April Speaker
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## Advance Notice

### May Meeting

**Teaching Awards**

Madeleine Jacobs, American Chemical Society

**Thursday, May 15th, 2008**

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

### May Advance Notice

**Teaching Awards**

Madeleine Jacobs, American Chemical Society

**Thursday, May 15th, 2008**

See the May *Catalyst* for details, call the Section Office at (215) 382-1589, email PhilaACS@aol.com
The first quarter of the year has quickly passed and we look forward to the meetings that comprise our traditional spring events. This month we recognize the outstanding students in our Section’s geographical area. These awards are known as the Scholastic Achievement Awards. They are presented each year by the Section to the top-ranking senior majoring in chemistry or chemical engineering in each of the colleges and universities in the Section that has an ACS-approved department or an ACS Student Affiliate Chapter. The awardees are chosen by the chemistry or chemical engineering departments of their schools. Students are presented an individual certificate recognizing their achievement at the April Section meeting. An engraved plate with the student’s name is also added to the Section award plaque at each recipient’s school. The Scholastic Achievement Awards are another way that we support students and recognize excellence in science in our Section.

Our speaker this month is Dr. James S. Falcone, Jr. of West Chester University. Jim is known for his passion and technical expertise in silicate chemistry, and for teaching. This meeting we get to experience some of both. As you can see from his abstract, Jim will tell us about the controversy in silica and silicate chemistry properties and mechanisms of action. He has also told me that he is proud of the contributions that were made by his students. I invite you to join us and learn about what is new and old in silica chemistry and to celebrate scholastic excellence.

The Section meetings for May and June are the Teachers awards and the 50 year members recognition luncheon, respectively. In May, in keeping with the theme of teaching excellence, Madeleine Jacobs, Executive Director, ACS is scheduled to discuss the importance of teaching communication skills in the education of today’s chemists. In June, Dr. Katie Hunt, Rohm and Haas Company, and ACS Immediate Past President is again scheduled to honor our long-term members.

The summer will be busy as we prepare for and participate in the ACS National Meeting coming to Philadelphia in August. Among the plans that are in the works is a special edition of the Catalyst that will be given out to attendees at the meeting. This special edition is intended to give the attendees an insider’s feel for our beloved home town. Please feel free to pass along your favorite things about our area to Libby Harper in the Section office (PhilaACS@aol.com) or to me (philaacschair@aol.com) and we will forward them to the Publications Committee. As we did in 2004, we are also planning to have other small give-aways at our booth. If you or your organizations know of or have anything we can offer attendees at our booth, please get in touch with me. We are considering co-sponsoring select events at the meeting and it is also possible that some decidedly “Philly” icons may be seen at the meeting at one time or another. We are still looking for volunteers, so if you can help, please let us know.

Be on the lookout for other special events during the remaining months of this year. In particular, the September meeting at the Victory Brewing Company is expected to be fun. As always, check out the local Section calendar of events in this issue of the Catalyst and mark your calendars to save the dates. Keep your eye on the Catalyst’s announcements, this column and our local Section web site for additional forthcoming details - http://membership.acs.org/p/philadelphia.

As we continue through 2008, I once again invite you to personally 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.
Please get in touch me if you have questions or suggestions for future events. You can send me an email at: philacacchair@aol.com. In any event, I look forward to seeing and meeting with many of you as we continue through 2008.

**NEWS ATOMS**

Andrew C. Price, formerly chair of the chemistry department at Ursinus College, is now on the faculty at Temple University, teaching general chemistry and developing new initiatives in laboratory and lecture courses.

William F. DeGrado, the George W. Raiziss professor of biochemistry and biophysics at the University of Pennsylvania’s school of medicine, is recipient of the Ralph F. Hirschmann ACS award in peptide chemistry. Sponsored by Merck Research Laboratories, it recognizes DeGrado’s pioneer work in protein design and his work with biomedical applications of peptides.

**DEATHS**

Lawrence J. Sigmund, retired engineer, April 3, 2007 at 88. He worked for Shell Oil, General Electric, Catalytic, and Dow Chemical. He was a 66-year member of ACS and was an accomplished singer and dancer who taught ballroom dancing.

Harrison LeVan Kalbach, retired chemical engineer, July 7th at 89. Following brief employment at International Paper Company and Joseph E. Seagrams & Sons, he obtained his MS and then joined Atlantic Richfield where he worked for 31 years. After retiring he was a technical and financial consultant for three years. Later he joined Johnston Pharmaceuticals where he became owner and vice president of administration. Kalbach was a 56-year ACS member and also served on the executive committee of the Philadelphia Museum of Art.

John T. Quinn, retired specialist in safety and fire protection, January 16th at 78. His 45-year career in the field was spent with Factory Insurance Assoc., Dow Corning, M & M Protection, and Rohm and Haas, where he retired in 1992. In retirement he continued to serve on the Philadelphia Fire Department’s Board of Safety and Loss Prevention. He was a 56-year ACS member.

**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 philacatalyst@aol.com or by mail to the Philadelphia Section ACS.

**BOOK REVIEW**

*Green Chemistry and Catalysis*


The gradual evolution of green chemistry stimulated the authors to create this work on clean catalytic methodologies in the manufacture of chemicals. The concepts apply to homogeneous, heterogeneous, and enzymatic methods.

The first chapter sets the stage for changing the focus from yield to elimination of waste and avoiding use of hazardous substances in the chemical industry. The concepts address many aspects of catalysis including solid acids and bases, catalytic reductions, catalytic oxidations, catalytic carbon-carbon bond formation, hydrolysis, the use of novel reaction media, chemicals from renewable raw materials, process and cascade catalysis, and a brief look to the future with green chemistry as the road to sustainability.

The results of applying the methods described in this book include more efficient use of energy and raw materials and the reduced generation of waste. The development of the olefin metathesis reaction, which is a classic example of clean catalytic chemistry, was recognized with the 2005 Nobel Prize in chemistry. The concepts described here help reduce solvent emissions and enhance catalyst recovery and recycling.

— Alan Warren
Date & Time:  Wednesday, April 9th  Networking, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM.

Speaker and Topic: Roger M. Singer, PhD, CFM—Taking control of Retirement: Managing the Risk of an Income Shortfall

Abstract: This presentation will focus on factors that can contribute to an income shortfall in retirement and provide solutions. These factors include the following: Longevity Risks Not outliving your assets; Withdrawal Risks Having enough to live comfortably without jeopardizing your future; Income Investment Risks Investing to keep ahead of inflation, and the timing of investment gains and losses. The key to success will be overcoming the changing landscape of retirement, the tendency to invest conservatively in retirement, and addressing returns in the first decade of retirement.

Biography: Dr. Singer has been providing financial planning services to corporations through his consulting practice for almost 20 years and to a limited number of individual clients for more than 30 years. In August 2000, Roger joined Merrill Lynch, where as Assistant Vice-President and Senior Financial Advisor, he focuses on creating, growing and preserving his individual client’s wealth. Roger has earned his Certified Financial Manager (CFM) designation and has BS, MS and PhD in chemistry from Ohio State University, Polytechnic Institute of Brooklyn and the University of Maryland, respectively, and an MBA from Rensselaer Polytechnic Institute.

Location: See map on opposite page. The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA 19004. From I-76 drive S on City Line Ave. (US Rte. 1). Turn right on Conshohocken State Rd. (Rte. 23); stay in right lane. After second light watch for white left-turn arrows painted on street (about 0.14 mi/750 ft). Do not follow Rte. 23 left at turn but instead go straight ahead onto Llandrillo Rd. (passing to right of Valley Press printing). In one block bear left onto Trevor Lane at stop sign. Clubhouse and parking are on the left. Please park in lot if space is available; otherwise park on Trevor Lane.

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, April 3. Late reservations and walk-ins subject to availability. No-shows will be invoiced. Please advise of any special food requirements. There is no charge for talk only; registration is suggested using contact information above.

CALL FOR VOLUNTEERS

Adult volunteers needed 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.
Follow arrows to the Cynwyd Club

The Cynwyd Club
332 Trevor Lane
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 at 4:03 PM per Chair Davis. The minutes for the December, 2007 meeting were approved as amended.

COMMITTEE REPORTS:

Finance, Budget, and Audit (G. Cowperthwaite): A significant, lengthy in depth analysis of the 2008 Budget took place.

Major points from the discussion - Victor Tortorelli asked George Cowperthwaite to ensure that there was a full accounting of the MARM income from 2007. Transfers of monies were to be made to money market accounts, under board oversight, until a use could be found for the income. C.J. Bruner indicated that all bills had now been received for MARM expenses. George Cowperthwaite indicated that the MARM account should be closed by the end of January or February 2008. A motion to accept the 2008 budget passed unanimously.

Teller’s Report—D. Cichowicz for T. Straub:
The Board needs one person to complete a one-year term. Tom proposed that the Board approve Kendra Yoder. A motion to approve Yoder passed unanimously.

An additional alternate councilor is needed to fill the last year of Judith Curran’s 2006-2008 term. Anne DeMasi nominated John Crawford. A motion to approve Crawford passed unanimously.

OFFICER’S REPORTS:

Chair’s Report: Chair Davis thanked everyone for all their work last year. Special mention was made of the enormous amount of work carried out by Deb Kilmartin, in particular, her work for the upcoming Graduate and Undergraduate poster session.

Chair Davis indicated that she would like to see someone nominated from our Section for a MARM 2008 award. Ann DeMasi interjected that she would like to see Deb Kilmartin nominated for the Volunteer Service Award. Anne DeMasi was appointed to form an ad hoc committee to spearhead this effort. Bill Suits indicated that the Section needed to nominate someone for the E. Emmet Reid teaching award.

The Chair further went on to say that a committee needs to be formed to review the bylaws because they have not been reviewed in 12 years. One particular revision is for the inclusion of electronic balloting.

The program for 2008 is well in place.

Chair-Elect (R. Gates): No report.

Secretary (J. Tierney): No report.

Treasurer’s Report: C.J. Bruner handed out a revised December report. This year’s treasurer’s reports will only be three pages long because the investment figures from ACS National are only supplied quarterly. Jim Falcone asked if it was possible to retrieve these monthly numbers on-line. C.J. indicated that she would look into this. C.J. indicated that she would not be able to complete the annual report until January 31st. All MARM monies are in the money market account. A motion to accept the treasurer’s report passed.

OTHER BUSINESS:

Alan Heldon indicated that a Legislative Action Group, of about 50 people, could invite all 10 Greater Philadelphia area representatives for a meeting with ACS members. The agenda is to push for greater education and research funding. A place is required for the meeting to be held, and it would be necessary to ensure that the Philadelphia ACS members were present in strong numbers.

Vic Tortorelli wanted to know if the Section was still committed to giving the undergraduate teaching award. Libby indicated that nominations were being sought in the February Catalyst. Vic Tortorelli then indicated that there might be pressure on his ad hoc group (see minutes 596th Board of Directors Meeting - Chair Elect comments) to come up with funding.

Libby Harper indicated that nominations letters for the undergraduate teaching award are due March 4th, 2008, as published in the February issue of the Catalyst.

Ann DeMasi indicated that 10 councilors have responded as to whether they will attend the council meeting in New Orleans. Deb Kilmartin is unable to attend and an alternate has been approached. When the other councilors are heard from, alternates will be chosen if necessary.

Kathleen Thrush-Shaginaw reported that Michelle Francl will be the keynote speaker at the Expand Your Horizons program at Chestnut Hill College March 8th. Volunteers are needed.

Carolyn Rulli—Chemical Education Group Chair —reported on the preparations for High School Day...
at the August national meeting. Teachers from New York to Delaware have been invited. Resources will be needed and the High School Day committee is asking for donations from local sections.

Chair Davis announced that the NOBCChE meeting is to be held March 16-21.

Chair Davis suggested Robert Levis as a speaker for the ACS Distinguished Scientist Lecture Series.

There being no other business, the meeting was adjourned at 5:17 pm.

Respectfully submitted,

John Tierney, Secretary

MANUFACTURING SOLAR CELLS PRODUCES FEW POLLUTANTS

In a finding that could help ease concerns about the potential environmental impact of manufacturing solar cells, scientists report that the manufacture of solar cells produces far fewer air pollutants than conventional fossil fuel technologies. Their report, the first comprehensive study on the pollutants produced during the manufacture of solar cells, is scheduled for the March 15th issue of the ACS’ *Environmental Science & Technology*.

Solar energy has been touted for years as a safer, cleaner alternative to burning fossil fuels to meet rising energy demands. However, environmentalists and others are increasingly concerned about the potential negative impact of solar cell technology. Manufacture of photovoltaic cells requires potentially toxic metals such as lead, mercury and cadmium and produces carbon dioxide, which contributes to global warming.

In the new study, Vasilis M. Fthenakis and colleagues gathered air pollution emissions data from 13 solar cell manufacturers in Europe and the United States from 2004-2006. The researchers found that producing electricity from solar cells reduces air pollutants by about 90 percent in comparison to using conventional fossil fuel technologies.

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BOOK REVIEW

New Frontiers in Asymmetric Catalysis
Koichi Mikami and Mark Lautens, eds.
434 pages, case bound, 6 ⅛ by 9 ½ inches,
68026-0, $100, John Wiley & Sons, Inc., 111
River Street, Hoboken NJ 07030.

Nearly two dozen authors provide recent
advances in asymmetric catalysis based on
the creation of robust chiral catalysts with a
combination of chiral organic compounds
and metal centers. The first several chapters
discuss ligand design for catalytic asymmetric
reduction, oxidation, and carbon-carbon bond
formation. Other chapters deal with C-H
bonds and small molecules such as carbon
monoxide, carbon dioxide, hydrogen cyanide
and others.

A couple of chapters focus on recent progress
on chirally economical nonlinear phenomena,
racemic catalysis, and autocatalysis. Recent
advances in asymmetric desymmetrization
reactions are described followed by a
discussion of the history and perspective of
chiral organic catalysts. Final chapters deal
with chiral Brønsted/Lewis acid catalysts and
chiral bifunctional acid/base catalysts.

This book will be useful to chemists in
academia, pharmaceutical and other industries
including biotech and agricultural fields, and
graduate students studying advanced organic
chemistry and chemical synthesis.

—Alan Warren

BOOK REVIEW

Methods and Reagents for Green
Chemistry: An Introduction
Pietro Tundo, Alvise Perusa, and Fulvio
Zecchini. eds. 332 pages, 6 ¼ by 9 ½ inches,
case bound, Wiley-Interscience, Hoboken NJ
Wiley & Sons, Inc., 111 River St., Hoboken
NJ 07030.

This book is an outgrowth of the Summer
School on Green Chemistry devised by the
Italian Interuniversity Consortium to train
young chemists in environmentally friendly
techniques. The school was founded in Venice
in 1998 and is partly sponsored by NATO.
The lecture notes used in the courses evolved
into this textbook to guide chemists in the
redesign of chemical production so that it is
safe, protective of the environment, socially
acceptable, and profitable.

Over 30 scientists contributed the
chapters in the book, which are divided
into 3 general areas on green reagents,
alternative reaction conditions, and green
catalysis. Methods described in Part 1
include multicomponent reactions to create
isocyanides, use of carbohydrates instead
of fossil fuel derivatives for biofeedstocks,
photoinitiated reactions, and use of the green
dimethyl carbonate for alkylation in place of
methyl halides.

Part 2 describes the replacement of
conventional solvents with ionic liquids, use
of catalyst-philic liquid phases to promote
catalytic activity and to facilitate product-
catalyst separation, organic chemistry in water
(Diels-Alder reactions are accelerated in
water), and modifying incinerator operations
to minimize chlorinated micropollutants
(dioxins).

Part 3 examines green catalysis and
biocatalysis. Areas of focus include modifying
catalysis to reduce waste stream volume,
improving efficiency in petrochemical
production along with use of renewable
resources like feedstocks from farming and
carbon dioxide, use of zeolite catalysts, use
of the more efficient and clean solid (acid)
catalysts, substitution of polyoxometalates
in heterogeneous catalysts, and biocatalysis
(with its mild reaction conditions and
nontoxicity) in the chemical industry.

The principles described here are attracting
continued research in efforts to find safer
raw materials, to increase energy efficiency,
to eliminate process hazards, and to reduce
waste, resulting in a more environmentally
friendly chemical industry.

—Alan Warren

NEW ALTERNATE COUNCILOR

At the February Board of Directors meeting,
Michael Prushan was appointed to fill the
unexpired term (2007-2009) of Ella Davis,
who was elected alternate for a 2008-2010
term.
APRIL MEETING

The Philadelphia Section, American Chemical Society

presents

DR. JAMES S. FALCONE, JR.
West Chester University

Silica and Me "Too"

and

Presentation of Scholastic Achievement Awards

Thursday, April 17th, 2008
7:00 PM

The Cynwyd Club
332 Trevor Lane
Bala Cynwyd, PA 19004

The lecture is free.

Social Hour: 5:00-6:00 PM
Dinner: Preceding the lecture at 6:00 PM
Dinner Cost: $30; students with reservation and ID: $15.

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, April 10th. Cancellations, if necessary, cannot be accepted after NOON on Tuesday, April 15th. 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. See map on page 55.

The Board of Directors will meet at 4:00 PM at the Cynwyd Club.
**SPEAKER BIOGRAPHY AND ABSTRACT**

Dr. James S. Falcone, Jr., PhD, CChem, FRSC

Assistant Professor and Assistant Chair, Chemistry, West Chester University of Pennsylvania

**Biography:** Professor Falcone attended the University of Pennsylvania on a Senatorial Scholarship and attained a BS in Chemistry in 1968. He received a UNIDEL research fellowship while at the University of Delaware and completed the PhD in Physical Chemistry with a minor in Inorganic Chemistry under the guidance of Prof. Robert H. Wood in 1972. After a year at University of Florida as a Post-Doctoral Research Associate of Prof. Roger G. Bates, he embarked on a 16-year career in industry, mostly at The PQ Corporation. Twelve of those years were spent as a manager scientist with full responsibility for R&D support to the corporation’s industrial silicate businesses world-wide. During three of those years in the late 1980s he was also the manager of Corporate Planning, responsible for coordinating the year long planning process for PQ’s 20 business units and integrating the results for presentation of the Board of Directors by the CEO.

Since coming to West Chester University in early 1990, he has taught Chemical Thermodynamics, Physical Chemistry with Biological Applications, Experimental Physical Chemistry, General Chemistry, Experimental General Chemistry, Environmental Chemistry and the History of Chemistry. In addition to these courses, he participated in the development of an innovative integrated science curricula based on electricity that was designed for elementary education majors. Additionally, Maurine Falcone and he have developed and taught hands-on science workshops for teachers. From 2002 until 2006 he was Chair of the Chemistry department and is currently the Assistant Chair.

Dr. Falcone maintains an active research interest in the chemistry of soluble silica and silica gels, and is currently studying the use of FT-IR as a probe for variations in the chemical nature of polymeric silicate solutions. In the past 35 years he has collaborated to study aqueous silicate chemistry emphasizing basic understanding of structure/property aspects, particularly related to industrially important applications of ‘soluble’ silicates species, including:

- interactions of ions and silica colloids in solution
- the precipitation/crystallization of silicas in porous media and gels and subsequent permeability modifications
- interfacial tension and ‘sorption’ studies in oil/brine/reservoir mineral systems
- the kinetics of the formation of zeolites and gels
- the influence of silica gels on the catalytic properties of supported metals
- the measurement of various thermodynamic properties of silica and silicates

Dr. Falcone has 8 patents, edited several books, published 35 journal articles and book chapters and presented numerous papers. He is a fellow of the Royal Society of Chemistry and highly active in the Philadelphia Section of the ACS. He has been the Section Chair, was active on the Investment Board of Trustees and currently serves on the Board of Directors. Since 1992 he has served ACS as a Career Consultant.

**Abstract: Silica and Me “Too”**: In 1967, Guy Alexander wrote a short book entitled, *Silica and Me: The Career of an Industrial Chemist* describing his career-long study of this interesting material. My research since 1974, in both academia and industry, has also focused largely on silica, more specifically the solutions formed when silica dissolves in water at varying hydroxide ion concentrations or is reacted with sodium carbonate to form glasses and dissolved in water – the colloidal soluble silicates. I will discuss their complexity, what we have learned over the years and how we have been better able to engineer their use in very important commercial systems.

Although the knowledge of these soluble glasses has been traced to antiquity and Goethe
is known to have experimented with them in 1768, the industrial development began in Germany in the early 19th century. In 1863 commercial production in North America by Elkinton began in Philadelphia during the Civil War. They were needed in laundry soaps as a replacement for rosin, which was scarce because of the war. Detergent applications still make up a large share of their use today. The relative importance of the different uses of soluble silicates has shifted since World War II, when adhesives and soap comprised the principal markets. Currently, they are used primarily as sources of reactive silica (grt 50%), and performance enhancers in detergency (about 25%), followed by many smaller applications. Thus, the sodium silicates constitute a versatile, stable and growing commodity. They are ranked among the top 50 commodity chemicals.

Silica makes up about 60% of the earth’s crust and is present in nature in a seemingly limitless number of compounds with literally hundreds of different structures. The chemistry of silica is sometimes likened to carbon chemistry in complexity. In commercial solutions, the silica species – soluble silicates – are comprised primarily of polymeric silicate ions. Dent Glasser once called these ions in solution the “Cinderella anions” because their chemistry was so intractable that they had little appeal to classical inorganic chemists. Commercially they are generally added to systems to supply specific silica species. These species are known to enhance system performance in a wide range of applications such as detergency, water and waste treatment, mineral beneficiation, oil field applications and pulp bleaching. They are also used as adhesives, binders, dispersants and soil grouts. Most importantly they are a source of reactive silica to make silicon containing performance materials which can be made by various combinations of hydrothermal reaction, ion exchange, acid addition, spray drying and post-treatments. The products – for example, sols, gels, precipitated silicas, various metal silicates and zeolites – are distinguished primarily by their composition, pore volume, surface area, particle size, internal and external morphology, and content of residual salts.

As part of my presentation we will also address some of the controversy over the wide variations in silica and silicate properties reported in the literature and some mechanisms for processes by which silica and silicate species exert their influence as additives and reactants.
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✓ Diversity
✓ Industrial Relations
✓ Legislative Liaison
✓ Liaison
✓ Membership
✓ Planning
✓ Public Relations
✓ Social
✓ Student Affiliate Mentor
✓ Awards
✓ Continuing Education
✓ Natl Chemistry Week
✓ Program
✓ Publications
✓ Tellers
✓ Web Page
✓ Younger Chemists
✓ Women Chemists

email Deb Kilmartin at kilmartinD@msn.com
or contact the Section Office at philacs@aol.com or 215-382-1589.
Put “Volunteer” in the subject line or leave a message including contact information.

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Directory of Services
# PHILADELPHIA SECTION, ACS 2008 CALENDAR OF EVENTS

<table>
<thead>
<tr>
<th>DATE</th>
<th>EVENT</th>
<th>LOCATION</th>
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<tbody>
<tr>
<td>Apr. 1-3</td>
<td>Delaware Valley Science Fair</td>
<td>Valley Forge Convention Center</td>
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<td></td>
<td><a href="http://www.dvsf.org">www.dvsf.org</a></td>
<td>Valley Forge, PA</td>
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<tr>
<td>April 6-10</td>
<td>ACS Spring National Meeting</td>
<td>New Orleans, LA</td>
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<tr>
<td>April 9</td>
<td>Chemical Consultants Network: <em>Taking control of Retirement: Managing the Risk of an Income Shortfall</em></td>
<td>The Cynwyd Club</td>
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<td><a href="http://www.chemconsultants.org">www.chemconsultants.org</a></td>
<td>Bala Cynwyd, PA</td>
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<tr>
<td>April 10</td>
<td>American Institute of Chemical Engineers: Student Awards</td>
<td>University of Pennsylvania</td>
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<tr>
<td>April 14</td>
<td>Delaware Valley Mass Spectrometry Discussion Group: Gary Glish, UNC</td>
<td>Villanova University</td>
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<td></td>
<td><em>Fundamentals of Linear and 2D Ion Traps</em></td>
<td>Villanova, PA</td>
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<td></td>
<td><a href="http://science.widener.edu/svb/msdg">http://science.widener.edu/svb/msdg</a></td>
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<tr>
<td>April 17</td>
<td><strong>Scholastic Achievement Awards</strong></td>
<td>The Cynwyd Club</td>
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<td><strong>Dr. James S. Falcone, Jr., West Chester University</strong></td>
<td>Bala Cynwyd, PA</td>
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<td>April 23</td>
<td>Philadelphia Organic Chemists' Club</td>
<td>University of Pennsylvania</td>
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<td></td>
<td>Dr. Paige Mahaney, Wyeth</td>
<td>Philadelphia, PA</td>
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<td><a href="http://www.pocclub.org">www.pocclub.org</a></td>
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<tr>
<td>May 10-16</td>
<td>Chromatography Forum of the Delaware Valley: HPLC 2008</td>
<td>Baltimore, MD</td>
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<td><a href="http://cfdv.org">http://cfdv.org</a></td>
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<tr>
<td>May 15</td>
<td><strong>Teaching Awards</strong></td>
<td>TBA</td>
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<td></td>
<td><strong>Madeleine Jacobs, ACS</strong></td>
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<tr>
<td>May 18-21</td>
<td>Middle Atlantic Regional Meeting (MARM)</td>
<td>Queensborough Community Coll.</td>
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<td>June 19</td>
<td><strong>50-year Members</strong></td>
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<tr>
<td>Aug. 17-21</td>
<td>ACS Fall National Meeting</td>
<td>Philadelphia, PA</td>
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<td>Sept. 18</td>
<td><strong>Victory Brewing Company Tour</strong></td>
<td>Downingtown, PA</td>
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<td>Oct. 16</td>
<td><strong>Philadelphia Section Award</strong></td>
<td>TBA</td>
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<td>Nov. 20</td>
<td><strong>Ullyot Lecture: Bernard Bigot Commissariat à l’énergie atomique France</strong></td>
<td>Chemical Heritage Foundation</td>
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<td></td>
<td><a href="http://www.chemicalheritage.org">www.chemicalheritage.org</a></td>
<td>Philadelphia, PA</td>
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<tr>
<td>Dec. 13</td>
<td><strong>Herb Bassow Memorial Chemistry Demonstrations and Hands-on Activities</strong></td>
<td>TBA</td>
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