September Meeting
Dr. Michael H. Tunick
Drexel University

Chemistry of Chocolate

HIGHLIGHTS
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ADVANCE NOTICE

OCTOBER MEETING
Tuesday, October 16, 2018
Note: This is a Tuesday

Philadelphia Section Award

Dr. Marsha I. Lester
University of Pennsylvania

See the OCTOBER issue of the Catalyst for details, call the Section Office at (215) 382-1589 or email PhilaACS@gmail.com.
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Advertising: Vince Gale, MBO Services, P.O. Box 1150, Marshfield, MA 02050,

email: cust-svc@mboservices.net.
I hope everyone had an enjoyable summer, despite all the rain we received. The excitement of summer doesn’t have to fade away as we have many local ACS events lined up for this fall and winter. On September 27th, Dr. Michael H. Tunick at Drexel University will speak on the Chemistry of Chocolate and provide attendees with various chocolate samples. In addition to an informative and delicious presentation, attendees can enjoy dinner prepared by the Culinary Arts & Science students. Please see more details about the September meeting and a link for registration in this issue of the Catalyst. Looking forward, the October meeting will celebrate the recipient of the 2018 Philadelphia Section Award. This year we honor Dr. Marsha I. Lester from the University of Pennsylvania as our winner. Finally, in November the Science History Institute will host Professor Jennifer A. Doudna as the 2018 Ullyot Lecturer:


The 2018 Philadelphia ACS calendar has been full of outstanding events, following a memorable series of activities in 2017. The success of our Section’s 2017 programming has been recognized by ACS National and we have been nominated for two ChemLuminary Awards: Outstanding Local Section Career Program Award and Outstanding Local Section Award. I, past-Chair Deborah Cook, and the Chair of our Career Services, Joseph Martino, attended the 20th Annual ChemLuminary Awards poster session in Boston, MA during the 256th ACS National Meeting to highlight the 2017 accomplishments of our Section. Many other Philadelphia Section members participated in this meeting by serving on governance committees, chairing scientific sessions, and listening to many diverse presentations. I am proud to be a leader of such an active and impactful ACS local section.

**NEWS ATOMS—Alan Warren**

**DEATHS**

**Dale Warren Blackburn**, senior R&D chemist with Smith, Kline & French. No date of death or other details available.

**Harold G. Engle, Jr.**, retired chemist, July 7, 2014 at 84. Following service in the US Navy in Korea he joined Hershey Foods where he was employed as a chemist for 39 years.

**Warren Perrault Johnson**, retired chemical engineer, February 5, 2018 at 95. As an ordnance officer in the Army Air Force during WWII, his unit had the duty to destroy all bombs left in India after the Japanese surrender. He worked for Bethlehem Steel and Hercules before obtaining his master’s degree. He was then employed by Air Reduction and Curtiss Wright.

Johnson joined his family’s marine paint business, Petit Paint, where he started as plant manager and became president when his father retired. He sold the business in 1963 and worked for
Allied Chemical as new business development manager and then American Cyanamid as director of business development and planning, retiring in 1991.

**Owen W. Webster**, retired DuPont chemist, April 13th at 89. In 1955 he joined DuPont’s central research department at the Experimental Station where he spent his 40-year career, retiring as a DuPont fellow. His early research was in the synthesis of cyanocarbons. Later he moved into polymer science and invented group transfer polymerization (GTP), a technology used to make ink for ink-jet printers.

Webster held 34 patents. He received the ACS applied polymer science award in 1993, the American Institute of Chemists’ chemical pioneer award in 1995, and DuPont’s Lavoisier medal in 1996.

**Charles W. Lutz**, retired physical chemist, April 13th at 88. He worked for FMC Corporation and held several patents in phosphates, laundry detergents, and bleaches.

**Edward D. Wysocki**, retired chemical engineer, April 13th at 68. No further details.

**Charles Shambelan**, retired DuPont chemist, May 13th at 88. He helped commercialize Kevlar® used in body armor. Shambelan joined DuPont in 1957 as a chemist and retired in 1989 as a senior research fellow.

**Frank Edward Carevic**, retired chemical engineer, May 22nd at 88. He was employed by FMC Corporation and then Scott Paper, where he retired in 1997 as chief research engineer.

**James Francis Jungé**, retired chemical engineer, June 30th at 97. He was employed by Gulf Oil and later served as a consultant to the oil refinery and petrochemical industries. He was director emeritus of the Pitcairn family investment firm, having served as president from 1963 to 1979 and board chairman 1979-1986. He was also lead director of the board for Pittsburgh Plate Glass, now PPG Industries.

**Harold “Hal” A. Sorgenti**, chemical engineer and business and civic leader, July 11th at 84. He joined Arco Chemical in 1959 as a research engineer and obtained 16 patents. He then held various positions in planning and strategic development, becoming senior vice president in 1976. In 1979 he was named president and CEO of Arco, retiring in 1991.

With a partner he founded Freedom Chemical Company and with acquisitions grew it to $350 million. They sold the firm in 1998. He created the minority-owned EMSCO Scientific Enterprises that provided laboratory ware. His civic contributions included service on the boards of the Philadelphia Orchestra, Academy of Music, Pennsylvania Academy of Fine Arts, St. Joseph’s University and the United Way.

He was recognized with many honors from the Philadelphia Chamber of Commerce, Penjerdel Council, the Franklin Institute and received honorary degrees from St. Joseph’s, Chestnut Hill College, Villanova, Drexel, and Ohio State University.
SEPTEMBER MEETING

THE PHILADELPHIA SECTION, AMERICAN CHEMICAL SOCIETY

presents

Dr. Michael H. Tunick
Assistant Clinical Professor, Drexel University

*Chocolate Chemistry* with chocolate sampling

Thursday, September 27, 2018
*Note: This is the fourth Thursday of the month*

Drexel University
Center for Food & Hospitality Management Academic Building
101 N. 33rd Street, 6th Floor Bistro,
Philadelphia, PA 19104

Board of Directors Meeting: 3:30 PM to 5:00 PM in the Gomes Casino Room

Event: 5:15 PM to 8:00 PM in the Academic Bistro
5:15 PM Registration
6:00 PM Dinner made by Drexel University Culinary Students
7:00 PM Lecture by Dr. Michael Tunick and Chocolate Tasting

Cost is $35 for members, $17 for students

Registration:

[https://www.eventbrite.com/e/philadelphia-section-acs-september-event-tickets-45984433679](https://www.eventbrite.com/e/philadelphia-section-acs-september-event-tickets-45984433679)

or

PhilaACS@gmail.com
(215)-382-1589
Abstract: A great deal of chemistry is involved in the production of chocolate. When the harvested cocoa beans are fermented, storage protein is broken down into peptides and amino acids that react with polyphenols and sucrose to form flavor precursors and the characteristic aroma. The roasting step that follows removes volatile acids and starts the Maillard reaction, leading to the formation of color and flavor compounds. The cocoa butter that is added has six different crystal structures, only one of which leads to the desired silky surface, smooth texture, and meltability inside the mouth. Chocolate is celebrated as a highly craved food, with sugar, fat, caffeine, and other compounds all contributing to this desire. The sensory properties of chocolate, including aroma, sweetness, and texture, appear to contribute to craving. The combination of emotion and chemistry have caused chocolate to be regarded as an aphrodisiac by some people and an excellent treat by most.

Biography: Michael H. Tunick received a BS in Chemistry from Drexel University and a PhD in Physical-Analytical Chemistry from Temple University. He served as a Research Chemist with the US Department of Agriculture in Wyndmoor, PA for 32 years, where he planned and conducted research aimed at creating new dairy products and expanding marketability of existing products. His accomplishments included developing a low-fat mozzarella cheese that has been used in the National School Lunch Program since 1995, devising rapid thermal methods for detection of mislabeled products, determining thermal stability of pathogens, researching physical chemistry of ethnic cheeses and whey powders, and investigating bioactive compounds in milk from cows fed conventionally and on pasture. He has authored or coauthored 130 publications and has co-edited six books. He was named a Fellow of the ACS in 2011 and Oxford University Press published his book The Science of Cheese in 2013. He was an adjunct faculty member at Drexel University starting in January 2016 and became an Assistant Clinical Professor in September 2017 when he retired from USDA.
Excellence in Undergraduate and Pre-College Teaching Awards

Winner of the ACS Excellence in Undergraduate Teaching Award: Professor Steve Fleming of Temple University.

Winner of the ACS Excellence in Pre-College Teaching Award: Mr. Ryan Williams of Abington Senior High School.
50- and 60-Year Member Photos. Union League Event

Top row left to right: Dr. Ara H. DerMarderosian (60), Dr. Deborah Cook (past Chair), Dr. William Smith (60), Mr. Alan Warren (60). Bottom row left to right: Dr. Wolfgang Gunther (60), Dr. David Graves (50), Mr. Donald Minkhouse (50)

2018 Scholastic Achievement Award Winners

Katherine Eames Arcadia University
Steffany Chou Bryn Mawr College
Pia Lopez Bryn Mawr College
Meghan Guagenti Chestnut Hill College
Angelina Laudermalch Delaware Valley University
Victoria Smith Drexel University (Chemistry)
Valerie Neimann Drexel University (Chemical & Biological Engineering)
Kayli N. Martinez Eastern University
Rosalind Jaming Xu Haverford College
Ryan T Blough Immaculata University
Luke R. O’Connor LaSalle University
Amanda Tallon St. Joseph’s University
Barrett M. Powell Swarthmore College
Aaron McLeod Temple University (Chemistry)
Jimin Yoon University of Pennsylvania (Chemistry)
Philadelphia Section High School Students Win First Place at MARM!— Bill Smith

Students Regina Campion and Allison Lowell won first place at the Mid-Atlantic Regional Meeting CHEMAGINATION contest held on June 3rd at Lehigh University. For this event, high school students were asked to imagine that they are living 25 years in the future and were invited to write an article for ChemMatters, an ACS magazine for high school students. In addition to the article, students are asked to design a cover for the magazine. The article was written as if the students were living in the year 2043, looking back at innovations that have occurred since 2018. Regina and Allison’s article was entitled Waste to Watts and their teacher, Ms. Sookyang Chang at Saint Basil Academy guided them through to success; first in our local section contest, and then in representing the Section at MARM.

Their winning entry appears on the following pages.
A new form of harnessing the power of hydroelectricity without harming wildlife or destroying natural space and vegetation can be found within the sewer pipes that run underneath the buildings of your neighborhood. Waste water does not have to be wasteful, because this new development transforms what is flushed down the toilet into a renewable energy source. Hydroelectricity is a great source of clean energy. When collected properly, it produces sixteen percent of the world's energy, second only to fossil fuels.

Humans have been transforming water pressure into clean energy without producing the greenhouse gases that affect our ozone layer for thousands of years. The Greeks used water power to turn wheat into flour and in the mid-1700s, Bernard Forest de Belidor wrote “Architecture Hydraulique.” The first hydropower plant was built in California in 1893. Fast forward to twenty-five years ago in 2018: water energy was harnessed by storing water in reservoirs, blocked up by dams. The dams caused water pressure to build up, then the water was released and the quick flow caused by gravita-
tional pull pushed turbines, turning the rotors of an electricity generator and creating a magnetic force to induce an electric current. This old-fashioned method may have produced green energy, but still had a negative effect on the environment: the reservoirs needed took up a lot of natural space and destroyed vegetation and forced both people and animals out of their homes; the power plants blocked off paths of migratory fish, and some even got caught in the turbines; the plants would also alter the gas composition of the water, which affected the wildlife that lived there. If the dams flooded over vegetation, the vegetation would decompose and release the greenhouse gas methane.

After these were developed, the new idea was to have hydroelectric turbines in the ocean to catch the energy created by the force of the waves. These were designed to be placed nearshore, offshore, and far offshore near the surface of the water. Different methods were used to capture the waves: Terminator devices extended perpendicular to the direction of the waves in order to capture or reflect the energy; attenuators have restraints on the bow and along its length and were positioned parallel to the waves and floated on top of them like a ship to extract the energy; another floating device known as the point absorber was built to move with the motion of the waves and harnessed the energy from the rising and falling of the waves; the overtopping device created a reservoir in the ocean and built up pressure in the water, similar to a dam, before releasing the water back into the ocean. After methods to turn ocean waves into energy came about, the new idea was to harvest the currents that flow through rivers. Rivers can flow as fast as three miles per hour and putting turbines into the sturdy, clay banks provided for another source of hydroelectricity. When heavy rains caused rivers to flood, scientists thought of a new idea: using the force of running water as it flows down the streets and falls into a drainage trap to turn a rotor and create the magnetic field. Seeing the rain drain down near the sewers has triggered a new idea.

It’s time that we start looking for clean energy sources in something that is used everyday by millions of people: the sewer systems. A new method of harvesting electricity from water similarly to how reservoirs collected energy twenty-five years ago, but without harming animals, vegetation, or people can be found right underneath your feet. The pipe system that runs in your house and community relies on gravity, the same force that provides the hydroelectric energy in reservoirs. After flushing, the wastewater enters a drain trap that holds the water for a period of time to prevent sewer odor. The wastewater is released, and flows downhill through a system of wide pipes. A vent system is connected to these drainage pipes to prevent a vacuum forming and slowing down or stopping the flow of the waste water. As the wastewater flows through the drainage pipes, it will run into two turbine wheels located within the pipe. These wheels are designed like a Pelton turbine. Water comes through and hits the spoon shaped cups arranged on the wheel, causing it to rotate and create mechanical energy. These wheels would be connected to rotor of an electricity generator and spaced out enough that the solid waste will be able to freely pass through the gaps between the two wheels and the walls of the pipes. The wastewater
moves the wheels and the rotational motion of the turbine is transmitted from the shaft to a generator. Pelton wheels can contain up to 6 nozzles, and can be controlled by adjusting the flow of water to the buckets.

On average, a person can flush anywhere between 2,336 to 12,775 gallons of wastewater per year, depending on the type of toilet. Imagine that amount times the 1.6 million people that live in Philadelphia, or the 3.9 million people that live in Los Angeles. This innovation can change people lives by using these already moving gallons to produce a lot of clean energy. This method of collecting the electricity will help protect the environment, further securing our earth for generations to come. This would also help improve people’s lives economically. Workers would have to tend to the upkeep of the turbines and others would have to monitor and transfer the magnetic current to harvest the energy. This would create jobs for Americans, not only improving our country's green thumb, but also our prosperity.
2018 NCW Illustrated Poem Contest
Chemistry is Out of This World

The Philadelphia Local Section of the American Chemical Society (ACS) is sponsoring an illustrated poem contest for students in Kindergarten through 12th grade.

Contest Deadline: October 30th (email entries in pdf format / include entry form)

Prizes: $50.00 for each grade category (K-2, 3-5, 6-8, and 9-12)

Contact: Dr. Bill Smith (willsmith2@aol.com) email for a digital entry form ASAP.

Winners of the Philadelphia Local Section’s Illustrated Poem Contest will advance to the National Illustrated Poem Contest for a chance to be featured on the ACS website and to win prizes!

Write and illustrate a poem using the NCW theme, “Chemistry is Out of This World.” Your poem must be no more than 40 words and in the following styles to be considered:

HAIKU - LIMERICK - ODE - ABC POEM - FREE VERSE - END RHYME - BLANK VERSE

Possible topics related to space chemistry include:

<table>
<thead>
<tr>
<th>Light</th>
<th>Stars</th>
<th>Atmosphere</th>
<th>Spectrum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planets</td>
<td>Gases</td>
<td>Supernova</td>
<td>Ultraviolet</td>
</tr>
</tbody>
</table>

Entries will be judged based upon:
- Artistic Merit - use of color, quality of drawing, design, and layout
- Poem Message - fun, motivational, inspiring about yearly theme
- Originality Creativity - unique, clever and/or creative design
- Neatness - free of spelling and grammatical errors

Contest rules:
- All poems must be no more than 40 words, and in one of the following styles to be considered: Haiku, Limerick, Ode, ABC poem, Free verse, End rhyme, and Blank verse.
- Entries are judged based upon relevance to and incorporation of the NCW theme, word choice and imagery, colorful artwork, adherence to poem style, originality and creativity, and overall presentation.
- All entries must be original works without aid from others. Poems may be submitted by hand on an unlined sheet of paper not larger than 11” by 14” or scanned and sent via email. Illustrations may be created using crayons, watercolors, other types of paint, colored pencils, or markers. The illustration may also be electronically created by using a digital painting and drawing app on a computer, tablet, or mobile device.
- The text of the poem should be easy to read and may be typed before the hand-drawn or digital illustration is added, or the poem may be written on lined paper, which is cut out and pasted onto the unlined paper with the illustration.
- No clipart or unoriginal images can be used.
- Only one entry per student will be accepted; all entries must include an entry form. If the illustration is created using a digital painting or drawing app, the name of the program must be included on the entry form.
- All illustrated poems and/or digital representations of the poems become the property of the American Chemical Society.
- Acceptance of prizes constitutes consent to use winners’ names, likenesses, and entries for editorial, advertising, and publicity purposes.
Are you a Chemical Technical Professional looking for a new position or the next level in your current career?

DEVELOP YOUR CAREER AS A CHEMICAL TECHNICAL PROFESSIONAL JOB SEARCH ROADMAP

FREE LIVE WEBINAR
Tues., Sept. 25, 2018
12:00 PM - 1:00 PM EDT

Two ACS Career Consultants, Bill Carroll, Ph.D. and Joseph A. Martino III, M.S, and an Analytical Chemist, Elizabeth Diaz, will discuss soft skills and provide networking advice specific for chemical technical professional that will help you achieve a success in your individual career pathway.

Registration Link:

WHAT YOU WILL LEARN

- How to prepare when the expected or unexpected happens in your career
- What types of new skills or certification prepares you for the next level of your career
- How to talk to others to sell your abilities and experiences, be the most valuable person
- Discover how a 30 sec elevator chat or concise conversation featuring problem statements can improve your career

CHEMICAL CONSULTANTS NETWORK
SEPTEMBER 12, 2018 MEETING

QUICK START GUIDE TO BECOMING A CONSULTANT

Chris Owens – OppNex

DATE & TIME: Wednesday, September 12th at The Cynwyd Club, Bala Cynwyd, PA Networking, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM

Click here to see the latest tools and strategies being covered & to register

Abstract: Have you ever considered becoming a professional consultant? It can be a seemingly daunting and frightening endeavor to set out on your own - as an independent consultant or the principal of a small practice. Luckily, in today's “GIG” economy and with an entrepreneurial revolution taking place, there are plenty of tools, services, and systems to support your startup as a consultant. In this presentation we will discuss what you need to know and what to consider when becoming a professional consultant. We will also talk about ways to find support in tackling both the business and operational aspects of owning a consultancy. Please join us for a “Soup-to-Nuts” perspective on how to set up, organize, and operate your consulting practice, including techniques to sustain business, mitigate risks, and ensure delivery/payment.

Biography: Chris Owens started his career as a process engineer in the biopharmaceutical industry, which led to his later role as a business development executive, serving a wide range of manufacturing industries including food, foundries, chemicals, defense electronics and pharmaceutical. He earned his bachelor’s degree in chemical engineering at Drexel University. Mr. Owens is now president of OppNex, a firm that helps clients bring products and technology to their markets by using multidiscipline, problem-solving teams and owner representatives to implement manufacturing projects.

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

Reservation: Click here to register to attend the event, or e-mail CCNReservations@aol.com or call the CCN phone number at (267) 666-0949 and leave a message. Fee, including food and beverages, is $30 by reservation/cancellation deadline: Saturday, Sept. 8th.

CONSULTANTS - OPPORTUNITY HERE! PLEASE VISIT http://www.chemconsultants.org/

Are You Getting the Benefits of CCN Membership or Event Participation?

The Chemical Consultants Network provides valuable tools for members beyond the meetings and networking. Check out our:

• Valuable past presentations – including methods and techniques on how to do consulting
• Consultants’ Directory – find consultants who can help you solve your problems & meet your needs
• Blogs – did you know that chemists can blog? Yes! A broad range of subjects of value to all of us...
• Resources – useful & helpful information and references
• Join! Most valuable – post your consulting practice information – and have greater visibility!
• If you’d like to speak with one of our members, come to a CCN me
ACHIEVE YOUR CAREER GOALS IN PHILADELPHIA!

Attend the upcoming ACS Career Day in Philadelphia, PA where you can attend panel discussions and table talks and network with other chemists. ACS members get access to even more resources like personalized career consulting including resume reviews, mock interviews, and more.

Saturday, September 15, 2018
8 AM - 5 PM
Temple University
Science Education Research Center (SERC)
1801 N. Broad St
Philadelphia, PA 19122

Register for free at www.acs.org/careerdayphiladelphia

RECRUIT AT ACS CAREER DAYS
Contact us today to learn about how our booth and sponsorship packages can help your company achieve its recruitment goals.
The ACS Philadelphia Section and the ACS-BIOT Mid-Atlantic Student Chapter Presents:

ACS
AN INTERACTIVE CAREER WORKSHOP

Wednesday, October 3, 2018
6:00 PM to 9:00 PM

Room 10A
Garey Hall, Villanova University
Villanova, PA 19085

For more information and to sign up visit: https://acsphillybiotcareerevent.eventbrite.com
698th BOARD OF DIRECTORS MEETING
March 15, 2018
University of Pennsylvania, Philadelphia, PA

Present: David Cichowicz, Melissa Cichowicz, Jason Cross, Ella Davis, Anne DeMasi, Erin Fruchey, Sharon Haynie, Alan Heldon, Lee Hoffman, Kathie Lysko, Joseph A. Martino, Christie McInnis, James Murray, Kathleen Thrush Shaginaw, Victor J. Tortorelli. Elizabeth Wagoner, Michael Vogel

Excused: Deborah Cook, Rick Ewing, Flory Wong

Also present: CJ Bruner, JP Northrop

The 698th Board Meeting of the Philadelphia Section, ACS, was called to order at 4:34 PM. A quorum was present.

1. Minutes
   The Minutes of the February ‘18 Board Meetings were submitted to the Board and were approved as submitted with 0 nays and 0 abstentions.

2. Officers
   A. Chair, Elizabeth Wagoner, ewagoner22@gmail.com
      1. PAGES™ will be April 7th. Volunteers are needed.
      2. YCC Poster Contest is at Temple U. on April 10th. Judges are needed.
      3. April Meeting - Student Achievement Award Presentations, April 17th, at McCall Conference Center.
      4. April 20-28 - Phila. Science Festival, Franklin Institute
      5. April 22-28 - Chemists Celebrate Earth Week, Poetry Competition
      6. May 17 Section Meeting - High School and Undergraduate Teaching Awards Presentation.

   B. Chair-Elect, Flory Wong, flory.wong@gmail.com
      No Report

   C. Secretary, Alan Heldon, alan.heldon@live.com
      The Secretary advised that as the April Meeting will be by electronic participation, the submission of written reports for circulation prior to the meeting would greatly expedite the proceedings.

   D. Treasurer, David Cichowicz, cichowic@lasalle.edu
      No written report.
      Treasurer reported the receipt of $15,000 from ACS National as dues for July – December 2017. Allotment of $28,000 due next week from National.

   E. Past Chair’s Report, Deborah H. Cook, deborahcook72@gmail.com
      No Report.

3. Committees
   A. Council Affairs, Anne DeMasi, anne.demasi@lanxess.com
      All the Section Councilors will be attending the National ACS Meeting.

   B. Career Services, Joe Martino, acsphillycareerservices@gmail.com
      1. The Philly YCC/ACS BIOT Mid-Atlantic Student Chapter/Career Services career event being planned for the Fall of 2018 is continuing to move along nicely. A list of individuals (industrial and academic) that have the potential to participate in the event is currently being comprised. The process of comprising this list is ongoing and will be discussed at our next teleconference for this event on March 14th. We are anticipating having our comprehensive list finalized as well as action plans on approaching high potential individuals for the event. Additionally, we will continue to market the event throughout the year. An Eventbrite website and charging for the event is being considered and will be discussed at the Teleconference. Moreover, we are still waiting to see if we are awarded the Corporate Associates grant as well as seeing if our immigration
attorney can help with funding. Mike Vogel and Doug Gisewhite of Philly YCC and Kelsey O'Donnell of the ACS BIOT Mid-Atlantic Student chapter are working with Joe Martino of Career Services on this project. (write-up by Mike Vogel, edited by Joe Martino)

2. The Career Club scheduled for March 7th was cancelled due to inclement weather. The Career Club will resume on Tuesday, May 15th from 4:00 PM to 6:00 PM at the Community Center of the Giant Super Food Store in Willow Grove, Pennsylvania.

3. ACS National is planning an update for ACS Career Consultants at the Spring National Meeting to be held in March 2018 in New Orleans. Career Services has been informed by ACS National that there is a plan for an ACS National Career Services regional road tour, and ACS National has expressed an interest in the activities of our local Career Services Committee. The information obtained from this update will be utilized to plan our Career Services strategy meeting, which will be an in-person meeting to take place in 2018.

C. Younger Chemists Committee, Christine McInnis, mcinnis@gmail.com
1. YCC’s Twitter War did not go as well as planned. Low student participation.
2. Discussion of using Salute to Excellence Awards to recognize the exemplary work of several Temple U. students and young professionals supporting YCC projects and programs. Will require Board approval.
3. Discussion of ASC Undergraduate Travel Grant. There is an applicant for a Section travel Grant to attend the Spring National Meeting. Specific figures not in hand. Discussion as to the availability of a Travel Grant Application. Travel Grant Application out of date. Question as to whether the Travel Grant Applications were timely circulated. Determined: On receipt of the necessary facts and figures from the applicant the Grant Application would be examined and a determination made by email/e-conference.

4. Other Business
   There being no additional business before the Board, the meeting, on motion, was adjourned at 4:53 PM.

Respectfully submitted,

Alan R. Heldon, Secretary, alan.heldon@live.com

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699th BOARD OF DIRECTORS MEETING
April 12, 2018
Electronic Meeting


Absent: David Cichowicz, Lee Hoffman

Excused:

Also present: CJ Bruner, Bill Smith, Liliana Suarez

The 699th Board Meeting of the Philadelphia Section, ACS, was called to order at 5:08 PM. A quorum was present. This meeting was conducted electronically via GoToMeeting. Reports were submitted electronically.

1. Minutes
   The Minutes of the March 2018 Board meeting were tabled.

2. Officers
   A. Chair, Elizabeth Wagoner, ewagoner22@gmail.com
   1. Undergraduate Scholastic Achievement Awards are next week April 19th at McCall Meeting and Conference Center, Upper Darby.
2. Philadelphia Section Teaching Awards, May 17th, University of the Sciences. Speaker: Dr. Andy Jorgensen, Associate Professor Emeritus of Chemistry, University of Toledo, *Global Climate Disruption: How Do We Know? What Can We Do?*

B. Chair-Elect, Flory Wong, flory.wong@gmail.com
No report.

C. Secretary, Alan Heldon, alan.heldon@live.com
No report.

D. Treasurer, David Cichowicz, cichowic@lasalle.edu
No report.

E. Past Chair’s Report, Deborah H. Cook, deborahcook72@gmail.com
Work on the Section’s election slate is underway.
   1. The unexpired Chair-Elect and Chair terms will need to be included.
   2. The Treasurer, five director and three councilor terms are expiring.
   3. A motion to “open” nominations was made and passes with 0 nays/0 abstentions.

3. Committees
   A. Council Affairs Committee, Anne DeMasi, anne.demasi@lanxess.com
   255th ACS National Meeting, New Orleans, LA, March 18-22, 2018
   Actions of the Council. Election Results
   Candidates for President-Elect, 2019
   • The Committee on Nominations and Elections presented to the Council the following nominees for selection as candidates for President-Elect, 2019: Harmon B. Abrahamson, Luis A. Echegoyen, Thomas R. Gilbert, and Mary Virginia Orna. By electronic ballot, the Council selected Luis A. Echegoyen and Thomas R. Gilbert as candidates for 2019 President-Elect. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.

   Candidates for Districts I and V
   • The Committee on Nominations and Elections announced the results of the election held prior to the New Orleans meeting to select *candidates* from the list of nominees for Directors from District I and District V on the Board of Directors for the term 2019-2021. By internet ballot, the Councilors from these districts selected Katherine L. Lee and Laura E. Pence as District I candidates; and John E. Adams and Joseph A. Heppert as District V candidates. Ballots will be distributed on or before October 1 to all ACS members in District I and District V for election of a Director from each District.

   Candidates for Directors-at-Large
   • The Committee on Nominations and Elections announced the selection of the following candidates for Directors-at-Large for 2019-2021 terms: Frank D. Blum, Lee H. Latimer, Ingrid Montes, and Angela W. Peters. The election of two Directors-at-Large from among these four candidates and any selected via petition will be conducted in the fall. Ballots will be distributed to the Council on or before October 1, 2018.

   Special Interim Election: Committee on Committees
   • The Committee on Nominations and Elections announced that Susan M. Schelble received 142 votes to Rick Ewing’s 128 votes to fill a vacancy on the Committee on Committees (ConC) for a full two-year term (2018-2019).

Other Council Actions
Amendments to the ACS Bylaws
• The Council approved Petition on the Composition of Society Committees [Bylaw III, Sec. 3, e, (3), (4), and (8)], which will change the requirement for Councilors on Society Committees from at least two thirds (2/3) to a majority and remove the requirement that the Chair and Vice-Chair of a Society Committee must be Councilors.
• The Petition for Election of Committee Chairs [Bylaw III, Sec. 3, c, (1); d, 3, (3), (8); e, (3), (8); g, (3); i (3)], which would allow the voting members of all ACS committees to select their own Chairs, failed to gain the approval of Council.
2019 Member Dues
• The Council voted on the recommendation of the Committee on Budget and Finance to set the member dues for 2019 at the fully escalated rate of $175. This rate is established pursuant to an inflation-adjustment formula in the ACS Constitution and Bylaws.

Distribution Formula for Division Funding
• The proposed formula for allocating dues funds to divisions, recommended by the Committee on Divisional Activities, was recommitted to the committee.

Continuation of Committees
• The Council approved the recommendation of the Committee on Committees that the Committee on Ethics be continued; and that the committees on Publications and on Younger Chemists be continued contingent on approval by the Board of Directors.

Resolutions
• The Council passed several resolutions:
  1. in memory of ACS Past President Ronald Breslow and other deceased Councilors;
  2. in gratitude for the officers and members of the Louisiana Section, host for the 255th National Meeting, the divisional program chairs, symposium organizers, and ACS staff for the planning and execution of the meeting; and
  3. to recognize Dr. Harry P. Schultz, former Councilor for the South Florida Section (1974-1977), on the occasion of his 100th birthday.

Highlights from Committee Reports
Online Preference Forms for Councilors
• All Councilors, including new Councilors, were reminded to complete their online committee preference form for 2019 committee assignments, which is open from March 26 – June 8, 2018 at https://www.yellowbook.acs.org (log in required).

Nominations and Elections
• The Committee on Nominations and Elections solicits Councilors’ input of qualified individuals for President-Elect and/or Directors for future consideration. Suggestions may be sent to nomelect@acs.org.

Budget and Finance
• In 2017, ACS generated a Net from Operations of $28.6 million, which was $4.8 million higher than 2016. Total revenues were $553.1 million, increasing 5.0% or $26.4 million over 2016. Expenses ended the year at $524.5 million, which was $21.6 million or 4.3% higher than prior year. This was attributable to strong performance from the Society’s Information Service units (CAS and ACS Publications) and a continued emphasis on expense management across the ACS.
• Additional information can be found at www.acs.org. At bottom, click ‘About ACS’, then ‘ACS Financial Information’. There you will find several years of the Society’s audited financial statements and IRS 990 filings.

Membership
• The ACS ended 2017 with over 150,000 members. While this means that ACS remains the world’s largest scientific society, this number represents a continuing decline in overall membership for the sixth year in a row. The Committee on Membership Affairs is committed to working with Council, the Board of Directors, the Committee on Budget and Finance, ACS staff, and other stakeholders to halt this trend and return ACS to a growing and engaged membership.

New Orleans Meeting Attendance as of Monday, March 19:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendees</td>
<td>8,470</td>
</tr>
<tr>
<td>Students</td>
<td>6,432</td>
</tr>
<tr>
<td>Exhibitors</td>
<td>877</td>
</tr>
<tr>
<td>Expo only</td>
<td>301</td>
</tr>
<tr>
<td>Guests</td>
<td>505</td>
</tr>
<tr>
<td>Total</td>
<td>16,585</td>
</tr>
</tbody>
</table>

Petitions to Amend Constitution and Bylaws
New petitions to amend the Constitution or Bylaws must be received by the Executive Director no later than May 2 to be included in the Council agenda for consideration at the fall 2018 meeting in Boston. Contact the Committee on Constitution and Bylaws with any questions or requests for information at bylaws@acs.org

Actions of the Board of Directors - The Board’s Executive Session

- The ACS Board of Directors met in Executive Session March 16-17, and considered a number of key strategic issues and responded with several actions.

The Board’s Committees

The Board of Directors received and discussed reports from its committees on Executive Compensation, Strategic Planning, Corporation Associates, Pensions and Investments, Professional and Member Relations, the Joint Board-Council Policy Committee Task Force on Governance Design, the Joint Board-Council Committee on Publications, and the Leadership Advisory Board. In particular,

- The Board received an extensive briefing and approved several recommendations from its Committee on Executive Compensation. The compensation of the Society’s executive staff continues to receive regular review from the Board.

- On the recommendation of the Joint Board-Council Committee on Publications, the Board voted to approve the reappointments of Editors-in-Chief for several ACS journals. Those appointments will be announced in C&EN once the appointed individuals have been notified and arrangements for their continued service have been made.

- On the recommendation of the Committee on Professional and Member Relations, the Board approved a Society nominee for the 2019 King Faisal International Prize for Science, and screened lists of nominees for the 2019 Priestley Medal and the ACS Award for Volunteer Service. The Board will select the recipients of these latter two awards from the screened lists provided.

- The Board liaison to the Leadership Advisory Board gave an update on the history of the Advisory Board and the ACS Leadership Program, and offered key observations and strategic questions regarding the direction of the program in light of future Society and member needs.

- The Board liaison to the Committee on Corporation Associates offered an update on the future design state of the committee in the context of the landscape for chemical corporations and professional societies.

- The co-chair of the Task Force on Governance Design offered brief comments on its written interim report and provided a preview of its planned presentation to the Councilor caucuses focusing on streamlining the Society’s governing documents.

The Executive Director/CEO Report

- The Board received an extensive report from the Executive Director and CEO on issues relating to the Safety and Professionalism core values of the Society as well as on Membership, ACS financial performance, Operational Excellence, and upcoming events and activities. He also led a discussion on the strategic direction of the Science History Institute (formerly the Chemical Heritage Foundation) and its ramifications for ACS. His direct reports then engaged in discussions with the Board on the activities, opportunities and challenges of the Education Division, Chemical Abstracts Service (CAS), and the ACS Publications Division.

Other Society Business

- As is customary, the Board heard reports from the Presidential Succession on their current and planned activities for 2018. Several presidential symposia and events incorporating and supporting the meeting’s theme of Food, Energy and Water were highlighted in those reports.

Board Resolution

- Finally, the Board approved a resolution that recognizes and applauds the United Nations for proclaiming 2019 as the International Year of the Periodic Table, and pledged that the Society will do its utmost to recognize and participate in events celebrating this important scientific milestone and achievement.
The Board’s Regular (Open) Session

- The Board held a well-attended open session on March 18, which featured a presentation from Dr. Lisa M. Balbes (Balbes Consultants, LLC) on Nontraditional Careers in Chemistry: Thinking Outside the Beaker. She also introduced two alumni from the ACS Scholars Program, Brandon Presley and Isa Watson, who briefly shared their careers paths to date with the assembled audience.

- Prior to the presentation, the Board Chair gave a report on Board actions and issues from its Executive Session March 16-17. Members of the presidential succession and the Executive Director & CEO also offered brief reports on their activities. The officers provided more extensive reports on their activities and/or future plans as part of their written and oral reports to the Council.

Contact the Board

- Your Board of Directors is elected by and acts in the best interests of the members of the Society. Please contact them with your comments, concerns, ideas, and suggestions at secretary@acs.org.

B. Career Services, Joe Martino, acsphillycareerservices@gmail.com

1. The Philly YCC/ACS BIOT Mid-Atlantic Student Chapter/Career Services career event focusing on MS, PhD and post-doctoral students being planned for the Fall of 2018 is continuing to move along smoothly. Current plans are to seek 12-15 volunteers for speed networking, 2 ACS Career Consultants for resume reviews and 2 ACS Career Consultants for mock interviews. The event will take place from 6:00 PM to 9:00 PM at the Villanova Room in the Connelly Center of Villanova University, with one hour buffers before and after the event. The planning group is currently prioritizing volunteers for the speed networking portion of the event. Current budget the event is $1,500.00, with $500.00 contributed by Career Services, Philly YCC and the ACS BIOT Mid-Atlantic Student Chapter, respectively. The results of an ACS Corporation Associates Local Section Grant application remain pending. A $5.00 registration fee will be collected through an Eventbrite website for the event. Career Services thanks Mike Vogel and Doug Gisewhite of Philly YCC and Kelsey O’Donnell of the ACS BIOT Mid-Atlantic Student Chapter for their hard work on this event. (write-up by Mike Vogel, edited by Joe Martino)

2. The Career Club previously scheduled for March 7th will now be held on Tuesday, May 15th from 4:00 PM to 6:00 PM at the Community Center of the Giant Super Food Store in Willow Grove, Pennsylvania. Current plans are for three ACS Career Consultants and a representative from Getson and Schatz to provide immigration law information for those who need it.

3. ACS National has provided no detailed update on the ACS Career Consultant program other than a strategic retreat to be held at some point in 2018. Further updates will be provided as local ACS Career Consultants receive information. As a result of the delay in this information, Career Services will proceed with planning a strategic meeting for the Career Services Committee to be held in 2018. Joe Martino will be working with Lori Spangler in preparing for the strategy meeting.

C. Younger Chemists Committee, Christine McInnis, mcinnis@gmail.com

1. The YCC poster session took place on April 10th at Temple University with 104 students presenting posters and over 180 attendees in total. We had support from Gausean, Quaker, Penn, Temple, and Dr. Addison. There were multiple companies and grad schools hosting tables at the grad school and career fair.

2. I would like the section to somehow formally recognize the 8-10 students from Temple plus three younger chemists for their dedication to the poster session. Due to the number of people, a newly developed section award or a letter of appreciation from the board would be more appropriate than the awards discussed during the last board meeting.

3. The YCC is hosting a table at the Philly Science Carnival on April 28th in collaboration with our education and outreach committee.

D. Communications Committee, Liliana Suarez, liliana.y.suarez@gmail.com

Philadelphia Section Public Relations and Website Makeover: The Section will greatly benefit from a good public relations plan represented by effective communication between the Section and its primary and secondary audience (membership and public respectively).

Discussion:

This Committee is participating in two important projects marked as key objectives for 2018:

1. ACS National Public Relations Makeover Program: Introduced to us by Kathy Thrush Shaginaw (ACS Communications and Public Relations Committee, CPRC), this pilot program led by Lynn Hogue and Amber Charlebois (CPRC subcommittee) is assisting the Section with developing a personalized PR plan or PR makeover. Both the Section’s PR and Communications Committees completed a survey that is being used as a basis to generate ideas to customize the makeover. The committees expect to receive a complete report with practical recommendations in the following weeks or so.
2. Redesign of the Section website (discussed at the Board meeting on December 12, 2017): The Committee is considering various alternatives, including moving part or all of the website content off webs.com (Webs is the current website hosting provider offered for free to Local Sections by ACS National). We have engaged ACS National (Christine Schmidt, ACS Web Strategy & Operations, and Lynn Hogue, CPRC subcommittee) in the discussion and there are two primary considerations:

A: ACS National agrees that the webs.com service is no longer the best solution and they encourage moving off of the service. They are in the process of developing a broader strategy for supporting Local Sections and the website service is being considered.

B: The Section may continue using webs.com to host the entire website or as a temporary “archival” website through 2018. However, they recommend beginning to think about archiving elsewhere and offered assistance if needed.

Trademark Application

On September 27, 2017, the Section filed applications to extend the Philadelphia Section’s Trademark registration and protections for the Section’s Mark, the Catalyst, for class 009, as a downloadable journal, and for class 041, as an online journal.

Summary:

The Trademark Examiner has partially refused the application in both class 009 and 041 due to an incorrectly reported date of use in both classes and also to a conflict with the description of the mark in class 041 (due to restrictions in the application process, the mark was described in terms of a blog for class 041). A detailed explanation follows on the next page.

The date of use is open to corrections, which would give us protection in class 009. However, the application cannot be amended to modify the description in class 041. Our options:

1. Abandon the class 041 application and rely for protection on class 009 and 016. No refund.
2. Comply with the description used in the application by documenting a blog. The Comments from the Chair column with appropriate formatting could constitute a “blog”.

The Section will gain nothing by abandoning the application. If we were to assemble the last months of Comments from the Chair in reverse chronological order it would be a blog, therefore, we could get our application in class 041 approved. We would not need to maintain the blog indefinitely.

Trademark Application Status

The Section has received a letter from the Trademark Examiner assigned to our applications. The letter requests correction of the “first used” dates for both the class 009 and class 041 application. And, the letter requests more specific documentation of use for the class 041 application. The Section has until this July to respond.

In review, The Section’s objective in renewing its in-print trademark registration and applying for protection in classes protecting electronic media was to protect the Section’s trademark as it is currently used and as it will be used for the next 10 years, the duration of registration.

On advice of counsel, the Section renewed its in-print protection (class 016) and applied to register in classes offering downloadable journal (class 009) and on-line journal (class 041) protection. Use of multiple classes offers complementary and interlocking protections.

The TEAS Reduced Fee application was chosen for the class 009 and class 041 applications as it offered economy and our application seemed to fit the required criteria. Of particular concern was the “description” of use. The application instructions indicated that the TEAS RF description of use did not need to be selected from the Trademark I.D. Manual. This was misleading.

For the downloadable journal (class 009) application an I.D. Manual description existed that suited our needs. For the on-line journal (class 041) we found an I.D. Manual description for an “on-line journal, namely, a blog featuring [chemistry].” We believed that the more general case, an “on-line journal featuring chemistry” would be acceptable. It was not. The on-line application form would only accept “on-line journal, namely, a blog featuring [chemistry].”

Council advised that, unfortunately, the trademark application process is not geared for corrections. Most corrections must be done by starting over and paying a new fee. Corrections that expand the use are unlikely to be approved.

In hindsight, to have registered as an “on-line journal featuring chemistry” in class 041 would have required a TEAS Full ($400.00) application as it would have been the registration of a “new” use.

The Section will fill the requirements for class 009 protection when we correct the first use date for the Catalyst as an electronic journal.

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1 Stephen Schaefer, an attorney with the firm of Whiteford, Taylor, Preston LLP which does trademark work for ACS National.
2 $275.00 per class
3 The USPTO website indicated that TEAS Plus applications required that “[g]oods/services listing must be selected from the USPTO Trademark Identification (ID) Manual but that the TEAS Reduced Fee application did not require carry this requirement.
The Section will need to correct the first used date for the class 041 application to reflect the date of the implementation of a “blog.” The first use date needs to be before July 2018. If the Section does not document a “blog” with the Catalyst on the “masthead” by July we will default and not get class 041 registration. No refund.

Documentation requirements were discussed with the trademark examiner assigned to this application. Various documentation options are available including submitting a copy of the “blog” or submitting a copy of an announcement about the creation and availability of the “blog.”

The “blog” would reside on the Section website as a subfolder(s) under the Catalyst tab. Reader comments and responses could be as emails to the editor. If the “blog” proves unsuccessful, the Section could discontinue it without losing class 041 protection.

Discussion with the attorney indicated that the Section will not lose a lot if the class 041 is for a “blog journal” rather than a “journal” because of overlapping protections from our registrations in classes 009 and 016.

Blogging is established and growing. Given the trends in electronic journalism, someone’s blog that infringes our trademark is more probably than infringement by a non-blog journal. Blogging is, legally, a “new” area for trademark use and consequently the law is gray as there have been few cases for precedent. Arguably, blogging is sufficiently distinguishable from traditional journals as to require that it not be treated as a sub-classification of journals and that Trademark application “descriptions of use” will need to specify “blog.” Having a blog trademark protection could be a substantial plus.

The Section can easily fulfill the USPTO’s documentation requirements with existing resources. The Comments from the Chair column with appropriate formatting constitutes a “blog.”

Needing to “blog” can be an opportunity. The “blog” creates a forum where guest columnists can promote Section events such as Chemists Do Earth Day and the YCC’s Poster Session. This would be part of promoting and publicizing what the Section does. These “event” columns could be and posted as blogs and used in the Catalyst. The blog’s URL would be posted as part of our Facebook promotion of the event.

E. Women Chemists Committee, Kathy Thrush Shaginaw, Katt@verizon.net
The ACS Philadelphia Section WCC had another great PAGES™ session on Saturday, April 7, 2018. We had 86 girls from 23 schools and 55 volunteers. Enrollment was down because the date was near Easter/Passover/Spring Breaks. The keynote speaker was Heather Kostick an environmental science doctoral student at Drexel University studying snails.

The next PAGES™ will be October 27, 2018, then April 13, 2019.

F. Education and Outreach Committee, Bill Smith, willsmith2@aol.com
Events and Status
1. National Chemistry Olympiad, Project Coordinators: Laura Grande (grandel1@lasalle.edu), Craig McClure (cpm76@drexel.edu)
   High school level examinations have been completed.
   National Examination will be administered at La Salle University on April 21st.

2. Chemists Celebrate Earth Week, Project Coordinator: Bill Smith (willsmith2@aol.com)
   April 22 – 28, 2018
   We have received the following support materials from National and distributed them to Kathy Thrush Shaginaw for PAGES and other programs:
   750 copies “Celebrating Chemistry (English)
   250 copies “Celebrating Chemistry (Spanish)
   100 CCEW stickers
   12 CCEW pencils
   50 CCEW tattoos

   CCEW Illustrated Poem Contest: K-12 students from throughout the Section area will create an Illustrated Poem on the theme of “Dive Into Marine Chemistry.” All participants will receive a certificate and a first and second place winner from each of three grade bands will receive an award check from the Section. First place winners will proceed to National for the next level.

3. High School Certificates, Project Coordinator: Bill Smith (willsmith2@aol.com)
   An award certificate has been mailed to each teacher on the high school distribution list provided by National for the National Chemistry Olympiad. Individual schools are encouraged to give the award to a deserving student.

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4 A blog is a series of postings in reverse chronological order. Usually someone’s opinion.
5 Trademark examiners are attorneys. The examiner was very helpful.
4. CHEMAGINATION, Project Coordinator: Bill Smith (willsmith2@aol.com)
   April 1 – 27, 2018
   Students write article for ChemMatters, an ACS high school magazine. The article is set in the year 2043 and is to report on the outcome of an important discovery in 2018.
   Section winners will proceed to nanoMARM level competition at Lehigh University on June 3rd.

5. Scholastic Achievement Awards, Project Coordinator: Bill Smith (willsmith2@aol.com)
   April 19, 2018
   Awardees have been selected and a new certificate has been designed. Certificates are being printed.
   We are looking for a professor to take on the role of Project Coordinator for this project starting in 2019. The project coordinator will be responsible for inviting universities with ACS certified programs to select an awardee and manage follow-on correspondence and the awards process.

6. Philadelphia Science Festival, Project Coordinators: Tom Umile (umile.t@gmercyu.edu)
   Saturday, April 28, 2018
   Section booth volunteers will make guar gum slime with Carnival participants.

7. Project SEED, Project Coordinator: Lee Hoffman (lwh28@drexel.edu)
   Two venues this summer
   1.) Bureau of Laboratory Services, Philadelphia Water Department
   2.) Solvay, Bristol, PA

4. Other Business

There being no additional business before the Board, the meeting, on motion, was adjourned at 6:08 PM.

Respectfully submitted,

Alan R. Heldon, Secretary, alan.heldon@live.com

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**Chemistry Safety Video Contest**

Trenton ACS members, the time is almost here for an event which will give you a chance to express your creativity, network with your peers, share and enhance your knowledge of Chemical Safety, and win great prizes!

In 2018, the Trenton local section is holding a Chemical Safety Video Contest. There will be a call for submissions, the opportunity to interact with top chemical safety experts from the ACS, and chances to win awards! Outstanding videos will be recognized at an awards ceremony in multiple categories including “best picture.”

The Trenton ACS invites members of the community to submit educational safety videos for the contest. Here are the details:

**Length of the video:** 2-3 minutes

**Format of the video:** Youtube uploads. Must follow Youtube community standards. No copyrighted materials can be used. MP4 should also be submitted.

All videos must be “PG” rated and have educational value.

All videos should be conducted using proper safety protocols. Please do not behave in an unsafe manner to demonstrate the benefits of safety!

Limit 4 people in production, unlimited number of actors (maximum of 4 gift cards)
The Process:

1. **Submit proposal for safety video**
   Proposal submission window: September 15 to October 15, 2018

2. **Receive feedback on proposal, potential funding support, free ACS safety materials, and a safety mentor for your team**
   Proposal decisions will be communicated no later than November 1, 2018
   Safety mentors will be assigned to each team and will be expected to check in with teams on
   November 15, December 1, and December 15.

3. **Create your video!!**

4. **Submit your video**
   Final video submissions are due December 21!

5. **Participate in the Awards Ceremony**
   Nominees for awards announced no later than January 22
   Awards ceremony: February 9 (with a potential snow date February 23)

Proposal Format: (There will be a Google form available September 15 on Trenton ACS website)
Each proposal must include the following information:
1. Production Team members
2. Team leader
3. Email address for team leader
4. School/institution with zip code
5. Local faculty/teacher mentor/champion
6. Topic of video
7. Anticipated learning outcomes
8. 200 words describing the content of the video
9. Estimated budget (itemized, Trenton ACS will support no more than $50)

Suggested Topics:
Safety in the undergraduate teaching lab (general, organic, etc.)
Safety in the high school lab
Chemical safety at home
Kitchen chemicals
Garden
Prescription medications
Home improvement chemicals
Music parodies (must have a strong educational component)
Safety in the research lab
Ionizing radiation safety
Laser safety
Gas cylinders
Cryogen safety
Biohazards
Glove selection and proper use
Root cause analysis (analyzing a previous safety incident, do not reproduce)
Hazard labeling
Flammable chemical safety
Fume hood use
Waste disposal
Green chemistry (specifically minimizing toxicity, waste)

Awards Categories:
Best video overall by undergraduate
Best video overall by high school students
Best use of costume design (PPE)
Best educational drama or documentary
Best educational comedy or musical

Cash prizes will be awarded to the winners!

Things to consider in videos:
PPE
Recognizing hazards
Assessing risk of hazards
Minimizing risks
Prepare for emergencies

Tech suggestions:
Free Mac options to edit videos: iMovie
PC options to edit videos: lightworks,
Record videos using cell phones

And here are some Examples with critiques:
https://youtu.be/OOwyVh5K1Ow
Content is accurate
Presentation is not engaging
https://youtu.be/BRDApYgvDqQ
Presentation is very engaging
However, MANY unsafe practices are used in the video
https://youtu.be/-aV_A2zUnzI
Presentation is engaging
Education content is present, but may be too general to make an impact.
Some safety concerns with with the open flame, inconsistent PPE
https://youtu.be/EfGVh-2gMQc
Presentation is engaging
Education content is very high but learning goals are demonstrated through the use of unsafe prac-
tices, which sends mixed messages and is not appropriate for this competition.
https://youtu.be/5_yMoin8GHA
Clear learning goals, no unsafe practices were demonstrated
Could be updated using the most recent ACS Safety Guidelines
Animations may be challenging for the short turn around of video production
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 Tellier’s Committee, involve minimal work—one night 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.

SEARCHING FOR THAT SPECIAL JOB?

There are many companies and organizations searching for chemical and biochemical personnel to fill important jobs in their organizations.

- Companies for laboratory and management positions
- Universities & Colleges for teaching positions and laboratory personnel
- Hospitals for technical and research personnel

There are several web sites that may help you search for these open positions.

- www.mboservices.net
- http://membership.acs.org/p/philadelphia/jobs/

ADVERTISING INDEX

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Micron Inc. 137
Robertson Microlit Labs 137
Tyger Scientific, Inc. 137

Advertising: Vince Gale, MBO Services, P.O. Box 1150, Marshfield, MA 02050; phone: (781) 837-0424

email: vincegale@mboservices.net

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<table>
<thead>
<tr>
<th>Date and Time</th>
<th>Event</th>
<th>Location/Information</th>
</tr>
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<tbody>
<tr>
<td>Monday, September 10</td>
<td>Delaware Valley Mass Spectrometry Discussion Group; Talk by Charles McEwen – University of the Sciences</td>
<td>Villanova University Location TBA See webpage for details; <a href="http://www.dvmsdg.org/">http://www.dvmsdg.org/</a></td>
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<tr>
<td>6:00 PM Social hour</td>
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<tr>
<td>7:00 PM Talk</td>
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<tr>
<td>Wednesday, September 12</td>
<td>Chemical Consultants Network Meeting: <em>Quick Start Guide to Becoming a Consultant</em> by Chris Owens – OppNex</td>
<td>The Cynwyd Club 332 Trevor Lane Bala Cynwyd, PA 19004 Registration and additional information is available at <a href="http://chemconsultants.org/page1641395">http://chemconsultants.org/page1641395</a></td>
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<tr>
<td>5:30 PM Networking</td>
<td></td>
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<tr>
<td>6:30 PM Buffet Dinner</td>
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<tr>
<td>7:30 PM Forum</td>
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<tr>
<td>Saturday, September 15</td>
<td>ACS Career Day Philadelphia</td>
<td>Temple University Science Education Research Center 1801 N. Broad Street Philadelphia, PA 19122 For further details see website <a href="https://www.acs.org/content/acsevents/careerfair/philadelphia.html">https://www.acs.org/content/acsevents/careerfair/philadelphia.html</a></td>
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<tr>
<td>8 AM – 5 PM</td>
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<tr>
<td>noon - 1 PM</td>
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<tr>
<td>free webinar</td>
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<tr>
<td>Thursday, September 27</td>
<td>Philadelphia Section Monthly Meeting <em>Chocolate Chemistry</em> by Dr. Michael H. Tunick – Drexel University</td>
<td>Drexel University Center for Food &amp; Hospitality Management Academic Building 101 N. 33rd Street Philadelphia, PA 19104 See the <em>Catalyst</em> for further details. Registration at <a href="https://www.eventbrite.com/e/philadelphia-section-acssevent-ticketsevents/45984433679">https://www.eventbrite.com/e/philadelphia-section-acssevent-ticketsevents/45984433679</a></td>
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<td>Wednesday, October 3</td>
<td>ACS Philadelphia Section &amp; ACS-BIOT Mid-Atlantic Student Chapter present <em>ACS Comprehensive Professional Development Evening</em></td>
<td>Villanova University Garey Hall, Room10A Villanova, PA 19085 See: <a href="https://www.eventbrite.com/e/an-interactive-career-workshop-tickets-48049453208">https://www.eventbrite.com/e/an-interactive-career-workshop-tickets-48049453208</a></td>
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<td>6 PM – 9 PM</td>
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<td>Tuesday, October 16</td>
<td>Philadelphia Section Award; Dr. Marshia I. Lester, University of Pennsylvania</td>
<td>Location TBA See the October issue of the <em>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

Spring 2019 National Meeting in Orlando
[https://www.acs.org/content/acsevents/meetings/national-meeting/abstract-submission.html?sc=home_4up_OR19_od](https://www.acs.org/content/acsevents/meetings/national-meeting/abstract-submission.html?sc=home_4up_OR19_od)