Joint Meeting of Philadelphia ACS, ChemPharma Professional Association, the AIChE Delaware Valley Section and the STLE Philadelphia Section
Dr. Britt Dahlberg, Science History Institute

Conshohocken Brewing Company
3100 Horizon Drive
King of Prussia, PA

See the FEBRUARY issue of *the Catalyst* for details,
call the Section Office at (215) 382-1589 or email PhilaACS@gmail.com.
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Advertising: Victor Tortorelli, vtortorelli@ursinus.edu
INTRODUCING OUR NEW CHAIR
—Joseph A. Martino III
American Chemical Society Career Consultant

Born and raised in Norristown, PA, Joe Martino earned his BS in the Comprehensive Science Program with a Minor in Chemistry at Villanova University. He remained at Villanova University to earn his MS in Chemistry under the direction of Professor Robert M. Giuliano. Here, Joe performed research on the chiral resolution of racemic amicetose, a 2,3,6-trideoxyhexose, using lipase-catalyzed transesterifications and hydrolyses. (Noecker, et al., Tet. Asym. 1998, 9(2), 203-212.) From here, Joe served as Senior Chemist at Arkema in King of Prussia, PA, where he performed process chemistry on organophosphines and tin catalysts as well as applications development on tin catalysts. Joe then was employed at the Metabolic Pathways Center of Excellence in Drug Discovery at the Upper Merion West campus of GlaxoSmithKline, where he performed large-scale preparatory synthetic work in support of a group of approximately 70 medicinal chemists.

Joe currently serves as an Independent Contractor to the American Chemical Society, where he presents the ACS Career Pathways series of career workshops at ACS National, Regional and Local Section meetings as well as to universities and to address corporate downsizings upon request. He is pro-active as an ACS Career Consultant on both the national and local levels, frequently serving National and Regional meetings as well as Local Sections and universities upon request. Joe has single-handedly recruited five ACS Career Consultants to the program and continues to provide input toward its success. He has also served for four years as a Consultant to the ACS Council of Economic and Professional Affairs. Locally, Joe has served as Chair of the ACS Philadelphia Section’s ChemLuminary Award-winning Career Services Committee, where he grew the committee to a pro-active group of nine volunteers that has organized career workshops, career counseling events for Section members as well as established partnerships with local universities, Local Sections and ACS Divisions. Joe has also served as a Member of the Board of Directors of the ACS Philadelphia Section, where he campaigned for the re-establishment of the Section’s Program Planning Committee to organize the Section’s Regular Meeting. As 2019 Chair-Elect of the ACS Philadelphia Section, Joe chaired the Awards Committee and the Program Planning Committee, assisted in the creation of the 2019 election slate, and supported the efforts of the 2019 Chair of the ACS Philadelphia Section. Joe’s efforts have been recognized with the 2014 ACS Philadelphia Section Local Section Outreach Volunteer of the Year Award and the 2016 ACS Career Volunteer Award.

Outside of chemistry and career development, Joe enjoys spending his time with his wife and two sons, whose opinions and love of life continue to astound and amaze their proud father. He
enjoys travelling with his family, cheering his sons on in swimming and Taekwondo, and keeping busy with house projects and getting together with family and friends. Joe has also been active in church ministry, serving in various leadership roles for YASKI, a young adult Roman Catholic ministry in Wayne, PA. Joe has also served as a Lector, Extraordinary Minister of Holy Communion and a member of the Pastoral Council of Holy Saviour Parish in Norristown, PA. He continues to serve as a Lector and a member of the Christian Family Movement at St. Mary Roman Catholic Church in Schwenksville, PA.

Happy New Year! Before I begin my first column as Chair, I would like to publicly thank my predecessor, Jim Murray, for his hard work in moving our Section forward. It was my pleasure to work with Jim in 2019, and I know that I have rather large shoes to fill. Thanks, Jim!

When I was in high school, my history teacher became the yearbook moderator. He would motivate our class about his newfound responsibilities, and – probably in an attempt to recruit new yearbook volunteers -- tell us frequently: “The yearbook is only as good as you make it!”

I share this story with motivation and with optimism toward my new responsibilities to the ACS Philadelphia Section and to you. What my high school teacher said holds true for the ACS Philadelphia Section as well: It is only as good as you – the members – make it.

But, you may ask, what is the ACS Philadelphia Section? Where are we going? And what do we want it to be?

This is where January’s Section Expo will help. Here, you will hear a talk from University of Pennsylvania Chemistry Professor and ACS Past President Joe Francisco about what membership in ACS means to him and can mean to you. You will get a chance to network with our leadership and Committee Chairs to see what the ACS Philadelphia Section does for its membership. Finally, you will get to see what we are ultimately all about – chemistry. Our Younger Chemists Committee will be holding their long-awaited annual poster session, where they are eager to share their scientific research with you!

Moving forward into 2020, we will be networking with our friends at ChemPharma, the AIChE Delaware Valley Section and the STLE Philadelphia Section in February at Conshohocken Brewing Company in King of Prussia, where we will be hearing Dr. Britt Dahlberg of the Science History Institute speak about her research on the effects of asbestos exposure on the people of nearby Ambler. In March, we continue the great tradition of the Edgar Fahs Smith Memorial Lecture featuring Professor Barbara Imperiali of MIT. Finally, the ACS Philadelphia Section is honored to be the host Local Section for the 2020 ACS Spring National Meeting to take place from March 22-26 at the Pennsylvania Convention Center in Philadelphia.
Yes, the Section is only as good as you – its members – make it, and, as you know, you – the members – over the years have made it a very great and justly famous Section. Please come join us and say hello! Feel free to reach out to me at philaacs@gmail.com with your thoughts and ideas, and I hope to meet you soon!

Happy New Year!

NEWS ATOMS—Alan Warren

Yelin Jung of Bryn Mawr College received a 2019 ACS Division of Organic Chemistry summer undergraduate research fellowship.

DEATHS

Donald Michael Lynch, reported by National ACS, no further details available.

Roberta Colman, emerita professor of chemistry and biochemistry, August 15, 2019 at 81. Following postdoctoral work she taught at Washington University and then Harvard Medical School. She joined the University of Delaware faculty in 1973 and retired in 2009. She authored over 260 technical articles, many of which dealt with enzyme structure and enzyme catalysis.

She served as treasurer of the American Society for Biological Chemists and on the executive council of the American Society for Biochemistry and Molecular Biology. Colman chaired the ACS division of biological chemistry, and was a member of the editorial board of Archives of Biochemistry and Biophysics for 27 years. She was awarded the University of Delaware’s highest faculty honor in 1985, the Francis Allison award.

Patrick T. Hardesty, analytical chemist, September 10th at 68. He spent his career with DuPont, retiring after 34 years as a manager in the global regulatory affairs group for crop protection.

Ike Yi Chang, research chemist, October 24th at 94. He worked for 30 years at DuPont conducting research on polymer chemistry.

William Charles Kashatus, Jr., former oncologist, November 29th at 90. Following degrees in chemistry he graduated from Hahnemann and spent 40 years in medical practice and teaching there. He also served as Mid-Atlantic region medical director for SmithKline Beecham clinical laboratories.
This event is free and open to the public.

The Board of Directors meeting will be held prior to the Expo from 4:45 to 5:30 in Room 201 of the Athletic/Recreation Center of the University of the Sciences.

All ACS Philadelphia Section Board of Directors meetings are open to the public and are available through teleconferencing. To attend the Board of Directors meeting by teleconference, please use the following access information:

Dial-in number (US): (605) 472-5573
Access code: 714653, then press #
International dial-in numbers: https://fccdl.in/i/philaacs
Online meeting ID: philaacs
Join the online meeting: https://join.freeconferencecall.com/philaacs
SPEAKER’S BIOGRAPHY

Dr. Joseph S. Francisco

President's Distinguished Professor of Earth and Environmental Science and Professor of Chemistry at the University of Pennsylvania

Joseph S. Francisco is the President's Distinguished Professor of Earth and Environmental Science and Professor of Chemistry at the University of Pennsylvania. He received his BS at the University of Texas, Austin, and he received his PhD from Massachusetts Institute of Technology. Francisco was a Research Fellow at Cambridge University in England, and a Visiting Associate in Planetary Science at California Institute of Technology. His research has focused on bringing new tools from experimental physical and theoretical chemistry to atmospheric chemical problems to enhance our understanding of chemistry in the atmosphere at the molecular level. This work has led to important discoveries of new chemistries occurring on the interfaces of cloud surfaces as well as fundamental new chemical bonding controlling these processes. He was awarded an Alexander von Humboldt US Senior Scientist Award; appointed a Senior Visiting Fellow at the Institute of Advanced Studies at the University of Bologna, Italy; Professeur Invité at the Université de Paris-Est, France; a Visiting Professor at Uppsala Universitet, Sweden; an Honorary International Chair Professor at National Taipei University, Taiwan; and an Honorary Professor, Beijing University of Chemical Technology, China. He served as President of the American Chemical Society in 2010. He is a Fellow of the American Academy of Arts and Sciences and a member of the National Academy of Sciences.

Jump Start Your Career

At the ACS National Meeting in Philadelphia, several opportunities are available to grow your career.

Personalized Career Advice https://www.acs.org/content/acs/en/careers/personal-career-consulting.html Including mock interviews and résumé reviews at Career Navigator Live! from ACS Career Consultants
Leadership Development https://www.acs.org/content/acs/en/careers/leadership.html Courses that give you the leadership skills necessary to excel in your career
Professional Education https://proed.acs.org/content/proed/en.html Stay competitive and move ahead in your career with professional development and technical training courses
Career Pathways Workshops https://www.acs.org/content/acs/en/careers/career-services/career-pathways.html Workshops that provide career guidance to up-and-coming and professional scientists as they navigate their futures.

To find the complete schedule of these opportunities, please visit our National Meeting Career Development site. (https://www.acs.org/content/acs/en/meetings/national-meeting/events/career-development.html)
CALL FOR NOMINATIONS
2020 ACS PHILADELPHIA SECTION AWARD

Notice is hereby given that the ACS Philadelphia Section invites its members as well as Regional and Topical Groups to nominate candidates for the 2020 ACS Philadelphia Section Award.

This Award shall be presented “to one member of the Section, or in exceptional circumstances to two members of the Section jointly, who by conspicuous scientific achievement has/have made important contributions to the field of chemistry and thereby aided the public appreciation of the profession.” (ACS Philadelphia Section Bylaw X, §1.) Any member of the ACS Philadelphia Section may be nominated. Recent awardees include Donna M. Huryn (University of Pennsylvania), Anthony W. Addison (Drexel University), Marsha I. Lester (University of Pennsylvania), and Michelle Francl (Bryn Mawr University).

INSTRUCTIONS FOR SUBMITTING NOMINATION

1) Nominators should provide a CV of the nominee showing education; employment and/or academic history; a list of publications, presentations and patents; 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, e-mail 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 a 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 at:

ACS Philadelphia Section
Department of Chemistry
University of Pennsylvania
Philadelphia, PA 19104-6323
(215) 382-1589; e-mail PhilaACS@gmail.com

The completed packet of nomination materials may be e-mailed to PhilaACS@gmail.com or mailed by April 1, 2020 to the Chair of the Awards Committee at the Section Office address above.
CALL FOR NOMINATIONS
2020 ACS PHILADELPHIA SECTION
AWARDS FOR EXCELLENCE IN PRE-COLLEGE TEACHING

Notice is hereby given that the ACS Philadelphia Section invites its members to nominate candidates for the 2020 ACS Philadelphia Section Awards for Excellence in Pre-College Teaching.

The Awards honor two outstanding science teachers. One Award will be given to a full-time educator involved in teaching science in grades K-8. The second Award will be given to a full-time educator at the secondary level (grades 9-12) who teaches chemistry. Nominees must teach in the geographic territory of the ACS Philadelphia Section (Philadelphia, Bucks, Chester, Delaware and Montgomery Counties in Pennsylvania, and Burlington and Camden Counties in New Jersey).

PLEASE NOTE! Nominations for 2020 will now be accepted until March 1, 2020.

INSTRUCTIONS FOR SUBMITTING NOMINATIONS

1) A Nominator Recommendation of not more than 750 words submitted by the nominator according to the guidelines outlined on the Recommendation Form.

2) A current curriculum vitae or resume that includes a list of the nominee’s honors, professional activities, and additional evidence of service to the profession. This must be limited to no more than two pages and the activities listed must have occurred within the past five years.

3) A statement by the nominees of not more than 500 words that describes the nominee’s teaching philosophy or commitment to the profession.

4) At least one, but not more than three, letters of support. One letter, of no more than 400 words must be from the teacher’s current principal or supervisor. Additional letters of support, of no more than 400 words, may be sent by colleagues, members of the ACS who are familiar with the nominee’s achievements, or former students and parents of former students.

5) The total nomination package should not exceed 30 pages.

The nomination package may be e-mailed or sent to:

ACS Philadelphia Section
Department of Chemistry
University of Pennsylvania
Philadelphia, PA 19104-6323
(215) 382-1589; e-mail PhilaACS@gmail.com

The Award Recipient will be honored at our April 2020 Section meeting with a plaque and an honorarium.
CALL FOR NOMINATIONS
2020 ACS PHILADELPHIA SECTION
AWARD FOR EXCELLENCE IN UNDERGRADUATE TEACHING IN THE
CHEMICAL SCIENCES

Notice is hereby given that the ACS Philadelphia Section invites its members to nominate candidates for the 2020 ACS Philadelphia Section Award for Excellence in Undergraduate Teaching in the Chemical Sciences.

This award will honor an outstanding, full-time educator involved in teaching an undergraduate course in the chemical sciences (i.e., chemistry, biochemistry). Nominees must teach in an institution that is within the geographical territory of the ACS Philadelphia Section (Philadelphia, Bucks, Chester, Delaware and Montgomery counties in Pennsylvania, and Burlington and Camden counties in New Jersey).

Nominations for 2020 will now be accepted until March 1, 2020.

Nominations should consist of the following:

1) A letter of nomination.
2) The nominee’s resume.
3) Two letters of recommendation.
4) The total nomination package should not exceed 30 pages.

The nomination package may be e-mailed or sent to the Chair of the Awards Committee at:

ACS Philadelphia Section
Department of Chemistry
University of Pennsylvania
Philadelphia, PA 19104-6323
(215) 382-1589; e-mail PhilaACS@gmail.com

The Award Recipient will be honored at our April 2020 Section meeting with a plaque and an honorarium.
Marvelous Metals! - Dr. Bill Smith, Project Coordinator

Students from across the Section’s territory participated in our annual Illustrated Poem Contest for National Chemistry Week. This year’s theme was Marvelous Metals!

We had 76 entries to judge and one week to do it! Special Thanks to Education and Outreach Committee members Dr. Christine Cocozza, Mrs. Lindsay Davis, Dr. Laura Grande, Mr. Alan Heldon, and Dr. Craig McClure for volunteering to judge and being so efficient!

This year’s winners are:

**Grades 9-12 Category**

Nikkita Pandey – Conestoga High School, Malvern, PA – Teacher: Mr. Derrick Wood
Grades 3-5 Category

Josie Caber – Pennell Elementary School, Ashton, PA – Teacher: Ms. Cameron

Zinc, Oh zinc

Let’s get this straight
It’s the 24th most common element in the state

Zinc is in our seawater
It comes from the air and the land
If you don’t like zinc then you just don’t understand
Grades Kindergarten-2 Category

Layla Mansfield – Pennell Elementary School, Ashton, PA – Teacher: Ms. Cameron

Each of the Section winners received a $50 prize and a First Place certificate. In addition, their entries were submitted to National but, sadly, did not bring home any further prizes. The remaining entrants received an Honorable Mention certificate.
Volunteering for 259th ACS National Meeting in Philadelphia, Spring 2020

Philadelphia will be the site of the 259th ACS National Meeting in Spring 2020-- "Macromolecular Chemistry: the Second Century" (March 22 – March 26, 2020). The Local Sections wants to show some Philly “LOVE” so that each attendee has a great experience.

We are seeking more volunteers. Examples of some open opportunities to serve:
(a) coordinate items for give-away at the Host Section booth;
(b) serve as liaison for the Committee on Community Activities to assist in a community outreach event on Saturday March 21, 2020;
(c) coordinate staffing the host welcome booth at the Convention Center.

Please contact Sharon L. Haynie, PhD (SLHaynie55@gmail.com) if you have questions or are interested in volunteering.

ACS CAREER CONSULTANTS

Would you like to speak to a local ACS Career Consultant? The Philadelphia Section career consultants can provide one-on-one career advice, resume reviews, or mock interviews. Please send an email request to acsphillycareerservices@gmail.com to set up an appointment.
SYNTHESIS ON SCALE:
PROCESS CHEMISTRY IN THE PHARMACEUTICAL INDUSTRY

Registration, Light Breakfast

Jean-Michel Adam, F. Hoffmann-La Roche Ltd.
“BACE1: From 12 mg to 7 kg, a Great Mix of Challenges, Surprises and Achievements”

Sue Zultanski, Merck & Co.
“Process Development of a Robust Manufacturing Route for Bridion”

Lunch

Jennifer Albaneze-Walker, Bristol-Myers Squibb
“Synthesis of Phosphorodiamidate Oligonucleotides”

Scott A. May, Eli Lilly & Co.
“Continuous Processing of API: From Milligrams to Manufacturing”

Reception

Wednesday, January 15th, 2020, 9:00 AM – 4:00 PM
Department of Chemistry & Chemical Biology
Rutgers University
321 Bevier Road, Piscataway, NJ 08854
CHEMICAL CONSULTANTS NETWORK  
JANUARY 8, 2020 MEETING 

THE SCIENCE AND MANUFACTURE OF VACCINES

Dennis M. Gross, MS, PhD  
CEO, Pennsylvania Drug Discovery Institute

DATE & TIME: Wednesday, January 8, 2020, Bacco Italian Restaurant, North Wales, PA 
Networking, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM 

Click here to register

Abstract: The world daily faces the potential for a coming plague of emerging communicable diseases we have not yet been exposed to. Science has developed vaccines for polio, rabies, typhoid, hepatitis A/B, pneumonia, cholera and a number of other communicable diseases whose administration prevents as many as 3 million deaths a year according to the WHO. The way we have made vaccines is time tested and rather effective against known threats. However, with recent history as a guide, we are ill-prepared for the coming plague of emerging diseases such as Ebola, Zika and even Influenza. Yes, many ID experts consider Influenza to be an emerging disease: it is basically different every year. We will look at how vaccines work and take a tour through history looking at how they have been made and the increasing sophistication of modern production, not forgetting that time is not our friend in responding to new emerging threats.

Biography: Dennis Gross is CEO of the PDDI, professor at the Blumberg Institute, faculty at Jefferson University and Sidney Kimmel Medical College, Geisinger Commonwealth Medical College and Harrisburg University. He received his PhD from UCLA (Dr Luciano Barajas) and was a postdoctoral fellow at Tulane University Medical School (Prof. James Fisher and Dr. Louis Ignarro 1998 Nobel Laureate). He joined Merck in 1977, retiring in 2006 as Senior Director working at a number of Merck sites in the US, UK, Italy, Canada and Japan. Upon retiring from Merck, he joined Jefferson University as Associate Dean for the Graduate School and Associate. Professor of Pharmacology & Experimental Therapeutics in the Medical School.

Location: Bacco Italian Restaurant, 587 DeKalb Pike, North Wales, PA 19454. DIRECTIONS

Reservation: Click here to register to attend the event. Fee, including dinner and non-alcoholic beverages, is $35 by reservation/cancellation deadline: noon Monday, January 6th, 2020.
DIRECTORY OF SERVICES

CAREER DEVELOPMENT

Being a part of one of our teams can help you develop organizational and meeting skills as well as help you to network with people from the largest area companies. Public Relations, such as sending out meeting notices and press releases, can help you to develop a network and help you get noticed!

All committees are looking for new members and several are looking for “take charge” chairs. Some, like the Teller’s Committee, involve minimal work—one per year and pizza provided. Others, like positions on Communications or Social Committees, involve one or two hours per month.

Committee details can be found at:
www.membership.acs.org/p/philadelphia
or by calling the Philadelphia Section Office (215) 382-1589.

S U R P R I S E

Our editor by calling and saying you appreciate the quality and content of our newsletter. Our editor works hard to maintain a publication of interest to our membership. Oh, and by the way, you could also give credit to our advertisers who financially support us.

CONTACTS
- Custom Synthesis of Chemicals
  - Gram to Commercial Production
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  - TIGER Scientific Inc.
    324 Stokes Ave., Ewing, NJ 08638
    Phone: 888-329-8990
    Email: sales@tygersci.com

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COMMITTEES SEEKING TEAM MEMBERS
- Career Services
- Chemical Health & Safety
- 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

Contact the Section Office at PhilaACS@gmail.com or (215) 382-1589.
Put “Volunteer” in the subject line or leave a message including contact information.

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Advertising: vtortorelli@ursinus.edu
## PHILADELPHIA SECTION, ACS
### CURRENT CALENDAR OF ACTIVITIES

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<tr>
<td>Monday, January 13 6:00 PM Social hour 7:00 PM Talk</td>
<td>Delaware Valley Mass Spectrometry Discussion Group: <em>Are Mass Spectrometers Truth Machines?</em> by Russ Granr (Lab-Corp)</td>
<td>Villanova University Mendel Hall, Room 154 800 Lancaster Avenue Villanova, PA 19085 See webpage for details: <a href="https://science.widener.edu/svb/msdg/">https://science.widener.edu/svb/msdg/</a></td>
</tr>
<tr>
<td>Wednesday, January 22 6:00 – 9:00 PM</td>
<td>ACS Philadelphia Section Expo and 19th Annual YCC Poster Session</td>
<td>University of the Sciences Athletic/Recreation Center 600 South 43rd Street Philadelphia, PA 19104 See this issue of <em>the Catalyst</em> for details</td>
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Please check the individual websites for additional updated information

All content submissions are due on the 15th day of the month prior to publication