

theCHEMICALbulletin

FEBRUARY • 1999

CHICAGO SECTION AMERICAN CHEMICAL SOCIETY

REGULAR MONTHLY MEETING

FRIDAY, FEBRUARY 19, 1999

HOLIDAY INN NORTH SHORE
5300 W. Touhy
Skokie, IL

DIRECTIONS TO THE MEETING

From the North on I-94 (Edens Expressway): Take the Touhy Ave. West (#39A) exit and the Holiday Inn is 3-1/2 to 4 blocks west on the right hand side.

From the South on 294(Tollway): Exit off Touhy Ave east, it is about 7-8 miles east of 294 Tollway. The hotel will be on the left hand side.

From the South on I-90/94 (Kennedy Expressway): Make sure when the 90-94 split to take the 94 west to Milwaukee, then exit off Touhy Ave. West (#39A). The hotel is 3-1/2 to 4 blocks on the right hand side.

From O'Hare Airport on 190 expressway/I-90 (Kennedy Expressway): Take 190 east to Chicago to merge with the 90. 2 miles down will be an exit for Harlem Ave. Exit on Harlem Ave. Turn left at the first street light in which you will be heading north on Harlem Ave. About 3-1/2 miles turn right on Touhy Ave. And the hotel will be 2 miles down on the left hand side.

From the I-55 (Stevenson Expressway): Take the I-55 to the 90-94 expressway west to Wisconsin (Milwaukee) the take the 94 after the split to Touhy Ave. West, then exit west on Touhy Ave. (#39A).

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

DINNER 7:00 P.M.

Dinner reservations are required and should be received in the section office (847/647-8405) by noon on Wednesday, February 17, 1999. Dinner cost is \$25 to Section members who have paid their local section dues, members' families, visiting ACS members. Cost to non-members is \$27. Seating will be available for those who wish to attend

the meeting without dinner. PLEASE HONOR YOUR RESERVATIONS. The Section must pay for all dinners ordered. No-shows will be billed.

The menu consists of Tempura Vegetable Kabobs, Sliced London Broil, Teriyaki Style, Deluxe Garden Salad with Italian or Herb French Salad Dressings, Stir Oriental Vegetables, Blended Wild Rice, Rolls and Butter. Flourless Chocolate Cake, and Coffee and Tea. Grilled Halibut with Basil Butter can be requested at time of reservation.

GENERAL MEETING 8:00 P.M.

THE TOPIC:

John R. Marquart, Ph.D., Professor of Chemistry, Eastern Illinois University, Department of Chemistry, Charleston, IL, "Caves - Worlds within the World: An Introduction to the Chemistry, Geology, and Ecology of Caves".

Cave science, or speleology, offers an important means of learning about the earth's geological history from the inside out. Caves are the three-dimensional worlds within our own two-dimensional surface world -- worlds within the world. Caves can be aesthetically beautiful, challenging, and sometimes fearsome. Prof. Marquart has been exploring and studying caves for several decades. He will take you on a slideshow tour of a number of fascinating caves across the country. Particular attention will be given to caves in the Midwest and Southwest.

The earth's geological history has led to the formation of differing types of caves around the country. The role of chemistry and geology in creating these wonders of nature will be emphasized. Examples of how speleology can tell us things about the ancient history of our planet will be explored. As an example, analysis of the chemical makeup of formations within the cave offers some surprising revelations about the climate

at the earth's surface hundreds and even thousands of years ago.

This presentation is designed for an audience of varied interests and experiences technical or non-technical. It is interdisciplinary in content, combining chemistry with geology, hydrology, and earth history to show how and where caves are formed and why environmental concerns are particularly serious in cave (karst) regions.

We will examine environmental problems in the karst areas of southwestern Illinois (in Monroe and St. Clair Coun-

(continued on page 2)

JOB CLUB

The next meeting of the Chicago Section Job Club will be held on Friday, February 19 at Holiday Inn North Shore 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.

Should you wish to attend the Section meeting following the Job Club, the fee for unemployed members is only \$13, 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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(continued from page 1)

ties - across from St. Louis) and along the Illinois River of north-central Illinois (in La Salle County) and work underway to remedy them.

THE SPEAKER:

John R. Marquart is a Professor of Chemistry at Eastern Illinois University in Charleston, IL. His area of research involves Analytical and Physical Chemistry as applied to environmental problems. His laboratory-based research involves development and applications of analytical methods for monitoring common environmental pollutants, such as heavy metals, pesticides, and herbicides. He is also active in a wide variety of field-based conservation and restoration projects involving subterranean environments (caves and mines). Ongoing projects include restoration and protection of environmentally sensitive mines and caves throughout the mid-West, especially within Illinois and at Mammoth Cave National Park, KY. He is past President of the Near Normal Grotto, the mid-Illinois grotto (chapter) of the National Speleological Society, a Director of the Illinois Speleological Survey, and is a member and consultant to Bat Conservation International. He is also President-Elect of the East-

Central Illinois Section of the American Chemical Society.

He is a native of Benton Harbor, Michigan. His interest in caves dates from his early childhood when his family took summer vacations in cave areas of Indiana and Kentucky where he and his older brother explored caves. His interest in caves as a challenging recreation has broadened into application of his background as a physical scientist to the scientific and technical aspects of caves.

He holds a B.S. in Chemistry from the University of Arizona in Tucson and an M.S. and Ph.D. from the University of Illinois in Urbana/Champaign. After his Ph.D., he worked as a research chemist for Shell Development Company in Emeryville, CA (five years), taught at Mercer University in Macon, GA (10 years), and currently teaches at Eastern Illinois University in Charleston (20 years). He also regularly teaches summer classes in Physical Chemistry at the University of Illinois in Urbana/Champaign and collaborates on research with this institution.

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PUBLIC AFFAIRS AWARD

The Public Affairs Award Committee, chaired by Barb Moriarty, immediate past chair of the section, has chosen Bill Kurtis, veteran and highly respected Chicago television journalist, as the recipient of the Public Affairs Award for 1999. The award will be presented to Mr. Kurtis at the March 12 section meeting at the Como Inn. Mr. Kurtis is being honored for producing the "New Explorers" series which highlighted extraordinary and significant scientific and explorations in science, and for his support of science education and science literacy. He is also remembered by some section members for his keynote lecture during the 1990 Chemistry Day Observance at the Museum of Science and Industry. Please mark your calendars and plan to attend.

JIM SHOFFNER
BARB MORIARTY
CoChairs, Public Affairs Committee

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"CHEM SHORTS" For Kids

This column is presented by the Elementary Education Committee. 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 teachers. It is hoped that teachers will try to incorporate some of these projects in this column into their lesson plans.

"A Viscosity Race"

Kids, do you know what lubricants are? They help reduce friction, or wear and tear, between moving parts. They can be solids such as graphite, soap, or talcum or they can be liquids like oils and greases. An important feature of a liquid lubricant is its thickness or ability to flow. This quality is called viscosity. Look up viscosity in the dictionary and it says, among other things: "the property of being glutinous or sticky". Well this certainly sounds like it could be a fun property to experiment with. It is the job of chemists to create and analyze lubricants. But you can easily tell which ones are more or less viscous than others by doing this simple experiment.

You will need 3 tall, narrow, clear jars with lids (olive jars or baby food juice jars), vegetable oil, clear shampoo, clear dish detergent, and 3 chocolate chips. Nearly fill one jar with the oil, one with the shampoo, and the last one with the detergent. Make sure all the levels are the same. Gently place a chocolate chip in one of the liquids. Time how long it takes to reach the bottom with a stopwatch. Make a chart and record the time. Do the same thing with the other two chips and liquids. Or, you can make a race out of this with two friends. Place the chips in the liquids at the same time and see whose goes fastest and slowest.

Determine which liquids have the shortest time, the next shortest time, and the longest time. For the jar with the shortest time for the chip to reach the bottom, is the liquid in that jar more viscous or less viscous than the other liquids? Hint: the longest time = the most viscous liquid.

You can make these jars reusable by sealing the tops on with Kraft glue. If you do this, seal a different colored marble into each jar rather than a chocolate chip.

Reference: "WonderScience", March 1990 issue and M. Ebeling (primary

level teacher, Naperville district 203).

ChemShorts are on the internet at:
<http://membership.acs.org/C/Chicago>.

KATHLEEN CARRADO
Elementary Education Committee.

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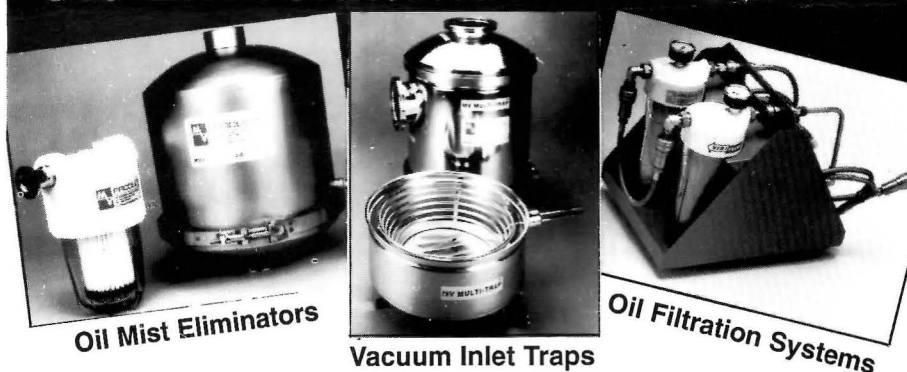
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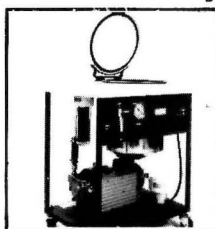
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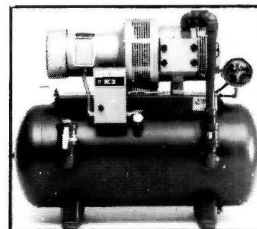


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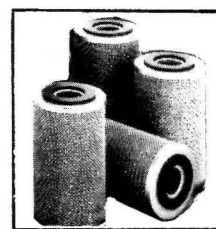
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1999 CALL FOR PAPERS

Please make the **1999 Eastern Analytical Symposium** the best ever, by submitting your own paper for inclusion in the technical program. The Symposium will be held on Nov. 14-19, 1999. Abstracts of the proposed papers should be 200 to 250 words, please indicate your preference for an oral or poster format to the committee.

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The deadline for Submission

of preliminary abstracts

is **April 16, 1999.**



"OH, WHAT A TANGLED WEB WE WEAVE"

If you haven't yet visited the Chicago Section Web page (<http://membership.acs.org/C/Chicago>), please do so and, get into the habit of visiting it regularly to keep up with news about the Chicago Section and chemistry matter in and round about Chicago. Due to the potential speed of electronic publishing, some of the contents may appear on the Web page.

We would like to increase the amount of information on the Web page and expand the number of pages. Proposed topics include:

- 1) Student Affiliate Chapters: news, activities, discussion
- 2) Careers: chemical careers, mentors
- 3) Chemistry for kids (in the broadest sense); incl. coordination of activities and presentations by:
Individuals, Museum Volunteers, Academic Groups, Corporations, Chicago Section ACS
- 4) Education activities: elementary, middle school, high school, College, continuing
- 5) Chemistry in the News: notes, critiques

Re the first topic, we'll be attempting to contact all Student Affiliate Groups requesting their input.

For career mentors, we'd like to maintain a list of careers in chemistry for which we could provide experts willing to provide more information and make presentations to any interested groups, esp. academic (e.g., science classes, Student Affiliate Groups, etc.). Interested parties would contact the Section and receive either material or the name of an expert willing to make a presentation. Already, we have presenters on the following topics: Forensics, Analytical, Information, and Patents.

We realize that not every member uses the Internet, but we are sure that usage will continue to grow, especially in the growth sectors in education and younger chemists. Therefore, we should provide as many services as possible on our Web pages.

For chemistry for kids, we'd like to maintain a list on the Web page listing all such activities by any group or individual within the boundaries of the Chicago Section, whether the activities are performed by the Chicago Section or not.

We solicit your input: information and

activities for the topics listed, willingness to act as a career mentor or give presentations to children, or suggestions for other topics for Web pages or contents of existing pages. A number of Section Committees will be involved, but until those duties are better organized, contact the author. The information will be organized and passed on to Milt Levenberg, our Web Master.

BOB BUNTROCK
Chair Elect, Chicago Section ACS
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For additional information, contact Professor Joel Goldhar, 312-906-6526.

OBITUARY

Dr. Hertseil S. Conway, 84, died January 11, 1999. He earned his doctorate from the University of Chicago in 1937. Dr. Conway retired as research chemist and editor from Standard Oil after 33 years of service. He was a Councilor '70-'88, Secretary for 2 years, Director for over 20 years ('59-'72) and held numerous positions on many committees in the Chicago Section American Chemical Society. Dr. Conway was also a longtime teacher and member of Sigma Xi and at Temple Beth El.

Robert W. Dean, 69, died January 8, 1999. He retired in 1995 after working 23 years as a chemist and food technologist for the U.S. Department of Agriculture. A native of Great Neck on New York's Long Island, He earned a bachelor's degree in 1951 from Bates College in Lewiston, Maine, and a doctorate in food technology from Rutgers University in 1959. Before joining the agriculture department, he worked in private industry. Dr. Dean was active for many years in the Institute of Food Technologists, Chicago Nutrition Association, Chicago Chemists' Club and the Chicago Section American Chemical Society.

David Anson Tyner, 76, died December 7, 1998. Dr. Tyner earned his bachelor's degree in 1944, masters in 1949 and his doctorate from University of Michigan in 1952. He worked on the Manhattan Project, the top-secret effort to make the first atomic bomb at the University of Chicago and in Oak Ridge, Tenn. Dr. Tyner later worked as a chemist for G.D. Searle & Co. of Skokie, a pharmaceutical company. He worked in organic chemistry on steroid research. He was an avid scuba diver with his wife, Evelyn and shared many adventures in lectures to the Chicago Section American Chemical Society and Chicago Chemists' Club. Dr. Tyner was an active member of the Chicago Chemists' Club, Chicago Section American Chemical Society and Sigma Xi.

SUPPORT PROJECT SEED

Project SEED (Summer Educational Experience for Economically Disadvantaged) for high school students is a program providing high school students from economically-disadvantaged backgrounds opportunities to experience the challenges and rewards of chemically-related sciences. The program provides students a chance to conduct hands-on research and learn what it's like to work as part of a team for eight to ten weeks during the summer with scientists in academic, industrial, or government research labs.

Each student does a chemical research project under the direct supervision of a scientist/mentor (called a preceptor). Students receive a stipend of \$1,750-2,000, depending on whether it is their first or second summer in the program. Students also get the chance to present their work at a poster session during a National meeting.

To get more Chicagoland students involved in the program, we need more funding from Chicagoland corporations, foundations, and individuals to sponsor our students and more scientists willing to participate as mentors/preceptors to foster the successful continuance and growth of this worthy program in the Chicago area for scientifically promising, but economically disadvantaged high school students.

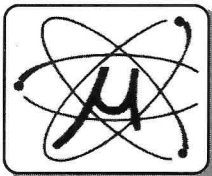
If you or your company would like to donate to your Chicago Section's Project SEED program to sponsor a local student, contact the Section office at (847) 647-8405.

CHERLYN BRADLEY
CHARLES CANNON
Co-Chairs of Chicago Section's Project SEED Committee

CELEBRATION

Over 150 persons enjoyed the annual holiday party of the Section on December 11 at The Ambassador West Hotel in Chicago. The meeting was held jointly with the Chicago Chemists' Club and Iota Sigma Pi. House Chair Julia Hertzler chose an outstanding menu and along with the outstanding talk of Michael McCreary of Eastman Kodak Company on Kodak Imaging and the Mars Missions which was arranged by Program Chairs Keith Kostecka and Angela Kowalski, it made for a most enjoyable meeting. Connie Buenvenida, Hospitality Committee Co-Chair, along with Kathy Brtko, provided a large number of door prizes. Everyone attending received one! Donors were Kraft Foods (Toblerone chocolate bars), Iota Sigma Pi (gift certificates), TEI Analytical (day calendars), Blistex (assorted samples), Chicago Chemists' Club (a bottle of wine per table), The Studio Restaurant (two dinners), Hyatt at University Village (brunch for two), Stepan Company (golf balls, tees, sweatshirt), O'Shea Company (golf towels), CRC press (Handbook of Chemistry & Physics), Chemistry Week Committee (ACS umbrella and holographic lollypop), Monastero's Restaurant (Two - \$25 gift certificates), Ambassador West Hotel (One - night stay with breakfast for two), Eastman Kodak Company (T-shirts, sweatshirt and misc), G.D. Searle (pill boxes, pens, rulers), Ann Sather Restaurant (\$20 gift certificate), Nordic Hills Resort (golf for two), lastly, generous monetary donations from Alberto Culver Company, Helene Curtis/Unilever and ITW Technical Center which enabled Connie to purchase many door prizes. Special thanks to all our donors for making this a most festive occasion.

If your company would like to donate a prize for next year, please call the office and give them the name of person to contact and they will see that a letter is sent to them late in 1999.



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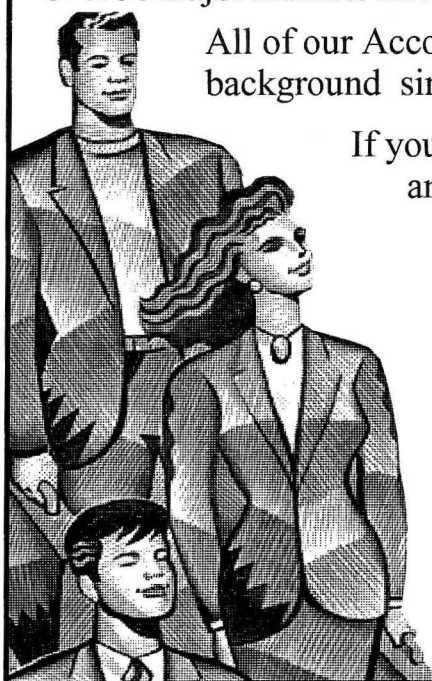
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LETTERS TO EDITOR

Dear Editor,

Perhaps you could publish this in the newsletter or write your own version. I think it is too good an opportunity for anyone to miss out on because they were unaware of the program's existence.

As an emeritus ACS member, I'd like to share a "find" with other ACS retirees, who are interested in continuing to "challenge the mind" in the company of other like-minded individuals. Roosevelt University (Schaumburg campus, just north of Woodfield Mall), has established an "Institute for Continuing Learning" which provides a range of courses aimed at the 50+ population.

For a modest membership fee (\$100 for 12 months) one can sign up for any or all courses (mostly peer-led). Most courses run 8 weeks, one 2 hour session a week, all are during the day, and there are three "terms" per year plus special events, like a free lecture series in January, or concerts at lunchtime during the term, etc. Course titles for the session beginning February 16 include: Wit is Made-Humor is Found, Remembering the 50s, Current Events, Opera Anyone, Reading Short Fiction, Writing to Preserve Family Stories, Planning for Life, What Ho! Wodehouse, Ethnic Pioneers in Chicago Immigration, King Lear, Religions of the World, Internet for Beginners, Productive Thinking, Film Study, Geology of the Great Lakes, Lateral (Creative) Thinking.

This is my second year in the ICL. It is a stimulating, amusing, interesting, challenging environment and group of people. It's nice to be with so many upbeat "alive" people. The coordinators who oversee the classes come from diverse backgrounds, and are all unpaid volunteers including one unbelievably active and alert 93-year-old who coordinates the Great Lakes Geology class,

but that's what keeping mentally alive can do for people (no guarantees!).

Those interested should call Victor Oswald, Director of the ICL, at 847-619-8283 for further information, especially since the information/registration session, in which all courses will be described by the respective coordinators, will be early February.

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Organic Letters will be available in both print and as a Web Edition. The Web Edition will include all the benefits and features currently available for other ACS Web Editions. These online enhancements include: Articles ASAP (As Soon As Publishable), Articles on Command, full text searching, links to appropriate databases, categorization of articles by reaction type, and options for experimental details and supporting information. Subscriptions are available to both ACS members and libraries. For more information, call Member & Subscriber Services at 800-333-9511 or 614-447-3776 (outside the U.S.).

NEWS BITS

MediChem Research Inc. announced it is expanding its Des Plaines operations to house 25 additional scientists. The Lemont-based contract research company specializes in new drug development through organic synthesis. The larger office will have 15,000 square feet of lab space and video-conferencing capability.

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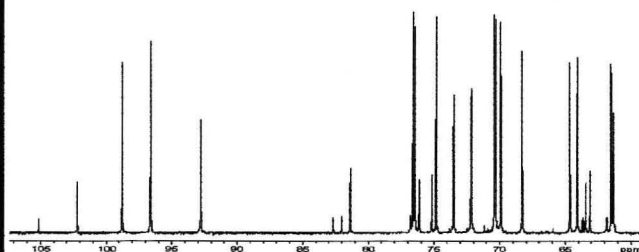
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DISTRIBUTION Chicago metropolitan area (Gary-Hammond, west to St. Charles-Elgin, north to state line, east to Lake Michigan).

Readers are trained Chemists or Chemical Engineers working in Research and Development, Chemical Process Development, Pilot Plants, Production and Administration. In addition to large numbers of industrial firms, The Bulletin reaches government installations and agencies, many well recognized schools and colleges and consulting organizations.

DEADLINE Closing dates must be verified with the publisher. Magazine is mailed 3 weeks prior to the monthly Section meeting. Closing dates are generally around one month prior to mailing date. CALL FOR EXACT DATE.

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HISTORY OF SCIENCE TOUR

Arrangements are well under way for Science History Tours' THIRD custom-designed tour. This time we will visit England and Scotland. The tour (and the concurrent college course, which is optional) will be of relevance to science teachers, social studies teachers and others interested in the history of science and technology.

The theme of the tour will be "SCIENCE AND THE INDUSTRIAL REVOLUTION" so we will focus on the midlands, the north of England and Scotland which are considered to be the cradle of the first Industrial Revolution. Visits will be paid to such significant areas as the Ironbridge Gorge, the Black Country, Derbyshire, York, Tyne-side, Glasgow and Edinburgh. We will also see some important SCIENCE AND INDUSTRIAL MUSEUMS. To round things out we will make visits to some stately homes, gardens and beauty spots in this very scenic part of the world. In addition to the science history, every opportunity will be taken to interact with local teachers, historians and other interesting people. Tour members will also be able to participate in cultural and other events.

A graduate course (3 semester hours credit) will be available at a very moderate extra cost. This course will be taught by Lee Marek. Additional lectures on subjects relevant to the theme will be given by experts at various points throughout the tour. Planning and organization of the trip will be done by Yvonne Twomey. We both will lead you every step of the way!

The trip will start in Manchester on Tuesday June 22, 1999, and will end in Edinburgh on Tuesday July 6, 1999. Cost is not yet fixed, but will be no more than the 1998 trip (\$2450 for 17 days) and could easily be less. This price is per person, double occupancy, and includes all accommodations (usually in comfortable hotels or small country inns), all breakfasts, many other meals, all group surface transportation, all lecture and entrance fees and some other expenses. A supplement is payable by persons requiring a single room. On both previous tours, participants have voted the trip to be excellent value for money. The price does not include your transatlantic airfare. Flights into and out of both Manchester and Edinburgh are frequent and airport access is easy. Inexperienced international travellers will be given plenty of help in planning the air journey.

Travelling companions are welcome. Non-scientists will find that there is a great deal to interest them. Persons

travelling alone can be introduced if they would like to share a room to save single room supplements. Those wishing to extend the trip at either end can expect good advice on where to go and where to stay.

Science History Tours is a non-profit organization and both our 1997 and 1998 tours were sponsored by NSTA. Funding is available to some people for courses such as this, so an early start in checking this out with your district or other source might dig up some financial assistance. Don't forget Eisenhower funding.


For further information or sign-up materials, please contact: Yvonne Twomey, 841 Kinston Court, Naperville, IL 60540 Tel: 630-961-9811 Fax: 630-961-0495 e-mail: ytwomey@mcs.com or Lee Marek, e-mail: Lmarek@aol.com

SUMMER RESEARCH PROGRAMS

The National Science Foundation Surface and Analytical Chemistry Program sponsors two Amacro-ROA@ (Research Opportunity Award) programs to provide collaborative summer research opportunities for faculty teaching analytical chemistry at non-Ph.D.-granting colleges and universities. These long-standing programs at the University of Tennessee-Knoxville and the University of Kansas-Lawrence have aimed to develop a strong regional infrastructure for sharing ideas among analytical chemistry faculty, and to increase the number and improve the preparation of chemistry majors at small institutions by invigorating the research interests and activities of faculty visitors. The goal of the program is to help participants establish or expand undergraduate research programs at their home institutions.

Participants in the UT program are paid \$1,100/week and provided with furnished apartments (those bringing families may need to make alternative housing arrangements). First-time participants generally spend 8-10 weeks in Knoxville, choosing a time convenient to the visitor and the UT collaborator; flexibility is a hallmark of the program. Shorter return visits (<5 weeks) can be arranged with support from the program and other resources. To receive the short application form or other information, contact Prof. Kelsey Cook, Department of Chemistry, University of Tennessee, Knoxville, TN 37996-1600 (phone 423-974-8019; fax 423-974-3454; e-mail kcook@utk.edu), or visit <http://www.chem.ukt.edu/acsec>. Applications are due by February 15, 1999, but will be evaluated as completed. As there are a limited number of appointments available, timely response is encouraged.

The program at KU features a ten-week summer research experience in bioanalytical or environmental analytical chemistry. Participants also have the opportunity to engage in collaborative research for a second summer at their home institution facilitated by follow-up support through this program. For applications or for more information, contact Prof. Cindy Larive, Department of Chemistry, University of Kansas, 2010 Malott Hall, Lawrence, KS 66045 (phone 785-864-4269; fax 785-864-5396; e-mail clarive@caco3.chem.ukans.edu), or visit our web site at <http://www.chem.ukans.edu/macroroa.html>.



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CALENDAR

February 1-5, 1999. Environmental Resource Center presents "ISO 14001 Lead Auditor Training" (#8230) at the Ramada Plaza in Chicago, IL. For additional information call (800) 537-2372 ext. 222.

February 4, 1999. Dr. Milan Mrksich, from the Department of Chemistry at the University of Chicago, will present a lecture on the use of organic surface chemistry to create substrates for studying and controlling the behavior of attached cells. The lecture starts at 4 p.m. and is open to the public in room G-208 of the Gyte Science building, 2233 171st Street. For further information call Prof. John Phillips at (219) 989-2283.

February 8-9, 1999. Environmental Resource Center presents "Hazardous Waste Management: The Complete Course" (#8008) at the Ramada Plaza in Chicago, IL. For more information call (800) 537-2372 ext. 222.

February 10, 1999. Environmental Resource Center presents "Hazardous Materials Certification Training for DOT 49 CFR Transportation Regulations" (#8063) at the Ramada Plaza in Chicago, IL. The advanced course (#8110) to be held on February 11, 1999. For further information call (800) 537-2372 ext. 222.

February 12, 1999. Environmental Resource Center presents "SARA Title III Workshop" (# 8133) at the Ramada Plaza in Chicago, IL. For more information call (800) 537-2372 ext. 222.

March 7-12, 1999, Pittcon '99 program, short courses and exposition will be held in Orlando, Florida. For more information and registration call The Pittsburgh Conference at (412) 825-3220 or (800) 825-3221.

March 10-12, 1999. The Milwaukee Section is sponsoring an ACS short course on elementary statistical design of experiments entitled "Experimental Design for Productivity and Quality in R&D" at Marquette University. For further information and registration contact Bob Goss at Oil-Dri (847) 634-3090: E-mail: 102070.3065@compuserve.com.

March 12, 1999. The Chicago Section ACS presents Public Affairs Award Banquet to be held at the Como Inn honoring Bill Kurtis. Mr. Kurtis will present "The New Explorers: Science Journalism as an Educational Adventure". For more information call the Section office at (847) 647-8405.

March 21-26, 1999. The 1999 National ACS Spring Meeting will be held in Anaheim, CA. For further information call the National ACS Office at (800) 227-5558.

April 23, 1999. The Chicago Section ACS presents Percy Julian's 100th Birthday Memorial Celebration to be held at Hyatt at University Village. For additional information call the Section office at (847) 647-8405.

May 21, 1999. The Chicago Section ACS presents the Willard Gibbs Award Banquet to be held at Monastero's Restaurant. For further information call the Section office at (847) 647-8405.

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