Dr. George R. Rossman
April Speaker

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Advance Notice

May Meeting
Dr. Zafra Lerman
and
Presentation of Teaching Awards
Thursday, May 25th, 2006

See the May issue of the Catalyst for details,
call the Section Office at (215) 382-1589, email PhilaACS@aol.com
This month’s lecture features Dr. George R. Rossman of CalTech. Dr. Rossman is a geologist with an interest in gems and mineralogy and uses chemical techniques such as IR and other spectroscopy methods to examine minerals and determine how they are formed. If you look on his website (http://www.gps.caltech.edu/~grr/), you can see he’s even investigated radiation effects on minerals.

Next month, as we host our teaching award winners, we’ll have Dr. Zafra Lerman of Columbia Institute speaking on innovative chemistry teaching using the arts. In June, we are hosting the ACS CEO, Dr. Madeleine Jacobs speaking to our 50-year members at the Chadds Ford Winery. Although this is an expensive meeting, it includes wine tasting and a tour of the winery, so I hope that many of you will decide to attend.

Enhance Your Career—Volunteer!

We are looking for members willing to serve on the Board of Directors, on the national Council, and in other positions both in the local section and on the mid-Atlantic (MARM) and national levels. If the reason you’ve never volunteered is because we’ve never asked, consider yourself asked now. We need both chemists and chemical engineers to come forward by June 1st to be considered for the election slate in September, so if you’d like to volunteer to run, contact either Deb Cook or Mrs. Libby Harper at PhilaACS@aol.com.

As Chair of the section, I have had several opportunities to speak to new groups. In February, I was fortunate in speaking to the Temple University Chemistry Society (TUCS) on careers in chemistry. In preparing for my talk, I found many career services of which I was unaware. Did you know that if you keyword in “EPIC” that the society pairs undergraduate students with internships not just around this country but also around the world? Be sure to tell any chemistry student you know about this wonderful program.

As always, if you’d like to reach me, you can send an email to philaacschair@aol.com or reach me through Libby Harper at 215-382-1589 or PhilaACS@aol.com.

MARM 2006 SPOTLIGHT

Catalytic Motors and Pumps

MARM 2006 features an in-depth technical program in materials science and nanotechnology, headlined by Dr. Thomas Mallouk, director of Penn State University’s Center for Nanoscale Science and the DuPont Professor of Materials Chemistry and Physics. Dr. Mallouk will be presenting an exciting plenary lecture on nanoscale motors and pumps. He is well known for his design and application of nanomaterials to several areas of science and society. Dr. Mallouk has applied his creativity to thinking small, using DNA to aid in the assembly of inorganic sheets, rods, and tubes, using combinatorial techniques to discover new fuel cell catalysts, using nanocrystalline semiconductors for artificial photosynthesis, and using chemical “delivery vehicles” for transport of nano-particles in the remediation of polluted soils. MARM 2006 is honored to have Dr. Mallouk present the Tuesday evening plenary lecture on his collaborative work with Dr. Ayusman Sen and their students on catalytic nano-motors. This lecture will feature amazing videos of nanometer size rods and gears that use hydrogen peroxide to fuel their motion. Anyone interested in how nanoscale chem-istry might ultimately change our lives will be happy they attended this thought-stimulating presentation.

The 2006 ACS Middle Atlantic Regional Meeting (MARM) will be held in Hershey, PA, June 4-7, 2006. For more information visit us at http://www.marm2006.org.
Abstract: Gems and Technology. For as long as recorded history existed, the gem minerals have been valued as objects of great beauty. Because of their great value, they have also been objects of research with the objective of improving their color. Many technologies dating back to ancient times have been applied to the modification of the color of the gemstones. Such technologies may involve nothing more than simple exposure to light and heat. But now, modern, high-tech methods that range from highly controlled oxidation/reduction reactions to the methods of nuclear physics are also used to modify gemstones.

Dr. Rossman has studied these technologies and the underlying changes to the chemistry of the minerals with a range of spectroscopic and analytical methods. He will present a colorfully illustrated look at the gems as they come out of the ground, the treatments to which they are subjected, and what we know about the fundamental changes to mineral’s chemistry. Is any stone immune to such treatment? Come and hear what the wizards of chemistry can do to some of nature’s most beautiful objects with technologies both modern and traditional.

WCC OVERCOMING CHALLENGES AWARD

The Women Chemists Committee is now accepting applications for the “Overcoming Challenges Award.” This award recognizes a female undergraduate from a two or four-year institution who has overcome economic, personal, or academic hardship to achieve success in chemistry. The winner will receive a plaque, a monetary award of $250, and up to $1,000 in travel expenses to the fall ACS national meeting. Those interested in being considered for the award should send a letter requesting the award, one letter of recommendation, and school transcripts to: Women Chemists Committee, American Chemical Society, 1155 16th Street, NW, Washington DC 20036. Nominations must be received by May 1st, 2006. For more information, call 1-800-227-5558, ext. 6334 or write f_dixon@acs.org.
APRIL MEETING

THE PHILADELPHIA SECTION,
AMERICAN CHEMICAL SOCIETY

presents

Gems and Technology
Dr. George R. Rossman
California Institute of Technology

and

Presentation of Scholastic Achievement Awards

WEDNESDAY, April 19th, 2006
7:00 PM

McCall Meeting and Conference Center
201 North Lynn Boulevard
Upper Darby (Highland Park section), PA

6:00 PM Dinner in the Windows Room
Dinner cost: $35.00; students with reservations and ID: $18.00

DINNER RESERVATIONS should be made by calling Mrs. Libby Harper at the Section Office, (215) 382-1589, or emailing PhilaACS@aol.com by 5:00 PM on Wednesday, April 12th. Cancellations, if necessary, cannot be accepted after NOON on Monday, April 17th. UNCANCELLED RESERVATIONS WILL BE BILLED. For directions, visit www.meetatmccall.com/map.html.

The Board of Directors will meet at 4:00 PM in the Putting Green, McCall
NEWS ATOMS

Mahmoud Mahmoudian joins Rohm and Haas as process chemicals global director of research and development. Prior to his new appointment he held positions in the biotech, pharmaceutical, and chemical sectors with Eastman, GlaxoSmithKline, and ICI Bio-Products.

Stacy A. Gibbs, chemistry student at West Chester University, was appointed the 2006 Student Liaison to the ACS Committee on Education’s task force on undergraduate programming.

Roger L. Blaine elected to the international board of directors of the American Society for Testing and Materials. He has been involved with ASTM for over 30 years and is currently chairman of the subcommittee E37.01 on thermal and rheological test methods and practices. Over the years he has been involved in various committees on petroleum products, paving materials, rubber, electronic insulation, composite materials, medical devices and many others. In 1982 he was named a fellow of ASTM and received its award of merit.

DEATHS

Roger Horton, retired director of patents and licenses at ICI Americas, January 9th, 2002. He was an ACS member for 62 years.

Melvin J. Silver, former pharmaceutical researcher at Thomas Jefferson University, in 2003. He was a 53-year member of ACS.

Jonathan H. Cilley, a 59-year member of ACS, November 18th, 2005.

Howard I. Forman, 50-year member of ACS, December 5th, 2005.

Edwin C. Gallagher, retired chemical company manager, January 13th at 97. He joined National Lead Co. in 1931 where he eventually directed the research laboratory and managed production of the Dutch Boy brand of paints for NL Industries. After retiring in 1976 he became a docent at the Philadelphia Zoo.

James B. Hunter, retired chemical engineer formerly with Atlantic Refining and Johnson Matthey, January 20th at 90. He joined Atlantic Refining in 1941 and was engaged in research and development of catalysts for petroleum products. In 1960 he moved to J. Bishop and Company Platinum Works as manager of new product development. The firm evolved into Johnson Matthey and Hunter was appointed vice president of R&D in 1969.

His work included platinum catalysts for fuel cells, ammonia oxidation, and automotive exhaust emission converters among others. He developed a hydrogen gas purification device that was part of NASA’s instrument package on the Viking Lander to Mars in 1976. During the 1950s Hunter served the Philadelphia Section as cover editor and then editor-in-chief of the Catalyst. He was recognized as a 50-year ACS member in 1988.

Donald G. Slavin, emeritus professor of chemistry at the Community College of Philadelphia, February 5th at 69. Following employment at Sadtler Research Labs he joined the CCP faculty in 1968. For over 30 years he headed the school’s chemistry department. He was a popular professor with students and earned several teaching awards. Under his leadership the chemistry department was named one of the top five for two-year schools by the ACS.

Have a contribution for News Atoms? Email Philcatalyst@aol.com.

THOUGHTS TO PONDER

“Appreciation can make a day — even change a life. Your willingness to put it into words is all that is necessary.”
— Margaret Cousins

“We are not what we know but what we are willing to learn.”
— Mary Catherine Bateson

“Work for something because it is good, not just because it stands a chance to succeed.”
— Vaclav Havel
Seven Deadly Sins Committed by Technology Start-ups in Raising Institutional Investment

Dr. Patrick J. Foley, Jr.

Abstract: After a brief discussion of the characteristics of venture capital, and particularly early stage venture capital, Dr. Foley will review the various aspects of a start-up business plan that VC firms pay particular attention to.

Biography: After retiring from DuPont following a distinguished career in a variety of new business development positions, Dr. Foley became Chairman and Managing Principal of the Delaware Innovation Fund. Most recently, he was involved in the creation of Innovation Ventures LC, a VC company focused on emerging companies in the chemical, advanced materials, electronic materials and nano-technology areas, where he is now a Principal. Dr. Foley is also active in numerous organizations supporting start-up companies.

Date & Time: Wednesday, April 5th, 2006. Networking, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM. Please note that this meeting is on the FIRST Wednesday of the month.

Reservation: To make or cancel a dinner reservation, email CCNReservations@aol.com or call the Section Office at (215) 382-1589. Fee, including food and beverages, is $35. Early Bird discount price is $25 if reserved by Thursday, March 30th.

Location: The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA.

Want a simple way to jumpstart your career? Then volunteer for a committee or two. The following are looking for a “take charge” person to develop the committee and its program. Training (both formal and informal) is provided:

✓ Public Relations

The following committees are looking for new “take charge” chairs as well as members:

✓ Career Services
✓ Chemical Health and Safety
✓ Diversity
✓ Industrial Relations
✓ Legislative Liaison
✓ Liaison
✓ Membership
✓ Planning
✓ Public Relations
✓ Social
✓ Student Affiliate Mentor

The following committees are looking for new and returning members:

✓ Awards
✓ Continuing Education
✓ National Chemistry Week
✓ Program
✓ Publications
✓ Tellers
✓ Web Page
✓ Younger Chemists
✓ Women Chemists

And past volunteers, especially officers, are invited to work on the Section’s Work Manual.

To volunteer to chair or to join a committee, email Deb Kilmartin at kilmartind@msn.com

or contact the Section Office at philaacs@aol.com or 215-382-1589.

Put “Volunteer” in the subject line or leave a detailed message including contact information and the committee or committees you’d like to try.
This is the edited version of the minutes. A full copy of the minutes can be obtained from the Section Office.


The meeting was called to order by Chair Kilmartin at 4:08 PM.

Introductions were made around the table to welcome new members of the Board.

The minutes of the December 2005 meeting were unanimously approved.

COMMITTEE REPORTS:

Finance, Budget and Audit

The report prepared by G. Cowperthwaite was distributed to the Board. WCC (line item # 3090) was amended from $4200 to $6100 at the request of K. Shaginaw. The ensuing $1900 budget imbalance was then discussed, and it was noted that this additional amount could be covered either through transfer from capital, or from monies remaining from other line items that will not be spent. A motion to approve the budget amended by transfer from capital was unanimously approved.

OFFICERS’ REPORTS:

Immediate Past-Chair (D. Cook)

D. Kilmartin, on behalf of D. Cook, reported that the electronic vote regarding business of the Salary Committee resulted in the recommended outcome.

Chair (D. Kilmartin)

Electronic Mailing: request was made for approval of purchase of program for bulk e-mailings. Board directed the Chair to purchase the software.

Bylaws Revisions: a meeting will be set up soon for the committee that has volunteered to work on bylaws revisions: R. Gates, J. Summers-Gates and D. Kilmartin. Chair Kilmartin encouraged the Directors to make specific suggestions to this committee for changes to be included.

Ullyot Public Affairs Lecture: Speaker for November is still not confirmed, but may be Ralph Cicerone of the NSF.

Section Meetings for 2006: Chair Kilmartin discussed dates and topics for upcoming monthly meetings this year; her agenda is to highlight speakers who are not “standard” or traditional chemists. Discussion followed regarding the challenge, and need, to keep dinner costs down to encourage attendance. Choice of location and format of meeting will contribute toward meeting this goal. Clarification was offered on the Section’s responsibility regarding the payment of dinner costs for guests.

Chair-Elect (D. Cichowicz)

Reported that he is registered for, and will attend, the Leadership Conference in Baltimore.

Secretary (A. DeMasi): no report.

Treasurer (C.J. Bruner): monthly report was discussed; there is approximately $15 K in the money market fund; the fund performed well this past year. A motion to accept the Treasurer’s report was unanimously approved.

ANNOUNCEMENTS:

Mettler-Toledo: announcement received about Food Science Education grants, with a submission deadline of April 30th.

Coriell Science Fair: seeking judges for event on March 4th, 7 AM to 1 PM – information sheets are available to anyone interested in helping out.

Homeschool Science Fair: also seeking judges for their event on February 11th at Villanova.

OTHER BUSINESS:

Anne DeMasi was elected Chair of the Council Affairs Committee.

Another annual donation was received by the Philadelphia Section ACS

Student Poster Session (today’s program) was reported to have 49 posters – 13 undergraduate authors and 35 graduate student authors. Posters will be on display and...
Valerie Kuck from National will lead a Career Services program.

There being no other business, the meeting was adjourned at 5:05 PM.

Respectfully submitted,
Melissa Betz Cichowicz, Ph.D.
Substitute Secretary

---

WANTED: COMMUNITY OUTREACH AND PROGRAM COORDINATORS

• Recruit volunteers for community outreach programs (e.g., National Chemistry Week, Chemists Celebrate Earth Day, Chemagination, Chemistry Olympiad, etc).

• Determine overall outreach budget, including soliciting funding.

• Facilitate or coordinate correspondence with schools and other partner organizations to ensure program consistencies.

• Coordinate with Public Relations Chair to ensure media coverage of local section outreach events.

• Serve as liaison and point person for Local Section Executive Committee.

• Keep lines of communication open with other Program Coordinators.

Programs supported by the American Chemical Society’s (ACS’s) Office of Community Activities (OCA) are designed to assist volunteers in becoming more involved in their local section, division(s), and community by providing reliable resources that can easily be used for promoting the contributions of chemistry. Participation in community activities provides opportunities for ACS members to increase media and public awareness of the importance of chemistry in our daily lives.

Chemists Celebrate Earth Day (“Dig it!” - April 22nd, 2006): Chemists Celebrate Earth Day is an environmental awareness campaign. The event provides activities that are designed to enhance public awareness of important contributions made through chemistry in preserving our planet and improving our environment. The event is held annually on April 22nd. For more information visit chemistry.org/earthday.

National Chemistry Week (“Your Home - It’s All Built on Chemistry” - October 22-28, 2006): National Chemistry Week (NCW), a community-based outreach program, is designed to reach the public with positive messages about chemistry and to make a positive change in the public’s impression of chemistry. Activities include chemical demonstrations, hands-on activities, lectures, open houses, displays, contests and games. NCW is celebrated annually from Sunday through Saturday during the fourth week of October. For more information visit chemistry.org/ncw.

For advice on these or other community activity programs available through ACS, contact the Office of Community Activities, oca@acs.org. If you are interested in heading up one of these outreach programs, contact the local section chair at philaacschair@aol.com.

---

ENHANCE YOUR CAREER!

VOLUNTEER!

Typical volunteer assignment requires one to two hours a month. Training (both formal and informal) is provided.

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2006 ACS Middle Atlantic Regional Meeting (MARM) Spotlight

Plenary Sessions

• Paul Anderson  A Retrospective View of Drug Discovery
• Howard and Sally Peters  Chocolate  Food of the Gods
• Edward Yeung  Single Molecule Spectroscopy for Early Diagnosis of Disease
• Thomas Mallouk  Catalytic Motors and Pumps

Special Programs and Symposia:

• Celebration of 100 years of FDA Regulation
• The Alfred Burger Award in Medicinal Chemistry
• The Cope Scholar Award in Organic Chemistry
• Proteins as Biomarkers and Protein Rational Design
• Mass Spectroscopy in Toxicology and Metabolite Identification
• The ACS Regional Industrial Innovation Award
• Joseph Priestley History
• Chemistry of Chocolate, Beer, Tea and Wine
• Delaware Valley Chromatography Forum Student Awards
• Major Symposia in Analytical Chemistry, Medicinal/Organic Chemistry, Chemical Education, Solid State and Materials Science, and Chemical History

The 2006 ACS Middle Atlantic Regional Meeting (MARM) will be held in Hershey, PA, June 4-7, 2006. For more information visit us at http://www.marm2006.org

The Chemistry Department of Ursinus College Proudly Announces the Keynote Address at The 70th Intercollegiate Students Chemists Convention

Using Tricks from the Electronics Industry to Aid in the Detection, Diagnosis and Treatment of Human Diseases

Dr. Joseph M. DeSimone

William R. Kenan, Jr. Distinguished Professor of Chemistry at the University of North Carolina at Chapel Hill and Professor of Chemical Engineering at North Carolina State University

Saturday, April 22nd, 2006 at 1:30 PM
Olin Auditorium, Ursinus College, Collegeville, PA
POSSIBLE TREATMENTS FOR ALZHEIMER’S

Chemists in Chile and Spain have identified a new approach for the possible treatment of Alzheimer’s disease that they say has the potential to destroy beta-amyloid fibrils and plaque thought to contribute to the mental decline of Alzheimer’s patients. The “molecular surgery,” which involves attaching gold nanoparticles to a group of beta-amyloid fibrils, could halt or slow the disease’s progress without harming healthy brain cells. The research appears in the January 11th issue of the ACS journal, Nano Letters.

Two other promising Alzheimer’s disease studies were subjects of releases from the Office of Communications. One release reports on the development of a set of synthetic compounds that could help slow – perhaps even halt – the progression of Alzheimer’s and other neurological disorders. This research appeared in the December 29th issue of the Society’s Journal of Medicinal Chemistry. The second release highlights a study by Swiss researchers who say a compound isolated from cyanobacterium, a type of pond scum, may be a natural drug candidate for fighting Alzheimer’s and related diseases. The report on pond scum appeared in the December 26th issue of the Journal of Natural Products.

MARM 2007 COMMITTEES

The Mid Atlantic Regional Meeting (MARM) is coming to the Philadelphia Section in 2007 and is a great opportunity to get involved in ACS activities again. MARM 2007 will be held at Ursinus College in Collegeville, PA on May 16-18, 2007. The Local Operating Committee is under the leadership of co-chairs Dr. Vic Tortorelli and Dr. Sharon Haynie. Dr. Tony Addison and Dr. Lynn Abell are the program co-chairs. There is much work to do between now and May 2007. We are looking for good people and good ideas. If you are interested in helping or have some ideas to share, respond to George F. Cowperthwaite, Treasurer, MARM 2007 at georgecow@aol.com. The particular need at the moment is staffing for the following committees: Publicity, Awards, Fund Raising, and Finance. We are also in need of a Web Master. If you were able to serve at the 2004 national meeting in Philadelphia, this opportunity should be as enjoyable.

HIGHER EDUCATION

Choosing A Graduate School? Need To Know Who Is Doing Research Critical To Yours?

Consult the DGRweb, which is the searchable, online version of the ACS Directory of Graduate Research (DGR), now available free of charge at http://chemistry.org/education/DGRweb. The ACS Directory of Graduate Research is the most comprehensive source of information on chemical research and researchers at universities in the US and Canada. Using this online directory, one may search for both faculty and institutions. Search for faculty includes specific research area, academic rank, gender, and state, and the search results produce complete contact information for faculty including direct links to faculty email addresses and web pages. Institutional searches provide all departmental contact information along with statistical data on the number of faculty and students in the department and a complete list of faculty active in graduate research. DGRweb 2005 also includes access to the complete 1999, 2001, and 2003 databases.
ACS RESPONDS TO MEMBERS AFFECTED BY GULF COAST HURRICANES

Following the devastation to the Gulf Coast wrought by this year’s major hurricanes, a Hurricanes Response Task Force was created to identify ways in which the Society can help ACS members who live and work in those areas.

At the recent ACS Board of Directors meeting, the Board voted to accept the recommendations made by the Task Force:

- That the Society declare a suspension of dues for a period of 12 months to the 302 ACS members in the hardest hit regions affected by the Gulf Coast hurricanes. These members will be moved to an unemployed dues waiver status and be treated as “paid active” for a period of 12 months, starting the date following the current paid date.

- That all members (approximately 564) in the postal zip codes that were at one time considered undeliverable be eligible to “opt – in” to the unemployment dues waiver status. Members will have the option to continue their dues as routine, or postpone dues payment via an “opt – in” feature.

Members in the affected areas will soon be notified. The Board expressed its appreciation to the Hurricanes Response Task Force for its effective response to this significant crisis.
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<td>April 5</td>
<td>Chemical Consultants Network</td>
<td>Cynwyd Club Bala Cynwyd, PA <a href="http://www.chemconsultants.org">www.chemconsultants.org</a></td>
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<tr>
<td>April 14</td>
<td>Society of Plastics Engineers: Nanotechnology Forum</td>
<td>Holiday Inn Select Claymont, DE <a href="http://phillyspe.plastics.com">http://phillyspe.plastics.com</a></td>
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<tr>
<td>April 11</td>
<td>Philadelphia Section, AIChE: Student Awards</td>
<td>Drexel University Philadelphia aiche-philadelphia.org</td>
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<tr>
<td>April 19</td>
<td>Dr. George Rossman, California Institute of Technology: Gems and Technology and Scholastic Achievement Awards</td>
<td>McCall Meeting and Conference Center Highland Park, PA</td>
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<tr>
<td>April 22</td>
<td>Chemists Celebrate Earth Day</td>
<td>All over Delaware Valley Philadelphia, PA</td>
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<td>May 18</td>
<td>Wyeth-Penn Lecture: Carolyn Bertozzi, University of California, Berkeley</td>
<td>University of Pennsylvania Philadelphia, PA</td>
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<tr>
<td>May 25</td>
<td>Dr. Zafra Lerman, Dir., Inst. for Science Education and Communication, Columbia College, Chicago Teaching Awards</td>
<td>McCall Meeting and Conference Center Highland Park, PA</td>
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<td>June 4-7</td>
<td>ACS Middle Atlantic Regional Meeting (MARM)</td>
<td>Hershey, PA</td>
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<td>June 15</td>
<td>Madeleine Jacobs, Executive Director, ACS Fifty-Year Member Recognition</td>
<td>Chaddsford Winery Chadds Ford, PA</td>
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<tr>
<td>Sept. 21</td>
<td>Dr. Scott Woodward Sorenson Molecular Genetics Foundation DNA of Royal Egyptian Mummies</td>
<td>University of Pennsylvania Museum of Archeology and Anthropology Philadelphia, PA</td>
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<tr>
<td>Oct. 19</td>
<td>Philadelphia Section Award</td>
<td>TBA All over Delaware Valley</td>
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<tr>
<td>Oct. 22-28</td>
<td>National Chemistry Week</td>
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<tr>
<td>Nov. 16</td>
<td>Ullyot Public Affairs Lecture Dr. Ralph Cicerone, President, National Academy of Sciences</td>
<td>Chemical Heritage Foundation Philadelphia, PA</td>
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<td>Dec. 9</td>
<td>Herb Bassow Memorial Demos for All Ages</td>
<td>TBA</td>
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<tr>
<td>Dec. 14</td>
<td>Board of Directors Meeting</td>
<td>TBA</td>
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