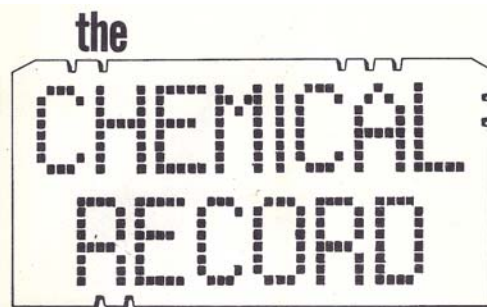


50 Years
The Chemical Record

1958-2008



Volume 50, Number 6 — October, 2008
Columbus Section of the American Chemical Society, Inc.
George Greene, Editor — Ron Mitchum, Section Chair
www.acscolumbus.org



IN THIS ISSUE...

NOTE FROM THE EDITOR	2
FROM THE CHAIR.....	2
VOLUNTEERS NEEDED!	2
MEETING NOTICE	3
ABOUT THE SPEAKER AND TOPIC	4
RECOGNITION OF FIFTY-YEAR ACS MEMBERS	4
IN MEMORIAM: GODFREY FRED GRAIL	4
WELCOME NEW MEMBERS!	5
COLUMBUS SECTION AND ASHLAND CHEMICAL COMPANY SPONSOR OCTOBER CHEMISTRY TEACHERS' MEETING	5
REPORT FROM THERESA HUSTON ON ACS FALL MEETING 2008	6
CELEBRATE NATIONAL CHEMISTRY WEEK OCTOBER 19-25, 2008	6
VOLUNTEERS DESPERATELY NEEDED FOR NCW CHEMISTRY DEMONSTRATIONS	6
COLUMBUS SECTION ACS CALENDAR OF EVENTS.....	7
MOLECULE OF THE MONTH: CALCIUM CHLORIDE	7
REPORTS FROM ACS INTERNATIONAL ACTIVITIES COMMITTEE AT ACS NATIONAL MEETING IN PHILADELPHIA	8
HELP WANTED	9
PLEASE SUPPORT OUR SPONSOR.....	9
ABOUT <i>THE CHEMICAL RECORD</i>	10
CHANGE OF ADDRESS.....	10
ADVERTISING RATES.....	10
SECTION E-MAIL ROUTING	10



Volume 50, Number 6
October, 2008
Page 2

NOTE FROM THE EDITOR

By George Greene

I would like to apologize to the members who receive the hard-copy version of *The Chemical Record* for the lateness of the September issue. I had the mailing ready to go on time, but I was called out of town due to a death in my family and I totally forgot about the Chem Record until I was 150 miles away. As soon as I returned to Columbus I mailed it, but most of you probably did not receive it in time to make reservations for the meeting.

FROM THE CHAIR

By Ronald K. Mitchum

The September meeting was cancelled due to Hurricane Ike's damage to the planned meeting facility. In addition it was probably not prudent to ask our members to travel in the immediate Columbus area due to the storm damage. I know many of you were disappointed and I hope the cancellation did not inconvenience anyone. The ACS tour speaker, **Dr. Jeffery Seeman** graciously accepted my invitation to have dinner and an overnight stay at Snake Creek Ranch before being on his way to his next engagement. It was unfortunate we missed his talk.

The October meeting represents another of the Section's premier meetings. The meeting will feature the new President-Elect of the American Chemical Society, Dr. Thomas Lane. I always look forward to learning about the new initiatives that the ACS President-Elect will bring to the members of the Society.

The November meeting will feature **Terry Webb** who is a member of the American Society for Non-Destructive Testing.

The December meeting will be a joint meeting with American Institute of Chemical Engineers. Stay tuned for details.

The Section will honor **Cynthia Hummel**, the recipient of the **2008 High School Teacher Award**, at the October meeting. This annual award recognizes excellence in high school teaching in central Ohio. The **50 year and 60 year member awards** will also be presented. The Columbus Section is honored to present these awards to our 50 and 60 year members for their steadfast allegiance to the Society and the Society's members. I know many of you have had long professional relationships with these members so come to the meeting and honor your colleagues.

We remain in need of candidates for elected offices for the Section. We are making progress identifying candidates. Let's make the section's election representative of our member base and get your nomination in, self or otherwise, to Julia Moniaci at jmoniaci@areotek.com.

VOLUNTEERS NEEDED!

By Ronald K. Mitchum

Volunteers are needed to fill the following elected offices for 2009: Chair-Elect, Secretary, Treasurer-Elect, Councilor and Alternate Councilor. Self nominations are welcome or nominate a colleague. We need at least two (2) nominees for each position. For further information contact **Julia Moniaci**, Nominating Committee Chair, at jmoniaci@areotek.com. You may also mail your nomination to Julia at 425 Metro Place North Suite 250, Dublin OH 43017, or call her at 614-932-1325 (work.)

All elected officers are members of the Executive Committee (EC) of the section and are required to attend the EC meetings at the request of the Section Chair. Candidates for office should have a willingness and enthusiasm for ACS service. Experience is welcome but not necessary; training is provided. Nominees for Councilors are encouraged to have prior or current service to the ACS as Councilor/Alternate and/or Officers for a Local Section or Technical Division.

The Offices for election are as follows:

Chair-Elect: The Chair-Elect succeeds the Chair after one year of service in this position. The main responsibilities are Program and Planning. Attendance at Leadership Training provided by ACS is also required. This is very good training both for ACS service and for personal growth.

Secretary: One-year position. The main function is to maintain records, record minutes of Executive Committee meetings, and assist the Chair on agenda items.

Treasurer-Elect: The Treasurer-Elect succeeds the Treasurer after serving one year in this position. The main responsibilities are to assist the Treasurer and become familiar with procedures.



50 Years
The Chemical Record
1958-2008



Volume 50, Number 6
October, 2008
Page 3

Councilor: The Councilors represent the Section's membership before the ACS at National meetings and on Governance-related functions as required through the year. The section has three Councilors who serve staggered 3-year terms to ensure continuity.

Alternate Councilor: The alternate Councilors may replace councilors if the elected councilor is not able to serve in that capacity.

Persons interested in these positions can find more complete descriptions in the Section's Job Manual. The Manual in its current draft version is at www.acscolumbus.org, under the pull-down menu "How we work".

<p>MEETING NOTICE Columbus Section of the American Chemical Society, Inc. www.acscolumbus.org Tuesday, October 21, 2008</p>	<p>Chemical Abstracts Service, CAS 2540 Olentangy River Road Columbus, OH 43202 614-447-3600 www.cas.org</p>
<p>PROGRAM: ACS President-Elect, Dr. Thomas H. Lane Presentation of 50 Year Member Certificates Presentation of the High School Chemistry Teacher of the Year Award to Cynthia Hummel Talk: <i>And Now For Something Completely Different</i></p>	
4:30-5:30 PM	Executive Committee Meeting (open to all members)
5:30-6:30 PM	Social Hour sponsored by CAS (hot and cold appetizers, wine, beverages)
6:30-7:30 PM	Dinner
7:30-8:30 PM Speaker	Program. Dr. Thomas Lane , presenting the High School Chemistry Teacher of the Year Award and Certificates to 50 Year Members. Talk: <i>And Now For Something Completely Different.</i>
Menu	Salad: Garden Toss with dressings Choice of Entree: Flounder Del Rey, Flank Steak Roulade, Vegetable Napoleon (Vegetarian) Sides: Oven roasted new potatoes, peas and corn. Rolls & Margarine Dessert: Double Chocolate Cake Beverages – Coffee, decaf, tea, lemonade, soda, milk, water
Cost	\$23 per person, \$20 retired and unemployed, \$5 students. The 50 Year Members and Spouses and High School Chemistry Teachers are guests of the Section, but need to make reservations.
Reservations	Please use the voice mail reservations service by calling 614-447-3600 extension 7047. Follow template for reservations*. Alternatively, please send e-mail to The Columbus Section at the following e-address: acscols@cas.org
*Voice Mail/E-Mail Reservations Template	<ul style="list-style-type: none"> • First and last name: please spell last name. • Membership category: member, retired, emeritus, teacher, unemployed, student, non-member, other. • Employer or school. • Menu Choice, Flounder, Flank Steak, Vegetable. • Your phone number, in case we need to contact you. • Program only?
Reservation Deadline	Wednesday, October 15th. Your reservation is a dinner order and must be paid.
Directions	From 315, N or S, Exit at Ackerman Rd., toward Olentangy River Road. Enter CAS campus from either Dodridge St. or Olentangy River Road driveways and follow signs for visitor parking. Parking available in numbered spots also. Enter the main building, building A and proceed to the ACS hospitality table.



Volume 50, Number 6
October, 2008
Page 4

ABOUT THE SPEAKER AND TOPIC

*(Tom) THOMAS H. LANE, Ph.D., CChem, CSci, FRSC
Dow Corning Corporation*

Current Appointments: Director, Global Science and Technology Outreach and Senior Research Scientist, Dow Corning Corporation.

Tom has over thirty-three years of research experience in the field of organosilicon chemistry. He received his undergraduate chemistry education at Purdue University, a master's degree from Central Michigan University and his Ph.D. in physical organic chemistry from the Open University in England. Tom's work has allowed him to make significant contributions to the field in the areas of interfacial science, scientific computing, and most recently in the biology and biotechnology of silicon. He holds academic positions in both the US and abroad. He is a Fellow of the Royal Society of Chemistry and president-elect of the American Chemical Society, the largest scientific society in the world. Today, Tom's primary focus is education and putting a human face to chemistry. He will outline his innovative ideas and projects for the coming year.

Tom is actively involved in education at all levels, K-post graduate. He is the immediate past chairman of the board of trustees for Delta College, graduate research advisor, K-12 classroom friend, and an advocate for all teachers.

For fun – Tom enjoys photography. He specializes in black & white, film photography using large wooden field cameras (8x10 inch negatives). He maintains and uses a professional level darkroom in his home to develop and print his images using techniques and formulas that date back to the mid-1800's.

RECOGNITION OF FIFTY-YEAR ACS MEMBERS

By Wendy Reichenbach

The Columbus Section will recognize Fifty and Sixty Year Members of ACS at the Section meeting on October 21st. The following members are celebrating **fifty years** with the American Chemical Society this year:

Mr. John D. Crecca	Mr. Raymond E. Maginn
Mr. John T. Dickman	Mr. Ferenc M. Relle
Mr. Noel E. Franks	Dr. William J. Wallace
Dr. George L. Gilbert	Dr. F. Eugene Welsh

The following members are celebrating **sixty years** with the American Chemical Society:

Mr. Kenneth Charter	Dr. Robert E. Stobaugh
Dr. Frank L. Himes	Dr. Albert Herman Soloway

The Columbus Section congratulates these members on attaining these milestones.

IN MEMORIAM: GODFREY FRED GRAIL From *The Columbus Dispatch*

Godfrey Fred Grail passed away on Monday, August 25, 2008, at Wexner Heritage Village. Fred is survived by Harriet, his wife of 20 years; daughter, Celia Grail (Gabriel Lerner); son, Efreim Grail (Dr. Karen Goldman); grandsons, Jonah, Joshua, and Jeremy. Also survived by Harriet's children, Dr. Jeffrey Greene (Sharry), Denise Harper, Leslie Vollman (Nick); grandchildren, Michael, Lindsay, Anthony, Mathew, Brad, Bethany, Allison, and Brandon. Also survived by sister, Blanche Wilner; and brother-in-law, Irwin Galan (Wendy). Preceded in death by parents Leo and Frieda Grail, wife of 33 years, Anita Soffen Grail, and sister Irma Davidoff. Fred was a Jewish War Veteran who served as a medic for over 5 years during WW II. He graduated from City College of New York and Columbia University. For 40 years he worked at Chemical Abstracts as an Editor. He was recognized as a 50-year member of the American Chemical Society. Fred was on the Congregation Tifereth Israel Board as Chairman of the Library Committee. He volunteered at Wexner Heritage Village and Creekside, where he discussed weekly "News and Reviews" with the residents. Fred was a member of the Jewish Community Center for over 50 years where he was on the board and also enjoyed playing handball. Fred was a member of the Chamber Music Columbus for over 40 years. Funeral service 3 p.m. Thursday, August 28, 2008, at CONGREGATION TIFEREETH ISRAEL, 1354 E. Broad St., with Rabbi Harold Berman and Rabbi Michael Ungar officiating. Burial to follow at the New Tifereth Israel



Volume 50, Number 6
October, 2008
Page 5

Cemetery. Shiva will be observed at the family residence through Tuesday evening. Memorials preferred to Congregation Tifereth Israel Library Fund, Wexner Heritage Village-Claire Galan Special Activity Fund, or the Jewish Community Center.

WELCOME NEW MEMBERS!

By George Noethlich

Please join us in welcoming the following new members who have joined the Section recently. The Columbus Section cordially invites new members to our monthly meetings. The Section will pay for new members' meals the first time they attend a meeting.

DEBRA JEAN BOEHLER
H C MICHELLE BYRD
RAYMOND DEVINE
ROCKENDRA GUPTA
GREG HUSTON HANSON
JONATHAN HELMUS

BARRY R HOOK
YAN JIN
TAMARA L KLOTZBACH
ZHENQING LI
HEATHER R MANRING
KATHLEEN MCENNIS
CAROLYN S REID

OSCAR B TORRES
DAVID WILCOX
GREGORY PAUL WILHELM
ARTHUR H WINTER
RYAN J YODER
YUNLONG ZHANG

COLUMBUS SECTION AND ASHLAND CHEMICAL COMPANY SPONSOR OCTOBER CHEMISTRY TEACHERS' MEETING

By Jeff Bracken

Westerville North High School will once again be hosting the October Chemistry Teachers' Meeting, sponsored by Ashland Chemical Company and the Columbus Section of the American Chemical Society. This year's date is October 17th, and we plan to host the meeting from 8:30 to 11:30 in our chemistry labs.

In the past, we have attracted upwards of 50 teachers from across Central Ohio. For the past several years, Ashland has provided \$250 of financial support of this professional development opportunity. That money has allowed us to provide refreshments and demonstration devices/hands-on materials to the teachers in attendance.

This year's plans include activities as follows:

HYDROPONICS IN ACTION: Tour of the hydroponics facilities that we have created at Westerville North High School. We currently have hydroponics systems in 8 of our classrooms and three additional smaller rooms that were remodeled for our efforts. We are growing cherry tomatoes, lettuce, sweet Italian basil, oregano, indigo, Roma tomatoes, Moringa trees, and coleus houseplants. Teachers will be able to see the different types of grow lights and make connections to the chemistry that essentially supports each hydroponic system.

HYDROPONIC MORINGA: A senior chemistry student will be talking about his ongoing research into *Moringa oleifera*, which was named "Plant of the Year" by the NIH as part of the its *Earth Day 2008* Celebration. The student made contact with a professor in New York who donated Moringa seeds he had collected from Haiti and Uganda. While native to India, the Peace Corps have planted this tree throughout much of Africa to combat nutrient deficiencies.

GROUNDS TO GROUND COMPOSTING: We also plan to showcase our school's "Grounds to Ground" project that involves the composting of used coffee grounds and cafeteria food scraps. The prototype rotating barrel style composter was constructed in August, and is expected to produce compost much faster to the increased aeration during the composting process.

OGT TEACHING STRATEGIES: I met recently with Pat Funk, veteran chemistry teacher at Pickerington Central, who would like to share some strategies he uses to increase his students' success on the Ohio Graduation Test.

FREE GLASSWARE/LAB EQUIPMENT: George Greene at Abbott Nutrition has been instrumental in donating glassware and equipment to teachers throughout Central Ohio. In July, I was able to collect two SUV-loads of free equipment that will be offered to teachers who attend this meeting.

DYEING ALUMINUM EXPERIMENT: Teachers will also be shown a lab activity where the students can dye aluminum flashing using RIT fabric dyes. The aluminum flashing is inexpensive (Lowes) and can be cut with scissors. Add the dye to a beaker of water, heat on hotplate for 10 minutes and the dye is absorbed into the thick aluminum oxide layer. Surprisingly, very few teachers have ever seen this before.



Volume 50, Number 6
October, 2008
Page 6

INCREASING ENROLLMENT IN AP CHEMISTRY: We'll also discuss strategies that have resulted in a 100% increase in our AP chemistry enrollment at Westerville North. We'll also share some simple ideas that we used to boost the enrollment of minority students to insure that our school's diversity is reflected in our AP chemistry course.

REPORT FROM THERESA HUSTON ON ACS FALL MEETING 2008

As a member of the Committee on Economic and Professional Affairs, I attended the meetings held on August 16 and 17, 2008, and was asked to be the secretary for this meeting. Updates were given by members of the ACS Department of Career Management and Development on the various programs and documents for which we have responsibilities. A discussion was held on how we can help the ACS members deal with globalization. Each subcommittee spent a large part of their meeting time on how we each fit into the strategic plan and what metrics we can use to see whether our programs are benefiting and being used by ACS members. Each subcommittee gave reports to the full committee and various motions were passed. As a member of the subcommittee on Professional Services, I was asked to attend various workshops being given on Career Development during the national meeting and giving assessments of the trainers.

I attended the District II Councilors' Caucus on August 17th and the Council Meeting on August 20th representing the Columbus Section.

CELEBRATE NATIONAL CHEMISTRY WEEK OCTOBER 19-25, 2008



This year's celebration of National Chemistry Week (NCW), with the theme, *Having a Ball with Chemistry (The Chemistry of Sports)*, will be a very special celebration! The mission of NCW is to reach the public, particularly students, with positive messages about chemistry and to provide a means of effectively mobilizing ACS local sections.

Join with ACS this October 19-25 to celebrate *Having a Ball with Chemistry*, emphasizing the chemistry of sports.



VOLUNTEERS DESPERATELY NEEDED FOR NCW CHEMISTRY DEMONSTRATIONS Saturday, October 25, 2008




Volunteers are needed to help guide the public in performing chemistry demonstrations on Saturday, October 25, at the Columbus Metropolitan Library, Main Branch, 96 South Grant Avenue. The experiments are simple (acid-base reactions, making "slime", generating carbon dioxide from baking soda and acetic acid, etc.) *COSI on Wheels* and volunteers from the Columbus Section of the American Chemical Society will provide all of the chemicals, setup, and supplies, and we will show you what to do. We are extremely grateful to our friends at GFS Chemicals for sponsoring this important educational event.

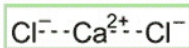
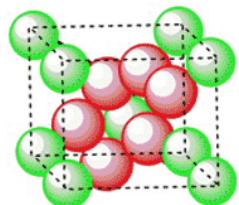
This is a terrific way to introduce kids (and adults) to chemistry and show them that science is indeed FUN! If you are not comfortable performing demonstrations we also need volunteers for "crowd control" (greeting guests, making sure everyone has safety glasses, etc.)

Shifts are from 10-12, 12-2, and 2-4. If you would like to sign up for a shift (or two), please contact **Professor John Blaha** at 614.287.5930 or jblaha@csc.edu



COLUMBUS SECTION ACS CALENDAR OF EVENTS

2008	October	15	Wed		5:00 PM: Deadline for making reservations for October Section meeting.
2008	October	21	Tue	Chemical Abstracts Service, 2450 Olentangy River Road	Monthly Section meeting with ACS President-Elect, Dr. Thomas Lane , and presentation of 50-Year Member awards.
2008	October	19-25	Sun-Sat	Here, There, Everywhere!	 National Chemistry Week. <i>Having a Ball with Chemistry (The Chemistry of Sports.)</i>
2008	October	23	Thu		 6:02 AM – 6:02 PM on 10/23, National Mole Day , commemorating Avogadro's number (6.02×10^{23}). The theme of Mole Day 2008 will be <i>Mole of Fortune</i> .
2008	October	24	Fri		4:00 PM: Deadline for submission of material for November, 2008 <i>Chemical Record</i> .
2008	October	25	Sat	Columbus Metropolitan Library Main Branch, 96 South Grant Avenue	National Chemistry Week Chemistry demonstrations. Volunteers are needed please see details elsewhere in this issue of <i>The Chemical Record</i>.
2008	November	19	Wed	Clintonville Woman's Club, 3951 North High Street, Columbus Ohio 43214.	Monthly Section meeting with Terry Webb , American Society for Non-Destructive Testing
2008	December	TBA	TBA	TBA	Joint meeting with Columbus Chapter of the American Institute of Chemical Engineers
2009	March	22-26	Sun-Thu	Salt Lake City, Utah	237 th ACS National Meeting and Exposition
2009	April	22	Wed	Here, There, Everywhere!	 Chemists Celebrate Earth Day. Stay tuned for announcements of Columbus Section activities.
2009	August	16-20	Sun-Thu	Washington, DC	238 th ACS National Meeting and Exposition
2010	March	21-25	Sun-Thu	San Francisco, CA	239 th ACS National Meeting and Exposition
2010	August	22-26	Sun-Thu	Boston, MA	240 th ACS National Meeting and Exposition



Molecule of the Month: Calcium Chloride

Calcium chloride (CaCl_2) dissolves exothermally in water and is highly hygroscopic. These properties make it useful for applications such as removing water from gases and liquids, melting ice on roadways, maintaining a liquid layer on road surfaces for dust control, and preparing aqueous solutions with low freezing temperatures.

[Get more information on this molecule](#) from CAS (Chemical Abstracts Service)



Volume 50, Number 6
October, 2008
Page 8

**REPORTS FROM ACS INTERNATIONAL
ACTIVITIES COMMITTEE AT ACS
NATIONAL MEETING IN PHILADELPHIA**

*By Ed King
Chair, Subcommittee on Asia and Pacific Rim
ACS International Activities Committee*

The ACS International Activities Committee met in Philadelphia on August 16 2008. The following are two noteworthy programs reported at the meeting:

1. Chemistry in Context:

Chemistry in Context: Applying Chemistry to Society, 6th Edition, is the newest edition of a successful, issues-based curriculum model developed by the American Chemical Society for non-science majors at the college level. The textbook enables students to learn chemistry in the context of their own lives and significant issues facing science and the world. The integrated activities help students develop an informed understanding of topics such as air quality, global warming, alternative fuels, acid rain, polymers, and genetic engineering.

The Chinese version of "[Chemistry in Context](#)," was launched at the Chinese Chemical Society (CCS) National Meeting in Tainjin jointly by ACS President Bruce Bursten and CCS President Chunli Bei. Translating the book into Chinese, an idea that was first discussed two years ago when ACS and CCS officials met in Atlantic City, N.J., was a major undertaking. It involved ACS, CCS, Peking University, which actually translated the book, the publishing firm McGraw-Hill, and China's Chemical Industry Press.

Cathy Middlecamp, the editor-in-chief of the 7th edition of "Chemistry in Context," was in Tianjin for the launch. "I think I can speak for the past editors and say that we all welcome the chance to learn from our colleagues in China how we might improve the book and make it truly about chemistry in a global context," she says.

2 International Research Experiences for Undergraduates (IREU)

The American Chemical Society (ACS), in collaboration with the Deutscher Akademischer Austausch Dienst (DAAD) and the European Chemistry Thematic Network (ECTN), successfully completed the 2008 IREU program, made possible by funding received from the National Science Foundation (NSF). Fifteen U.S. students were placed at numerous German universities and research institutes under the German Research Internships in Science and Engineering (RISE) infrastructure. Three additional U.S. students were hosted (one each) by the University of Strathclyde in Scotland, the University of Perugia in Italy, and CPE-Lyon in France. Likewise, a total of eighteen European students were placed at U.S. universities involved in the Research Experience for Undergraduates (REU) program. The students spent approximately 8-10 weeks collaborating with their PhDs, PIs, and other lab members on research projects. Following that, they presented their research results at the Fall ACS National Meeting in Philadelphia on August 2008. Through discussions with the students at the National Meeting, ACS was able to hear firsthand accounts from the students about their experiences. Many of the students remarked that this experience had been a once in a lifetime opportunity that gave them the means to sharpen their research skills, work in a cross-cultural setting, and develop a global scientific perspective. To read about the students' experiences, please view the blog at <http://ireu2008.blogspot.com/>. Work is underway to expand this program to other countries in Europe as well as in Asia.



Volume 50, Number 6
October, 2008
Page 9

HELP WANTED

**ADJUNCT POSITION at OTTERBEIN COLLEGE
in
PHYSICAL CHEMISTRY**

Winter and Spring Quarters 2009 (5 Jan - 10 Jun), *CHEM 340/341; 350/351 -- Physical I and II with lab* (class and lab times are negotiable). Ph.D. required.

Please send a brief statement of qualifications and resume to:

Prof. Jerry A. Jenkins, Chair
Department of Chemistry & Biochemistry
One Otterbein College
Otterbein College
Westerville, OH 43081
jjenkins@otterbein.edu
614/823-1616, FAX 823-1968

PLEASE SUPPORT OUR SPONSOR...

The Chemical Record is brought to you in living color by the Columbus Section of the American Chemical Society and our fine sponsor, **Hogarth Chemical Consulting**:

**HOGARTH
CHEMICAL
CONSULTING**

SPECIALIZING IN:
Training
Research & Development
Laboratory Design & Safety

Lewis Hogarth, Ph.D.
614.268.8534
Fax 603.308.8133
email: westwood@infinet.com

HOGARTH CHEMICAL CONSULTING

SPECIALIZING IN:

Training
Research & Development
Laboratory Design & Safety

Lewis Hogarth, Ph.D.

Voice 614.268.8534

FAX 603.308.8133

email: westwood@infinet.com



Volume 50, Number 6
October, 2008
Page 10

ABOUT ACS

The American Chemical Society is a self-governed individual membership organization that comprises more than 158,000 members at all degree levels and in all fields of chemistry. The organization provides a broad range of opportunities for peer interaction and career development, regardless of professional or scientific interests. The programs and activities conducted by ACS today are the products of a tradition of excellence in meeting member needs that dates from the Society's founding in 1876.

ABOUT THE CHEMICAL RECORD

The Chemical Record, official newsletter of the Columbus Section of the American Chemical Society, Inc., is published monthly, February-May and September-December (eight issues per year.) Opinions expressed by editors or contributors do not necessarily represent the official position of the Columbus Section or of the editorial staff. We welcome your contributions to your *Chemical Record*. Please submit them via postal or electronic mail to George Greene, PO Box 360941, Columbus, Ohio 43236-0941, george.greene@abbott.com. Electronic mail contributions should be in MS Word file attachments (preferred) or plain-text messages. When preparing electronic documents, please remember that you are no longer using the old Remington typewriter so you do not need to add a carriage return at the end of each line. *Thank you very much!*

CHANGE OF ADDRESS

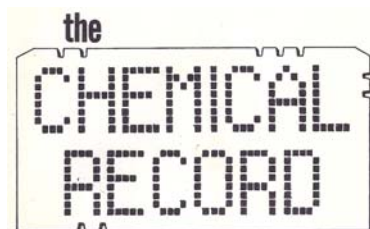
Changes in postal or e-mail address should be reported to the Membership Chair, **George Noethlich**, 2740 Bella Via Avenue, Columbus OH 43231-2305, e-mail gnoethlich@wowway.com. George will forward the change-of-address information to ACS Headquarters.

ADVERTISING RATES

Advertising rates for *The Chemical Record* are as follows (per single insertion): Full Page, \$250; Half-page, \$150; Quarter Page, \$120; Eighth Page: \$60; Business Card, \$50. Discounts: 5% for four insertions or 10% for eight insertions during a calendar year. There is no charge for "help wanted" ads.

SECTION E-MAIL ROUTING

Please send items for distribution to the Section e-mail list to **Stephen Renner** (srenner@cas.org) and **Maria Rosenthal** (mrosentha@cas.org). Maria and Stephen will perform any necessary formatting then they will forward the message to **John Todd**, Electronic Communications Coordinator, for distribution. If you would like to be added to the e-mail distribution list, please contact John Todd (jtodd@cas.org)



Columbus Section of The American Chemical Society, Inc.
P.O. Box 82181
Columbus, OH 43202