

# CHICAGO SECTION AMERICAN CHEMICAL SOCIETY

# **Regular Monthly Meeting**

# FRIDAY, SEPTEMBER 23, 2005

Fountain Blue Banquets 2300 Mannheim Rd. **Des Plaines, IL** (847) 298-3636

#### DIRECTIONS TO THE MEETING:

#### From 290 East/West

Take 290 from either direction and exit onto 294 North. Continue until you reach the exit for 190 West (to O'Hare). Exit and immediately pay toll. Exit onto Mannheim Road North. Go North for 2 miles.

#### From 90 East/West

Take 90 from either direction and exit onto 190 West (to O'Hare). Pay toll and immediately exit onto Mannheim Road North. Go North for 2 miles.

#### From 294 North/South

Take 294 from either direction and exit 190 West (to O'Hare). Pay toll and immediately exit onto Mannheim Road North, Go North for 2 miles.

#### From 88 East

Take 88 East to 294 North. Take Touhy Avenue exit and go west to Mannheim Road. Turn north on Mannheim and proceed to Fountain Blue.

#### PARKING: Free

JOB CLUB 5:15 - 6:15 P.M.

**TOPICAL GROUP:** 5:30 - 6:30 P.M.

"Who Are Tomorrow's Chemists and How Do We Reach Them: The Millennials" presented by Dr. Russell Johnson, Corporate Fellow, Honeywell International; Chair of the Chicago Section, ACS

(See page 2 for more information)

Cash bar

6:00-7:00 P.M.

**GENERAL MEETING** 

8:00 P.M.

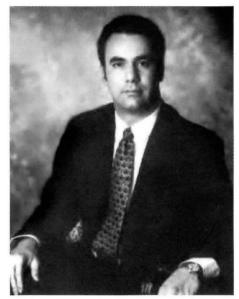
Dinner reservations are required and should be received in the Section Office via phone (847-647-8405), fax (847-647-8364), email (chicagoacs@ameritech.net) or website (http://chicagoacs.org) by noon on Tuesday, September 20. PLEASE HONOR YOUR RESERVA-TIONS. The Section must pay for all dinner orders. No-shows will be billed.

MENU: Choice of Chicken Piciatta, Broiled White Fish, or Vegetarian Pasta Primavera with Alfredo Sauce; Fresh Fruit Cocktail; Garden Salad with a variety of dressings; Included with the chicken and fish entrees are Athenian Oven Roasted Potatoes and a Peas, Mushrooms & Carrots Medley; Chocolate Sundae; beverage; bread and butter.

The cost is \$30 to Section members who have paid their local section dues, members' families, and visiting ACS members. The cost to non-Section members is \$32. The cost to students and unemployed members is \$15. Seating will be available for those who wish to attend the meeting without dinner.

# 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.



**General Meeting Speaker** Dr. Donald Dabdub, Assistant Professor of Mechanical and Environmental Engineering, The Henry Samueli School of Engineering, University of California-Irvine Irvine, CA.

#### Title: "Heterogeneous Interfacial **Reactions: A New Paradigm in** Atmospheric Chemistry"

Abstract: Climate change and air pollution are two leading issues in science today. It is essential that we understand the dynamics of our atmosphere so that governments can craft proper legislation. Detailed atmospheric measurements have only been made over a relatively short period of time, and atmospheric modeling is exceedingly complex. Similarly, it is essential to know how atmospheric pollution interacts with human lungs.

Professor Dabdub will discuss the

(continued on page 2)

SOCIAL HOUR

DINNER

7:00 P.M.

#### (continued from page 1)

mathematical modeling of air pollution dynamics. His research is conducted in two areas: atmospheric sciences and computational sciences. Working in the area of atmospheric sciences, his work is aimed at the mathematical modeling of urban and global air pollution, understanding the dynamics of atmospheric aerosols, and global climate change. Within the realm of computational sciences, Prof. Dabdub is interested in massively parallel computations, the numerical analysis of partial differential equations, and the development of problem solving environments.

His current activities include a modeling study of Cl<sub>2</sub> formation from aqueous NaCl particles; development of a semi-Lagrangian flux scheme for the solution of the aerosol condensation/evaporation equation; development of a twolevel time-marching scheme using splines for solving the advection equation; and an investigation into the effect of alveolar volume and sequential filling on the diffusing capacity of the lungs.

This work will foster a better understanding of air pollution and the dynamics of global climate change.

Speaker's Information: Donald Dabdub is Assistant Professor of Mechanical and Environmental Engineering at the Henry Samueli School of Engineering, University of California-Irvine Irvine, CA. He earned a B.S. from Lehigh University prior to M.S and Ph.D. degrees in Chemical Engineering from California Institute of Technology. His interests in atmospheric sciences include mathematical modeling of air pollution dynamics, dynamics of atmospheric aerosols, chemical reactions at gas-liquid interfaces, and impact of energy generation on air quality. He combines these areas with computational applied mathematics, numerical algorithms on massively parallel computers, and grid-based computations. Professor Dabdub's awards and honors include the Gaspar de Portola International Fellowship, the UCI Project Prometheus Teaching Award, the NSF CAREER Award, the W. E. Schiesser Distinguished Lecture at Lehigh University, the William Corcoran Fellowship, membership in the Tau Beta Pi National Engineering Honor Society, and membership in the Phi Eta Sigma National Honor Society.

#### PLEASE VOTE

IN THE 2005 CHICAGO SECTION ELECTION

(BALLOTS ARE IN THE MAIL)

## TOPICAL GROUP SPEAKER



**Dr. Russell Johnson** 

#### " Who Are Tomorrow's Chemists and How Do We Reach Them: The Millennials "

Abstract: It is important for chemists to ensure the future of the chemical sciences through the education and motivation of the next generation. The Millennials, those born after 1982, are showing substantial changes in behavior and demographics relative to earlier generations.

Key findings based on the focus groups conducted by Wirthlin Woldwide on behalf of the American Chemical Society will be reported. The primary objective of this research was to understand how best to communicate the benefits of pursuing a science career and especially a career in chemistry to Millennials. Based on 12 focus groups in three locations across the country (Baltimore, Cincinnati, and Orange County, California, the study draws several important conclusions about communicating science to this generation. This study was developed for communication to the public by the ACS Committee on Public Relations and Communications (CPRC).

Biography: Russell W. Johnson serves on the Committee for Public Relations and Communications, the Council of the American Chemical Society, and for a second time as the Chair of the ACS Chicago Section. In his "day job," he works for Honeywell International as Corporate Fellow, the highest technical level at the company. He is also Chief Scientist, Demilitarization Technology. He has led the technology development effort for the company in demilitarization of propellants, explosives, and chemical agents.

Dr. Johnson has worked across the corporation in aerospace, air purification, emission control, chemicals, fluorochemicals, petrochemicals and fuels over the last 31 years. He has received 48 patents and has a large number of technical publications.

Dr. Johnson earned a B.S. in chemistry from the University of Minnesota and a Ph.D. in chemistry from the University of Colorado. Dr. Johnson's area of specialty is in applying catalysis and separations to chemical process technology. He was awarded an American Chemical Society Heroes of Chemistry Award in 1997 for efforts in the area of environmentally sound manufacturing and demilitarization.

# SECTION SPEAKERS' BUREAU

The Section is trying to rejuvenate its Speakers' Bureau. We have had some individuals volunteer to speak at schools, service organizations etc and a few requests for speakers or demonstrators. We are in need of someone willing to take responsibility for compiling a list of volunteer speakers and topics and for getting this information out to area schools, libraries and service organizations. One person has volunteered to help organize this but cannot take on the project without assistance. If you can possibly fit this task into your busy schedule, please call or e-mail the Section office. If you cannot do this but are interested in speaking, please also let us know.

SUSAN SHIH, CO-CHAIR LONG RANGE PLANNING

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# "CHEM SHORTS" For Kids

The Elementary Education Committee of the Chicago Section ACS presents this column. They hope that it will reach young children and help increase their science literacy. Please cut it out and pass it on to your children, grandchildren, or elementary school teachers. It is hoped that teachers will incorporate some of the projects in this column into their lesson plans.

#### Stained Glass from Glue

Kids, how would you like to combine elements from both science and art to make a simulated stained glass? For artists, creating the right material (whether it is a painting or a sculpture or whatever) requires much experimentation until the result is exactly what they want. For some scientists this same principle holds when making a particular molecule, for example, although different tools and media are used. In this activity, you can experiment with producing a colorful art material from glue.

First, put about 1 tsp. Elmer's glue in a small plastic cup. Add about 1/4 tsp. water and mix with a popsicle stick. Pour the glue-water mixture into a yogurt cup lid or another plastic lid, or a Styrofoam bowl. Tilt the lid or bowl all around until the glue solution completely covers the inside surface. Next place two or three drops of differed food colorings onto the glue surface. Now, off to the side, put a small amount of liquid dish detergent in a small cup. Touch a toothpick into the detergent, getting just a very small amount, and then touch the center of each food coloring droplet and quickly remove the toothpick. Do not stir. What happens?

Your glue has water in it plus long-chain molecules called polyvinyl acetate. When the food coloring drops are added, they do not spread out much because of the polymer. (Try adding food coloring to a plain cup of water and you'll see that it rather easily spreads out). When the detergent is added, the food coloring begins to spread out into the glue. This is because detergent molecules lessen the "pull" (the surface tension) between water and polymer molecules. The chemical word for soap that helps to describe this action is "surfactant". Experiment by touching the food coloring drops with more detergent, or with more or less colors to get the effect that you are looking for.

Think about this. . .Colored glass has been used for centuries to make beautiful stained glass windows. Glass makers use different combinations of chemicals to produce the many different colors of glass. Wonderful works of art are created by variations in the design, the colors, and the effect of light passing through the material. Can you think of a way to use your "stained glass" glue to make a design that light can shine through? Hint: wax paper might be a good surface to experiment on.

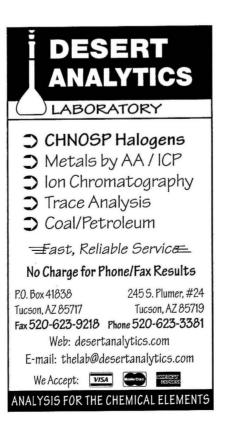
#### Good luck!

Bonus information --- Some of the pigments used to color glass are: cobalt oxide (CoO) makes blue, calcium fluoride (CaF<sub>2</sub>) makes milky white, gold (Au) or cuprous oxide (Cu<sub>2</sub>O) or selenium (Se) all make red glass. To make glass green, either iron sulfate (FeSO<sub>4</sub>) or copper (Cu) or chromium oxide (Cr<sub>2</sub>O<sub>3</sub>) is used. Amber glass is colored by a mixture of carbon (C) and iron sulfide (FeS). See the 12/96 issue of ChemShorts for an entire column devoted to glass itself.

Reference: "WonderNet! — Chemistry and Art" activity at: www.chemistry. org/portal/a/c/s/1/wondernetdisplay. html?DOC=wondernet\activities\art\ stainedglass.html.

EDITED BY K. A. CARRADO, ARGONNE NATIONAL LABORATORY

All past "ChemShorts": http://member ship.acs.org/C/Chicago/ChmShort/ kidindex.html



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# 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 its activities.

# CONTACT THE CHAIR

Do you have any questions, suggestions, recommendations, ideas, gripes, complaints, or pet peeves relating to the Chicago Section? Do you want to volunteer, help out, or lend a hand with Section programs or activities? Then contact your Chair. Simply log onto the Web Page Section's at http://chicagoacs.org, find the green button "Contact the Chair", and send me an e-mail. If I can answer your query I will respond personally. If I can't I will forward your e-mail to someone who can, or try to provide you with a contact -- all in a timely manner. The Section belongs to you and the other 5,100 ACS members who reside in the Chicago area (northeast Illinois and northwest Indiana). Only you can make it work for you by being involved. But you can also make it fail by not being involved. I look forward to hearing from you.

RUSS JOHNSON Chicago Section Chair

# 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! **Congratulations to T-shirt winner Shilpa Desai, (June meeting)** 

# CHICAGO SECTION SLATE FOR 2005 BALLOT

The following slate of candidates is presented by the Nominating Committee for the 2005 Section Election. New officers will take office January 2006. Ballots have been mailed and are due in the Section office by noon on October 21. The results of the election will be announced at the October 21 dinner meeting.

CHAIR (see Note) Barbara Moriarty Susan Shih

CHAIR-ELECT Ken Fivizzani Paul Feng

VICE-CHAIR Fran Clifton David Crumrine

SECRETARY Margaret Levenberg Marsha Anne Phillips

**TREASURER** Frank Jarzembowski Robin Zavod

#### DIRECTORS

Larry Berman Cherlyn Bradley Herb Golinkin Inessa Gorelik Amber Kawaoka Mike Koehler Marilyn Kouba Fran Kravitz Dennis Lehman Milt Levenberg Peter Lykos Steve Sichak Anthony Tortorello Paul Young

## COUNCILORS

Roy Bible\* Charles Cannon\* Mark Cesa Tom Kucera\* Jim Shoffner

#### ALTERNATE COUNCILORS

Connie Buenvenida\* Fran Clifton Herb Golinkin\* Inessa Gorelik Milt Levenberg

#### \* Incumbents

Note: The current Chair-Elect has asked to step down from office due to a change in job location; the Nominating Committee was, therefore, charged with slating individuals to run for Chair for 2006 as well as for Chair-Elect.

# Do Away with Vacuum Pump Oil Mist with MV Oil Mist Eliminators



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## SECTION DUES

It is that time of year again when the National ACS dues bill arrives in the mail. The question I have for you today is: "Why should I pay my local section dues?" Currently, the Chicago section has 4820 members. This year we have received \$26,992.43 in local section dues from National. (This amount is based on National ACS sending us the \$15 from members who pay this amount minus any financial deficiency in the amount a member sends in for other dues-related expenses such as publications or other nonvoluntary division dues.) The Chicago Section charges \$15 per member which is voluntary on your National ACS dues statement. This means approximately 1,800 members pay their local section dues. We have 504 members who are emeritus and do not pay dues. This leaves 2,526 number of members who do not pay their voluntary local section dues or, if their dues are sent in by their employer, do not pay this portion. Sadly, we have 52 % of members who fail to help support member programs at the local level. It has come to our attention that some members do not even realize they are not paying their local dues. Upon surveying Board members it was noted that if you have your employer pay your dues, they may not include your local voluntary portion of \$15.

What do section dues fund? Your Chicago Section dues go toward: Chemistry Day activities; monthly section dinner meeting speakers; student, retired and unemployed subsidized dinners; Chicago Section employment services: the Chicago Section office, staff and equipment; 50-year members dinner; the Chemical Bulletin; High School Education programs including the scholarship exams, Chemistry Olympiad and teacher programs; hospitality programs including new member information packets, holiday dinner giveaways and the Chicago Section tshirt program; the Illinois State Fair project which provides educational material to the public; the College Education programs for undergraduate symposiums; the Willard Gibbs Award Dinner; minority affairs programs; Project SEED programs for economically-disadvantaged students; Public Affairs programs; Councilor travel expenses to represent the Chicago Section at National meetings; younger chemist activities: and many more activities which make this section appear to run effortlessly. Volunteerism makes up the greatest portion of unfinanced revenue. So, where does the Section get its

revenue? Sources of income for the Section are: 1) National ACS allotment, 2) Local Section dues, 3) Advertisements, and 4) Investments. Through the years, the Section has made major efforts to conserve expenses while not sacrificing members' services. Our trustees have made very strong but conservative decisions with our investments which have helped fund many programs. We are not a section which is having financial trouble, but our trustees are predicting if we do not increase our current sources of revenue we will continue to lower our unrestricted funds from our portfolio. Our current budgeted expenses for 2005 are \$221.843.08.

The Section leadership, its Board and committees, has undertaken strong steps to control expenses and still maintain the high quality programs our members are use to and that brings us National recognition. How can you help? Besides our tremendous resource of volunteers, the other source is local section dues. If 52% of members who did not pay their dues did, we would be \$37,890 ahead in revenue. So, when your National ACS dues statement comes in the mail, please make an effort to support the Chicago Section by paying your local voluntary dues. You will be rewarded with a deep sense of gratification knowing how many programs you have made possible. Also remember, if your employer pays your dues, check to see if they are also including your local dues with your National dues. You can pay your local section dues directly to the Chicago Section by mailing them to our office at Chicago Section ACS, 7173 North Austin Avenue, Niles, IL 60714. Finally, I would like to thank all members in advance for having paid their dues.

FRAN KRAVITZ BUDGET DIRECTOR CHAIR



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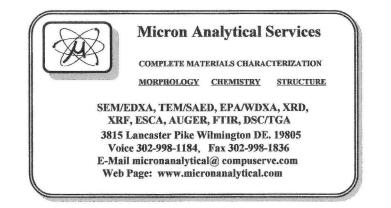
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www.ChromatographyTraining.com (312) 243-2153

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For more information, contact the Section office Phone: (847) 647-8405 Fax: (847) 647-8364



# ALMA E-NEWS

#### Lab Tours Safety

For many laboratories, visitors or tours are a near daily occurrence. Many companies use their labs as showplaces to promote their technology or to impress their customers with their technical competence. Rarely does anyone seriously question the safety of these forays and, even so, it is unlikely that the practice would be discontinued. So the problem for the lab manager is to make sure that these important visitors are always protected from harm, and that the intrusion does not cause harm to staff members.

Certainly visitors should follow basic safety rules such as wearing safety glasses or other protective equipment and stay within defined walkways. These rules are commonly enforced by nearly all labs.

However, a second precaution that is much less observed but is equally important is to allow absolutely no unannounced visitors or tours in the workplace. There are certain operations in almost any lab that require the analyst's full attention since there is the potential for injury if not done strictly to protocol. A tour that shows up unexpectedly and distracts at a critical moment during one of these operations could cause injury to both the analyst and the visitor.

It is the Lab Manager's responsibility to give staff adequate opportunity to make the workplace safe for visitors to enter and to deny entry when this notification has not been given. No tour is worth compromising the safety of staff or visitor, and most customers will be more impressed by your attention to safety than offended by being delayed or missing a tour.

If you have any comments, cost saving suggestions, opinions, etc. let me hear from you.

Past ALMA (Analytical Laboratory Managers Association) e-News editions are available at the website http://www.labmanagers.org/.

WAYNE COLLINS wayne.collins@thermo.com

# REGISTER TO ATTEND MONTHLY SECTION MEETINGS

**ON LINE** 

at www.ChicagoACS.org

# ALMA CHICAGOLAND MEETING

The next ALMA CHICAGOLAND MEETING will be held on September 23, 2005 at Stepan Company, 22 W Frontage Road, Northfield, IL 60093 starting at 11:30 with lunch at 12 noon and concluding by 4 p.m. This meeting will be hosted by Dave McGregor (847-501-2454) of Stepan Company.

The following four topics will be presented:

- · Managing experts vs. generalists
- Selling the value of the analytical lab
- Managing the knowledge in the analytical lab
- Aligning business and analytical goals and cascading them to the analysts

If you would like to give a presentation, please send an email to Dr. David McDonald, the current president of the local group, **dmcdonald@usg.com**, or to **dmgregor@stepan.com** 

Past presenters have been Claude Lucchesi from Northwestern and Bruce Firth from BP. At the last meeting, significant time was devoted to discussions of problems facing managers of analytical labs and networking.

ALMA is the Analytical Laboratory Managers Association. **Toxicology Consulting** 

Medical Devices Pharmaceuticals Biologicals Risk Assessments

Product Development FDA Registration Quality Assurance Regulatory Compliance

# Northup RTS

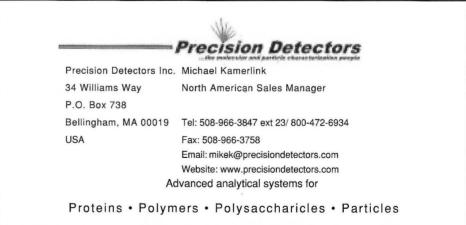
Sharon J. Northup, PhD, DABT 783 Ridge Road Highland Park, IL 60035

Ph: 847-579-0049 Fax: 847-579-0052

Northuprts@aol.com www.toxconsultants.com

The Chicago Section's e-mail address is chicagoacs@ameritech.net

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



With Sales Offices in Bellingham, Ma and Chicago, Ill we build State-ofthe-art laser, viscometry and refractive index detectors for the characterization of proteins, polymers, macromolecules, and nanoparticles in solution. Key information is provided for molecular weight and size (1-100nm radius). The product line includes flow-cell detectors (for HPLC, FPLC, FFF, and High-Temp GPC) and manual/automated batch systems.

# 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 Chicago Bulletin covering topics such as networking, career development, and vignettes of women in chemistry. This month's topic is about Mary Margaret Lally Huston.

Every month a member of the Women's Chemist Committee is asked to choose a female chemist that they would like to write an article about for the Chemical Bulletin. Here is a second article of someone special who has made me and many others feel welcome when they joined the Chicago Section.

Mary Margaret Lally was born 1921 on the south side of Chicago. She attended Aquinas High School and earned a four-year scholarship to Rosary College. She completed her B.S. in chemistry in 1942. Upon graduation, she went to work for the U.S. Department of Agriculture. This would have been enough for most of us, but Ms. Lally went on to earn her M.S. in chemistry from Loyola University in 1956. This was not easy, since she completed this while working full time, taking classes in the late afternoon and Saturdays.

Soon after receiving her M.S., Margaret Lally married Professor John Huston of Loyola University. Mrs. Huston continued her long and distinguished career in the food industry. Some of her research included problems associated with the salmonella bacteria. This research was done in cooperation with the Federal Center for Disease Control. For many years, she was a Chief Chemist for the Egg and Poultry Products Association. Mrs. Huston helped establish standards for poultry plants throughout the U.S. and received international recognition for this achievement. This led to invitations from the governments and poultry industries of Spain and Germany to lecture and consult on salmonella control in the poultry processing industry. Much of the QC practiced in the industry is due to her input.

Mrs. Huston went on to work for private industry as the principal scientist for a food manufacturer. After her retirement, she continued to consultant for the food industry.

Margaret Huston's talent did not end there; to many of us we will always remember her for her dedicated work for the Chicago Section. Margaret Lally Huston was the second woman to chair of the Chicago Section (1980). She has served the Section in many other capacities including vice-chair, treasurer, director and both alternate councilor and councilor. Her committee work has included Bylaws, Long Range Planning, Nominating, Policy, Tellers, National ACS Meeting, Employment, Gibbs Arrangement, Hospitality, Chemical Bulletin Editorial, Distinguished Service Award, Chicago School Board Liaison and others. Mrs. Huston earned the Distinguished Service Award from the Chicago Section in 1992.

She has also been very active in her church. She served 15 years as a coordinator for the Ministry of Care at St. Peter's Catholic Church until the year 2000. Mrs. Huston enjoyed traveling with her husband John Huston until his death in 2003. Today, she remains a vital and active member of her community and church.

From time to time, many of us get to see her at a Section event. I had a chance to talk to her as I was putting this article together. Just as she was when I joined the Section, she was warm and friendly and willing to catch up on the news of old acquaintances. She tells me she reads the Chemical Bulletin monthly to keep up with what is happening in the Section. Like other women of the Section, she will remain a strong role model for young women to follow. I know I am glad to have had a chance to meet and know her.

FRAN KRAVITZ

# CALL FOR NOMINATIONS -CITATION FOR CHEMICAL BREAKTHROUGHS AWARD

The Division of History of Chemistry (HIST) of the American Chemical Society solicits nominations for its new award program, Citation for Chemical Breakthroughs. This award recognizes breakthrough publications and patents worldwide in the field of chemistry. The term "breakthrough" refers to advances in chemistry that have been revolutionary in concept, broad in scope, and long-term in impact. Plaques, to be placed near the office or laboratory where the breakthroughs were achieved, will be presented annually to the departments and institutions at which these breakthroughs occurred. All nominations must be received by October 1, 2005. Information can be found on the HIST website, under the heading "Divisional Awards": http://www.scs.uiuc.edu/~mainzv/HIS T/ or write to: hist ccb@yahoo.com.

# JOB CLUB

The next meeting of the Chicago Section ACS Job Club will be held on **Friday, September 23 at the Fountain Blue Banquets at 5:15 p.m.** The meeting will include a review and discussion of some of the fundamental 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 what kind of job you are looking for.

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 following the Job Club, the cost for unemployed members is \$15 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. So when you can't attend the Job Club, you can still find out about job openings and other information.

# DEADLINES FOR CHEMICAL BULLETIN

Please submit all *Chemical Bulletin* copy to the editor before the deadlines listed below for each issue. Articles can be emailed to the editor, Cherlyn 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.

Issue	Deadline
November 2005	9/23/05
December 2005	0/14/05

# 2005 SCHOLARSHIP EXAM RESULTS

The High School Education Committee of the Chicago Section ACS held its fiftieth annual High School Scholarship Examination on May 7, 2005 at Loyola University in Chicago. This year, 72 students were nominated to take the examination. Each high school chemistry teacher could nominate up to two students. The results of the 2005 Scholarship exam are listed in the table below.

PRIZE	WINNER	TEACHER & SCHOOL
FIRST \$5,000 ROHM & HAAS AWARD	Alex Barnas	Preston Hayes Glenbrook South High School
SECOND \$3,000 AWARD	Vamsi Aribindi	Beverly George Naperville North High School
THIRD \$2,500 AWARD	Jason Chua	Preston Hayes Glenbrook South High School
FOURTH \$1,500 AWARD	Jonathan Thirman	Gillian Thomsen New Trier High School
FIFTH \$1,250 AWARD	Carlo Angiuli	Gilliam Thomsen New Trier High School
MARIE LISHKA * \$500 AWARD	Anna Dikina	Najwa Dajani Niles North High School
MARSHALL S. SMOLER** \$200 AWARD	Lawrence Tanzman	Walt Kinderman Walter Payton College Prep
BERNARD E. SCHAAR***		

\*To the highest scoring female in the examination.

\$400 CHICAGO CHEMISTS' CLUB AWARD

\*\*To the highest-scoring Chicago Public High School Student. Marshall S. Smoler's sister, Rachel, established this award in 1972 in memory of her brother. Mr. Smoler was a chemistry teacher in the Chicago public schools for many years. \*\*\* To the highest scoring Chicago High School student. Mr. Schaar's widow established this award in memory of her husband, who was active a long active in the Chicago Section, American Chemical Society and the Chicago Chemist's Club.

Lawrence Tanzman

Walt Kinderman Walter Payton College Prep

#### HONORABLE MENTIONS LISTED IN ALPHABETICAL ORDER

(These students were the next highest performers)

Student & School	Teacher
Rhagu Chandrasekaran Naperville North	Robert Schmitt
Brian Chapp Maine West	Stefan Panzilius
Andrey Dolinko Vernon Hills	Lynne Shenk
Jessica Dong Naperville Central	Patti Kenton
Joel Ferm Naperville Central	Eric Day
Jung-Ho Ham Maine East	Tina Sabatello
<b>Khalid Khayr</b> Vernon Hills	Lynne Shenk
Alexander Lapides	Robert Schmitt
Naperville North	(continued on page 9)

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**Beverly George** Josh Merel Naperville North John McInerney Ramsi Farran Fenwick **Charles Muller Amy McGrail** Oak Park/River Forest Walker Peterson John Gridley New Trier Kyle Reilly **Cheryl Dispensa** Geneva Yi Ren Steve Wiesbrook Naperville Central Joe Sawa Steve Wiesbrook Naperville Central Andrew Soffer **Cheryl Rulis** Oak Park/River Forest Aliza Stein Ann Levinson Chicagoland Jewish High School **Daniel Sussna** John Gridley New Trier

The section is grateful to Dr. Daniel Graham from Loyola University for authoring and administering the examination. The section is also grateful to the following companies for their contributions which made these scholarship awards possible: Rohm & Haas, Dr. Henry M. Walton, Chicago Chemists' Club, and Rachel Smoler.

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AMI LEFEVRE CHAIR, HIGH SCHOOL EDUCATION COMMITTEE

# 2005 UNITED STATES CHEMISTRY OLYMPIAD RESULTS

The Chicago Section ACS supported the United States National Chemistry Olympiad (USChO) this year. Under the direction of Dr. David Crumrine both the Local and National Exam were held at Loyola University. On March 17, 2005 the search for potential nominees took place. Thirty-eight students took a two hour exam to identify the top students. The students qualifying to take the challenging five-hour National Exam on April 5, 2005 were:

Michael Chu, Naperville Central High School Michael Bilow, Deerfield High School Daniel Cullina, Morgan Park Academy Scott Abrams, Naperville North High School Joyce Fan, Libertyville High School Stacey Frumm, New Trier High School Sarah Carden, Naperville North High School Jennifer Kim, Glenbrook South High School Elliot Uvero, Illinois Math and Science Academy Syed Shahnawaz Zaheer, College Preparatory School of America Vincent Dorgan, Schaumburg High School Kaz Teope, Schaumburg High School Erik Johnson, Maine South High School Caleb Ng, Libertyville High School

The top twenty students (nationwide) from the National Exam attended a Study Camp from June 5-19, 2005 at the U.S. Air Force Academy in Colorado. Out of this group, four students entered the International Chemistry Olympiad (IChO) held in Taipei, Taiwan from July 16-25, 2005. I am proud to announce the Chicago Section had one representative, Michael Bilow, attending the Study Camp. We also had six additional students rank in the top 50 (High Honors). They were Scott Abrams, Sarah Carden, Vincent Dorgan, Joyce Fan, Erik Johnson, and Caleb Ng.

The Chicago Section would like to thank Dr. David Crumrine and Loyola University for sponsoring the competition this year.

AMI LEFEVRE CHAIR-HIGH SCHOOL EDUCATION COMMITTEE

# 2005 Basolo Medal Goes To Bercaw

Northwestern University will honor **Professor John E. Bercaw** from Caltech with the Basolo Medal for recognition of his work in inorganic chemistry. Named for Northwestern University chemistry professor Fred Basolo, the award is given by Northwestern University and cosponsored by the ACS Chicago Section. Professor Bercaw will deliver the award lecture at the Northwestern University Technological Institute, Evanston, IL Campus, on October 21, 2005.

Professor Bercaw's research interests are in synthetic, structural and mechanistic organotransition metal chemistry. He consulted with Exxon for more than twenty years before beginning with BP in 2002.

He has received the ACS awards in Pure (1980).Chemistry for Organometallic Chemistry (1990), for Distinguished Service in the Advancement of Inorganic Chemistry (1997), the George A. Olah Award for Hydrocarbon or Petroleum Chemistry (1999), and an Arthur C. Cope Scholar Award (2000). He has also been selected as a Chemical Pioneer by the American Institute of Chemists (1999). He was selected as a Fellow of the American Association for the Advancement of Science (1986) and was elected a member of the National Academy of Sciences (1990), as a Fellow of the American Academy of Arts and Sciences (1991), and a Honorary Doctorate of Science at the University of Chicago (2001).

The Medal presentation will follow the lecture at the Chicago Section's meeting. Meeting information and additional details may be found at the section website, **www.chicagoacs.org**. Reservations may be made on-line or by calling (847) 647-8405.

# FALL LECTURE SERIES FEATURES TOPICS IN FOOD SCIENCE

The Associated Colleges of the Chicago Area Fall Lecture Series will focus on topics in food science. Olivet Nazarene University offers graduate credit to participants who attend any seven of the sessions. Participants may attend any or all of the lectures, whether or not they receive graduate credit.

The lectures will be presented at Benedictine University, Kindlon Hall, Room 164, from 7 to 9 p.m. on Tuesdays, Sept. 13-Nov. 15. The following speakers and topics are planned:

- Sept. 13: Dr. Bill Artz, University of Illinois, "Overview of Food Science"
- Sept. 20: Dr. Divya Reddy, Kraft Foods, "Cheese Making"
- Sept. 27: Dr. Leslie Lepore, Quest International, "Chemistry So Good You Can Eat It"
- Oct. 4: Open date
- Oct. 11: Dr. Eric Dose, Quest International, "Chromatography of Flavors and Essential Oils"
- Oct. 18: Dr. Amanda Miller, Kraft Foods, "Fat Substitution in Foods"
- Oct. 25: Dr. Andrew Lynch, Quest International, "Flavoring Beverages: Opportunities and Challenges"
- Nov. 1: Dr. Robin Dunleavy, OSI Industries, "Meat Processing"
- Nov. 8: Dr. Elizabeth Jeffery, U of I, "Functional Foods"
- Nov. 15: Rick Mamoser, Prairie State Winery, and Dr. Eugene Losey, Elmhurst College, "Wine Making"

To receive graduate credit, participants must attend any seven sessions and write a brief summary of each. Contact Dr. Douglas Armstrong, Professor of Chemistry, Olivet Nazarene University, **darmstrg@olivet.edu**, 815-939-5393.

# "THE JOY OF TOYS" - NCW

National Chemistry Week (NCW), a community-based outreach program, is designed to reach the public with positive messages about chemistry and to make a positive change in the public's impression of chemistry. Activities include chemical demonstrations, hands-on activities, lectures, open houses, displays, contests and games. NCW is celebrated annually from Sunday through Saturday during the fourth week of October. This year, NCW is October 16-22. Chicago Chemistry Day is October 15 at DePaul University.

# ACS BRINGS SCIENCE AND TECHNOLOGY FUNDING MESSAGE TO CAPITOL HILL

ACS delegates, including Chicago Section members, visited their Congressmen and Senators during the Society's fourth annual Legislative Summit on April 6. They asked members of Congress to sustain United States innovation leadership by boosting funding levels for the Department of Energy's Office of Science and the National Science Foundation.

In preparation for the summit, the delegates attended a series of briefings by prominent members of the Washington DC science policy community: David Stonner, head, Congressional Affairs Section, National Science Foundation; Carolyn Hanna, founder and president, Secure Horizons Consulting; and James Turner, chief democratic Counsel, U.S. House of Representatives' Committee on Science.

On the day of the Summit, the ACS held a breakfast at the Hill, and Dr. Ray Orbach, director, DOE Office of Science, addressed the delegates. He discussed new science being done by the Office of Science, the Office's budget situation, and the need for scientists to make their voices heard on Capitol Hill.

The Chicago Section delegates were Jeffrey Gaffney, Zafra Lerman, Claude Lucchesi, and Jim Shoffner. ACS Officers and Board members were part of the delegation that fanned out across the Hill after the ACS breakfast to meet with their individual Congressmen and Senators and their office staffs. At each meeting they related personal experiences with NSF and the Office of Science and the importance of these agencies to the chemistry community. By the end of the day the delegation had delivered their message to over 55 congressional offices. The ACS staff of the Committee on Chemistry and Public Affairs did a magnificent job of guiding the delegates. The guide for the Chicago Section was Brad Smith.

#### **CLAUDE LUCCHESI**

# NEW ACS PUBLICATION

The new Journal of Chemical Theory and Computation provides articles, letters, and reviews on new theories based on physical laws, advances in computational methods, and important applications to problems in chemistry. For more information on this publication, go online at http://pubs.acs.org/JCTC.

# THE COMMITTEE ON CHEMICAL SAFETY: SAFETY PUBLICATIONS FROM ACS

The ACS Committee on Chemical Safety (CCS) provides advice and counsel on the handling of chemicals and seeks to ensure safe facilities, designs, and operations by calling attention to potential hazards and stimulating education in safe chemical practices. CCS has developed a dozen publications that are available in hardcopy and/or can be downloaded from the CCS publications website at

#### http://membership.acs.org/c/ccs/ publications.htm.

Safety in Academic Chemistry Laboratories (SACL) is the flagship publication of CCS and has been in print continuously since 1972. It has two volumes: Volume 1 for college and university students; and Volume 2 for faculty, graduate teaching assistants, and administrators.

CCS has now produced new safety booklets within the last five years for all academic levels: Safety in the Elementary (K-6) Science Classroom; Chemical Safety for Teachers and Their Supervisors, Grades 7-12; Safety for Introductory Chemistry Students; and SACL. These booklets are designed to assist science teachers and students with one of the special aspects of teaching and doing science, that of making the experimental environment safe for the participants.

Besides the safety booklets for academics, there are also safety publications intended more for laboratory employees in the workplace: Safety Audit/Inspection Manual, Chemical Safety Manual for Small Businesses, Handbook of Chemical Health and Safety, and Living with the Laboratory Standard. There are also web-based editions of Less is Better and of Managing Mercury Spills.

CCS has recently expanded its activities in partnering with other groups within ACS and outside the ACS on matters related to chemical safety and health (e.g., disseminating accepted standard chemical safety practices regarding contact lens use in labs, lab course experiments, chemical storage, distillation safety, chemical plant safety and security issues, and nanotechnology) and is proactive in a variety of areas including: working with the Division of Chemical Health and Safety, the Committee on Environmental Improvement, the Committee on Community Activities, the Task Force on Environmental Health and Safety, the Committee on Education, and the American Industrial Hygiene Association.

For more information, including on-line publications and resources, visit the CCS

website at: http://membership.acs.org/c/ccs

CHERLYN BRADLEY

# ARE YOU UNEMPLOYED?

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

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

There are several Career Consultants in the Chicago Section who are willing to meet with you and help improve your resume. Simply call the Section office at 847-647-8405 and set up an appointment. Fifteen to thirty-minute sessions will be arranged at our monthly meetings. Should you require more time arrangements can be made with your consultant to continue discussions by telephone, by e-mail or by additional face-to-face sessions. You also can attend the Section's Job Club where you can network with other people having similar concerns.

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

# POP TOP RINGS COLLECTION

Instead of throwing away those pop top rings from your pop cans, please bring them to the dinner meeting so we can donate them to a program at Ronald McDonald House. Put your business card here Reach prospective clients by advertising in *The Chemical Bulletin* 

For more information, call the Section office (847) 647-8405 or e-mail at chicagoacs@ameritech.net

# ADVERTISING INDEX

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Micron Inc.	5	302-998-1184	www.micronanalytical.com
Axion Analytical Labs, Inc	. 5	312-243-2153	www.ChromatographyTraining.com
Northup RTS	6	847-579-0049	www.toxconsultants.com
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# CALENDAR

**September 14, 2005:** The Chicago Chemists Club will begin its 87th year with a musical program at Demetri's Restaurant in Deerfield. Boris and Aila Gorelik, Mensk Conservatory graduates in piano and violin, will present contemporary, classical, and folk music. For further information, call Judy Reuter at 847-679-2444 by September 12.

**September 23, 2005:** The next ALMA Chicagoland Meeting will be held at Stepan Company, 22 W Frontage Road, Northfield, IL starting at 11:30 with lunch at 12 noon and concluding by 4 pm. For further information, contact Dave McGregor (847-501-2454; dmgregor@stepan.com) or Dave McDonald (847-970 5262; dmcdonald@usg.com).

October 15, 2005: Chicago Chemistry Day at DePaul University

**October 18-25, 2005:** The 101st meeting of the Gulf Coast Conference addressing issues regarding chemical analysis within the petrochemical, refining, and environmental businesses will be held at the Moody Gardens Convention Center & Moody Gardens Hotel in Galveston, TX. Information is online at **www.gulfcoastconference.com**.

**October 21, 2005:** Basolo Medal Award joint dinner meeting with Northwestern University.

October 26-28, 2005: "Managing a Modern Laboratory" is the theme of the 26th Annual ALMA Conference, Gaithersburg, MD. For further information call ALMA at 505-989-4683, email at alma@labmanagers.org, or go online at www.labmanagers.org.

**October 30 — November 2, 2005:** The American Oil Chemists Society (AOCS) will have the 6th Annual Soy Symposium at The Renaissance Chicago Hotel in Chicago. The symposium will have talks on the role of soy in preventing and treating chronic disease.

**November 2-4, 2005:** AIChE/ACS Management Conference in Cincinnati, OH. Email **meetmail@aiche.org** for further information.

**November 7, 2005:** ASTM's new Committee E56 on Nanotechnology will have its first meeting at the Hyatt Regency Dallas in Dallas, TX. For further information, contact Pat Picariello at 610-832-9720 or email at **ppicarie@astm.org**.

November 18, 2005: Chicago Section's monthly dinner meeting.

**December 9, 2005:** Chicago Section's Holiday party and dinner meeting.

January 21-26, 2006: Lab Automation 2006 will be held in Palm Springs, CA. For more information, go to labautomation.org/LA/LA06.

March 12-16, 2006: Pittcon 2006, Orange County Convention Center, Orlando, FL. For further information, go to www.pittcon.org or call 412-825-3220.

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