

the
Catalyst

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February 2004



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Philadelphia Section Meeting:
The Science and Art of Glassblowing

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the Catalyst

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ADVANCE NOTICE

MARCH MEETING

Edgar Fahs Smith Lecture

Carlos Bustamante
University of California-Berkeley

THURSDAY, MARCH 18, 2004

University of Pennsylvania

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

ABOUT SIMON PEARCE

It often comes as a surprise when people discover that Simon Pearce is an actual person and not just a well-known custom trademark for high quality glassware and pottery and a highly acclaimed restaurant.

Pearce was raised in County Cork, Ireland, the son of a well-known potter who was credited with spearheading the revival of craft ceramics in Ireland. Simon followed in the footsteps of his father and older brother, Stephen, studying pottery making in New Zealand during his late teens. It was initially sibling rivalry that led Pearce to glassmaking. Eager to establish himself in a different field, he apprenticed with some of the world's best glassmakers at the Royal College of Art in London; at the Leedam glass factory in the Netherlands; at Venini in Italy; and at Orrefors and Boda, in Sweden. He often talked his way through the door, offering to sweep floors, if necessary, in order to refine his glassblowing skills.

In 1970, Simon established his own workshop in Kilkenny, Ireland, where he produced his original glass line for ten years. Following his marriage to American-born Pia, he began searching for a site in the United States, in part to escape the many barriers confronting entrepreneurs in Ireland. In 1981, he moved his operations to a historic woolen mill in Quechee, Vermont, where he successfully revived the traditions of glassblowing, fueling his glass furnace with hydropower.

He brought three Irish glassblowers with him and set about renovating the brick mill. Pearce and his studio quickly acquired a reputation for producing fine glass pieces of the highest quality. In time, he expanded the studio to include potters and their work, as well. After 25 years as a glassblower, Pearce himself retired from the hot, demanding work of glassblowing to concentrate on design.

Simon Pearce on the Brandywine opened in November 2000 and achieved immediate and well-deserved popularity. The interior design – like the glass made, sold and used here – is a study in simplicity and elegance. The 120-seat restaurant defines clean lines with a Danish parquet floor, red and white walls and expansive windows. Two-tiered seating gives every table a view of the Brandywine River.

The retail shop is quite lovely in itself. It features original Simon Pearce glass and pottery, along with wood items, fine linens, and accessories. The well-lit space has large, wooden display stands and great lighting with Simon Pearce chandeliers.

Before you leave the premises, head downstairs to watch glassblowers in action. Wall charts explain the glassmaking process and display sample tools. The workers are happy to answer questions about their techniques or products. It's quite a fulfilling experience to see the origins of the items in the restaurant and shop, and to watch the molten material become works of art.

CHEMO DYNAMICS LP

CHEM101C

FEBRUARY MEETING

The Philadelphia Section,
American Chemical Society

presents

The Science and Art of Glassblowing

**Featuring speakers from
Simon Pearce
and
At-Mar Glass of Kennett Square
and
Tour of Simon Pearce Facility**

Thursday, February 19, 2004

6:00 PM

Simon Pearce Restaurant
1333 Lenape Road
West Chester, PA 19382

Social Hour: 5:15 PM

Refreshments cost: \$10.00
Students with Reservations and College ID: \$5.00
Cash Bar

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 12th**. **Cancellations**, if necessary, cannot be accepted after NOON on Tuesday, February 17th. **UNCANCELLED RESERVATIONS WILL BE BILLED.**

PARKING is available at the restaurant. For more information and directions, call 610-793-948 or visit their Web site at www.simonpearce.com/restaurants/westchester.asp.

The Board of Directors will meet at 4:00 PM in the private dining room.

NOMINATIONS INVITED

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 G. Molander (University of Pennsylvania, 2003); J. Huff (Merck Research Laboratories, 2002); G. Preti, (Monell Chemical Senses Center, 2001).

INSTRUCTIONS FOR SUBMITTING NOMINATIONS:

(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 consideration for this award.

(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 should consist of 9 COMPLETE SETS, and should be sent by April 1, 2004 to Dr. Deborah H. Cook, Chair, Awards Committee, at the Section Office address above.

Chemical Demonstrations at Phantoms Game

by Deb Kilmartin

Imagine driving up to the gate, giving your name and being waved into the free VIP parking area, parking close by the "Will Call" door. Just a short step into the stadium, given a press pass then escorted to your location, and there you are. The best views of the game for free.

Well, in spite of the snow and the Phantoms' loss, I had a grand time doing chemical demonstrations with Dr. Tom Straub of LaSalle University. We showed the kids simple yet fun demos, like vivid paper chromatography using only various black ink pens, the kaleidoscope effect of adding food coloring and just a drop of detergent to milk, and others. Some kids were so excited they brought their parents back with them.

The demonstrations at the game started several years ago, spearheaded by former Chair Anne DeMasi, and staffed by Dr. Straub, as part of our National Chemistry Week (NCW) activities. Besides the demonstrations, we displayed the winning posters from our NCW poster contest. The winners were given tickets to the game, and several stopped by to see their posters and do hands-on activities with us.

Although our press passes entitled us to visit the locker rooms, we passed on that and instead caught glimpses of the game when we

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***From
The
Chair***

***Melissa Betz
Cichowicz***

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of Melissa
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The intersection between science and art is fascinating, and there are numerous examples to illustrate this point; the particular one I ask you to consider this month involves the intriguing material known as glass. A recent “What’s That Stuff?” article by Victoria Gilman in *C&E News* (November 24, 2003) captured some of the mystery of glass and adds information to the topic of this month’s meeting. “Glass is a state of matter, not a particular substance” according to Robert H. Brill of the Corning Museum of Glass in New York, as quoted in the article. There are literally thousands of chemical substances that can be made into glass, which is defined as “an amorphous solid that has cooled to rigidity without crystallizing.”

Most glass is composed primarily of silicon dioxide, with other substances added to prevent weathering (calcium carbonate) or improve “sparkle factor” and to make it more fracture-resistant when carved or etched (lead oxide). Other additives may be employed to color the glass, either to simulate gemstones (copper and cobalt oxides to give blue stones, for example) or for use in artistic projects. The process of glassblowing is believed to have originated around the first century B.C. in Syria and spread to other parts of the world as a result of trade. Many of the formulas used and procedures employed were secret, and according to Robert H. Doremus of Rensselaer Polytechnic Institute this resulted in a potential death penalty for a glassblower who revealed his methods.

As an undergraduate student about 25 years ago at St. Joseph’s College in Philadelphia, I had the privilege to take an elective class in laboratory glassblowing. It was taught by a retired scientist named Percy Cole who, like his father, was also a skilled fine artist. He regaled us with stories of his university days

at the Sorbonne, where one of his instructors was the legendary LeChatelier (how’s that for a “seven degrees of separation” connection to an historical figure?). In those days, a practicing scientist often had to fabricate and repair his own apparatus, and so the skill of glassblowing was routinely acquired.

Today, of course, most of us either purchase our glassware from a stock manufacturer, or send diagrams to a specialty shop for fabrication. Thus one’s appreciation for the combination of art and science may not be as acute. This point became increasingly clear to me as I struggled to learn the technical skills necessary to make a functional O-ring seal in a condenser, or the indentations for a Vigreux column, since not only did I want to make the projects meet the scientific requirements Dr. Cole had put forth, I also wanted them to look reasonably good. Getting a functional result **and** an esthetically pleasing product was not always possible, but we all did our best. Perhaps because I had taken some artistic training in my younger days, I was particularly dissatisfied when my project did not look as well as it functioned. However, my appreciation for the medium, and admiration for those trained in both the technical and artistic sides of glassblowing, have remained undimmed over the years.

This month we are fortunate to have our Local Section meeting at Simon Pearce Restaurant on the Brandywine, a beautiful location with a functioning glassworks. Simon Pearce has not only an outstanding restaurant and glassblowing workshop on this site in Chester County, but also a retail store where the products of the skilled artisans are available for admiration and sale. One of the artisans will speak to our group about the traditional process of creating hand-blown and hand-finished glassware, using clear glass which is regarded as the most difficult medium to master. The opportunity to observe the functioning of the workshop should be an interesting highlight to this part of the program. We will also hear comments from a scientific glassblower who works at a local

establishment, so that the similar and complementary aspects of glass fabrication can be appreciated. I hope that you will consider joining us this month for a special and unique program that is sure to be educational and appealing!

CHEMICAL CONSULTANTS NETWORK

Visit our web page at
www.chemconsultants.org

Date & Time: Wednesday, February 11, 2004 at the Cynwyd Club, Bala Cynwyd, PA; Mixer, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM.

Speaker Topic: *Legal Issues for Consultants*

Speakers: Arnold W. Winter and Adam G. Garson

Abstract: As attorneys, who have advised consultants in various fields, Arnold Winter and Adam Garson will provide an overview of some of the legal concepts and tools that can help develop and grow a consulting practice. Time will be provided at the end of the presentation to discuss questions and comments from the audience.

Biography: Arnold W. Winter, Esquire, has been practicing law since 1991, focusing on intellectual property as well as general business and commercial matters. In 2002, Mr. Winter joined the law firm of Lipton, Weinberger & Husick in Media, PA. Being fluent in German, Mr. Winter also has a foreign language translation business. Before attending law school, Mr. Winter held the position of Contracts Administrator for a women and minority-owned consulting firm in Washington, DC. Mr. Winter received his law degree in 1991 from Duke University School of Law and is admitted to practice in Pennsylvania and New Jersey. He also holds a Masters of Arts degree in History and North American Studies from the Free University Berlin, Germany.

Adam G. Garson, Esquire, is Of Counsel to the law firm of Ralph A. Jacobs & Associates, LLC of Philadelphia, PA. Mr. Garson's legal practice focuses on commercial litigation,

and computer/Internet intellectual property, and computer/Internet law. He is experienced in representing clients ranging from individuals to large companies. Mr. Garson also runs a software company for which he writes software in his spare time. He holds a J.D. degree from Temple University, a Ph.D. from Yale University, and a B.A. from Colgate University.

Location: The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA 19004.

Reservation: To make or cancel a dinner reservation, CCNReservations@aol.com, email, or call the ACS office at 215-382-1589 (leave message on voicemail if necessary).

For directions or information about the dinner fee, email CCNReservations@aol.com.

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could. All in all, quite an enjoyable evening, watching the game and getting to do chemistry with kids at the same time. For more information on this and other NCW activities, visit our NCW website at <http://webpages.ursinus.edu/vtortorelli/new/>. To participate in our 2004 NCW activities, catch us in September!

NEW ACTIVITY

BEAR HUGS AT ST. CHRISTOPHER'S HOSPITAL FOR CHILDREN

The Bear Hugs program ended on Christmas Day, with 76 children receiving a teddy bear with a white NCW tee shirt at St. Christopher's Hospital for Children. Bears were given to all the infants in the Neonatal Intensive Care Unit (NIC-U), the children in the intensive care unit, and longer-term resident children at the hospital.

Although the goal was to collect a total of 120 bears, the program is considered successful with only 76 collected. Over 111 ACS members, student affiliates, and others pledged bears, attended "Stuffing Parties" at various area Build-A-Bear store locations within the Section, dressed the bears in white tee shirts bearing the National Chemistry

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NEWS ATOMS

Barry Schwartz appointed business group manager in the industrial chemicals division of PQ Corporation.

HONORS

James D. Burke was elected chairman of the board of directors of the American Chemical Society at their board meeting in December. Burke, who is retired from Rohm and Haas, is a director-at-large and has held numerous offices in the Philadelphia Section ACS.

DEATHS

Elden D. Haller, retired vice president of Thomas Scientific, February 25 at 93.

Claude H. Hills, retired biochemist formerly with the U. S. Department of Agriculture, November 22 at 91. He retired from USDA in 1976 and worked as a high school substitute teacher and track coach. He

had a long interest in competitive track events and accumulated over 1,400 medals and trophies in track-and-field sports. He set a couple of world records and was a co-founder of the Philadelphia Masters Track Club.

Jesse Lieberman, an expert in radiation safety, November 23 at 83. He served as chief of occupational environment with the Philadelphia Department of Public Health. From 1972 to 1986 Lieberman worked in the industrial hygiene division of the Naval Regional Medical Center. This was followed by a 17-year career with Rohm and Haas and running his own consulting firm.

Theodore Shell, retired chemist formerly with DuPont, December 11 at 73. He served in the merchant marine and then in the United States Army during the Korean War. From 1961 until 1990 he was employed by DuPont in Wilmington.

The national ACS office has advised of the deaths of the following individuals: James B. Egee, Carl S. Oldach, and Richard Wikander. No further details were available.

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continued from page 24

Week logo, and presented the bears to the children.

The bears and tee shirts were obtained from the Build-A-Bear stores in King of Prussia, PA, who also donated ear ribbons, and in Springfield, Delaware County, PA. Coordinator Deborah Kilmartin applied NCW logos to the tee shirts. Other support was received from students from Villanova University and University of the Sciences in Philadelphia, which not only collected donations but also participated in "Stuffing Parties". Group donations were received from EssChem Company, Villanova, University of the Sciences in Philadelphia (USP), Mr. George Cowperthwaite, Dr. Catherine Bentzley and family, and the Flamingo Travel Group in Glenolden, PA, which obtained pledges from area travel agents.

Please Place 2003
Bears Photo Here

Photograph of USP students with collected bears, November 15, 2003, St. Christopher's Hospital for Children. Front Row: Sarah Krudener, Katherine Little, Katerina Bartlett, Amy Phillips, and Ms. Allison Koran in the back.

Editor-in-Chief Wanted

Applications are being taken for Editor-in-Chief of *the Catalyst*. No experience necessary; training and equipment provided. If interested please contact Ms. Deborah Kilmartin at PhilCatalyst@aol.com or Mrs. Libby Harper at the section office at 215-382-1589 (leave message if no answer) or email PhilaACS@aol.com.

554th Board of Directors' Meeting Thursday, September 18, 2003 Small Conference Room, First Floor Chemical Heritage Foundation 315 Chestnut Street Philadelphia, PA

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

Board Members Present: S.L. Haynie, M.B. Cichowicz, C.J. Bruner, D.E. Kilmartin, A.S. DeMasi, R.R. Acchione, C. Bentzley, J. Nikelly, T.S. Straub, V. Tortorelli, and E.J. Williamsen.

Also: E. Harper, Barbara Hodsdon Ullyot, and Hank Whalen.

Chair Haynie called the meeting to order at 4:10 PM. B. Baker, C. Barbour, E.L. Davis, F. Goodson, G.J. Maffia, and G.F. Palladino asked to be excused from this meeting.

A motion to approve the minutes of the June meeting passed unanimously.

Officers' Reports

A. Chair (S. Haynie)

A discussion on the Annual Report was deferred. Chair Haynie congratulated the Younger Chemist Committee, which hosted a well-attended meeting on September 4th. 70 to 75 people attended the lecture featuring forensic chemistry careers. They will present the November meeting featuring young entrepreneurs at Rohm and Haas' Spring House location.

A petition from Art Greenberg from the University of New Hampshire asking that Philadelphia be designated as a Chemical Historic Landmark was discussed. No particular location was designated, and T. Straub brought up the question of funding. While the Board would like a historical designation ceremony here for the Fall 2004 meeting, just what was being proposed was unclear. A suggestion to look into the American Philosophical Society, founded by Benjamin Franklin and the putative forerunner of the American Chemical Society, was suggested. Chair Haynie will look into this and report back to the Board at a later meeting.

The University of Pennsylvania parking policy was brought to the Board's attention. In the past, parking lot number 1 has been available for a flat rate. This changed last January. Now we must pay \$10 per car and all car licenses must be noted ahead of time. A motion to continue to have subsidized parking was unanimously denied. A motion to have a designated parking lot with a fixed cost parking

paid for by attendees and advertised in *the Catalyst* was passed with one abstention.

B. Chair-Elect (M.B. Cichowicz)

Chair-elect Cichowicz reported that the 2004 program is shaping up well. She expects to present her preliminary program at the next Board meeting. January will once again feature the Graduate Student Poster Session at Drexel University. Interested participants are asked to email their abstracts to gradposters@aol.com. Other activities being planned include joint meetings with the polymer division, and with other local sections. She is also considering using ACS tour speakers.

She will be attending the second leadership conference in St. Louis the first weekend in October. The Board approved the expenses for this over the summer with electronic balloting.

The Philadelphia Section Award in October will be presented to Dr. Gary Molander of the University of Pennsylvania. Chair Haynie will not be present, so Chair-Elect Cichowicz will be presiding at the Board meeting as well as the award presentation. Only the first 40 registrants will be accepted to the dinner before the presentation. The dinner will be held at the White Dog.

C. Secretary (D. Kilmartin)

Nothing to report.

D. Treasurer (C.J. Bruner)

A motion to approve the deferred Treasurer's report from June was passed unanimously. A motion to approve the combined Treasurer's report from July and August was also passed unanimously.

Treasurer Bruner asked that the budget line item number be used when payment requests are being made to minimize debits from the wrong account. Only the annual budget amount less current debits is showing.

COMMITTEES:

A. National Chemistry Week (NCW) Committee (A. DeMasi):

Graduate School Night will not be sponsored by Merck this year but is expected to be sponsored by them again next year. A motion to use NCW funds to support the program this year passed unanimously.

B. Council Affairs Committee (J. Nikelly):

Chair Nikelly reported that 11 councilors attended the fall meeting in New York City. One councilor could not attend at the last minute due to work demands and no replacement could be found in time. The dues escalator will be put into effect. The search continues for finding a new Executive Director of the Society, replacing John Crum after 20 years of service. Information on the search is available on the

Micron Inc.

MICR106C

National Website (www.chemistry.org) and will be announced on November 13th.

S. Haynie said that the High School Teachers Topical Group co-chairs hosted a successful teacher's workshop in New York, providing continuing education credits for New York and New Jersey teachers. This will be passed on to C. Rulli to consider for the Fall 2004 meeting here in Philadelphia.

The Expand Your Horizons Mini-Conference for Sixth Grade Girls is full for the November 1st session and half-full for the spring sessions. As always, more chemist volunteers are needed, please contact Dr. Thrush at kthrush@ParticularSolutions.com.

C. Chemist in the Classroom (D. Kilmartin):

Earth Day will be celebrated on April 22, 2004. The unifying event will be a music video contest called "What do you know about H₂O!" Chair Kilmartin will look into sponsorship by local water companies for this contest. Winners would be sent on to National for final judging.

Chair Kilmartin also proposed the Section sponsor a "Teddy Bear Day" at St. Christopher's Hospital for Children. Stuffed teddy bears from Build-A-Bear, wearing either t-shirts or possibly lab coats with the ACS logo on them will be distributed to all children at the hospital that day, with any leftovers being kept for distribution around holidays and birthdays. A tentative price of \$20 per bear is being set, with 60 pledges being taken prior to go ahead. Several "Build-A-Bear" parties will be held at various "Build-A-Bear" stores located around the Section, such as Springfield, Delaware County, King of Prussia Mall, and Cherry Hill, NJ where families can purchase and stuff a bear for donation. St. Christopher's has promised to publicize the event.

Other Business:

The expected 2004 National Meeting Hospitality Committee update report was not made, as Chair G. Cowperthwaite was not present.

Mrs. Harper reported that all issues of *the Catalyst* were returned from a McNeil facility because "non-profit mail is not accepted there." This will be looked into, as members designate the location they wish to get membership materials, such as *Chemical and Engineering News* and *the Catalyst*, delivered and these people have designated their work address. Hopefully this will be resolved by the next Board meeting.

There being no other business, the meeting was adjourned at 5:45 PM.

Respectfully submitted,
Deborah Kilmartin,
Secretary

**The Women Chemists Committee
of the
American Chemical Society
is pleased to
Call for Applications for Travel
Awards**

For post-doctoral, graduate, and under-graduate women to make their first research presentation at a scientific meeting.

Sponsored by:

Eli Lilly & Company

For more information and an application form, contact Cheryl Brown, 800/227-5558 ext. 6123 <http://membership.acs.org/W/WCC> or e-mail: wcc@acs.org or American Chemical Society, 1155 Sixteenth St. NW, Washington, DC 20036

Deadline for receipt of applications for 2004 meetings: February 15, 2004 for Meetings between July 1 and December 31, 2004

ACS Recruiting

ACSP115C

2004 Officers and Board of Directors

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CHAIR	Dr. Melissa Betz Cichowicz
CHAIR-ELECT	Dr. Deborah H. Cook
SECRETARY	Ms. Carol Carr
TREASURER	Mrs. Carol Jean Bruner
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2004 COUNCILORS AND ALTERNATE COUNCILORS

COUNCILORS

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Dr. Bradford Wayland	Dr. Marjam Behar	Dr. Donald Voet

Process Safety in the Chemical Industry

a short course for Chemical Engineers, Chemists and Managers in the Chemical Industry

Two Consecutive Saturdays, March 20 & 27, 2004
Hill Seminar Room, Drexel University, Philadelphia, PA

Principal Instructor: Dr. Jerry Maffia (gjm0001@widener.edu)
Professor and Chair, Department of Chemical Engineering, Widener University

Reservations: Reserve a spot by calling Mrs. Libby Harper at the ACS Section Office (215) 382-1589 or emailing PhilaACS@aol.com

Cost: *includes all materials*, call or email section office, information above; or see Web site <http://muse.widener.edu/~gjm0001/sc.html>

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8792, email: vincegale@adelphia.net.**

PHILADELPHIA SECTION
ACS 2004 CALENDAR OF EVENTS

February 11	<i>Legal Issues for Consultants</i> Chemical Consultants Network chemconsultants.org	Cynwyd Club Bala Cynwyd, PA
February 19	<i>The Science and Art of Glassblowing</i> Glassblowers from Simon Pearce and At-Mar Glass	Simon Pearce Restaurant West Chester, PA simonpearce.com
March 10	Marketing Services for Consultants Chemical Consultants Network chemconsultants.org	Cynwyd Club Bala Cynwyd, PA
March 18	Edgar Fahs Smith Lecture Carlos Bustamante www.upenn.edu	University of Pennsylvania Philadelphia
April 14	A Consulting Story Chemical Consultants Network chemconsultants.org	Cynwyd Club Bala Cynwyd, PA
April 15	Undergraduate Student Awards	To Be Announced
May 12	Chemical Consultants Network chemconsultants.org	Cynwyd Club Bala Cynwyd, PA
May 20	2nd Merck Undergraduate Teaching Award and 13th Pre-College Teaching Award	To Be Announced
June 17	50 Year Member Awards business-services.upenn.edu /arboretum	Morris Arboretum
September 16	Perkin Medal Award/Carrothers Symposium	Chemical Heritage Foundation
October 21	Philadelphia Section Award	To Be Announced
November 18	Ulliot Public Affairs Lecture chemheritage.org/events/ event-nav2-ullyot.html	Chemical Heritage Foundation
December 11	Herb Bassow Memorial Chemical Demonstration Program	West Chester University

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