# the Catalyst

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February 2008

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Contact: Symposium / Exhibit Manager Ms. Janet Cunningham, Barr Enterprises P.O. Box 279, Walkersville, MD 21793 USA P 301-668-6001 / F 301-668-4312 janetbarr@aol.com / www.hplc2008.org

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#### CALL FOR PAPERS

Researchers are invited to showcase their contributions to emerging and established topics in the separation sciences by submitting abstracts to HPLC 2008 through our web site at www.hplc2008.org.

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# the Catalyst

Official Publication of the Philadelphia Section, American Chemical Society Founded April 15, 1899

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# ADVANCE NOTICE

#### **MARCH MEETING**

Edgar Fahs Smith Lecture Dr. Chad Mirkin, Northwestern University

MONDAY, March 17th, 2008 (Note: third MONDAY in March)
University of Pennsylvania

See the March *Catalyst* for details, call the Section Office at (215) 382-1589, email PhilaACS@aol.com

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# From The Chair





Forensic programs are among the most popular shows on TV today. Shows such as the three CSI series, Bones and Crossing Jordan present forensic analysis of crime scenes and criminal investigations in combination with a story line that focuses on the major characters in an almost soap opera manner. In contrast, shows such as The New Detectives and Forensics Files present real cases in a much more matter-of-fact manner. Regardless of the format, I find it fascinating to hear how much of the analytical instrumentation we as chemists rely on in our day-to-day work is used to fight crime. To me, even more fascinating is the way analytical technology is presented (and too often mis-presented) to the general public.

Our meeting this month will include a talk from an active forensic chemist who utilizes analytical technology every day in the fight to control illegal and illicit drugs. Everyone who enjoys forensic TV shows is certain to find this talk interesting. Come and join us for the talk; we would also be delighted if you could come for dinner!

Plans for the remaining 2008 meetings are in progress, and include a tour of a local micro-brewery in September, as well as the usual local Section awards (March's Edgar Fahs Smith Awardee is Dr. Chad Mirkin, Northwestern University) and recognition meetings. Check out the local Section calendar of events in this Catalyst issue and mark your calendars to save the dates. Keep your eye on the Catalyst's announcements, this column and our local Section website for forthcoming details - http://membership. acs.org/p/philadelphia.html. Also, don't forget the upcoming Philadelphia ACS National Meeting in August and the National Organization of Black Chemists and Chemical Engineers national meeting in March.

By the time you read this we will have had the Graduate and Undergraduate Student Poster Session at Temple University. We thank all who worked hard to ensure the success of the event, particularly our host, Temple University. This annual event is a great opportunity for each of us to help encourage our students by our attendance. Encouraging students is part of my goal for the Section for this year.

As we continue through 2008, I invite you to get involved with your Section. You can participate on one of the several Section committees, participate in a Section outreach event or you can simply attend monthly meetings. Expand Your Horizons will be held on Saturday, March 8th, and is looking for women scientists to show 6th grade girls that women are scientists (contact Kathy-Thrush-Shaginaw at katt@verizon.net to volunteer).

Please get in touch if you have questions or suggestions for future events. You can send me an email at: philaacschair@aol.com. In any event, I look forward to seeing and meeting with many of you throughout 2008.

### **CALL FOR PAPERS**

The 236<sup>th</sup> ACS National Meeting & Exposition will be held at the Philadelphia Convention Center August 17-21.

The full-day High School Day Program will be held on August 17<sup>th</sup>. This program, which focuses on the needs of high school chemistry teachers, is a regular feature of all ACS National Meetings.

High school teachers or college professors who intend to present a session for this program are urged to submit proposal ideas to High School Day co-chairman Bill Bleam at bbleam@verizon.net. Abstracts of proposals must be submitted to ACS on its OASYS system by mid-March, pending approval of the proposal topic.

Also, many volunteer opportunities are available for chemical educators who would like to volunteer their time serving their profession behind the scenes at this event. If you are interested, please contact Bill at the above email address.

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#### **NEWS ATOMS**

**Barbara Jane Morgan**, fourth-year graduate student at the University of Pennsylvania, received a fellowship from the ACS Division of Organic Chemistry for continued research.

In addition to the ACS awards announced for 2008 and reported in the October issue, George W. Raiziss, professor of biochemistry and biophysics at Penn's school of medicine, will receive the Ralph F. Hirschmann award in peptide chemistry. Penn's associate professor of chemistry Jeffrey Bode will receive an Arthur C. Cope Scholar award.

Penn also announced that **Larry Sneddon** was named the Blanchard Professor of Chemistry.

#### **DEATHS**

Charles P. Neidig, chemical engineer who spent his life in investment banking, June 23<sup>rd</sup>, 2006 at 87. He held directorships on 9 major industrial and financial boards and spent 20 years with White, Weld & Co. where he became a general partner and then senior vice president, responsible for corporate finance and research in the chemical and drug industries. He was also senior vice president of IMS, a market research company serving the health care industry.

Neidig was a 68-year member of ACS and served as a national councilor. He was president of the Chemical Marketing Research Association and was a charter member of the Commercial Chemical Development Association. He provided major support to his alma mater, Penn State University, where he served as president of the Alumni Association and as a member of the board of trustees.

**Rudolph H. Michel**, retired research fellow at DuPont, October 26th, 2006 at 81. He was born in Landau, Germany and emigrated to the United States in 1936. He spent 32 years at DuPont and retired in 1984. He then spent seven years as a volunteer research associate at the University of Pennsylvania's Museum in the Applied Center for Archaeology. He wrote several papers on the chemistry of royal purple and the history of wine and beer.

**Walter Clavan**, retired from Pennsalt, December 15<sup>th</sup>, 2006 at 85. He chaired the first Middle Atlantic Regional Meeting (MARM), held in Philadelphia in 1966. He was a 65-year member of ACS.

**James H. Cogshall**, June 27<sup>th</sup>, 2007 at age 91. He was a 63-year member of ACS. No further details are available.

Aaron P. Greifer, chemist in the field of magnetic oxides, September 5<sup>th</sup> at 87. He worked on the Manhattan Project and then held positions with General Electric, RCA, and Clevite Corp. before joining Sperry Univac in 1964. There he worked on the development of ferrite memory cores and retired from Sperry in 1981. He lectured part-time in chemistry at Delaware County Community College and Villanova University. He was a past president of Toastmasters International.

**Evgeni J. Grinshtein**, business consultant, September 16<sup>th</sup> at 75. He founded his consulting firm E & M Associate in 1994.

Roy Machlowitz, retired biochemist from Merck and Co., September 18th at 86. Following positions with the Naval Boiler and Turbine Laboratory in Philadelphia, and the Aeronautical Materials Laboratory of the Naval Air Experimental Station, he joined Merck in 1951. He worked on new antibiotics, purifying viruses for vaccine use, and developed biochemical analytical methods, retiring from Merck in 1983. He authored or co-authored over 20 technical papers and held 6 patents.

Charles A. Garber, president of Structure Probe, Inc., September 19<sup>th</sup> at 66. He was world renowned in the fields of electron microscopy and polymer physics. He was founder, president, and CEO of Structure Probe. Garber worked briefly as a research physicist at DuPont's Experimental Station before starting his own firm. A 44-year member of ACS he was also an adjunct professor at West Chester University and Drexel University.

**Robert R. Rowe**, 51-year member of ACS, October 20<sup>th</sup> at 84. No further details available.

Richard Hetherington, retired chemist in the field of ion-exchange, December 1<sup>st</sup> at 84. He joined Rohm and Haas in 1946 and was appointed supervisor of the industrial water treatment section. After retiring from R&H he joined Epicor, Inc. as marketing manager. He authored papers and held patents in the field of ion-exchange resin technology, and was a 50-year member of ACS.

**Note:** News Atoms seeks to report on people in the field of chemistry in the greater Philadelphia area. If you have news about new hires, significant promotions, honors and awards, and those who have recently passed away, send it by email to philcatalyst@aol. com or by mail to the Philadelphia Section ACS.

# CHF CREATES DISTILLATIONS, A WEEKLY PODCAST

The Chemical Heritage Foundation (CHF) has just launched a new weekly podcast, Distillations: Extracts from the Past, Present, and Future of Chemistry, a weekly show offering entertaining reports on subjects ranging from alchemy to the contents of your kitchen cupboard to the chemistry of space exploration. It makes the wonders of chemistry available to listeners around the world through iTunes.

Join host Robert D. Hicks and guests every Friday for the latest episode of *Distillations*. A former naval officer and most recently Director of the Roy Eddleman Institute for Interpretation and Education at CHF, Hicks is also an expert in the history of navigation and at alented reenactor. Recorded in Philadelphia and produced in San Francisco, *Distillations* has a radio-quality sound that you can listen to wherever your iPod takes you.

The premier episode of *Distillations*, "Communicating Chemistry," is now online. Listen as Paul Smith, a Michael Faraday reenactor from Purdue University, explains how public chemistry lectures enchanted Londoners in the early decades of the nineteenth century. In this episode's installation of "The Element of the Week," a recurring segment, you'll hear how phlogiston was discovered and subsequently

discarded in favor of the element we now call oxygen.

Distillations is available free of charge through the iTunes store and at its Web site http://distillations.chemheritage.org. Subscribe or tune in each Friday to hear the first five episodes: "Communicating Chemistry," "Cleaning Up," "Happy Holidays from CHF," "Measurement," "The Body Chemical."

# CHEMICAL CONSULTANTS NETWORK

Visit our web page at www.chemconsultants.org

**<u>Date & Time</u>**: Wednesday, February 13<sup>th</sup> Networking, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM.

### Speaker and Topic:

Stephen Gale, PhD—*Terrorism's Focus on Economic Networks*.

Abstract: Over the past six years, Americans have come to believe that the objective of the attacks by Islamist groups such as al Qaeda is to kill Americans, to retaliate for the "damage" done by the West to the people of the Middle East and to Islam in general. What is really the case is that the Islamists have targeted not mass numbers of American deaths, but the "joints" of the US economy and society, to provide sufficient time to create a powerful, independent Islam free of Western influence. This talk will provide an analysis of the of the attacks on September 11th, 2001 and use it as the basis to describe what we in the US and the West should anticipate with respect to future acts of terrorism.

<u>Location</u>: The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA 19004.

Reservation: To make or cancel a dinner reservation, e-mail CCNReservations@ aol. com or call the ACS office at 215-382-1589 (leave message on voicemail if necessary). Fee, including food and beverages (wine, beer & sodas), is \$35. Early Bird discount price is \$25 if reserved by Thursday, February 7th. Late reservations and walk-ins subject to availability. No-shows will be invoiced.

# FEBRUARY MEETING

# The Philadelphia Section, American Chemical Society

presents

## DARRELL L. DAVIS

Laboratory Director, South Central Laboratory Drug Enforcement Administration, Dallas, TX

Forensics in a CSI Era

Thursday, February 21st, 2008 7:00 PM

> The Cynwyd Club 332 Trevor Lane Bala Cynwyd, PA 19004

> > The lecture is free.

Dinner at 6:00 PM: \$30; students with reservation and ID: \$15.

**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 **Thursday, February 14<sup>th</sup>**. **Cancellations**, if necessary, cannot be accepted after **NOON** on **Tuesday, February 19<sup>th</sup>**. UNCANCELLED RESERVATIONS WILL BE BILLED.

**DIRECTIONS AND PARKING:** From City Line Ave. (Route # 1) drive north on Conshohocken State Road (Route # 23) about 3 long blocks. Continue north on Trevor Lane instead of following Route #23 left. At "Y" in road one block north on Trevor Lane turn left where clubhouse and parking are on the left side of the road. Please park in lot if space is available; otherwise park on Trevor Lane.

The Board of Directors will meet at 4:00 PM at the Cynwyd Club.

# SPEAKER'S ABSTRACT AND BIOGRAPHY

Forensics in a CSI Era
Darrell L. Davis
Laboratory Director
Drug Enforcement Administration

**Abstract:** With the influx of TV shows depicting forensic work as glamorous and easy work, the appeal of being a crime scene investigator has struck an interest amongst college students and the professional workforce. The Drug Enforcement Administration's Office of Forensic Sciences is one of the premier laboratory systems in the world. This presentation will highlight the forensics disciplines that are used in their day-to-day operations.

**Biography:** Darrell L. Davis is the Laboratory Director for the Drug Enforcement Administration's South Central Laboratory in Dallas, TX. He began his career as a forensic chemist with DEA in 1979 at the Southwest Laboratory in San Diego, CA. As a forensic chemist, Mr. Davis was responsible for analyzing seized evidence for the presence of controlled substances. Mr. Davis is also qualified as an expert witness in over 10 states. After leaving the Southwest Laboratory in 1988. Mr. Davis transferred to the South Central Laboratory in Dallas, TX where he was promoted to Senior Forensic Chemist. In Dallas, he was a leader in the laboratory as an expert in the seizure of clandestine laboratories. Additionally, he trained law enforcement personnel and state and local chemists in the manufacture of controlled substances. After two years in Dallas, Mr. Davis was promoted to Supervisory Chemist at the Northeast Laboratory in New York City. There he was responsible for supervising over 12 employees. He later transferred to the Office of Forensic Sciences in Arlington, VA, and served as a Program Manager until he accepted his current position in January 2000.

Mr. Davis is a member of the American Chemical Society, American Academy of Forensic Science, American Society of Crime Laboratory Directors, and the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE). He served two terms as vice chairman of the board of NOBCChE which is a science based organization that promotes Science, Technology, Engineering, and Mathematics (STEM) related subjects to African American students and professionals.

Mr. Davis earned a BS in Chemistry from Prairie View A & M University in 1979. He was born in Port Arthur, TX and currently resides with his wife in Cedar Hill, TX. Mr. Davis's goal and commitment is to promote science and science education and to assist in training educators and encouraging minorities to pursue careers in science.

# **CALL FOR VOLUNTEERS**

Adult volunteers needed to To distribute the Catalyst and serve at the Section's Hospitality Booth at the ACS National Meeting, August 17-21. If you would like to volunteer, please give your name and contact information to Mrs. Libby Harper, 215-382-1589 or phillynatlmtg @aol.com.

Five to six students needed to serve as go-fers (paid positions) to assist the National staff during the meeting.

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# NOMINATIONS INVITED FOR THE PHILADELPHIA SECTION, AMERICAN CHEMICAL SOCIETY, AWARD

The Philadelphia Section invites its members and regional and topical groups to consider recommending candidate(s) for the Philadelphia Section Award.

This Award recognizes an individual, "who, by conspicuous scientific achievement through research, has made important contributions to man's knowledge and thereby aided the public appreciation of the profession." Any member of the American Chemical Society, Philadelphia Section, may be nominated for this award. Recent awardees include: R. Levis (Temple University 2007), P. Walsh (University of Pennsylvania 2006), R. Pasternack (Swarthmore College 2005).

#### **INSTRUCTIONS**

- (1) The nominator should provide detailed biographical data of the nominee, showing educational and employment data, a list of publications and a record of other accomplishments pertinent to award consideration.
- (2) One or two seconding letters (at least one of which should be from a person in an organization other than that of the nominee) should be requested in support of the nomination.
- (3) Nominators and seconders should be identified with addresses and telephone numbers so that they can be contacted, if necessary, for additional information.
- (4) Unsuccessful nominees from previous years may be renominated. In fairness to the nominee, however, renominations must be accompanied by an updating of the nominee's biographical data and list of accomplishments in order to make the nomination competitive. Unsuccessful nominees who have been considered three years in a row should not be renominated for the fourth year in succession without prior consultation by the nominator with the chair of the Awards Committee.

Nomination forms are available from the Section Office. Contact the Administrative Secretary, Mrs. Libby Harper at: Philadelphia Section, ACS, Department of Chemistry,

University of Pennsylvania, Philadelphia, PA 19104-6323, (215) 382-1589; email: PhilaACS@aol.com.

The completed packet of nomination materials may be emailed to PhilaACS@ aol.com or nine COMPLETE SETS may be sent by April 3<sup>rd</sup>, 2008 to Mr. Robert Gates, Chair, Awards Committee, at the Section Office address above.

# CALL FOR NOMINATIONS The 6th Annual Philadelphia Section, ACS Award For Excellence In Undergraduate Teaching In

#### **Chemical Sciences**

The Philadelphia Section of the American Chemical Society will honor an outstanding undergraduate teacher from the Delaware Valley with its Award for Excellence in Undergraduate Teaching in Chemical Sciences. The award will be given to a full-time educator involved in teaching an undergraduate course in the chemical sciences (chemistry, biochemistry). Nominees must teach in an institution that is within the Philadelphia Section's geographic area (Philadelphia, Montgomery, Delaware, Chester, Bucks, Burlington and Camden counties).

Nominations for 2008 will be accepted until Tuesday, March 4th, 2008. The nomination should consist of a letter of nomination, the nominee's resume and at least two letters of recommendation. Other supporting information, such as students' comments, is welcome. However, the total nomination package should not exceed 30 pages. The nomination package may be emailed to PhilaACS@aol.com or nine copies of the nomination materials may be mailed to: Mr. Robert Gates, Chair, Awards Committee, Philadelphia Section, ACS, Dept. of Chemistry, University of Pennsylvania, Philadelphia, PA 19104-6323.

For more information, please contact the Philadelphia Section office: (215) 382-1589 or email: philaACS@aol.com.

The award recipient will be honored at our May 2008 Section meeting with an honorarium and a plaque.

## 595<sup>th</sup> Board of Directors Meeting October 18<sup>th</sup>, 2007 Temple University Philadelphia, PA

This is the edited version of the minutes. A full copy of the minutes can be obtained from the Section Office.

**Present:** D. Cichowicz, E. Davis, A. DeMasi, C.J. Bruner, J. Falcone, Jr., M. Falcone, R. Gates, J. Summers-Gates, K. Thrush-Shaginaw, T. Straub, D. Thomas, J. Tierney, D. Kilmartin, D. Cook.

**Excused:** Sr. R. Mulligan, C. Rulli, M. Cichowicz, V. Tortorelli.

Absent: A. Templeton.

Also Present: E. Harper, S. Haynie.

The meeting was called to order at 4:05 PM by Chair Cichowicz. The minutes for the September 2007 meeting were approved as amended (C.J. Bruner, motion, M. Falcone second). All were in favor.

#### COMMITTEE REPORTS:

**Nominations Committee:** D. Kilmartin motioned that Susan Jansen-Varnum (Analytical) be a member of the Awards Committee. All were in favor.

National Chemistry Week: J. Summers-Gates requested that the Board assist with the voting process for the NCW posters at the end of the Board meeting. She also said that Expand Your Horizons is on schedule.

### **OFFICER'S REPORTS:**

Chair's Report (D. Cichowicz): The Temple University Student Affiliate Chapter has received a National Honorable Mention Award and will be recognized at the Spring National meeting. The Mid-Atlantic Russian Business Council will be sending a delegate to the Ullyot Lecture. The November meeting will be via teleconference/email only and the agenda item will be the Teller's Report. This is because there are only two weeks between the October and November meetings.

**Chair-Elect:** E. Davis discussed the proposed program for 2008. Additions since the last Board meeting include: April, tentative for West Chester University venue.

**Secretary (A. DeMasi):** The Teller's report must be sent to National by December 1<sup>st</sup>.

**Treasurer:** C.J. Bruner handed out the October report. C.J. will work with Jim concerning the difference between the report from National and the figures they gave him and report back on inconsistency. A motion was made to accept the treasurer's report. It passed unanimously.

#### **OTHER BUSINESS:**

Deb Kilmartin will contact Sharon Haynie about holding a Science Café during the National meeting in Philadelphia. This will have its own line item in the budget. Global Warming was mentioned as a potential topic.

The Publications Committee is gearing up for a special issue. There will be a Publications Committee meeting on November 13<sup>th</sup> at Pepper's Restaurant.

There being no other business, the meeting was adjourned at 4:45 PM.

Respectfully submitted, Anne DeMasi Secretary

# NEW BOARD OF DIRECTORS MEMBER

At the December Board of Directors meeting, Dr. Ping Cao was appointed to fill the unexpired term (2006-2008) of Sr. Rose Mulligan, who has relocated.

# DELAWARE VALLEY SCIENCE FAIRS

The Delaware Valley Science Fairs will be coming up before you know it. Judges and mentors are always needed.

Check the website:

**www.dvsf.org** for more information and to volunteer.

# SIRIRISI

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#### ACS DEBUTS BYTESIZE SCIENCE

The ACS Office of Communications has launched *Bytesize Science*, an educational, entertaining podcast for young listeners. *Bytesize Science* translates cutting-edge scientific discoveries from ACS' 36 peer-reviewed journals into stories for young listeners about science, health, medicine, energy, food, and other topics. It includes content from the ACS weekly *Chemical & Engineering News*.

New installments of *Bytesize Science* are posted every Monday and are available without charge. The archive includes items on environmental threats to killer whales, a scientific explanation for why some people love chocolate, some unlikely new uses for compact discs, and a hairy tale about "hairy roots."

The podcaster for *Bytesize Science* is Adam Dylewski, an ACS science writer and recent graduate of the University of Wisconsin-Madison with degrees in genetics and science communication. Dylewski spent his college career immersed in science and journalism, writing down-to-earth explanations of vital discoveries as a weekly science columnist for *The Daily Cardinal*, UW-Madison's student newspaper. Later, he continued to translate science news as a reporter for UW-Madison's Communications office and for *The Why Files*, an award-winning science news site with a witty, fun edge.

Podcasting is an increasingly popular way of accessing news, information, and entertainment content from the Internet. The term was derived from Apple's "iPod," a portable digital audio and video player, and "broadcasting." Podcasts allow users to subscribe to a "feed" and receive new files automatically whenever posted to the Internet.

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# PHILADELPHIA SECTION, ACS 2008 CALENDAR OF EVENTS

DATE Feb. 11	EVENT Delaware Valley Mass Spectrometry Discussion Group: Robert Noll, Purdue University and Chuck McEwen, DuPont: Orbittrap, http://science.widener.edu/svb/msdg/	LOCATION Villanova University Villanova, PA	
Feb. 12	American Institute of Chemical Engineers Winery Tour, http://aiche-philadelphia.org/	TBA	
Feb. 13	Chemical Consultants Network Stephen Gale: Terrorism's Focus on Economic Networks	The Cynwyd Club Bala Cynwyd, PA	
Feb. 21	Darrell L. Davis, DEA: Forensics in a CSI Era	The Cynwyd Club Bala Cynwyd, PA	
Feb. 21	Philadelphia Organic Chemists Club Juan Luengo, GlaxoSmithKline: Discovery of Eltrombopag, a Small-Molecule Oral Thromboprotein Receptor Agonist: From Screening to the Clinic	University of Pennsylvania Philadelphia, PA	
March 8	Expand Your Horizons Mini-conference for Sixth Grade Girls	Chestnut Hill College Philadelphia, PA	
Mar. 16-21	NOBCChE National Meeting www.nobcche.org	Philadelphia, PA	
March 17 3 <sup>rd</sup> Monday	Edgar Fahs Smith Lecture Chad Mirkin, Northwestern Univ.	University of Pennsylvania Philadelphia, PA	
Apr. 1-3	Delaware Valley Science Fair www.dvsf.org	Valley Forge Convention Center Valley Forge, PA	
April 6-10	ACS Spring National Meeting	New Orleans, LA	
April 17	Scholastic Achievement Awards James S. Falcone, Jr., West Chester University	West Chester University West Chester, PA	
May 15	Teaching Awards	TBA	
May 18-21	Middle Atlantic Regional Meeting (MARM) www.marmacs.org/2008/index.html	Queensborough Community Coll. New York	
June 19	50-year Members	TBA	
Aug. 17-21	ACS Fall National Meeting	Philadelphia, PA	
Sept. 18	Victory Brewing Company Tour	Downingtown, PA	
Oct. 16	Philadelphia Section Award	TBA	
Nov. 20	Ullyot Lecture: Bernard Bigot Commissariat á l'énergie atomique France	Chemical Heritage Foundation Philadelphia, PA	
Dec. 13	Herb Bassow Memorial Chemistry Demonstrations and Hands-on Activities	TBA	