

theCHEMICALbulletin

<http://membership.acs.org/C/Chicago>

FEBRUARY • 2003

CHICAGO SECTION AMERICAN CHEMICAL SOCIETY

Regular Monthly Meeting

FRIDAY, FEBRUARY 21, 2003

Rosewood Restaurant and Banquets
9421 W. Higgins Road
Rosemont, IL
847-696-9494

DIRECTIONS TO THE MEETING

Note: Rosewood Restaurant is located just west of River Road on Higgins Road, Southwest corner.

From Chicago: Take Kennedy (I-90) to O'Hare exit. Exit River Road. Turn left on River Road to Higgins. Turn left on Higgins to Rosewood Restaurant.

From the North: Take 294 South to O'Hare exit (pay toll). Exit Mannheim Road North, turn right on Higgins. Go one mile to the restaurant on the right.

From the South: Take 294 North to O'Hare exit (pay toll). Go to River Road. Turn left on River Road and go to second light (Higgins Road). Go left on Higgins to the restaurant.

PARKING: Free

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

"Characterization of Atmospheric Aerosols in Chicago, IL and Phoenix, AZ" presented by **Dr. Martina Schmeling**, Dept. of Chemistry, Loyola University Chicago. See page 2 for more details.

SOCIAL HOUR: 6:00- 7:00 P.M.
Cash Bar

DINNER 7:00 P.M.

Menu: Salad; Broiled Salmon, Chicken Francaise, or Vegetarian Pasta Primavera; Anna Potatoes; fresh vegetable medley; rolls and butter; Apple Cinnamon ice cream; and beverage.

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 **online** (<http://membership.acs.org/C/Chicago>)

by noon on Tuesday, February 18.

The dinner cost is \$28 to Section members who have paid their local section dues, members' families, and visiting ACS members. The cost to non-Section members is \$30. The cost to students and unemployed members is \$14. Seating will be available for those who wish to attend the meeting without dinner. PLEASE HONOR YOUR RESERVATIONS. The Section must pay for all dinner orders. No-shows will be billed.

GENERAL MEETING 8:00 P.M.



Gary Kitmacher, NASA Johnson Space Center, Houston, TX.

Title: "Views from Space"

Abstract: One of the greatest benefits of the space program has been the exceptional photography returned from missions around earth and to the most distant regions of the universe. In this presentation some of the best imagery is used to tell about the history and the uses of manned and unmanned space flight.

Biography: Gary Kitmacher currently serves as the Space and Life Sciences

Directorate Manager for Crew Health Care Systems. The directorate's responsibilities include managing the habitat and environment, astronaut's health, nutrition and medical care, and science operations.

Since 1993, he has served in several capacities in the Space Shuttle - Mir international program; he was the US manager for the NASA-Mir Priroda Project, and led US efforts to develop new systems and integrate payloads on the Mir's Priroda module, and subsequently served as the US manager for Mir operations.

Gary has been at the Johnson Space Center since 1981. He has worked in a variety of positions, starting in the lunar sample laboratory, then in the Space Shuttle program management office during the first years of Shuttle operations, and later leading design efforts for the International Space Station, manned moon and Mars habitats, and the commercially developed Spacehab module. Some of his contributions include the International Space Station Cupola, design, configuration and sizing of the International Space Station Lab and Hab Modules, Nodes, the establishment of the logistics concepts for supporting the ISS and the development of the standard for hardware transfer the cargo transfer bags (CTBs), and the development of the first crew recreational computer system, the Crew On Orbit Support System or COSS, used on Mir and ISS. Earlier he served as the mission manager for the Spacehab-2, STS-60 mission and as the Man-

(continued on page 2)

NOTICE TO ILLINOIS TEACHERS

The Chicago Section-ACS is an ISBE provider for professional development units for Illinois teachers. Teachers who register for the February meeting will have the opportunity to earn up to 4 CPDU's.

(continued from page 1)

Systems Architectural Agent for the Space Station.

A career highlight occurred when U.S.-Mir Astronaut Shannon Lucid honored him with the Silver Snoopy award. The Silver Snoopy represents the astronaut corps' recognition of an individual's outstanding performance in support of the human spaceflight program. In his spare time, he enjoys building models of the Mir and the Space Shuttles.

Gary has masters and bachelor's degrees in Management, Geology, Astronomy and Education. He resides with his wife and three daughters in Houston, Texas. A fourth daughter is stationed on the US Coast Guard Cutter Dallas.

TOPICAL GROUP SPEAKER



"Characterization of Atmospheric Aerosols in Chicago, IL and Phoenix, AZ" presented by Dr. Martina Schmeling

Abstract: Atmospheric aerosols, suspended particles in air, were collected during two different field campaigns in Chicago, IL (2002) and in Phoenix, AZ (2001). The presentation will cover collection and analysis of particles as well as their differences in chemical composition in these two cities. The differences, but also common features, will be discussed, based on chemical fingerprints, meteorology and local environment. Future research needs and perspectives in this field will be treated as well.

Biography: Martina Schmeling received her Diploma in Chemistry from the Westfaelische Wilhelms University in Muenster, Germany, in 1992 and her doctorate in 1997 from the University of Dortmund, Germany. She was a visiting professor at the University of Antwerp in 1997/98 and a post-doctoral researcher at Princeton University in 1998/99. In 1999 she joined Loyola University Chicago as an assistant professor.

Her professional memberships include the ACS, American Geophysical Union, American Meteorological Society, German Chemical Society and the German Aerosol Society. She is author/co-author of 24 publications including a book chapter.

JOB CLUB

The next meeting of the Chicago Section Job Club will be held on Friday, **February 21 at Rosewood Restaurant at 5 p.m.** 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.

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 meeting following the Job Club, the fee for unemployed members is only \$14 and you can continue your networking activities. Please call the Section office for reservations and indicate that you are eligible for a discount.

CHEMUNITY NEWS IS BACK!

The newsletter of the ACS Education and International Activities Division has returned -online. Educators and those interested in chemical education issues can now stay up-to date with division activities through bimonthly editions of *Chemunity News* delivered via email. Learn about upcoming workshops, new publications, and the various education programs that are available for students, teachers, and institutions. The articles featured in the most recent issue of *Chemunity News*, sent just before the ACS national meeting in Boston, demonstrate the division's broad range of activities. These include:

- **Wonder & Explore**, a new multifaceted resource designed to help elementary teachers better understand physical science concepts and develop an inquiry-based teaching approach.

- **34th International Chemistry Olympiad** competition took place this summer in Groningen, The Netherlands, and once again the U.S. team placed well, bringing home two gold medals, a silver and a bronze.

- **Online Registry of Chemistry-Based Master's Programs**, a searchable online resource for students seeking information about master's programs in the chemical sciences.

- **Starting with Safety**, the popular ACS video course that has been adapted for delivery via the Internet.

If you would like to receive Chemunity News, contact education@acs.org.

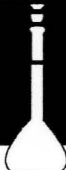
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ANALYSIS FOR THE CHEMICAL ELEMENTS

"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 science literacy. Please cut it out and pass it on to your children, grandchildren, or elementary school teachers. It is hoped that teachers will try to incorporate some of the projects in this column into their lesson plans.

Silly Putty

Kids, did you know that Silly Putty(r), in addition to being the pinkish, bouncing, stretchy stuff, is also a "dilatant" chemical compound? Silly Putty is a unique material. It stretches without breaking, yet it can be "snapped off" cleanly. It bounces higher than a rubber ball. It floats if you shape it in a certain way, yet sinks in others. It can pick up pencil marks from pages and comics from some newspapers. If you slam it with a hammer, it keeps its shape, yet if you push with light, even pressure, it will flatten with ease. Gravity has a slow, yet devastating effect on Silly Putty creations.

All kinds of information can be found at: www.sillyputty.com/default.htm. There are even some experiments described there for you to try, such as "Floating Silly Putty", "Making It Bounce", "Silly Putty Running", "Squishing Silly Putty", and "Stretching and Snapping". We'll describe one here. When you shape Silly Putty into a ball it will bounce great on a hard, smooth surface. Cooling it actually improves its "bouncability." Shape it into a ball and bounce it. Measure how high it bounces. Then place the ball in the freezer for about an hour. While it's still cold, bounce it the same way you did when it was warm and compare the result. Silly Putty is said to have a rebound of 80 percent, meaning it will bounce back 80 percent of the height from which it was dropped.

As we said before, Silly Putty is a dilatant — a silicone based polymer that is highly elastic, exhibits high bounce, can be easily molded, yet can hold its shape while at rest. It was invented by a chemist at General Electric who was working on synthetic rubber substitutes, at first by mixing silicone oil with boric acid. Warning, here are some more big words: a dilatant is a "non-Newtonian fluid" for which "viscosity" increases as the "shear rate" increases. This is called shear-thickening. There are four different kinds of non-Newtonian Fluids based on viscosity behavior and a dilatant is one of them. Examples of regular

Newtonian fluids include water, soda, and gasoline; some non-Newtonian fluids are wet clay, Gack (12/94 ChemShorts), and starch in water (see 4/93 ChemShorts "Tangled Molecules").

Silly Putty is also reported to be a "grip enhancer", used by athletes to increase hand strength. Unfortunately though it no longer lives up to what us older folks remember to be its best quality. Changes in printing inks and processes, not in the putty itself, have limited its ability to pick up newspaper images. And just in case you or your parent needs to know, there is a method at www.crayola.com (see "Helpful Information") for removing Silly Putty from carpet.

References: Ann Thayer, Chemical & Engineering News, 11/27/00, page 27. Dilatant information is at: www.sasked.gov.sk.ca/forum/science/archive/messages/1958.html

Submitted by DR. K. A. CARRADO

All past "ChemShorts": <http://member.ship.acs.org/C/Chicago/ChmShort/kidin dex.html>.

2003 YCC LEADERSHIP DEVELOPMENT WORK- SHOPS

Three YCC Leadership Development Workshops will be held at ACS regional meetings in 2003: the Western Regional Meeting in Long Beach, CA (October 15 - 18), the Central Regional Meeting in Pittsburgh, PA (October 19 - 22), and the Southeastern Regional Meeting in Atlanta, GA (November 20 - 22).

ACS members who would like to apply for a YCC Leadership Development Award to attend one of these workshops should submit their applications to the Younger Chemists Committee, c/o Ms. Stephanie Allen, American Chemical Society, 1155 16th Street, NW, Washington, DC 20036 by Tuesday, April 1, 2003. More information and the application form for the 2003 YCC Leadership Development Awards is posted at chemistry.org/ycc.

ACS members who would like to attend one of the workshops with the support of their employers or ACS local sections, divisions, or committees should contact Stephanie Allen at s_allen@acs.org. Since participation is limited, YCC will be extending invitations for each workshop only to 15 interested ACS members who have external support.

Please see chemistry.org/ycc for more information.

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CHAIR'S LETTER

Annual Report

As I write this, the Annual Report Committee is gathering information on the activities and finances of the Section for the year 2002. Once we have all the data, we will put together the annual report required by National ACS. There are several parts to this report including statistical information, descriptions of Section activities with photos, a financial report and nominations for possible ChemLuminary Awards. Failure to submit an annual report by the deadline would mean loss of funding from National so we are working very hard to finish it up in a timely fashion.

Once the report is completed, it will be sent on to National and we will publish it on the Section website. The major portion of it should be posted by the end of February. I encourage you to check out the report to see what we have done. If you have any suggestions for different activities, please let me know.

Our topic this month is "Views from Space" as described in the accompanying abstract. If you know of a non-member who might be interested in this presentation, tell him or her about it.

See you at a meeting!

SUSAN SHIH

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
April 2003	2/21/03
May 2003	3/7/03
June 2003	4/25/03

ANNUAL HOLIDAY MEETING

This year's annual holiday party was held at Monastero's Ristorante on Friday, December 13, 2002. There were about 170 people in attendance. This event was held jointly with the Chicago Chemists Club and Iota Sigma Pi. The speaker that evening was Dr. Mark Ratner, Morrison Professor of Chemistry, Northwestern University in Evanston, Illinois. This year the raffle items included dinners from Monastero's Ristorante, The Parthenon, Rosewood Restaurant, Steven's Steak House and the Wellington Restaurant; gift certificates to Marshall Fields from Iota Sigma Pi; wine from the Chicago Chemists Club; a membership from the Chicago Chemists Club; monetary gift from Northrup RTS; lip balm from Blistex, Inc.; pens from NorthStar Credit Union; gifts from Stepan Company and Kraft Foods; key chains from BP America; and t-shirts, poinsettias and additional raffle gifts from the Hospitality Committee.

The tradition of collecting food for charity continued this year at the annual holiday party. Each member was asked to bring in a nonperishable item of food to this dinner meeting. About 500 pounds of food were collected and donated to the Loaves and Fishes Community Pantry for distribution. This is a 250% increase from last year. The Hospitality Committee would like to thank our Section members who participated in this year's food drive and made it such an outstanding success.

FRAN KRAVITZ
HOSPITALITY COMMITTEE CHAIR

KIDS & CHEMISTRY WORKSHOPS

Kids & Chemistry is a program developed by the American Chemical Society to give chemists and other scientists the resources and training necessary to share hands-on chemistry with elementary school children. Opportunities to do hands-on chemistry with a chemist help children realize that science and chemistry are part of everyday living, that science is fun and something they can do, and that scientists are people like YOU! Free workshops to help you get started are available to local sections, employee groups, and student affiliate chapters. For more information, call 1-800-227-5558, extension 6249, or write to kids@acs.org.

For additional information on the Kids & Chemistry Program and the ACS resources available for scientists planning to work with elementary children, search "kids & chemistry workshops" on website, <http://www.chemistry.org>.



Chair Susan Shih with food collected at the Section's holiday party

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 Section's Web Page at <http://member.ship.acs.org/C/Chicago>, 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 5,475 ACS members who reside in the Chicago area (northeast Illinois and northwest Indiana). Only you can make it work for you by being involved. Only you can make it fail by not being involved. I look forward to hearing from you.

SUSAN SHIH
Chair

HELEN M. FREE AWARD FOR PUBLIC OUTREACH

There's still time to submit nominations for the Helen M. Free Award for Public Outreach. Any ACS member whose efforts have increased the public's awareness and understanding of the importance of chemistry or chemical engineering is eligible for the award.

Go to the Committee of Public Relations and Communications web page for all of the details: <http://chemistry.org/committees/cprc.html>.

Nominations are due **March 1, 2003** and should be mailed or faxed to: Office of Communications/CPRC Liaison AMERICAN CHEMICAL SOCIETY 1155 Sixteenth Street, NW Washington, DC 20036 Fax: (202) 872-4370

If you have any questions or concerns please feel free to call Allison Byrum at 800-227-5558 ext. 4400 or email her at a_byrum@acs.org.

PROFESSOR JOHN BRAUMAN WINS GIBBS AWARD

It was announced at the November 2002 meeting of the Chicago Section of the American Chemical Society that Professor **John I. Brauman**, the J. G. Jackson-C. J. Wood Professor of Chemistry at Stanford University, has won the 2003 Willard Gibbs award and medal for his pioneering work on the dynamics of the reactions of ions in the gas phase.

Dr. Brauman's research is directed towards understanding how molecules react and the factors that determine the rates and products of chemical reactions. The principal areas of research involve the spectroscopy, photochem-

istry, reaction dynamics, and reaction mechanisms of ions in the gas phase.

SCIENTIFIC LITERATURE DATABASE

ScienceWise, now a division of TheScientificWorld, Inc., provides access to the world's scientific literature through sciBASE — a database covering 30 million documents from more than 30,000 journals with 10,000 new documents added each day. This service enables you to locate, purchase, and receive online individual scientific articles. In addition, be alerted to newly-published scientific research in your areas of interest through the pupALERT alerting service. For more information, go to <http://www.TheScientificWorld.com/>.

WILLARD GIBBS DINNER

The Willard Gibbs Award Dinner will be held on Friday, May 30, 2003. Since the Great Lakes Regional Meeting to be held in Chicago will begin on Saturday, May 31, 2003, the Chicago Section ACS will be inviting GLRM attendees to come to the Willard Gibbs Award Dinner. Please send your coupon (included in this issue) in early to assure a reservation at the festive dinner!

REGISTER TO ATTEND MONTHLY SECTION MEETINGS

ON LINE

at
<http://membership.acs.org/C/Chicago>



AMERICAN CHEMICAL SOCIETY CHICAGO SECTION 2003 WILLARD GIBBS MEDAL AWARD PRESENTATION FRIDAY, MAY 30, 2003



You and your guest(s) are cordially invited to attend the 92nd presentation of the Josiah Willard Gibbs medal to John I. Brauman, the J. G. Jackson-C. J. Wood Professor of Chemistry at Stanford University, Friday, May 30, at the Argonne Guest House, 9700 S. Cass Ave., Bldg. 460, Argonne, IL. A social hour begins at 6 PM. Dinner is served at 7 PM. Dr. Brauman's talk will begin at approximately 8:30 pm.

Dinner on this special occasion includes Crab Cakes; Mixed Field Greens with Pecans and Buttermilk Dressing; a choice of Oven Roasted Prime Rib accented with Creamy Horseradish Sauce or Grilled Atlantic Salmon Fillet; and Chocolate Oblivion Cake. (A vegetarian entrée is available on request.)

To reserve your tickets, please fill out the attached reservation form and mail it with payment to the address below. Tables of 10 may be reserved. If you request seating for a group, please include a list of names of the people in your group. Tickets and nametags will be mailed to those whose orders are received by May 14. Your name will be added to a list that will be checked by Argonne Security at their gatehouse. No refunds will be made after noon, on Tuesday, May 27, 2003.

The Gibbs Award Dinner is always a memorable occasion. Only the Nobel Prize is considered more prestigious. Please come to salute the recipient and rejoice in Dr. Brauman's achievements in and contribution to the science of Chemistry.

Margaret Stowell Levenberg
Gibbs Arrangements Committee

2003 GIBBS DINNER RESERVATION FORM

Name _____ Affiliation _____

Address _____ Phone () _____

tickets for ACS members & guests _____ (\$40.00/ticket) Nonmembers _____ (\$42.00)

dinners: Prime Beef _____ Grilled Salmon _____ Vegetarian _____

tickets for students, unemployed members, and retirees (\$20.00/ticket) _____

Note: Professors must make student reservations.

Total Enclosed \$ _____ Payable at time of reservation. Please include a list of your guests' names, affiliations and dinner selection with this form.

**Return with payment to: American Chemical Society, Gibbs Reservations
7173 North Austin Ave., Niles, IL 60714**

NON-U.S. CITIZENS: PLEASE CONTACT THE ACS OFFICE AT 847-647-8405 BEFORE MAY 12, 2003 WITH YOUR BIRTHDATE AND CITY OF BIRTH FOR AN ARGONNE SECURITY CHECK.

ALMA E-NEWS

Chemical Waste Disposal

Almost every lab must deal with the myriad of rules and regulations for the handling of chemicals and disposal of wastes. Most of the regulations for assessing the risk associated with the various types of wastes and the accepted methods for dealing with them are promulgated by the Environmental Protection Agency but there may also be local or state regulations as well. Waste is generally defined as excess, unneeded, or unwanted materials with chemical waste further characterized as ignitable, corrosive, reactive, or toxic. It is the responsibility of the lab to determine the degree of hazard associated with each type of waste and to develop a system to manage compliance. I have found a laboratory EPA self audit tool on the University of California Riverside website (<http://www.ehs.ucr.edu/epa/>) to assist the manager in evaluating the effectiveness of the laboratory's system to fulfill these requirements. This checklist can be downloaded in Adobe Acrobat format and also contains brief explanations of the definitions and requirements-check it out.

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

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

WAYNE COLLINS
wayne.collins@bpsolvaype.com

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 Steve Sichak (December meeting).

FRAN KAREN KRAVITZ
HOSPITALITY COMMITTEE CHAIR

VC2-YOUR VIRTUAL CHEMISTRY CLUB UPDATE

Designed for high school chemistry students and others interested in the molecular science, VC2 has been updated to include new product reports on everything from hair coloring to Cheese Whiz. Check out these and other features at the Virtual Chemistry Club web page in chemistry.org, search using "vc2".

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ENGINEERS WEEK 2003: 100 YEARS OF AVIATION

What do engineers actually do? How do you become an engineer? What kinds of classes do you need to take to prepare for an engineering career? How do basic scientific principles translate into engineering applications? These are some of the questions we try to answer at the DuPage Area Engineers Week celebration, held each year during National Engineers' Week, to be held this year February 16-22, 2003. **The 19th Annual DuPage Area Engineers Week program will be held on Thursday, February 20 and Saturday, February 22, 2003 at Illinois Institute of Technology's Daniel F. and Ada L. Rice Campus.**

This year's event will celebrate "100 Years of Aviation," in honor of the Wright Brothers first powered flight at Kitty Hawk, NC in December 2003. On Thursday evening (2/20), a Speakers Forum, which is aimed at an adult audience, will be held. This year's Speakers Forum will discuss the Wright Flyer project, the goal of which is to recreate the Wright Brothers original flight in December 2003. The speakers, who will come from Wright Redox and Packer Engineering will discuss how the project was born and how it is progressing.

The Saturday event (2/22), which will be open from 12:30 to 5:00 PM, features interactive displays and presentations, many of which will focus on aviation. Some of the presentations this year include those on aviation science, structural engineering, and ZOOM into Engineering. ZOOM into Engineering is a national program, in conjunction with the popular PBS television show, which is designed to excite kids (ages 6 - 11) about science and engineering. In addition, the Rube Goldberg competition, sponsored by ASME for Middle School student (grades 6-8), will again take place. Rube Goldberg was a cartoonist in the 1930's and 40's who devised unique and complicated approaches for performing simple tasks such as cracking an egg. In honor of Goldberg's ingenuity, the ASME competition works with students to create a device that performs a specific task in the most unique approach. The resulting constructions are displayed at the Engineers' Week program.

The very first DuPage Area Engineers' Week Open House was held in 1985 at Midwest College of Engineering in Lombard, Illinois. In 1986 Midwest College merged with Illinois Institute of Technology to form a new, west-suburban campus called IIT West. The west suburban campus of Illinois Institute of Technology has continued the annual Engineers Week celebration. The DuPage program is a joint effort among professional engineering and scientific societies, the two area national laboratories, businesses, educational institutions and community organi-

zations. Presentations at the open house are directed toward introducing students of all ages and their parents to the current state of technology and advances being made throughout industry. The cooperation of the professional engineering societies, academic organizations and industry provide a comprehensive overview of the current state-of-the-art as well as generating an interest in the sciences among the program's visitors.

IIT's Rice Campus is located at 201 East Loop Road, Wheaton. For more information on the DuPage program, visit the program's web site at <http://www.rice.iit.edu/engineerweek> or call 630/682-6040.

ACS PROSPECTIVES 2003

ACS ProSpectives, a product of the Membership Division of the ACS, are small conferences for industry scientists that examine a field's consequential topics through presentations by its foremost researchers. Conferences for 2003 include the following topics: process chemistry in the pharmaceutical industry, polymorphism in crystals, catalysis in modern organic synthesis, combinatorial chemistry, and integrating proteomics into systems biology.

More information on these conferences is available at website <http://chemistry.org/acsprospectives>.

SECTION TRUSTEES

Have you ever wondered how the Section finances are handled? Did you know that we have three Section Trustees, a Comptroller, a Treasurer and a Budget Director? If you are interested in the Section finances, want to know how our portfolio is handled etc., plan to attend the April meeting for a Topical Group presentation on this before the dinner meeting. We are also planning a workshop for those who are interested in possibly serving as a Section Trustee or Comptroller in the future. More detailed information will be published in a later issue of the *Chemical Bulletin*.

SUSAN SHIH

CHEMICAL TECHNICIANS WEBSITE

The complete web site for all chemistry-based technicians is www.ChemTechLinks.org. This new ACS Web site contains a myriad of information about alliances between industry and academia, educational materials, technician resources, student outreach materials, current technician education projects, and much more. Questions, comments? — write to ChemTechLinks@acs.org.

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SCHOOL SEEKS SCIENTISTS TO MAKE SCIENCE REAL

The Young Women's Leadership Charter School (YWLCS) in Chicago seeks professional scientists to serve as guest speakers and provide company tours in an effort to demonstrate the real-world relevance of the science curriculum.

In its third year of operation, YWLCS is an all-girls middle and high school with a curriculum emphasis on science and technology. The purpose of the curriculum focus is not necessarily to graduate future scientists, but to graduate college-bound students with a firm foundation in science and technology. The school currently serves 325 students in grades 7-11, with the majority of students being African American or Hispanic.

"We recognize that even with a solid curriculum and good professional development, it can still be a struggle to engage the girls in science," said Science Director Marc Siciliano. "Guest speakers and field trips can make a big impression on the students, but in order for that impression to be lasting, the experience must be integrated with the curriculum", he added.

Here's a list of some of the curriculum units scheduled for the winter and spring of 2003:

Chemistry Class: Materials-Structures

and Uses, Petroleum-Breaking and Making Bonds, Chemistry and the Atmosphere, Applying Chemical Reactions, Nuclear Interactions, Food-Matter and Energy for Life, 7th Grade Science: Acids and Bases, Water Quality and Testing, Water Cycle, Groundwater, Soil Permeability, Environmental Contamination and Clean Up, Geology, Astronomy

TEI Analytical, Inc., is working with the school to create a database of volunteers and companies to be available throughout the year for guest speaking engagements and field trips. If the program proves successful at the charter school, plans are to expand it throughout the Chicago Public School system. Companies and professional scientific societies are encouraged to appoint a contact person to coordinate volunteers from their respective organizations.

To be included in the database, please send your name, title, company or society name, address, phone, fax, email, and field(s) of science most relevant to your organization's activity, to Ellen Sullivan, TEI Analytical, ellen@teianalytical.com, phone: 847-647-1345 ext. 803, fax: 847-647-0844.

More information will be provided as the program continues to take shape. Also go to <http://www.ywlcs.org>.

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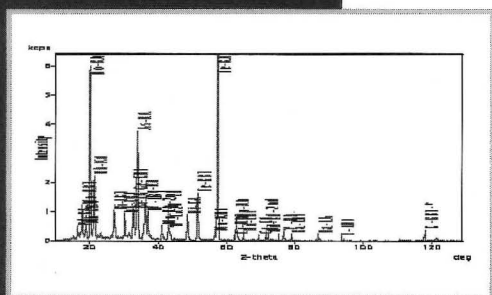
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BABIES DO CHEMISTRY

The 40 students age 3 to 4 in the Faragut Career Academy pre-kindergarten program are doing chemistry. The high schools students need to earn 40 service-learning hours before graduation. So the high school students are working with the pre-kindergarten.

So far the little ones have made GLUEP and SLIME. The joyful children have placed their individual treasures into plastic zip lock bags to take home. One young lady made red slime and passed it around to the other five children at her table to feel how good it felt.

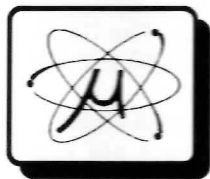
The pre-K teacher, Mrs. Dawkins, had to restrict the times the children could do chemistry because, since they love it so much, they would do it all day and not even eat lunch! The children are also developing their math and reading skills.

This program has made everyone happy — the little ones, the high school students and the pre-K teacher.



Pre-Kindergarten students enjoy doing chemistry

MARSHA ANNE PHILLIPS
CHAIR, MIDDLE SCHOOL AND
JUNIOR HIGH SCHOOL COMMITTEE.



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

Saturday Enrichment Program for Kids

Northwestern University's Center for Talent Development has opened a new location of its exciting enrichment program for kids. With the great success of the Center's Saturday Enrichment Program for PreK-9th grade on the Evanston campus, they recently opened a satellite branch at Glenbard West High School in Glen Ellyn last spring.

The program allows talented students to explore science, mathematics, and the humanities at a pace and in a peer grouping compatible with their abilities for eight Saturdays. Winter, spring, and fall courses are available from 9 a.m.-12 p.m., with parents seminars scattered throughout the year.

This program is the most substantial offered on Saturdays for kids in the Chicago area. The families who helped get the program off the ground last spring have had great experiences.

If you are interested in learning more, please visit: <http://www.ctd.northwestern.edu/programs/sep/westernsite.html>. Winter registration began with first winter class starting January 11.

Comments or questions? Call 847-491-3782 or visit <http://www.ctd.northwestern.edu>

THOSE WHO CAN. . .TEACH !!

This publication is a 52-page, full-color self-study instructional guide for faculty to use in preparing for classroom instruction. The guide includes: (1) introduction to Classroom Instruction, (2) Fundamentals of Learning, (3) Methods of Delivering Instruction, and (4) Administration, Evaluation, and Feedback. Each module contains a case study that presents a problem or situation. The guide is cross-disciplinary and easily incorporated into any field of instruction.

Prices:

1 - 24 copies \$15.00/copy
25-499 copies \$12.00/copy

To order phone 1-800-227-5558 or order online at www.chemistry.org, click on "Online Store" on "Quick Find" menu.

UNDERGRADUATE PROGRAMMING IN NEW ORLEANS

The 225th ACS National Meeting will be held in New Orleans on March 23-27, 2003. All undergraduate chemical science students are invited to this exciting meeting to hear about chemical science careers in the Federal Government and hazardous waste clean-up techniques. For more information on the undergraduate program and to find out how to submit an abstract for the Undergraduate Research or the Successful Student Affiliates Chapter Poster sessions, go to:

ACS REGIONAL MEETINGS!

ACS Regional Meetings bring chemists together in an intimate setting to—

- Bring outstanding technical programming to local audiences through symposia, professional development workshops, and poster sessions
- Present programs for graduate and undergraduate students
- Recognize outstanding achievements by chemists in the local area through presentation of industrial and academic awards
- Provide opportunities for networking and meeting colleagues from your area as well as ACS governance and staff
- Sponsor programs for high school teachers and students
- Help you to reap more benefits from your ACS membership

Plan to participate in 2003! Abstract submission for the spring meetings opened in late January and for the fall meetings in early June. Watch your C&EN issues for more details or visit the websites at <http://chemistry.org/meetings/regionalcalendar.html> for more information on the following:

35TH GREAT LAKES REGIONAL MEETING

MAY 31 — JUNE 2

LOYOLA UNIVERSITY OF CHICAGO

36th Middle Atlantic Regional Meeting

June 8-11
Princeton University

58th Northwest Regional Meeting

June 12-14
Montana State University Bozeman, MT

32th Northeast Regional Meeting

June 15-18
Sheraton Saratoga Springs, New York

35th Central Regional Meeting

Oct. 19-22
Sheraton Station Square, Pittsburgh

59th Southwest Regional Meeting


Oct. 25-28
Westin Oklahoma City

38th Midwest Regional Meeting

Nov. 5-7
University of Missouri, Columbia

55th Southeast Regional Meeting

November 20-22
Renaissance Hotel Atlanta, Georgia
Hilton Long Beach

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TRAVEL AWARDS FOR CHEMISTS WITH DISABILITIES

The ACS Committee on Chemists with Disabilities announces a new travel grant program. The program is open for all individuals with disabilities that are graduate, undergraduate students, or postdoctoral researchers who wish to make presentations at scientific meetings. The intent of the grant is to help defray some of the costs associated with travel and lodging. The goal of the program is to promote presentation of scientific research by individuals with disabilities and provide motivated students with opportunities to build professional relationships through networking.

The deadline for applications is **March 15, 2003** for meetings scheduled between July 1 and December 31, 2003. For further information, please go to <http://membership.acs.org/C/CWD/travap> or contact Kathleen Thompson 800-227-5558 ext. 8072.

SECTION DINNER MEETING DATES FOR 2003

March 14
April 25
May 30
June 20

SYMPOSIA ON THE TEACHING OF MATH AND SCIENCE

For the past 4 years several colleges and universities (both the colleges of education and the liberal arts colleges) have been sponsoring with the help of the State of Illinois a series of symposia on the teaching of math and science. The primary institutions that have supported this event are UIC, DePaul, Northeastern, Chicago State, Roosevelt, Rush Medical College, and Harold Washington. Two nationally known speakers are brought in for each symposium as well as having local talent doing breakout sessions. All symposia are on Fridays from 1 p.m. to 8 p.m.

February 7, 2003

Roosevelt University
Invited speakers are Kenneth Gerard Boutte, Sr., Professor of Biology and Associate Dean of the College of Arts and Sciences, Xavier University of Louisiana; Michael Starbird, Distinguished Teacher Professor of Mathematics, University of Texas at Austin.

March 14, 2003

Rush Medical College
Invited speakers are Marvin Druger, Professor of Biology and Chair of the Dept. of Science Teaching, Syracuse University; Cathy Kessel, Math Education Consultant, Berkeley CA.; Liping Ma, Sr. Scholar, The Carnegie Foundation for Advancement of Teaching.

April 25, 2003

Chicago State University
Invited speakers are Audrey Champagne, Professor of Chemistry and Professor of Educational Theory and Practice, University of Albany, State University of New York; Ramon E. Lopez, C. Sharp Cook Distinguished Professor of Physics, University of Texas at El Paso and Co-Director for Integrated Space Weather Modelling, NSF Science and Technology Center.

For information on registration and the program, see website www.math.uic.edu/chicagosymposia/, call the Institute for Mathematics and Science Education at 312-996-2448, or email David Cirillo at dcirillo@uic.edu.

HIGH SCHOOL EDUCATION COMMITTEE WEBSITE

The Chicago Section's High School Education Committee now has a website at <http://www.glenbard.dupage.k12.il.us/southstaff/heinz/ACS/acshome.htm>.

There is a link for the site on the Section's Webiste Home page.

POPULAR CAREER MANAGEMENT TEXTS

Four of ACS Department of Career Services most popular career-development publications are being updated and are due to be reissued early in 2003. These publications can provide invaluable job seekers or mature chemists with vital resources on preparing for an interview, resume-writing skills, finding the hidden job market or on making adjustments to the cultural differences in the United States.

Each of these four free publications can be downloaded from the DCS web-site <http://chemistry.org/careers>.

They are:

- *The Interview Handbook* discusses the various techniques and skills needed for a successful interview.
- *Tips on Resume Preparation* discusses the most successful types of resumes and offers samples of each.
- *Employment Guide for Foreign-Born Chemists in the United States* provides information on immigration requirements, job searching, evaluating foreign credentials, skills and experience, culture of the workplace, and how to adapt to a new domicile.
- *Targeting the Job Market* focuses on the components of targeting the job market: personal assessment, identifying market trends, credentials, conducting research, and network.

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CHEMICAL LABORATORY SAFETY SERIES NOW ONLINE

The award-winning series of ACS *Chemical Laboratory Safety Video Courses* is now Internet-accessible. The entire series is now available in one comprehensive on-line course. Each of the modules includes on-line documentation containing background information on the subject, the complete video in a streaming format, and a self-test to take after viewing the video. The course includes these modules:

Compressed Gases: Compressed Hazards
Compressed Gases: Safe Handling Procedures
From Cradle to Grave — Laboratory Waste Management
Marty's Guide to Chemical Storage in the Laboratory
Out of Harm's Way: Safe Handling of Corrosive Chemicals
Oxidation Hazards — More Than Just Air
Seeing the Light: Eye and Face Protection
Stop That Dose! — Working Safely with Toxic Chemicals
Taking the Long View: Carcinogens and Related Health Hazards
The Big Spill — Chemical Spill Prevention and Clean-up
Things That Burn — Flammable and Combustible Chemicals
Using Chemical Hoods — A Laboratory Safety Test

Subscription length for complete 12-module course: 90 days

Per person registration fee: \$95.00

Enrollment in the ACS Virtual Campus is free. Visit the ACS Virtual Campus on the chemistry.org website for more information or to register.

Do you have a group of employees or students who want to take an ACS Internet Course? A special offering of any ACS Internet Course can be arranged for your group. Email Cyrelle Gerson at c_gerson@acs.org for more information.

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ACS MATCHING GIFT FUND 2003 PROGRAM

The National ACS Board of Directors, on the recommendation of the Committee on Budget and Finance, approved the request for \$500,000 in matching funds for the Matching Gift Fund Program for 2003. The 2003 program was approved with a few changes:

1. Match one dollar for every two dollars
2. Gift minimum is \$3,000
3. Gift maximum is \$100,000 without prior approval
4. Funding for future years is contingent on budget position and National ACS Board approval

CHICAGO SECTION MEETING CALENDAR

March 14, 2003

Section meeting
Public Affairs program

April 25, 2003

Section meeting
Dr. Michael Pellin
Argonne National Laboratory
"Analytical Chemistry of Stardust"

May 30, 2003

Section meeting
Willard Gibbs Medal Award
Dr. John I. Brauman
Stanford University

May 31-June 2, 2003

Great Lakes Regional Meeting
Loyola University, Chicago.

June 20, 2003

Section meeting
Scholarship awards presented
Dr. Tejal A. Desari
Boston University, Boston, MA
"Micro-therapeutic Constructs:
Opportunities in Implantable and Oral
Based Drug Delivery"

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CALENDAR

February 12, 2003: The Chicago Section American Institute of Chemical Engineers (AIChE) monthly dinner meeting. Call (847) 588-3840 or go to www.aiche-chicago.org for further information.

February 16-21, 2003: The Gordon Research Conference on Inorganic Reaction Mechanisms will be held in Ventura, CA. Contact Jim Mayer at (206) 543-2083 or at mayer@chem.washington.edu for information.

February 20 & 22, 2003: The 19th Annual DuPage Area Engineers Week program will be held on Thursday, February 20 and Saturday, February 22 at IIT's Daniel F. and Ada L. Rice Campus. See article in this issue for more information.

March 9-14, 2003: PITTCON 2003 will be held in Orlando, Florida. For more information, call (412) 825-3220, or visit website www.pittcon.org.

March 12, 2003: The Chicago Section American Institute of Chemical Engineers (AIChE) monthly dinner meeting. Call (847) 588-3840 or go to www.aiche-chicago.org for further information.

March 14, 2003: The Chicago Section American Chemical Society will host the Public Affairs program at the Wellington in Arlington Heights. Stay tuned for further information as the date approaches.

March 14, 2003: The Annual Chicago Symposium Series' will have its second symposium on "Excellence in Teaching Mathematics and Science: Research and Practice" at Rush Medical College from 1 p.m. — 8 p.m. For information on registration and the program, see website www.math.uic.edu/chicagosymposia/, call (312) 996-2448, or email David Cirillo at dcirillo@uic.edu. (See also article in this issue)

March 20-21, 2003: ASTM Committee E48 on Biotechnology will meet at the Weston Crown Center in Kansas City, MO. ASTM meetings are open to all interested individuals. Contact Diane Rehiel at (610) 832-9717 or drehel@astm.org.

March 23-27, 2003: The 225th ACS National Meeting will be held in New Orleans. For further information, call the National ACS office at (800) 227-5558, go to www.chemistry.org, or send e-mail to natlmtgs@acs.org.

April 9, 2003: The Chicago Section American Institute of Chemical Engineers (AIChE) monthly dinner meeting. Call (847) 588-3840 or go to www.aiche-chicago.org for further information.

April 25, 2003: The Chicago Section American Chemical Society's monthly dinner meeting. The after-dinner speaker will be Dr. Michael Pellin, Argonne National Laboratory. His talk is entitled, "Analytical Chemistry of Stardust".

April 25, 2003: The Annual Chicago Symposium Series' third symposium on "Excellence in Teaching Mathematics and Science: Research and Practice" will be at Chicago State University from 1 p.m. - 8 p.m. For information on registration and the program, see website www.math.uic.edu/chicagosymposia/, call (312) 996-2448, or email David Cirillo at dcirillo@uic.edu.