DIRECTIONS TO THE MEETING:
From 290 East/West
Take 290 from either direction and exit 294 North. Continue until you reach the exit for 190 West (to O'Hare). Exit and immediately pay toll. Exit Mannheim Road North. Go North for 2 miles.

From 90 East/West
Take 90 from either direction and exit 190 West (to O'Hare). Pay toll and immediately exit 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 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
5:00 - 6:00 P.M.

TOPICAL GROUP:
5:30 - 6:30 P.M.
"Hands on Lesson in Ethical Decision-making" presented by Dr. Michael Davis, Senior Fellow at the Center for the Study of Ethics in the Professions and Professor of Philosophy, IIT, Chicago. See page 2 for more information.

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

DINNER
7:00 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, June 22. PLEASE HONOR YOUR RESERVATIONS. The Section must pay for all dinner orders. No-shows will be billed.

Menu: Choice of New York Strip Steak, Broiled Whitefish, or Stir-fried Vegetable Rice Pilaf; Fresh Fruit Cocktail Supreme; Chef's Tossed Salad with Garden Greens; Athenian Oven Roasted Potatoes; Peas, Mushrooms & Carrots Medley; Chocolate Sundae; beverage; bread and butter.

The cost is $30.00 to Section members who have paid their local section dues, members' families, and visiting ACS members. The cost to non-Section members is $32.00. The cost to students and unemployed members is $15.00. Seating will be available for those who wish to attend the meeting without dinner.

AWARDS PRESENTATION
8:00 P.M.
Winners of the High School Scholarship Examination

GENERAL MEETING
8:10 P.M.

Dr. Donald J. Wink, Department of Chemistry, University of Illinois at Chicago.

Title: "Relevance and chemistry education"

Abstract: Many chemistry teachers attempt to make their classes relevant through different strategies. What those strategies should include and problems in creating relevant curricula will be discussed.

Biography: Dr. Wink received his BS from the University of Chicago in 1980 and his Ph.D. in 1985 from Harvard University. He is currently developing innovations in the teaching of undergraduate chemistry. His research in chemical education is focused on the use of interdisciplinary teams to improve student understanding of chemistry. One program has developed a new curriculum for chemistry and mathematics. Another works on the introduction of perspec-
track changes in student attitudes and teaching programs that use chemistry. This is called the Chemical Professional Laboratory Program.

The methods of chemical education research are used in his programs to help design and evaluate the work. Quantitative questionnaires are used to track changes in student attitudes and performance. Qualitative measures, including focus groups and classroom observation, provide summary information about what happens in the teaching environment. Finally, literature studies of the impact of educational psychology are a new area of research.

Don is also the director of the small molecule crystallography program of the University's Research Resources Center. This has given him the opportunity to collaborate with eight groups in the department, and two outside, in the determination of single crystal x-ray structures to assist research in inorganic chemistry, organic chemistry and pharmacology.

**TOPICAL GROUP SPEAKER**

Dr. Michael Davis

"Hands on Lesson in Ethical Decision-making"

**Abstract:** I hope this will be a "hands on" lesson in ethical decision-making, not a lecture. I will take about twenty minutes to present some useful aids to making ethical decisions. The next twenty minutes or so I will lead a discussion of one or two ethical cases I have that raise questions of professional ethics for chemists. This will give some practice in the use of the aids presented. For the rest of the meeting, I would like to have the audience present professional ethics cases that have bothered them, whether because they have faced them, seen others face them, or just because they are worried that they may some day have to face such a case.

**Biography:** Michael Davis is Senior Fellow at the Center for the Study of Ethics in the Professions and Professor of Philosophy, Illinois Institute of Technology, Chicago. Before coming to IIT in 1986, he taught at Case-Western Reserve, Illinois State, and the University of Illinois at Chicago. For 1985-86, he held at National Endowment for the Humanities fellowship. Since 1991, he has held—among other grants—three from the National Science Foundation to integrate ethics into technical courses. He received his Ph.D. in philosophy from the University of Michigan in 1972. He has published more than 120 articles and chapters and authored seven books: *To Make the Punishment Fit the Crime* (Westview, 1992); *Justice in the Shadow of Death* (Rowman & Littlefield, 1996); *Thinking Like an Engineer* (Oxford, 1998); *Ethics and the University* (Routledge, 1999); *Professional Code, and Ethics* (Ashgate, 2002); and *Actual Social Contract and Political Obligation* (Mellen, 2002); and also co-edited three other books: *Ethics and the Legal Professions* (Prometheus, 1986); *AIDS: Crisis in Professional Ethics* (Temple, 1994); and *Conflict of Interest in the Professions* (Oxford, 2001). He is now at work on another book, *Code Writing: How Software Engineering Became a Profession.*

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**JOB CLUB**

The next meeting of the Chicago Section ACS Job Club will be held on Friday, June 25 at 5:00 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 actually 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 meeting following the Job Club, the fee for unemployed members is only $15 and you can continue your networking activities. Please call the Section office for reservations and indicate that you are eligible for a discount.

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**In This Issue**

**Features**

1. Dinner/General Meeting Speaker
2. Scholarship Awards
3. Topical Group Speaker
4. Job Club
5. Technicians Programs
6. Contact the Chair
7. Financial Report (pgs. 4-6)
8. Council Meeting Report
9. Profiles in Chemistry — Tom Kucera
10. Volunteers Needed — IL State Fair
11. Technician Affiliate Group
12. Reaction Mechanisms Conference

**In Every Issue**

1. Notice to Illinois Teachers
2. ChemShorts for Kids
3. Free T-Shirts
4. WCC Column: This Month — Linda Brazdil, Susan Shih, & Alanah Fitch
5. ALMA e-News
6. Ad Index
7. Calendar
"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.

Ripening Fruit

Kids, is a tomato a vegetable or a fruit? Tomatoes are fruit and, in fact, they are more like berries than any other fruit. Like all berries, they are wonderful when in season but mediocre when not. The problems with tomatoes are that their season is very short and that they don’t like to travel. The same travel part can be said for bananas. And avocados, and more. Tomatoes and many other fruits would never make the trip to the market when ripe. After all, their job is to rot and deliver seeds.

Most commercial tomatoes are picked at the “breaker” stage when they have reached full size but have only a hint of red/tan/pink visible. So how is it that they’re all an appealing red color by the time they all get to the market? After washing, sorting, sizing and packing, tomatoes are moved to an airtight room where they are exposed to a “ripening” agent. This agent is ethylene (C2H4) gas. Ethylene is a hydrocarbon that occurs naturally in many fruits and vegetables. As some fruits and vegetables mature, they produce their own ethylene, which continues the ripening process. Without ethylene, some items, such as bananas, would never ripen. Bananas are picked before they are mature enough to produce their own ethylene. After their journey from Central or South America up to here, they are placed in special rooms, which are then filled with ethylene to trigger the ripening process. The bananas are then sent to supermarkets, where they continue to ripen themselves by producing their own ethylene gas, going from the unripe green stages to the ready-to-eat yellow stage.

You can use a similar process to help ripen some fruit at home. For those that will ripen after harvest (only some, like avocados, can ripen after harvest; others, like pineapples, cannot), try this: Place a green tomato or hard avocado in a paper bag. Add a yellow banana or an apple and close. The banana or apple will give off their own ethylene gas and therefore help ripen the unripe fruit. Put similar unripe items into a bowl alone for comparison. These will also eventually ripen because fruits produce their own natural ethylene, but it will take longer. Wait several days, observing your fruit each day during the process. Occasionally we observe the detrimental effects of ethylene. For example, it can wilt flowers! Bananas and other ethylene-producers should therefore be kept away from fresh-cut flowers. Of course, you could intentionally try this in another experiment.

Ethylene producing fruits include apples, apricots, avocados, bananas, cantaloupe, figs, guava, honeydew, kiwi, mango, nectarines, papaya, passion fruit, peaches, pears, plantains, plums, and tomatoes. The experts say to keep supermatket tomatoes out of direct sunlight, and to never put them in the refrigerator. Below 500F a volatile flavor compound called hexenal flips itself off like a chemical switch - permanently.

Written by KATHLEEN CARRADO

References

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

“A CELEBRATION OF THE PROFESSIONAL AND SCIENTIFIC VALUE OF CHEMICAL TECHNICIANS IN THE SOCIETY — WE’VE COME A LONG WAY”

The Division of Chemical Technicians, Inc (TECH) and the Committee on Technician Affairs (CTA) of the American Chemical Society, cordially invite you to a Presidential Event to be held in Philadelphia on August 24, 2004 during the Fall National Meeting. This event celebrates the anniversaries for TECH (10th as a full ACS division), NCTA (15th), and CTA (40th).

The Event will consist of a symposium during the afternoon with a social/dinner in the evening honoring past winners of the National Chemical Technician Award (NCTA) and past chairs of TECH and CTA.

The symposium will focus on education/training of technicians (then and now) and a panel discussion with former winners of the NCTA on how winning the award has impacted them personally and professionally.

Please join us in the celebration.

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://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 5,600 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.

MILT LEVENBERG
Chair

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ANALYSIS FOR THE CHEMICAL ELEMENTS

This Profit and Loss Statement and the following Balance Sheet comprise the financial report for the 2003 fiscal year.

### Income

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tr>
<td>AG Edwards Capital Gains</td>
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<td>AG Edwards Dividends</td>
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<td>Chem. Bull. Advertising</td>
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<td>Donations</td>
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<td>Nat'l Allottments &amp; Commissions</td>
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<td>National ACS Reimbursements</td>
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<td>Wm. Blair Dividends</td>
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**Total Income**  
211,260.39

### Expenses

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<td>Chair-Elect</td>
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<td>Chem. Bull. Production</td>
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<td>Chemistry Week</td>
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<td>College Education</td>
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<td>Dinner Meetings</td>
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<td>Environ. &amp; Lab Safety</td>
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<td>Gibbs Arrangements</td>
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<td>High School Education</td>
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<td>Hospitality</td>
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<td>Insurance</td>
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<td>Minority Affairs</td>
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<td>Miscellaneous Expenses</td>
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<td>Office</td>
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<td>Payroll Expenses</td>
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<td>Payroll TAXES</td>
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<td>Telephone</td>
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<td>Travel (Councilor)</td>
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<td>Web</td>
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**Total Expense**  
182,188.55

**Net Income**  
29,071.84
### CHICAGO SECTION AMERICAN CHEMICAL SOCIETY

**BALANCE SHEET**

**AS OF DECEMBER 31, 2003**

#### Assets

<table>
<thead>
<tr>
<th>Item</th>
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<td>Prepaid Expenses</td>
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**Total Current Assets** 1,008,332.47

#### Liabilities and Equity

##### Liabilities

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<td>General Endowment Fund</td>
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<td>Henrietta Z. Freud Trust</td>
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<td>Endowment Fund</td>
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<td>Ipatieff Library Endowment Fund</td>
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<td>Marie A. Lishka Scholarship</td>
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**Total Liabilities** 993,537.48

##### Equity

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**Total Equity** 14,794.99

**Total Liabilities and Equity** 1,008,332.47

(see also pie charts on next page)
Sources of Revenue 2003

- Miscellaneous: 1%
- National ACS: 24%
- Investments: 34%
- Dues: 19%
- Chemical Bulletin: 11%
- Meeting Registrations: 7%
- Donations: 4%

Expenses 2003

- Miscellaneous: 0%
- Awards & Scholarships: 13%
- Insurance: 3%
- Administration: 3%
- Office: 21%
- Chemical Bulletin & Webpage: 24%
- Dinner Meetings: 16%
- Councilor Travel: 16%
- Education and Outreach: 1%
- Other Committees: 5%
REPORT OF COUNCIL MEETING IN ANAHEIM

The 227th National Meeting of the ACS was held in Anaheim, CA from March 28 - April 1, 2004. The Chicago section was fully represented by 14 counselors. The counselors who attended for the section were: Allison Aldridge, Roy H. Bible Jr., Cherlyn Bradley, Charles E. Cannon, David S. Crumrine, Nathanial L. Gilham, Russell W. Johnson, Fran K. Kravitz, Thomas J. Kucera, Claude A. Lucchesi, Barbara M. Morinak, Seymour H. Patinkin, Marsha A. Phillips, and Stephen Sichak. Jim Shoffner was also present at the meeting.

Election Results: The council selected F. Sherwood Rowland and Isiah M. Warner as candidates for President-Elect, 2005. In addition, a petition candidate, E. Ann Nalley, has been certified and will also run for the office.

Budget: ACS operations ended 2003 with a net deficit of $64,000. However, the financial performance was $811,000 favorable to the approved budget. Because of the performance, including investment gains, the ACS ended 2003 with an increase in the unrestricted net assets to $161 million. These results were better than expected due to the strong performance of the Publication Division.

The council voted to increase dues for 2005 to $123.00, the fully escalated amount. This does not include the temporary increases due to changing the way dues gets distributed to Local Sections and Divisions. The overall financial health of the Society will continue to be monitored to determine if decreasing this temporary measure is possible.

Economic and Professional Affairs: As of the end of Tuesday, there were 1281 job seekers at the National Employment Clearinghouse (NECH); there were 121 employers with 271 posted positions available. The number of interviews conducted in Anaheim, as of the end of Tuesday, was 1579. An updated edition of the Professional Employment Guidelines (PEG) was presented to Council for consideration.

Constitution and Bylaws: The bylaws of the Chicago Section have been reviewed and have received preliminary approval. Three petitions were presented to council for consideration: 1) a petition for electronic balloting, 2) a petition to change the annual report deadline for divisions and, 3) a petition to change the membership requirements for pre-college teachers.

ACS/AIChE Partnership: A major discussion item at the 227th ACS National meeting was the status of efforts underway to determine if a partnership should be formalized between ACS and the American Institute of Chemical Engineers (AIChE). Discussions indicated that this would not be a merger or acquisition, but rather a three-part alliance. The two organizations would remain separate, but work together to better serve the chemical enterprise. The two organizations are currently pursuing a programmatic alliance, where joint technical meetings, advisory committees and institutes would be pursued. A potential membership alliance would be the second step. This may result in joint memberships. Finally, an operational alliance, where some staff functions are joint may also be considered.

These discussions result from the recent financial challenges experienced by AIChE. AIChE was founded in 1908 and currently has ~ 45,000 members in 108 local sections with 18 technical divisions and forums. The dues for AIChE for 2004 are $199. There are ~ 8000 members that are members of both ACS and AIChE. The discussion at the council meeting showed strong support to continue forward with these discussions.

If you have any questions and/or comments about the above actions, please contact me by email (bmoriarty@nalc0.com) or one of the other counselors.

BARBARA MORIARTY

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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 Pat Stejskal (April meeting).

FRAN KAREN KRAVITZ
HOSPITALITY COMMITTEE CHAIR
Members of the Chicago Section's Women Chemist 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, vignettes of women in chemistry. This month's topic is about three local women in chemical education, Linda Brazdil, Susan Shih, and Alanah Fitch.

Teachers can often influence a student's choice of a career. In particular, a woman science teacher can encourage young women to consider the possibility of a career in science, acting as a role model and mentor.

Linda Brazdil is the Director of the Prairie Crossing Charter School. She received a B.S. at Notre Dame College of Ohio and her Masters and Ph.D. at Case Western Reserve University and has been in chemical education about 26 years. She became fascinated with chemistry in high school, because it helped to explain how and why many observed phenomena occurred. She enjoys watching students grow in knowledge over time and knowing that she has helped to provide the conditions for that growth to occur. Currently she is developing curriculum for 7th and 8th grades, including chemistry principles and their application to environmental studies. Her philosophy of ChemEd is to help students to first become good observers and recorders and then to help them ask questions and conduct experiments that will help them to understand basic chemistry in a variety of situations. Linda was formerly with the Illinois Math and Science Academy. Her extensive list of honors, awards and scientific memberships will be posted at the June meeting.

Susan Shih, while serving an 18-month term of office as chair of the Chicago Section ACS, was named "Outstanding Faculty for 2002-2003" in her Division at the College of Du Page, where she is a Professor of Chemistry. She received an A.B. from Rosemont College, and her Masters from Ohio State University. Susan chose a career in chemistry because she enjoyed it, her high school chemistry teacher was female and family members had degrees in chemistry. In graduate school, she discovered that she enjoyed teaching and working with students, more than doing laboratory research. She has been teaching at the college level since 1988, except for an eight-year motherhood break. Susan teaches primarily science majors and works at developing their critical thinking skills, considering it a success when they can logically analyze a problem. Currently she is involved in a NSF grant proposal with UIC and Purdue for setting up an undergraduate research center. It is important to her to be open to new ideas in pedagogy, to stay current in curriculum developments, and to serve as a role model and mentor to young women interested in science. Susan encourages anyone interested in chemical education to become a member of the division of Chemical Education of the ACS.

Alanah Fitch came to her position as Professor of Chemistry at Loyola University of Chicago by way of a B.A. in Cultural Anthropology from Antioch College, a M.S. in Soil Fertility from the University of Arizona and a Ph.D. in Agronomy (Soil Chemistry) from the University of Illinois-UC. She has done post-doctoral work in Soil Chemistry and Electrochemistry at the University of Wisconsin-Madison and in Chemistry at Northwestern University. While getting her degree in Cultural Anthropology, Alanah studied for a year at the Universidad Iberoamericana (Mexico City). She followed this with a semester at the Universidad de los Andes in Bogota, Columbia and became interested in soil erosion because of the mud slides she observed there. To get a suggested degree in soil fertility, she needed chemistry and liked freshman chem. After moving to Illinois, she found the area too flat to study erosion, so switched to soil chemistry for her doctorate, and more chemistry. This program required teaching, at which she excelled.

At Loyola, she organized an entire set of labs around the element lead so students could learn to make critical decisions about factors to focus on in choosing methodology based on the figures of merit of various methods of analysis.

The major aspects of her job are research (graduate student interaction) and undergraduate face to face contact. She also travels to various conferences in the U.S., and occasionally, the world. She enjoys working with students at all levels. Her teaching is based on deciding what she wants the students to actually know and then trying to plan into the class the appropriate methods of achieving that learning. Alanah thinks much of what is considered "hot" research if determined by a narrow, inwardly looking group of institutions, but that women tend to look outside of this group and make connections to the larger world. If the number of women in these institutions increase, perhaps they could change the focus to outward/society concerns. In June, Alanah will be taking 8 Loyola students to Kenya and co-teaching a class on the environment with a faculty member at Kenya Methodist University. They will be taking along equipment that the university does not have, including an electrochemical analyzer for doing metals in water. She just received an NSF fellowship to bring Loyola's instrumentation up to the capability to be manipulated from off site and involve Loyola, another Chicago institution and two east African schools in environmental experiments. She has been named Master Teacher of the College of Arts and Sciences, has achieved many awards, and written a book entitled "Sublime Lead: the Biography of a 5,000 year Toxic Love Affair".

Marilyn Koubas

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This article is the first of a series on profiles of Chicago area chemists that have had an impact on Chemistry in Chicagoland.

**PROFILES IN CHEMISTRY: TOM KUCERA**

It is a tradition each June for the Chicago Section of the American Chemical Society to recognize the importance of education. Although it is important to educate each new generation of chemists, it is equally important for the entire population to understand the importance of chemistry in everyday life. Dr. Thomas Kucera is an inspirational leader for the chemical profession. This Profiles in Chemistry will highlight Dr. Kucera's background and describe some of the activities leading to award last December of the American Chemical Society's Salute to Excellence.

**Education.** Inspired by a "good teacher," young Tom became interested in chemistry during high school. An intense interest led him to read his entire chemistry textbook in two days; this interest was further intensified by a Gilbert Chemistry Set—a very hands-on experience. Tom extended this interest by earning a B.S. from Loyola University, a M.S. from the Illinois Institute of Technology, and then a Ph.D. from Purdue University. Graduate School was not easy; Tom worked as a chemist during the day and as a student at night. He earned a prestigious Fellowship with the Office of Naval Research, and traveled to New Zealand as a Fulbright Scholar for a year, working in the area of natural products.

**Dr. Kucera Becomes a Leader in Industry.** Dr. Kucera credits the ACS with helping him land his first chemistry job—a job as a resin polymer chemist with Miner Laboratory. (It is notable that Dr. Miner was also a very active former Chicago Section Chair.) After his education, Dr. Kucera worked for Midwest Laboratory in Chicago, and then Charles Bruning Company, where he made important contributions to the development of sensitized films and paper. While working independently as a consultant, he worked on the new RCA Electrofax paper and apparatus, and provided valuable consulting services for companies such as Xerox.

Disaster struck in 1964. Dr. Kucera was injured in an automobile accident. The injury led to a deteriorating condition requiring first the use of crutches, and then confinement to a wheel chair. During this time he was hired by American Photocopy Equipment Company (APECO), where he provided outstanding leadership of this $135 million company, which owned factories around the world. His career led to the position of Vice President and Technical Director. Dr. Kucera has also authored a chapter on reprography in the Kirk-Othmer Encyclopedia of Chemical Technology, and continues to work as a consultant and expert witness. Tom's career has taken him around-the-world four times—"twice in each direction."

**American Chemical Society Leader.** Among some of the positions that Dr. Kucera has served for the Chicago Section are: Chairman; Trustee; Long Range Planning Chair; Chemistry Day Chair; Chemical Exposition Leader; Chemical Bulletin Editor, and many others. He served as the first Chair of the ACS Committee on Chemists with Disabilities. Dr. Kucera still attends all National ACS meetings as a Chicago Section Councilor; he remains one of the most active members. He was recognized for shepherding National Chemistry Week in Chicago since its inception 16 years ago and for his efforts to spread the word about chemistry to the general public, especially to children. This activity led to an ACS Salutes to Excellence Award, which recognizes positive impact by a chemist on everyday life.

Dr. Kucera's advice to students interested in chemistry: "Don't decide your career based on money," and "do the best that you can. Chemistry is very interesting and is a worthwhile career." Tom has three very successful daughters, one of whom is now a NASA Scientist working at the Goddard Space Center on an international solar flare UV characterization program.

Written by RUSS JOHNSON

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**ILLINOIS STATE FAIR VOLUNTEERS NEEDED**

The Chicago Section, American Chemical Society along with Decatur-Springfield, East Central, Illinois-Iowa, Kentucky Lake, Peoria, Rock River, Southern Illinois and St. Louis Sections will have a cooperative tent at the Illinois State Fair this year. The Illinois State Fair is from August 13 to August 22 in Springfield. This tent will provide information to the public on chemistry, chemical education, demos, etc. Last year, over 700,000 people went to the Illinois State Fair. This will give us a chance to touch the lives of many Illinois citizens and governmental leaders.

Our Section is currently looking for volunteers to help during the fair and also people interested in the initial phase of planning this project. Our next meeting will be held in Normal on June 12. If you are interested in helping during the State Fair in August, helping on the planning committee for the tent, or want to be on the mailing list—just call the Section office at (847) 647-8405.

**CHERYL BRADLEY & FRAN KRAVITZ**

**CO-CHAIRS, AD-HOC COMMITTEE ON THE ILLINOIS SECTIONS OF THE ACS COOPERATIVE STATE FAIR PROJECT**

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TECHNICIAN AFFILIATE GROUP (TAG)

BY JOHN H. ENGELMAN

Historically, although the role of professional-chemists has shifted little in the past thirty years, the duties of technicians has shifted significantly. In 1964, the ACS recognizing the shifting role of the chemical technician in the work place appointed an ac hoc Committee on Technicians Activities (CTA) chaired by William G. Young, Vice-Chancellor of UCLA. Two principle issues have dominated the attention of the ACS groups concerned with technicians: professionalism and education. An early action of the CTA was to encourage technicians to form TAGs affiliated with their local ACS sections.

Who or what then is a TAG? Two definitions are required, first what is a chemical technician and then what is a TAG. A chemical technician, as defined by the ACS, is a person who does not meet the qualifications stated in the definition of a chemist but whose training includes successful completion of a two-year post high school level chemistry curriculum leading to an Associate Degree, or the equivalent work in a Baccalaureate program, or the equivalent knowledge gained by experience. The primary work of a chemical technician is conducting experimentation and/or correlating information to help solve problems and/or discover new chemical knowledge. A chemical technician's work is generally directed by a chemist, chemical engineer, or a person with equivalent training or experience. TAG is the acronym use by the American Chemical Society (ACS) and the Division of Chemical Technicians, Inc. (TECH) for Technician Affiliate Group. Therefore these are groups of chemical technicians affiliated with their local ACS section.

These groups of technicians while affiliated with and deriving some financial support from the local section are autonomous. They provide programs, continuing education activities, and networking opportunities unique to the working technician. At the same time they provide the local section with a valuable source of membership and a pool of people to support public activities.

By 1972, TAGs were planning programs, presenting continuing education activities, and publicizing the contributions of technicians to the local chemistry community. These TAGs were the forerunner of TECH which was granted probationary status by the ACS in 1991 and attained full division status in 1994. TAGs are the building block of TECH and the major source of its membership and leadership.

In closing, the affiliation of the TAGs with the local ACS sections has many benefits for both groups — among them are:

• Provides a source of additional manpower for Local Section community outreach programs (National Chemistry Week, "Science Saturdays", etc.) and other Local Section programs.
• Encourages technicians to become full ACS members, increasing the membership base of the Local Section.
• Gives the Local Section potential volunteers for committee chairs and eventually Executive Committee candidates.
• Further cultivates the technician/scientist relationship in a venue outside the workplace.
• Gives the TAG members the opportunity to participate in more programs tied to their community and workplace through the Local Section.
• Allows TAG members to feel part of a larger local professional organization.
• Gives the TAG additional networking opportunities in local industry and academic institutions through which they can recruit new members.
• Provides expanded opportunities to communicate TAG programs and activities through Local Section publications.
• Gives both the Local Section and the TAG the opportunity to work and grow together - the synergy of the two groups can result in exciting fresh ideas and expanded possibilities.

NU TO HOST THE 30TH REACTION MECHANISMS CONFERENCE

The 30th Reaction Mechanisms Conference will be held Friday, June 25, through Monday, June 28, 2004, on the campus of Northwestern University in Evanston, Illinois. This distinguished conference has held a position of long-standing significance in mechanistic chemistry since its founding almost 60 years ago. Subjects have traditionally included organic, inorganic, and biological reactions. It was last held in the Chicago area in the 50s, at Northwestern in 1950 and at the University of Chicago in 1958. Registration fees for the conference will be modest ($50/person for students and postdoctorals and $100/person for all others) to encourage wide participation.

The speakers are a distinguished set of chemists with a variety of areas of interest: Igor Alabugin, Carolyn Bertozzi, John Brauman, Geoffrey Coates, Dennis Doughtery, Samuel Gallman, Karen Goldberg, Kendall Houk, William Jones, Frank Klaerner, Hilkka Kenttanmaa, Eric Kool, Frederick Lewis, Peter Schreiner, Robert Sheridan, David Tirrell, and Donald Truhlar.

Conference activities will take place in the McCormick Auditorium in the Norris Center of Northwestern University. This facility is a short walk from the Block Art Gallery and from the variety of downtown Evanston facilities that include coffee houses, book stores, restaurants, bars, and other activities. The elevated train to Chicago has several stops close to campus.

Further details may be found on the conference website, http://www.chem.northwestern.edu/~rme2004/.

JOSEPH B. LAMBERT
NORTHERN UNIVERSITY
ALMA E-NEWS

Nitrogen Dangers

Most lab personnel know that nitrogen causes more fatalities than any other chemical. When a person enters a nitrogen atmosphere, oxygen flow is reversed from arterial blood and tissues back into the lungs and loss of consciousness follows within seconds.

At a local plant, an individual was working on top of a reactor, leaned over, got a blast of pure nitrogen, and pitched forward into the vessel unconscious. In the lab, a similar event can occur when working with liquid nitrogen since the cold vapor concentrates at floor level—a worker who leans down into this cloud can be overcome.

Another too common mistake is to ride on a freight elevator with the container when transporting liquid nitrogen between floors. Elevators should have warning signs posted to strictly prohibit this practice.

The staff must also be trained to overcome their natural instinct to rush to assist an unconscious coworker since over half of workers who die in confined spaces are attempting to rescue other workers. Since nitrogen constitutes about 78% of the air that we breathe, it is easy to become complacent and underestimate its dangers.

If you use nitrogen in your lab, safe handling of this dangerous gas should be an annual topic for a safety meeting to remind the staff of the risks.

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

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

WAYNE COLLINS
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</tr>
</thead>
<tbody>
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<td>302-998-1184</td>
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</tr>
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<td>Desert Analytics</td>
<td>3</td>
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June 2-4, 2004: American Chemical Society's 36th Central Regional Meeting at Indiana University-Purdue University, Indianapolis, IN. Go to http://membership.acs.org/C/Cerm2004/.

June 20-23, 2004: The American Institute of Chemical Engineers (AIChE), Chicago Section, will have a Process Development Symposium, "Working Right on the Right Thing" at the Oak Brook Hills Resort, 3500 Midwest Road, Oak Brook, IL. Go to at www.aiche.org/conferences/processdev/ for program, hotel, and registration details.

June 25-28, 2004: The 30th Reaction Mechanisms Conference will be held in the McCormick Auditorium in the Norris Center on the campus of Northwestern University in Evanston, IL. Further details may be found on the conference website, http://www.chem.northwestern.edu/~rmc2004/.


July 18-22, 2004: 18th Biennial Conference on Chemical Education (BCCE). Contact Jodi Wesemann at j_wesemann@acs.org or (800) 227-5558, ext. 4587 for more information.

September 10, 2004: Chicago Section ACS Dinner Meeting.

September 28-30, 2004: The Plastics USA tradeshow of the Society of the Plastics Industry will be in Chicago, IL. For further information, call (800) 774-0015 or go to www.plasticsusa.org.

October 7-8, 2004: 14th International Activated Carbon Conference, Pittsburgh, PA. Go to http://www.pacslabs.com for information on the conference, courses, vendor's night and other conference activities.

October 17-20, 2004: ACS 36th Great Lakes Regional Meeting, "Formulate Your Future" at the Pere Marquette, Peoria, IL. Go to http://membership.acs.org/g/glrm04.

October 22, 2004: The joint meeting of Northwestern University, Dept. of Chemistry and the Chicago Section ACS for the Basolo Medal Award lecture at Northwestern. More information as the date approaches.

November 19, 2004: Joint Chicago Section ACS Dinner Meeting with the University of Chicago's Department of Chemistry for the Julius Stiegitz Award Lecture.


Whether you spend your summer traveling, going to school, working, or playing....Have a wonderful summer and see you in the Fall with the September issue — Editorial Staff