

the Catalyst



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May 2014
Volume 99, No. 5



May Meeting
Dr. Pamela E. Barnett
Associate Vice Provost and Director
Teaching and Learning, Center,
Temple University

HIGHLIGHTS

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ADVANCE NOTICE

JUNE MEETING

Thursday, June 19, 2014

50- and 60-YEAR LUNCHEON

Iron Hill Brewery and Restaurant
Chestnut Hill, Philadelphia, PA

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

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**Comments
From
The
Chair**



I'm writing my May comments on April 15th. It's Tax Day! My aunt was born on April 15th. It was only appropriate that she spent her career doing other people's taxes. It was always easy to remember her birthday. Tax Day also reminds me of a great quote of James Michener from an excerpt of one of his books that was written up in *Parade Magazine* in 1991. He wrote "The

best money I have spent in my life was not that used to make me either happier or more comfortable, but the taxes I have paid to the various governments under which I have lived." I'm a big fan of James Michener and I have enjoyed reading his books. I resonate to his sentiment about taxes.

I'm sure you feel the way I do concerning the support of the civil servants in the Philadelphia area. The fire departments and police departments in our counties (Philadelphia, Bucks, Montgomery, Chester, Delaware, Camden, NJ, and Burlington, NJ) have men and women who have chosen careers facing danger and stress on a daily basis as they serve and protect the public. We are indebted to these individuals.

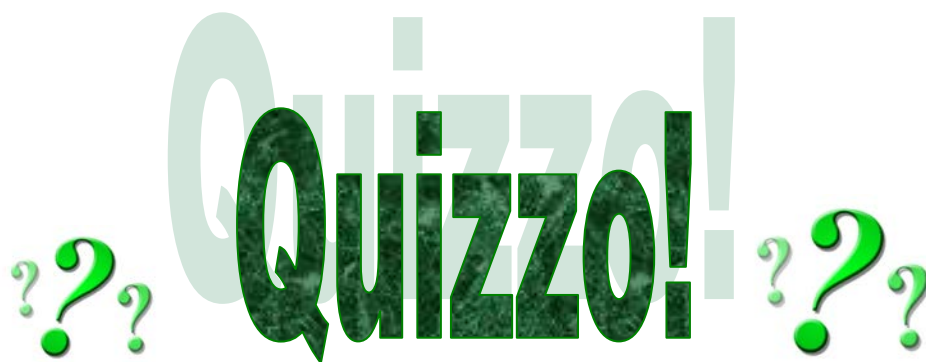
Our federal tax dollars go to the national defense and veterans' programs. We appreciate the service of our military personnel. In times of duress, we benefit from the federal government income security programs (e.g., unemployment benefits, disability insurance, housing assistance, Medicare). I'm happy to pay my taxes in support of those who are in need. If you want to see a detailed breakdown of where your federal tax dollars go you can check out the webpage www.usataxdollars.com/default.aspx.

The major portion (>20%) of my federal tax dollars go to the Social Security program. It is an honor to support those who have retired. It is on the shoulders of these members of the previous generation that we currently labor. Particularly in the sciences, we depend on those who have explored and developed for so many years before us.

Interestingly, it is a rather small percentage (<1%) of my federal tax dollars that go to the support of basic research. Even though it is a relatively minor amount, it is good to be a contributor in the advancement of science.

So what does all of this tax talk have to do with the Philadelphia Section of the ACS? Maybe you can see the connection. We pay our taxes to support the government, the agencies under that umbrella, and ultimately our neighbors and colleagues. Similarly, we can give our time to support the ACS and the individuals that are served by the organization. The ACS serves its retired members, its employed members, its unemployed members, the post-docs, the graduate students, the undergraduate chemistry majors, and the general public. We are trying to do that in the Philadelphia area. If you are helping in that effort, I thank you. If you would like to help in that effort, let us know. There are many opportunities for serving. For example, we are in need

of a volunteer for the position of National Chemistry Week Coordinator for the local section. If you are interested in helping out, please contact Libby Harper (philaacs@aol.com), or me (sfleming@temple.edu). We can fill you in on the details of the position.



Come out for an evening of fun with
the Philly Younger Chemists Committee.

Surprise yourself & your friends with your daily chemistry knowledge!

When: Tuesday May 13, 2014, 7 – 9 PM

Where: Landmark Americana Tap & Grill

3333 Market St, Philadelphia, PA 19104

This event is open to the public! No cover charge!

For more information, please contact Lauren at
lauren.weinrich@amwater.com

MAY MEETING

THE PHILADELPHIA SECTION, AMERICAN CHEMICAL SOCIETY

presents

Dr. Pamela E. Barnett

**Associate Vice Provost and Director, Teaching and Learning Center,
Temple University**

What Works in Science Education?

and

**Presentation of the Philadelphia Section
Pre-College and Undergraduate Teaching Awards**

Thursday, May 15, 2014
7:00 PM

Villanova University Conference Center
601 County Line Road (629 County Line Road with GPS)
Radnor, PA 19087

Dinner at 6:00 PM

Dinner cost \$45; Students with reservations and ID: \$20

RESERVATIONS should be made by calling Mrs. Harper at the section office, (215) 382-1589, or emailing PhilaACS@aol.com by 5:00 p.m. Thursday, May 8. Cancellations, if necessary, cannot be accepted after NOON on Tuesday, May 13. **UNCANCELLED RESERVATIONS WILL BE BILLED.**

DIRECTIONS: <http://www.acc-villanovaconferencecenter.com/villanova-conference-center-en.html>

The Board of Directors will meet at 4:00 PM at the Conference Center.

SPEAKER'S ABSTRACT AND BIOGRAPHY

Dr. Pamela E. Barnett

Associate Provost and Director, Teaching and Learning Center
Temple University

What Works in Science Education?

Abstract: What would it take to implement Nobel Laureate Carl Wieman's proposal to take a "scientific approach to science education?" In this talk, I will share current trends in STEM educational achievement, research on best practices for promoting students' learning and success, and a blueprint for a university that applies as much rigor and scholarly attention to education as it does to research.

Biography: Pamela E. Barnett has served as Associate Vice Provost, and Director of Temple University's Teaching and Learning Center, since 2007. As the university leader charged with fostering excellent teaching in all schools and colleges, she is gratified that over 1,500 educators participated in faculty development activities this year. She is Graduate Faculty in Temple's department of Psychological, Organizational and Leadership Studies, and publishes in the field of teaching and learning, most recently on issues of diversity and inclusion, the future of instructional technology, and organizational change in universities. She is on the editorial board for *Transformations: The Journal of Inclusive Scholarship and Pedagogy* as well as the international journal *Teaching in Higher Education*. Pamela came to Temple from Princeton, where she was Associate Director of the McGraw Center for Teaching and Learning. Prior to her work in instructional development, she was a tenured Associate Professor of English and African American Studies at the University of South Carolina.

NEWS ATOMS—*Alan Warren*

David W. Christianson, professor of chemistry and chemical biology at Penn, received the 2013 Repligen award in the chemistry of biological processes for his work with the structure and function of metal-requiring enzymes.

DEATHS

John A. Weaver, chemical engineer, December 11, 2013 at 76. He spent most of his career at Rohm and Haas, retiring as vice president in 1990.

Ellis Golub, chemistry professor, January 22, 2014 at 71. He joined Penn's school of dental medicine in 1977 and became full professor in 1990. He chaired the department of biochemistry 1996-2003 and served again as interim chair 2009-2013. Two primary areas of his research

were calcification of hard tissues, and computer applications in biochemistry and molecular biology.

Patrick John McNulty, retired research chemist, February 27th at 90. He was engaged in research at three different locations for Rohm and Haas, primarily in the field of agricultural chemicals. He was named director of employee health and safety and product regulatory affairs, retiring in 1990 after 38 years of service. He then joined Penn's Wharton School for 10 years as senior research fellow and lecturer.

John M. Sondey, retired medicinal research chemist, March 5th at 80. He worked for Merck & Co., for 35 years.

Sister Mary George O'Reilly, chemistry teacher, March 10th at 95. She taught at Holy Child Academy and then joined Rosemont College in 1947. Later she was named dean of the college and in 1962 became president of Rosemont, serving in that office until 1971. She returned to the college in 1982 to direct a capital campaign for new construction and the endowment. From 1996 until 2003 she was executive assistant to the college president.

Gerard Otten, retired chemist, March 25th at 86. Born in the Netherlands he worked as a chemist there and then moved to the United States in 1968 where he worked in the field of water treatment. He was named vice president of Puricon, retiring in 1992. Otten was active in the ASTM Committee D-19 on water.

George J. Crits, expert in ion-exchange technology, March 27th at 92. During WWII he worked on the Manhattan Project and then worked briefly for the Army and the University of California at Los Alamos. He was a technical director for Cochrane Co. for 38 years, retiring in 1988. He held many patents and authored 150 papers on water treatment. After retiring he was a consultant for several water treatment companies and then created his own consulting firm, Aqua-Zeolite Sciences.

Mark M. Chamberlain, former chemistry professor, March 29th at 82. After teaching chemistry at the former Glassboro State College for a number of years, he served as president of today's Rowan University from 1969 to 1984. During his tenure the university underwent significant expansion with new facilities construction. After leaving the presidency he continued to teach chemistry until 2000. He was a volunteer firefighter and active with the Friends of Gettysburg National Park.

Interested in Working for ACS?

We're drawing up the slate of candidates for the fall 2014 election. Specifically, there are openings for chair-elect, treasurer, directors, and councilors. The chair-elect has several responsibilities, including chairing the Section awards and program committees during the first year of the term and running the Section during the second year. The treasurer is mainly responsible for paying the bills and keeping the financial records. Directors form the governance of the local section and meet monthly September-June. Councilors represent the Section at ACS national meetings.

If you would like to run please get in touch with JP Northrop (john.northrop@anton-paar.com) or Libby Harper (PhilaACS@aol.com or (215) 382-1589)).

In addition, we are still looking for a chair of the National Chemistry Week Committee. If you would like to volunteer for this position, please get in touch with Steve Fleming (sfleming@temple.edu) or Libby Harper (PhilaACS@aol.com or (215) 382-1589)).



2014 Edgar Fahs Smith Lecture

Dr. Carolyn R. Bertozzi of the University of California, Berkeley receiving the Edgar Fahs Smith Scroll from University of Pennsylvania Chemistry Department Chair Dr. Gary Molander (l.) and Philadelphia Section Chair, Dr. Steven Fleming (r.) at the March 20th lecture.

FROM THE SPRING COUNCIL MEETING—*Tony Addison*

Council met in Dallas on the morning of March 19th. Our Section was well-represented (see photo, p.71, April *Catalyst*). Peter K. Dorhout and William A. Lester, Jr. were selected as candidates for 2015 President-Elect. Pat N. Confalone and Anne S. DeMasi were selected as candidates for Director in our region. All these folks will appear on the November ballot, as will candidates for Director-at-Large.

The Dallas meeting had 13,680 registrants, including 5,140 students. The ratio of attendees to papers (0.73) seems low to me, given that regional meetings (such as the MARMs) usually have a ratio more like 1.5.

On the recommendation of a Board Task Force, the Meetings & Expositions Committee is operating under a new structure, and on March 16th, discussed criteria for siting of future National Meetings. There is no intention to move to a single annual meeting, but the ACS Board has requested that the Society show a net return of 5% on the National Meetings. This is not easily done, given the number of students whose attendance is effectively subsidized. One outcome is that more attention will be paid to more popular sites, such as San Diego, Boston and San Francisco, so these sites were recommended for several meetings in the 2010-2029 timeframe. Changes in operation modes at some convention centers now appear to make Chicago somewhat more attractive than before, but Philadelphia less so.

Council voted to eliminate the author index in the printed meeting program book, and recommend that folks use the electronic version. The last takes the form of a mobile application, which is becoming quite popular. The reduction of the print version seems to me to be an appropriate move toward elimination of the printed book; quite a thing for a relative Luddite like me to say.

Council voted to set the member dues for 2015 at the fully escalated rate of \$158.

In 2013, ACS generated a net gain from Operations of \$15.1 million, which was \$2.0 million favorable to the budget. This represents the Society's tenth consecutive year of positive operating results. Total revenue was \$490.5 million, essentially flat when compared with 2012, so we did not yet become a "half-billion dollar" organization, as I had expected we should in 2013. Unrestricted net assets rebounded in 2013, rising to \$207 million, and more than doubling from the 2012 level. A good part of this has to do with arcane accounting rule treatment of ongoing pension obligations and the way they are treated as a function of time.

There was an interesting juxtaposition of discussions on two matters: firstly, efforts by the Society to increase the number of young people choosing careers in Science/Tech/Engineering/Math areas. Secondly, though, there was a troubling report about unemployment, which

amongst new graduates rose by 2.4% to 14.9% in 2013, primarily due to relatively high unemployment among recent BS chemistry grads.

The Society voted to nominate individuals for the National Medal of Science - a task we apparently have not previously done.

An event I think is significant was the formation within ACS of the American Association of Chemistry Teachers, which will support K-12 teachers of chemistry by providing them with a professional home that addresses and is responsive to their needs.

While in Dallas, I participated in the Mid-Atlantic Region Board meeting; the ACS MAR 2013 Awards event had been held in May (Philadelphia); the next was scheduled for April 2014 (Glassboro), and the Board is entertaining proposals for 2016 and 2017 MARMs, so I remain hopeful.

DR. AMANDA GRANNAS

2014 Philadelphia Section ACS Awardee for Excellence in Undergraduate Teaching in Chemical Science



It is with great pleasure that the Philadelphia Local Section of the American Chemical Society announces that its 2014 Award for Excellence in Undergraduate Teaching in Chemical Science will go to Dr. Amanda Grannas, Associate Professor of Chemistry at Villanova University. Since joining the Villanova faculty in 2005, Dr. Grannas has established a thriving research group focused on environmental and atmospheric chemistry and has mentored nearly 40 research students in her lab. She has a diverse range of expertise, and her recent projects include the study of snow and ice photochemistry, the fate of organic pollutants in the Arctic and the development of advanced analytical techniques used to study ice cores. She is a prominent and internationally known expert in snow chemistry and has participated in a number of field campaigns in both the Canadian and Alaskan Arctic and has included a number of Villanova students in her fieldwork.

Dr. Grannas is the author of almost 30 peer-reviewed publications and has garnered numerous grants for her program.

Dr. Kassel, Chemistry Department Chair at Villanova says “Dr. Grannas is an excellent teacher, a respected researcher, an outstanding colleague, and an exemplary Department citizen. She demonstrates the teacher-scholar ideal by teaching innovative, rigorous, and challenging courses, while also engaging students in significant and timely research.”

Dr. Grannas’ previous honors include being awarded a prestigious Faculty Early Career Development Award from the National Science Foundation. Additionally, Dr. Grannas was named a 2013 Henry Dreyfus Teacher-Scholar.

656th BOARD OF DIRECTORS' MEETING

Thursday, January 16, 2014
Mitten Hall, Temple University
Philadelphia, PA 19122

Present: S. Fleming, W. Smith, A. Heldon, D. Cichowicz, J.P. Northrop, M. Cichowicz, J. Cohen, D. Cook, E. Davis, A. DeMasi, C. Palmer, K. Shaginaw, T. Straub, J. Tarver, D. Thomas, V. Tortorelli

Also: C.J. Bruner, J. Currano, R. Ewing, E. Harper, J. Martino

Excused: D. Hausner, C. McInnis, J. Summers-Gates

The January Board Meeting of the Philadelphia Section was called to order at 4:06 PM. A quorum was present.

1. A motion to accept the October Board Meeting Minutes, with minor corrections, passed with no nays and one abstention.

A motion to accept the November Board Meeting Minutes passed with no nays and one abstention.

A motion to accept the December Board Meeting Minutes, with minor corrections, passed with no nays and one abstention.

2. Communications D. Hausner, C. McInnis and J. Summers-Gates asked to be excused from this meeting.

3. Committee Reports

A.) Career Services Joe Martino

A networking event is scheduled for January 29th at Miller's Ale House on Rt. 611 in Willow Grove.

Career Services is planning for workshops and other events for 2014. Career "Clubs" are being considered in addition to workshops. Dates and venues will be announced as they become available.

B.) Tellers Committee Tom Straub

Since Bill Smith is Chair-elect, his Board position is vacant and needs to be filled. The Section Bylaws require this vacancy be filled by the first runner-up Board candidate from the latest election. Michelle Johnson is the first runner-up. The term is for one year. Michelle Johnson was appointed to fill this vacancy by motion with no nays or abstentions.

4. Officers' Reports

A.) Chair Steve Fleming

On behalf of the Board, Chair Fleming welcomed Judy Cohen, a new Board member.

1. The process of re-submitting to the Section membership the proposed new Section Bylaws is awaiting input from the national Constitution and Bylaws Committee. At issue is exactly what must be included with the ballot. The deadline dates are looming.

There was a brief discussion of cumulative voting for Board candidates which was permitted under our current bylaws but not included in the proposed bylaws. No technical barriers would prevent us from continuing the practice. There was no motion.

2. Committees for 2014

Chair looking for candidates to bring the Section's committees up to strength. Will ask election runners-up if they are interested in serving on one or more committees. What committees are most in need of additional members?

Doug Hausner will be our "Audit Person"

Rick Ewing has been elected Chair of our Councilor Affairs Committee.

The February Section meeting will be Thursday, February 20 at Ursinus College. The topic will be the chemistry of food with Guy Crosby of *America's Test Kitchen* as the speaker.

B.) Chair-elect Bill Smith

Bill reported attending a pre-leadership webinar and planned on participating in more leadership training at the Dallas National Meeting.

MARM's Chemagination will be at Princeton in May 2014. The Philadelphia Section will need to do a local contest.

May 3, 2014 the Bristol High School Student group will be manning our booth at the Philadelphia Science Festival Carnival on the Parkway and will be teaming with the YCC. We will need a bigger booth.

In view of the fact that the Section carries out a number of K-12 related events each year, including National Chemistry Week and the Science Carnival, the Chair-elect proposes establishing an Omnibus K-12 Committee to plan and coordinate these events more effectively.

C. Secretary Alan R. Heldon

Secretary Heldon reported receipt, from ACS National, of a "Past Chair" pin in appreciation of J.P. Northrop's service as chair for 2013.

D. Treasurer David Cichowicz

The Treasurer reports the transfer of \$20,889.94 unspent in 2013 to the 2014 budget.

The Section's investments are growing nicely.

The proposed Section budget for 2014 has been circulated to the Board. Without further discussion, on motion, the proposed budget was approved no nays or abstentions.

5. Other Business:

A. J. P. Northrop reported that the Section's annual report is in preparation.

The first draft of the Work Manual is being reviewed by the executive committee. The proposed draft is about one-half the length of the old manual. Further revisions await feedback. A new manual should be ready by the end of the year.

B. Judy Cohen is looking for nominations for ACS Fellows. There are currently three names in nomination but there can be up to 12 names.

Libby Harper is working on completing the list of Philadelphia ACS Fellows for the Catalyst.

C. The Temple U. Student affiliate group has made a travel grant request for \$1,000.00. The deadline for Dallas is January 31st. The Temple request is tabled until the February meeting. An e-vote on the Temple request will be done in early February if necessary.

There being no additional business before the Board, the meeting was adjourned pursuant to motion at 5:05 PM.

Respectfully submitted,

Alan R. Heldon, Secretary

657th BOARD OF DIRECTORS' MEETING

Thursday, February 20, 2014

Pfahler Hall, Ursinus College

Collegeville, PA

Present: J.P. Northrop, T. Straub, C. Palmer, D. Cichowicz, M. Cichowicz, J. Summers-Gates, E. Davis, K. Shaginaw, D. Thomas, W. Smith, V. Tortorelli, S. Fleming, C. McInnis, A. DeMasi

Absent: J. Cohen, D. Hausner, J. Tarver, M. Johnson

Also: E. Harper, D. Walsh, R. Gates, and C.J. Bruner

1. Approval of the minutes for January: Due to Alan Heldon's unavailability there is no draft of the January minutes, so approval postponed. Anne DeMasi is taking the minutes today.

2. Communications: A. Heldon and D. Cook have asked to be excused from this meeting.

3. Committees:

A. Career Services – Joseph Martino sent a report, report accepted as is, attached to these minutes.

B. YCC – Christie McInnis – The YCC webinar on February 11, *Love Potion #9, The Chemistry of Scent and Fragrance*, was hosted by the Drexel Chem Club. Attendees included non-YCC members. A representative of International Flavors and Fragrances brought a sampling of scents with her.

Jan 29th Networking event was not a YCC event, small turnout – encourage Board members to attend network events.

March Poster Session – need help from Board, extended abstract deadline, 23 people have signed up, need more attendees, asked Board to spread the word, expect snow has been a distraction.

Please sign up on the website, must be pre-registered, closes March 1st.

Science Festival Carnival is May 3rd, Bill Smith has been an excellent mentor, looking for more YCC volunteers.

Quizzo night in May – announcement to follow.

4. Officer's Reports

A. Chair Fleming

Steve thanked JP and Dave for submitting the annual report on time. It is now the responsibility of the immediate past chair to submit the report.

Welcome to Deborah Walsh, thank you for being Project Seed coordinator. Deborah will contact Tom Straub for initial assistance.

March 20th meeting at UPENN, Carolyn Bertozzi is the speaker.

McCall conference Center for Student Awards, April 17th is confirmed, Carsten Reinhardt, President and CEO of CHF will be speaker.

May Teacher's Award -location TBD – winner has not been identified, will pursue Villanova as a venue.

John Tierney has submitted last year's high school teaching award winner, Derrick Wood, for the MARM Regional High School Teaching Award.

Bylaws: (Libby) A printed hard copy of the ballot and of the revised bylaws may have to be mailed to each voting section member. Printing should not be an issue. The issue with mailing is that we need a new mailing permit. We hope to have it from the post office within a month.

It was suggested that if we don't need to include a printed hard copy of the bylaws, then we should send the ballot first class and bear the extra expense. Libby will check back with Barbara Polansky at National to confirm what exactly is required.

B. Chair-Elect Smith

1) Leadership Institute in Dallas – compared to other very large sections, the Philadelphia section is taking the lead in using emails. We do know we have to do everything as in the 1996 bylaws.

An Ad Hoc program committee has been formed. The Awards Committee has also begun its tasks for this year.

2) Education Projects

a) MARM Chemimagination, will happen in April, our second year, we gave a Phila award to someone in Princeton in error last year; we need to tighten up our list of invitees

b) Phila Science Carnival, paper work is completed, will run booths with Bristol Chem Students and YCC, have a much bigger booth; date is May 3rd.

c) Regional Chem Club meeting -- National likes the idea and wants to help us -- will have a program in the fall, need to lock in a date during March, sign contract with CHF, get program started, have it during National Chemistry Week -- eligible for a Chemluminary Award.

3) Education Committee -- wants to re-visit its activities, will talk to Tom Straub.

C. Treasurer -- D. Cichowicz

Board does not have copies of the report -- we did receive our allotment, investments are down slightly. Will vote to approve in March.

5. Other Business

A. Temple University Chem Society Student Travel request -- passed, all participants from the university are presenting at the award poster session; we have awarded funds to other student members doing this in the past (Motion JP, second M. Cichowicz), Tom Straub abstained.

Smith -- need a period of discussion before an internet motion, we need clarity when we are asking for a vote, perhaps run an email discussion over a three day period, cut off discussion then vote.

B. Kathy Shaginaw -- PAGES is April 5th, she is seeking volunteers.

C. Tom Straub -- Chemistry Olympiad is taking place, invitations have been sent, local test goes out next week.

D. MARM Award -- Emmet Reid Award for Undergraduate Teaching. We should submit last year's awardee, Jason Cross. S. Fleming can do nomination.

E. STEM professionals -- The School District of Philadelphia has a teacher training program for STEM professionals.

Meeting adjourned at 5:08 PM.

Respectfully submitted,

Anne DeMasi for Alan Heldon

Student Scholastic Achievement Award Winners at the April Meeting

Front row, left to right: Kristen Biernat, Britt Benner, Jacob Black, Jacob Shusterman and Sean Taylor.

Rear, left to right: Elena Montoto, Kaitlin Dylnicki, Kristen Kelly, Jennie Liao, Ashley Beck, Matthew Romei, and Caitlin Gottier.

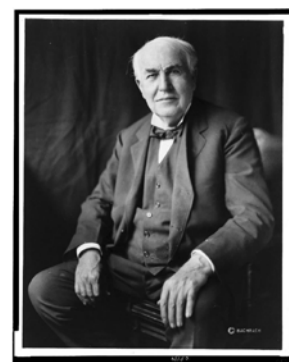


Thomas Edison's West Orange Laboratory to be Recognized as a National Historic Chemical Landmark

The American Chemical Society will recognize the chemical research and developments of inventor Thomas Alva Edison (1847–1931) as a National Historic Chemical Landmark in 2014. Applications of chemistry were a common theme in many of his inventions, including the carbon filaments used in light bulbs, plastic materials used in phonograph records, development of the nickel-iron alkaline electric storage battery, and research into domestic sources of rubber.

Edison's work will be celebrated at the Thomas Edison National Historical Park in West Orange on Friday, June 6, 2014, in partnership with the North Jersey Section of ACS. A community festival for families, Edison Day, will follow on Saturday, June 7th. For updates and information, visit www.acs.org/landmarks.

Edison opened his West Orange laboratory complex in 1887 as an expanded site for research and product development. The complex was among the most modern and well-equipped industrial research facilities in the world and included a chemical laboratory and library of chemical information to support Edison's expansive research, as well as chemical manufacturing operations and factories to produce Edison's inventions. Chemical developments originating from the West Orange laboratory included plastics and waxes for disc and cylinder phonograph records, nickel-iron alkaline electric storage batteries, and improvements to the manufacture of Portland cement.



Portrait of Thomas Edison in 1922.

Additional celebrations of Edison's work in chemistry will be held by the ACS at the present-day locations of his laboratories. Edison's Menlo Park laboratory will be recognized at The Henry Ford, Greenfield Village, in Dearborn, MI, on September 20, 2014, in partnership with the Detroit Local Section of ACS. The Menlo Park lab was moved from its original site in New Jersey to Dearborn in 1928 when it was reconstructed by Edison's friend Henry Ford. The Edison Botanical Laboratory at the Edison & Ford Winter Estates will be commemorated on May 25, 2014, in Fort Myers, FL, in partnership with the ACS South Florida Section.

The American Chemical Society established the National Historic Chemical Landmarks program in 1992 to recognize important achievements in the history of the chemical sciences. Subjects recognized through this program have included Bakelite, the world's first synthetic plastic; the discovery and development of penicillin; and the work of historical figures such as Joseph Priestley, George Washington Carver and Selman Waksman. More information is available online at www.acs.org/landmarks.

Thomas Edison National Historical Park is a National Park Service site dedicated to promoting an international understanding and appreciation of the life and extraordinary achievements of Thomas Alva Edison by preserving, protecting, and interpreting the Park's extensive historic artifact and archive collections at the Edison Laboratory Complex and Glenmont, the Edison family estate. For more information call (973) 736-0550 ext. 11 or visit: www.nps.gov/edis.

658th BOARD OF DIRECTORS' MEETING

Thursday, March 20, 2014

Makineni Room (#260, Cret Wing), Chemistry Building
University of Pennsylvania
231 South 34th Street
Philadelphia, PA 19104-6323

4:00 PM

Present: S. Fleming, W. Smith, D. Cichowicz, J. Northrop, M. Cichowicz, D. Cook, A. DeMasi, C. Palmer, K. Shaginaw, T. Straub, J. Summers-Gates, J. Tarver, D. Thomas, V. Tortorelli

Also: C. J. Bruner, E. Harper, D. Walsh

Excused: J. Cohen, E. Davis, D. Hausner, A. Heldon, M. Johnson, and C. McInnis

1. Approval of minutes: No draft yet for January. February draft approved without changes.
2. Communications: C. McInnis has asked to be excused from this meeting; J. Cohen has asked to be excused if delayed returning from the spring national meeting in TX.

3. Committees:

A Career Services Report to the Board, March 20, 2014

1) Career Services is planning a second networking event for the Spring of 2014. More details to come as the venue is reserved. Career Services also has circulated a survey about our series of networking events through *the Catalyst* and the monthly email to Section members. Results will be discussed at the next Board meeting.

2) Joe Martino and Lori Spangler will launch the Career Club on Tuesday, March 25th, from 6PM to 9PM at the Community Center of the Giant supermarket in Willow Grove, PA. Discussion as to how the Club is received will take place at the next Board meeting. Joe Martino thanks Lori Spangler and Mary Selman for their assistance with the Career Club and with venue reservations.

3) Our next career workshop on alternative careers for chemists will take place on Tuesday, May 12th, from 6PM to 9PM, also at the Giant Willow Grove Community Center. Invitations have been sent to potential panelists, and event will be publicized once panel has been finalized.

4) As a result of a discussion concerning funds allocated to Career Services for its programming at our last monthly teleconference, the Career Services Committee respectfully recommends to the Board of Directors for their consideration that a yearly report of Section's finances be disclosed to Section members through *the Catalyst*.

B. Younger Chemists Committee –

YCC has poster session ready; board members are invited to attend if registered. David will have checks for prizes at the meeting. A letter of thanks should be sent to committee members; they should be invited to attend a board meeting and dinner at the student rate; copies of the letters should go to their employers/supervisors. A letter should also be sent to the University of the Sciences.

Christie also mentioned the First Friday event at Chemical Heritage Foundation sponsored by the College of New Jersey and the Trenton Section followed by dinner at Karma. Philadelphia Section members are invited.

In May the YCC will be participating in the Philadelphia Science Carnival and plans a Quizzo night at a location to be chosen.

4. Officers' Reports:

A. Chair Fleming –

The Section needs a new National Chemistry Week chair. Anne DeMasi, Deb Cook and Bill Smith have offered to help. A request for volunteers was included in the Chair's Comments in *the Catalyst*.

Our Project SEED Coordinator, Deb Walsh met the chair, Sandra Bonetti, at the Dallas national meeting. A professor from Fordham is going to assist Deb W. and she has some leads to potential mentors.

The list of the 50- and 60-year ACS members has arrived. Letters will be sent with a request for bios. A short presentation of each will be part of the June program.

Student awards will be given April 17th; the deadline is March 27th for receiving the awardee names from each school.

Receipts from Temple students for travel to the ACS meeting are submitted. The Board approved supporting \$500 of their travel costs.

University of the Sciences students also need to be recognized in *the Catalyst* since their Chapter was awarded an honorable mention in Dallas.

B. Chair-elect Smith

Marta Gmurczyk, ACS Manager of the Office of High School Chemistry and Karen Karluati, who runs the ACS high school ChemClub program, like the proposed regional ChemClub meeting; they want it to be a Philadelphia National Chemistry Week event. They have pledged \$1000 to support our effort. We set it up and national will participate. They are very excited to meet one of their goals of having local sections work with the ChemClub program. They want to sponsor a ChemLuminary Award for the Section. A discussion of the new ACS AACT (American Association of Chemistry Teachers) followed.

Philly science carnival, May 3rd with two booths, section and YCC, is on track.

Chemagination – MARM contest for possible articles in *C&E News* 30 years from now – invitations will be sent out soon. Last year we had three winning entries.

Awards committee recommendations will be ready before the next meeting

Program planning for 2015 is running well. Plans to meet in each county of the Section.

C. Secretary Heldon – no report

D. Treasurer Cichowicz

Deb Cook moved to approve the February and March treasurers report; Jim Tarver seconded; motion passed.

There was a question about two uncategorized postal service direct purchases with the debit card. They will be moved to the correct account(s) when the receipts have been received.

Section dues and allotment for 2014 have not been received from national. Anne to follow up on this and also Philadelphia host money from the 2012 national meeting which was not received.

YCC wants checks to be available for prize winners at the poster session. Dave will provide checks to Libby that she can fill in. Board approved this.

5. Other Business:

A. Are local section service awards in work manual? A description should be there. They need to be brought up-to-date. Libby did tracking in past, Anne to help Libby. Put them on the website with perhaps a tab for service. Vic offered to help if needed.

B. ACS Council talking points from the spring meeting were brought up by Kathy Shaginaw. She will forward them to Libby to be distributed to the board and attached to these minutes.

C. The Ocean County section is to be dissolved by LSAC. We may lose a councilor without their members. Deb Cook made a motion to move forward with the possibility of incorporating the Ocean County section into Philadelphia section; K. Shaginaw seconded; motion passed.

D. SOCED – AACT moving forward.

A pilot program for international ACS student chapters was explored.

Also, what can ACS do to improve K-12 education?

E. K. Shaginaw: PAGES will be on April 5th. Ivona Sasimovich from International Flavors and Fragrances will be the speaker.

Communicating Science to the Public: Kathy has been working on it since November. National likes the idea and may provide some resources. They are looking to start a national initiative and there will be training in San Francisco from Alan Alda's education forum.

The meeting was adjourned at 5:24 PM.

Respectfully submitted,

Anne DeMasi
Acting Secretary

Philadelphia Science Festival Carnival

How can you mix your love of chemistry and getting involved with your community? Volunteer at the Philadelphia Science Festival!

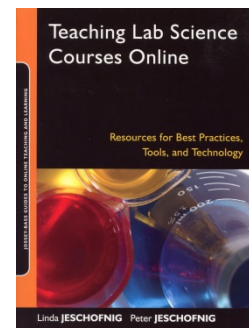
The Young Chemists Council of the Section's Younger Chemists Committee is looking for volunteers to help run their booth at the Philly Science Carnival on May 3rd 2014 from 10 AM – 4 PM on the Benjamin Franklin Parkway.

The YCC will be conducting demonstrations on the chemical, physical, and biological aspects of soap bubbles.

Please contact Francis, tub57042@temple.edu or JD, jdxv13@comcast.net for more information!

BOOK REVIEW—Alan Warren

Teaching Lab Science Courses Online by Linda and Peter Jeschofnig. 200 pages, 7 by 9 ¼ inches, card covers, perfect bound, a Jossey-Bass imprint of John Wiley & Sons, San Francisco, Cal., 2011, ISBN 978-0-470-60704-6, \$28.



The husband and wife co-author team brings together the experience of two retired college educators who now operate Hands-On Labs, Inc., a non-profit institute in distance science education. In light of the decline in science literacy seen in the United States, the authors recognize the increasing use of online learning and offer a means to use the method for wider scientific education. Their thesis is to bring the world of laboratory experimentation and the learning of scientific methods to students via online courses.

Laboratory experiences are important to learning science. Overcoming reluctance to move lab work outside the formal academic institution, and concerns over safety and liability are addressed in this book. Goals sought by distance learning or online teaching include increased personal responsibility for the student, greater investment of personal time and effort, making the learning experience more relevant and interesting, and achieving a greater sense of pride and better understanding as a result of the student's personal discovery process.

The tools for online teaching are described including Learning Management Systems (LMS), video-conferencing tools, social networking, and science-specific software tools that are free or low cost or shareware. The objectives of science laboratory experiences can be achieved via online techniques: learning by doing; understanding the scientific method; recognizing and dealing with potentially hazardous situations; learning to measure, manipulate, observe, and reason; recording observations, drawing conclusions, and clearly communicating results. The authors compare academic institution laboratory training with the use of commercial or instructor-assembled lab kits that can be used at home.

A chapter on the art of teaching online science courses covers the syllabus, course information and materials, the course calendar, assignments, plagiarism, Net etiquette, and other aspects. Another chapter addresses academic integrity of online science teaching with tools to prevent cheating, proctored exams, research papers, and the student tracking feature provided by LMS. Methods are discussed relating to online lab assignments for many disciplines including chemistry, physics, biology, and even virtual dissection. Resources for obtaining lab kits are identified.

Online teaching is already widely practiced. The authors offer persuasive arguments and the tools to extend such learning methods to laboratory science courses.

SCHOLASTIC ACHIEVEMENT AWARD WINNERS, 2014

Arcadia University	Sarah E. Wolf
Bryn Mawr College	Terry Park Huh
Chestnut Hill College	Britt Benner
Drexel University (Chemistry)	Jennie Liao
Drexel University (Chemical and Biological Engineering)	Caitlin Gottier
Eastern University	Ashley N. Beck
Haverford College	Matthew Romei
La Salle University	Kristen L. Kelly
Philadelphia University	Jacob A. Shusterman
Rutgers, The State University	Sean Taylor
St. Joseph's University	Elena Montoto
Swarthmore College	Elena Ruth Kingston
Temple University	Zachary J. Hauseman
University of Pennsylvania (Chemistry)	Samuel Levi
University of Pennsylvania (Chemical and Biomolecular Engineering)	Steven Lee
University of the Sciences Chemistry: in Philadelphia Biochemistry:	Megan Mohadjer Beromi Julie Mercadante
Ursinus College	Kristen Biernat
Villanova University (Chemistry)	Jacob W. Black
Villanova University (Chemical Engineering)	Chenyao Zhang
West Chester University (Chemistry)	Kaitlin Dylnicki

THE ACS PHILADELPHIA SECTION CAREER SERVICES COMMITTEE EVENTS

The Career Services Committee is working very diligently to bring you these two upcoming events. Both free events will take place at the Community Center at the Giant super Food Store, 315 York Road (PA 263), Willow Grove, PA 19090. Here's what we have in store for you:

May 13 (6:00-9:00 PM) – Career Workshop on Alternative Careers for Chemists: Join us as we discuss alternative career paths which are available for chemists who wish to transition away from the bench. Panelists include Lori Spangler (Bristol-Myers Squibb), Peter Mlynek (Mendelsohn, Drucker & Dunleavy, PC) and Amanda Martino (Amedra Pharmaceuticals). Opportunities to ask the panelists questions as well as networking will be provided. For further information, please visit <http://bit.ly/1o4JDk4>.

June 3 (6:00-9:00 PM) – Career Club: Come and join ACS Career Consultant Lori Spangler to discuss your career concerns. Any career topic is fair game for discussion. This program is open to all chemists – employed or unemployed, student or experienced. For further information please visit <http://bit.ly/1o4JLQF>.

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**PHILADELPHIA SECTION, ACS
2014 CURRENT CALENDAR OF ACTIVITIES**

Date	Event	Locations
Monday, May 12	Delaware Valley Mass Spectrometry Discussion Group Vendors Meeting: Jack Beauchamp, California Institute of Technology: <i>Designer Tools for Proteomics and Glycomics: Isobaric Tags, Cross Linkers, and Sequencing Reagents</i>	Villanova Conference Center (Note: this is NOT on the Villanova University campus) Radnor, PA http://science.widener.edu/svb/msdg/
Tuesday, May 13	Younger Chemists Committee: Quizzo night	Landmark Americana Tap and Grill Philadelphia, PA
Tuesday, May 13	Career Workshop on Alternative Careers for Chemists	Giant Food Store Community Center Willow Grove, PA http://bit.ly/1o4JDk4
Wednesday, May 14	LRIG Technology Showcase	Holiday Inn Somerset Somerset, NJ http://goo.gl/duzkGV
Wednesday, May 14	American Institute of Chemical Engineers: Veolia Energy Philadelphia Power Plant Tour	Philadelphia, PA http://aiche-philadelphia.org/events/2014-events/may-14-2014-veolia-tour/
Thursday, May 15	Philadelphia Section Awards for Excellence in Chemistry Teaching: Undergraduate Teaching to Amanda Grannas, Villanova University.	Villanova Conference Center (Note: this is NOT on the Villanova University campus) Radnor, PA http://www.acc-villanovaconferencecenter.com/villanova-conference-center-en.html
Thursday, May 15	Heritage Day	Chemical Heritage Foundation Philadelphia, PA www.chemheritage.org
Tuesday, May 20	Chromatography Forum of Delaware Valley: Fred Rabel, ChromHELP: <i>Analysis of Herbals/ Medicinals – How Authentic are Your Supplements?</i>	D'Ignazio's Towne House Media, PA http://www.cfdv.org/
Thursday, May 22	Philadelphia Organic Chemists Club: Tristan H. Lambert, Columbia University: <i>The Use of Aromatic Ions for the Design of Highly Reactive Organocatalysts:</i>	Chemistry Department University of Pennsylvania Philadelphia, PA www.pocclub.org
Tuesday, June 3	ACS Career Club	Giant Food Store Community Center Willow Grove, PA http://bit.ly/1o4JLQF
Friday, June 6	Thomas Edison National Historical Park Dedication as a National Historic Chemical Landmark	West Orange, NJ www.acs.org/landmarks
Thursday, June 19	Luncheon Honoring Our Fifty- and Sixty-year Members	Iron Hill Brewery and Restaurant Chestnut Hill, Philadelphia, PA
June 22-25	88 th ACS Colloids and Surface Science Symposium	University of Pennsylvania Philadelphia, PA http://www.colloids2014.lrsu.upenn.edu
Thursday, September 18	TBA	TBA
Thursday, October 16	Philadelphia Section Award	TBA
Wednesday, November 12	Ulliyot Lecture: George Whitesides, Harvard University	Chemical Heritage Foundation Philadelphia, PA
Saturday, December 13	Chemistry Demonstrations and Hands-on Activities for Children for All Ages	TBA

**248th ACS Fall National Meeting
August 10-14, 2014
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