Student Chapter activities and growth
- Special programming at ACS National Meetings offers opportunities for undergrads to present their work and connect with their peers
- *Careers in Chemistry* is an online collection of descriptions of some of the places a chemistry degree can take you; the College to Career web site (available December 2013) will provide information about traditional and nontraditional career paths in chemistry and will include career descriptions, career profiles of chemists, and information on how to pursue a career in chemistry
- The new Chapter Reporting Tool will make chapter management and recording events and activities much easier for ACS student chapters
- [Undergrad.acs.org](http://Undergrad.acs.org) is where undergrads can become ACS members!

Get connected with the undergrad resources from ACS for a great start to your career in the chemical sciences! You can also keep up with ACS's undergrad programs on **Facebook** and **Twitter**.

*ACS Members, get the most out of your membership by taking advantage of all the resources available through your Society. You can find complete details about ACS Undergraduate Programs and other resources at [www.acs.org/member-handbook](http://www.acs.org/member-handbook).*

*Not an ACS Member? Join today at [www.acs.org/joinacstoday](http://www.acs.org/joinacstoday) and start enjoying everything that comes along with being an ACS Member!*

## "Energy: Now and Forever" Chemistry Day Saturday, October 26, 2013 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 26 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. ACS volunteers are the vital link in this highly successful community outreach program. Featured activities for students and their parents, teachers, guardians, as well community leaders, include magic demonstrations, hands-on chemistry lab experiments, and interactive exhibits.

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 2013* is "Energy: Now and Forever".

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!

IRENE CESA	<a href="mailto:icesa@flinnsci.com">icesa@flinnsci.com</a>
DAVID CRUMRINE	<a href="mailto:dcrumri@luc.edu">dcrumri@luc.edu</a>
AVROM LITIN	<a href="mailto:alitin@comcast.net">alitin@comcast.net</a>

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## PRESIDENTIAL MEDAL OF FREEDOM GOES TO A CHEMIST

**Dr. Mario J. Molina**, who helped elucidate the role of chlorofluorocarbon gases in the destruction of Earth's protective ozone layer and has advocated for climate-change research ever since, has been selected to receive the Presidential Medal of Freedom.

Molina shared the 1995 Nobel Prize in Chemistry with fellow chemists Paul J. Crutzen and the late F. Sherwood Rowland for their work on the ozone layer. He was the Chicago section's 1998 Willard Gibbs medalist.

The Medal of Freedom puts the University of California, San Diego (UCSD), professor of chemistry and biochemistry outside his usual scientific crowd. His fifteen fellow awardees this year include media mogul Oprah Winfrey, country singer Loretta Lynn, and former president Bill Clinton.

"The Presidential Medal of Freedom goes to men and women who have dedicated their own lives to enriching ours," President Barack Obama said in announcing the awards. "This year's honorees have been blessed with extraordinary talent, but what sets them apart is their gift for sharing that talent with the world."

Born in Mexico, Molina has been active talking about and doing research related to global climate change. "I am thrilled because the recognition is not only due to my work as a scientist, but it also involves my work addressing societal problems," he says. "It is a powerful incentive to continue with this work."

Molina says he is particularly honored to receive the award from Obama because he has worked with him for several years now as a member of the President's Council of Advisors on Science & Technology (PCAST). He also served on PCAST for Clinton.

In addition to his position at UCSD, Molina is director of the Mario Molina Center for Energy & Environment in Mexico City. He is also a member of the National Academy of Sciences and the Institute of Medicine.

"Molina demonstrated how an immigrant to the United States could make Nobel Prize-stature contributions to science," says Marinda Li Wu, president of the American Chemical Society, where Molina has been a member for 42 years. "He later helped to raise awareness about global climate change among news media, the public, and policymakers."

Dr. Molina will receive his medal later this year at a White House ceremony.

## BASOLO MEDAL

### History

The Fred Basolo Medal was established by the former students of Fred Basolo in appreciation for his contributions to inorganic chemistry at Northwestern University.

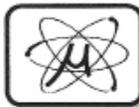
Fred Basolo was born in Coello, Illinois in 1920 and received a B.Ed., at Southern Illinois Normal University. He then went to the University of Illinois where he received a Ph.D. with John C. Bailar, Jr. in 1943. After working on a classified military research project during WWII, he joined the faculty at Northwestern in 1946. In 1980, the University honored him with the Charles E. and Emma H. Morrison Professorship of Chemistry.

Internationally recognized for his original contributions to the syntheses and reaction mechanisms of transition-metal Werner complexes, Basolo did some of the seminal work in the developing fields of organometallic and bioinorganic chemistry. He was also a truly gifted teacher. Many of his former students occupy prominent academic and industrial positions. Basolo influenced students worldwide to study inorganic chemistry and received the 1992 ACS Pimentel Award in Chemical Education. He published 400 scientific publications and four books.

Basolo's contributions to the profession of chemistry were equally outstanding. He served as President of the American Chemical Society in 1983 and as Chairman of the Chemistry Section of AAAS in 1979. He was a member of the Board of Trustees of the Gordon Research Conferences and its chairman in 1976. Some of the many honors received by Basolo include membership in the National Academy of Sciences, the American Academy of Arts and Sciences, foreign membership in the Italian Academy of Sciences Lincei, as well as the ACS Awards for Research and for Service in Inorganic Chemistry. He received the first Joseph Chatt Medal, the 1996 Willard Gibbs Medal of the Chicago Section ACS, and was the 2001 Priestley Medalist of the ACS.

Previous Basolo Medalists:

1991	<b>Ralph G. Pearson</b>	University of California, Santa Barbara
1992	<b>Henry Taube</b>	Stanford University
1993	<b>Jack Halpern</b>	University of Chicago
1994	<b>Harry Gray</b>	California Institute of Technology
1995	<b>Lawrence Dahl</b>	University of Wisconsin, Madison
1996	<b>Richard H. Holm</b>	Harvard University
1997	<b>Kenneth N. Raymond</b>	University of California, Berkeley
1998	<b>Malcolm Green</b>	University of Oxford, UK
1999	<b>Thomas J. Meyer</b>	University of North Carolina, Chapel Hill
2000	<b>James P. Collman</b>	Stanford University
2001	<b>M. Frederick Hawthorne</b>	University of California, Los Angeles
2002	<b>Stephen J. Lippard</b>	Massachusetts Institute of Technology
2003	<b>Daryle H. Busch</b>	University of Kansas
2004	<b>Malcolm H. Chisholm</b>	The Ohio State University
2005	<b>John E. Bercaw</b>	California Institute of Technology
2006	<b>Ivano Bertini</b>	University of Florence, Italy
2007	<b>Richard R. Schrock</b>	Massachusetts Institute of Technology
2008	<b>Robert H. Grubbs</b>	California Institute of Technology
2009	<b>Peter J. Stang</b>	The University of Utah
2010	<b>Ronald Hoffmann</b>	Cornell University
2011	<b>Gregory J. Kubas</b>	Los Alamos National Laboratory
2012	<b>Richard Eisenberg</b>	University of Rochester



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**PLEASE VOTE** in the Section's online election when you receive your special election password in the mail

## CHICAGO SECTION 2013 ELECTION SLATE

The following slate of candidates was put together by the Nominating Committee for the 2013 Section Election. New officers will take office January 2014.

### OFFICERS:

#### CHAIR

Inessa Gorelik

#### VICE-CHAIR

Ken Fivizzani  
Susan Shih

#### SECRETARY

Margaret (Peggy) Schott  
Irene Cesa

#### TREASURER

Teri Collins  
Mark Kaiser

#### DIRECTORS:

Katie Leach  
Frank Jarzembowski  
Norman Hudson  
Anthony Toussaint  
Tom Higgins  
Joy Walker  
Russ Johnson  
Andrea Twiss-Brooks  
Paul Brandt  
Mary Jo Boldingh  
Margaret Levenberg\*  
Milt Levenberg\*  
Zhiliang Gong

#### COUNCILORS:

Russ Johnson\*  
Cherlyn Bradley\*  
Barb Moriarty\*  
Fran Kravitz

#### ALTERNATE COUNCILORS:

Irene Cesa\*  
Tom Higgins\*  
Mark Kaiser\*  
Paul Young\*  
Josh Kurutz  
Avrom Litin  
Michael Koehler

\*Incumbents

## ILLINOIS STATE FAIR PROJECT

We had another successful summer joint project at the Illinois State Fair August 9-18. This was our tenth year of having an exhibitor tent in Conservation World. We had 44 volunteers this year working the time from the pre-fair tent set-up through the actual ten days of the Fair. The planning committee and tent volunteers included members of four of the Illinois sections (Chicago, Decatur-Springfield, Heartland, and Mark Twain). Among the volunteers were several groups of college students and their advisors from the chemistry clubs at Illinois State University, Illinois Valley Community College, Benedictine University in Springfield, and Millikin University.

Over 15,900 people came through the tent during the Fair to enjoy the science demos, science toys and activities for kids, teacher packets, free literature, and prizes.

We again shared a large tent with another group and distributed wooden rulers and hand fans with the project's logo and website as the main give-aways throughout each day. Still a popular item for the science teachers was a plush toy ACS mole given each day to the first science teacher who visited the tent and signed in. Each teacher who visited the tent and signed in received a special CD with over 200 experiments for kids and a Cartesian diver kit, among other items. We also again had three computers strategically set up, one with the science quiz, one for teacher registration, and one for receiving the visitors' surveys. We also sold some science toys.

Many thanks to our section's 14 volunteers who worked diligently with the other Illinois sections this summer to again make our "chemistry tent" a great attraction at the State Fair. The Chicago Section's volunteers this year were **Richard Boice, Melinda Boice, Cherlyn Bradley, Charles Cannon, Karen Cochran, Chris Cochran-Woods, Robin Fine, Chantel Kamm, Fran Kravitz, Milt Levenberg, Margy Levenberg, Avrom Litin, S. Burhan Qaderi, and Min Zhang.**

Also, a big thank-you to all our sponsors this year: Chicago Section, Mark Twain Section, Heartland Section, Rock River Section, Decatur-Springfield Section, BP retirees group, NorthStar Credit Union, Wizardcraft, and several individuals. Contributors of materials and/or talents included Avrom Litin, Fran Kravitz, Josh Kurutz, Milt Levenberg, Peggy Schott, BP Volunteers-Naperville chapter, AAAS, Continental Cement, Enthone, Flinn Scientific, Fisher Scientific, Illinois 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, Katie D. - graphics artist's "Elements"; Chemical Education Foundation.

We are already thinking about next year. The planning committee's wrap-up meeting will be scheduled before the end of this year. Let us know if you would like to help with this fun and worthwhile public outreach project.

For further information about this project, including a description of some of the demonstrations, go to <http://chicagoacs.net/statefair/index.html>. You can also now follow us on Facebook at <https://www.facebook.com/ACSILStateFair>.

CHERLYN BRADLEY  
CHAIR, IL STATE FAIR CO-OP PROJECT

## ARE YOU AN INDUSTRY PROFESSIONAL WHO WANTS TO BE MORE INVOLVED WITH ACS?

The American Chemical Society is launching a new program based in two topic areas: Toxicology for the Scientist and Separation Science, and needs your content. ACS is looking for the best and brightest as well as the new and hypothetical. If you have authored an impressive paper, article or lecture slide set, or created a high-quality image, graphic, animation, illustration or video in either of these topic areas, ACS wants to see it. Contact us at [sci-mind@acslearning.org](mailto:sci-mind@acslearning.org) with your ideas.

### SECTION DUES

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

### WHEN YOU CHANGE YOUR EMAIL ADDRESS

Please let the section office know what your new email address is so that you will not miss any section information. Contact the office at 847-391-9091 or at [chicagoacs@ameritech.net](mailto:chicagoacs@ameritech.net)

## HELP WANTED

### FORMULATION CHEMIST

**HNC Products Inc., an international R&D and Custom dermatology products manufacturing company centrally located on a 15 Acres campus, outside of Clinton, IL, is looking for an experienced Formulation Chemist to join their R & D group.**

**Ideal candidate should have a B.S. or M.S. in chemistry or bio-chemistry and several years of formulation experience working with nutraceuticals, cosmeceuticals, and OTC actives. This hands-on position requires GLP and cGMP guideline knowledge.**

**Please forward your resume to:**

**Chim Potini  
V.P. Research and Development  
HNC Products Inc.  
283 Cromwell Drive  
Clinton, IL 61727  
Fax-217-935-8938  
E-mail: [cspotini@yahoo.com](mailto:cspotini@yahoo.com)**

**No Phone Calls please.**

## IL SCIENCE EDUCATION CONFERENCE

This year the Illinois Science Education Conference (ISEC13) will be held October 24-26 and is again sponsored by the Illinois chemistry, biology, environmental education, and science teachers associations. The conference has moved to the Tinley Park Conference Center in Tinley Park, IL which provides a vendor-friendly venue just south of Chicago. The emphasis of the conference is on STEM education and NEXT GENERATION SCIENCE STANDARDS. There is a new program format of both symposia and presentations for the two-day program in 22 breakout rooms to provide many options for teachers.

For further information, visit <http://www.ista-il.org/> or contact Harry Hendrickson, Executive Director of the Illinois Science Teachers Association, at [hhendrickson@ista-il.org](mailto:hhendrickson@ista-il.org)

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## KIDS AND CHEMISTRY PROGRAM

The Chicago Section of the American Chemical Society is in the process of reviving the "Kids & Chemistry" program. The "Kids & Chemistry" is a community-based program that brings together scientists and children to do hands-on science activities at local schools. The Section will provide kits and supplies for the classroom. Each kit must be checked out and returned to the section within one week of the classroom presentation. Current kits that will be available are: "Buno the Elephant's Toothpaste" (grades 1st-5th) contributed by Elizabeth College Student Chapter; "Chemistry is More Than Hot Air!" (Grades 3rd & 4th) contributed by Northwestern State University Student Chapter; and "Lava Lamp" (Grades 2nd-5th) contributed by Chi Epsilon Mu (XEM) Chemistry Club at Austin Peay State University. Future kits available in 2014 will be "Jiggle Gels: (Grades 3rd-5th); "What's New, CO<sub>2</sub>? (Grades 4th-6th); and "Chemistry Rainbow" (Grades 5th-8th).

We are currently looking for individuals who would like participate in this program. The section will match volunteers to a school requesting the "Kids & Chemistry" program or you may directly contact a school in your area. Volunteers can be from the industrial, government or academic sectors or can be from a student chapter at local colleges or universities or science clubs at local high schools. Please contact Fran Kravitz if you are interested in becoming a volunteer presenter in our "Kids & Chemistry" program at [fk1456@sbcglobal.net](mailto:fk1456@sbcglobal.net). Indicate "Kids & Chemistry" in the subject title.

## LABORATORY MANAGEMENT CONFERENCE

ALMA 2013, the premier conference where laboratory managers from around the world meet, sponsored by The Association of Laboratory Managers (ALMA), October 22-25, 2013 in Orlando, Florida

This high-energy conference features presentations by renowned laboratory leaders, panel discussions with senior industry experts, and roundtable discussions with experienced fellow managers. It is a great opportunity to network with lab managers sharing similar challenges, along with several pre-conference workshops.

See details at <http://labmanagers.org/>

## CANDIDATES FOR THE FALL 2013 ACS NATIONAL ELECTION

The ACS Committee on Nominations and Elections (N&E) announces the final slate of candidates who will appear on the fall 2013 ballot. The slate is:

### Candidates for President-Elect, 2014

- Dr. G. Bryan Balazs, Associate Program Leader, Lawrence Livermore National Lab, Livermore, CA
- Dr. Charles E. Kolb, Jr., President and CEO, Aerodyne Research Inc., Billerica, MA
- Dr. Diane Grob Schmidt, Section Head R&D, The Procter & Gamble Company, Cincinnati, OH

### Candidates for Directors-at-Large, 2014-2016

- Dr. Susan B. Butts, Independent Consultant, Susan Butts Consulting, Midland, MI
- Dr. Thom H. Dunning, Jr., Director, National Center for Supercomputing Applications and Professor, Distinguished Chair for Research, University of Illinois at Urbana-Champaign, Urbana, IL
- Dr. Dorothy J. Phillips, Retired, Waters Corporation, Milford, MA
- Dr. Kathleen M. Schulz, President, Business Results, Inc., Albuquerque, NM

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## FREE CHEMMATTERS RESOURCES

Free ChemMatters magazine resources are available at: <http://www.acs.org/content/acs/en/education/resources/highschool/chemmatters.html>

- **Teacher's guides** (with extensive background information about the articles, laboratory activities, questions pertaining to the articles, and reading and anticipation guides created by our reading specialist)
- **Animated video podcasts**, which provide visual support of chemistry concepts discussed in the articles
- **"News You Can Use,"** an online section that highlights topics that recently appeared in the news and are related to high school chemistry concepts

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## CHEMISTRY MENTORS NEEDED IMMEDIATELY FOR BOY SCOUTS OF AMERICA CHEMISTRY MERIT BADGE PROGRAM!!

The Chicago Section of the American Chemical Society is currently seeking volunteers for its Boy Scout of America's Chemistry Merit Badge program. We need individuals to join us for lunch (noon to 1 p.m.) on either Saturday, October 5 at Oakton Community College in Des Plaines; Saturday, October 12 at College of Lake County in Grayslake; or Saturday, October 19 at North Central College in Naperville to discuss their chemistry career. Volunteers can be either active or retired chemists or chemical engineers in the industrial, government or academic sectors or be a graduate student. Scouts will be divided into small groups of 4 to 5 scouts per table during lunch. Volunteers are asked to describe their career and general information about careers in chemistry including educational requirements. Lunch consisting of cheese pizza, dessert and beverage will be provided. We are seeking at least ten volunteers at each location. Additional information about each location will be sent to volunteers that sign up for this activity. Please contact Fran Kravitz immediately at [fk1456@sbcglobal.net](mailto:fk1456@sbcglobal.net) if you are available to help with this very valuable educational Chicago Section program. We need to make sure that we have enough volunteers at each location. Please put "BSA Chemistry Merit Badge Program" on the subject line.

## SOCIAL MEDIA FOR THE CHICAGO SECTION

As a way to disseminate more information and communicate more effectively with our members, I've created accounts for the Chicago ACS on Facebook, Twitter, and the ACS Network. Please follow us on:

- Facebook (like us at <http://www.facebook.com/pages/American-Chemical-Society-Chicago-Section/226772460669486>)

- Twitter (follow us at <http://twitter.com/#!/ChicagoACS>)

- ACS Network (join us at <https://communities.acs.org/groups/chicago-section>)

We can announce meetings and other events, scholarships/grants available to members, volunteer requests...the list goes on!

KATIE LEACH

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

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## ADVERTISING INDEX

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Micron Inc.	5	302-998-1184	<a href="http://www.micronanalytical.com">www.micronanalytical.com</a>
HNC Products Inc	6		<a href="mailto:cspotini@yahoo.com">cspotini@yahoo.com</a>
Mass-Vac., Inc.	7	978-667-2393	<a href="http://www.massvac.com">www.massvac.com</a>

## CALENDAR

**October 1-4:** NOBCCHE Annual Conference, Indianapolis, IN. Go to <https://www.nobcche.org/> for more information.

**October 4-5:** Museum of Science and Industry's STEM career fair, Science Works: Cool Jobs, Hot Careers. The fair will be from 9 to 2:30pm on 10/4 and from 9 to 3:30pm on 10/5 and is a free event for students, but advance registration is requested at [rsvp\(at\)sciencechicago.com](mailto:rsvp(at)sciencechicago.com). For further information, visit <http://www.msichicago.org/whats-here/events/science-works-cool-jobs-and-hot-careers/>

**October 5, 12, 19:** Volunteers needed for the Chicago Section ACS Boy Scout of America's Chemistry Merit Badge program, noon to 1 p.m. on either Saturday, October 5 at Oakton Community College in Des Plaines; Saturday, October 12 at College of Lake County in Grayslake; or Saturday, October 19 at North Central College in Naperville to discuss their chemistry career. Contact Fran Kravitz at [fk1456@sbcglobal.net](mailto:fk1456@sbcglobal.net) if you are available to help. **See article in this issue.**

**October 11:** Chicago Section ACS Dinner Meeting at Hotel Orrington in Evanston. This is the Basolo Medal Award Lecture, Dinner, and Presentation. The lecture will be at Northwestern University prior to the dinner. **See details in this issue.**

**October 22-25:** Laboratory Management Conference sponsored by The Association of Laboratory Managers (ALMA), Orlando, FL. See details at <http://labmanagers.org>.

**October 24-26:** Illinois Science Education Conference, Tinley Park Conference Center. For more information, visit <http://www.ista-il.org/>. **See article in this issue.**

**March 2-6, 2014:** PittCon 2014 will be in Chicago and co-programming with the ACS Division of Analytical Chemistry. For further information, go to [www.pittcon.org](http://www.pittcon.org).

### BECOME A SCIENCE COACH

Share your expertise and enthusiasm for science with an elementary, middle, or high school teacher - become an ACS Science Coach. In this year-long volunteer role, you may find yourself planning and presenting demonstrations, helping students with lab, answering content questions, or providing real-world examples. Together, you and the teacher decide how to best combine your time and talents. If approved, ACS will donate \$500 to the school to support your efforts. Find out more at [www.acs.org/ScienceCoaches](http://www.acs.org/ScienceCoaches).

### THE CHEMICAL BULLETIN ADVERTISING RATE SCHEDULE

The Official newsletter of the Chicago Section American chemical Society, The *Chemical Bulletin*, publishes news and information of interest to the Section's 4,383 members, who are professional chemists and others in related professions in industry, academia and government throughout greater Chicago.

SIZE	DIMENSIONS	RATE
Full Page	7.5" wide x10" depth	\$700
2/3 Page (2 columns)	4.917" wide x 10" depth	\$530
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1/3 Page (1 column)	2.333" wide x 10" depth	\$360
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Business Card	3.5" wide x 2" depth	\$95

We accept ads sent in jpg, tif, Photo Shop, Indesign and pdf files. For more information, contact [chicagoacs@ameritech.net](mailto:chicagoacs@ameritech.net) or call 847-391-9091.

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### ACS OFFERS SPECIAL BENEFITS FOR UNEMPLOYED MEMBERS

During these tough economic times it's more important than ever to belong to the American Chemical Society. Unemployed members can tap into a host of valuable benefits and services that help them get back in the workforce. And, members in good standing may qualify for an unemployed member dues waiver, allowing them to renew their memberships and keep their member benefits at no cost. Contact ACS at [service@acs.org](mailto:service@acs.org), 800-333-9511 or 614-447-3671 for complete details.

Other valuable benefits that help ACS members get back in the workforce include:

- Free registration at ACS National Meetings and registration fees at Regional Meetings of just \$25. Meetings offer ACS Career Fairs with on-site interviews.
- Special discounts for ACS/Harvard courses, ACS ProSpectives and Short Courses, and the ACS Leadership Development System.
- Membership in the ACS Network, your online resource to connect and communicate with friends, colleagues, and potential employers
- Free Guidance from ACS Career Consultants – ACS mentors offer resume reviews, job search strategies, and interview tips that make you stand out from the rest.
- Free access to InterviewStream, an online tool that will sharpen your interview skills
- Members-only access to the ACS Salary comparator.
- And more!

Contact ACS customer service today at [service@acs.org](mailto:service@acs.org), 800-333-9511 or 614-447-3671 and let us know how we can help.