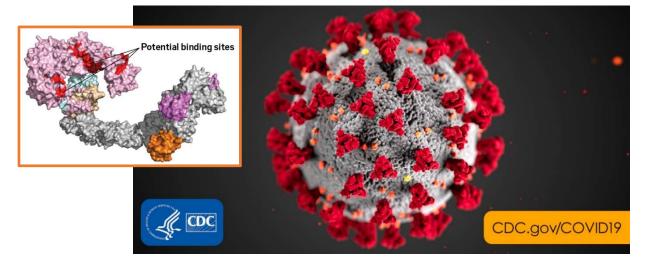
ACS ChemistryforLife* NEWSLETTER OF THE LEHIGH VALLEY SECTION OF THE AMERICAN CHEMICAL SOCIETY

APRIL 2020 VOL. 103, NO. 4

THE OCTAGON

AT-HOME SOLUTIONS TO VIRUS 'CABIN FEVER'



LVACS is offering one-hour, online webinars and web conferences to keep the community talking about chemistry. Our first webinar, held on Tuesday, March 24th, addressed the very timely topic of "Teaching and learning chemistry online - the new normal." A report with a link to the recorded event may be found on pages 3-4 of this issue.

More webinars are scheduled over the next three weeks and will feature Chemists Celebrate Earth Week (CCEW) topics and demonstrations you can do at home! Join us for an at-home dose of Earth Week chemistry!

Thursday, April 9th 12:00 noon "Protecting our Planet through Chemistry" interactive discussion around this year's CCEW Theme (Nigel Sanders and George Ruger, moderators). Zoom Meeting link below: https://zoom.us/j/803426209?pwd=c3R0OUxZZUpZN2xmUXhqL3BrWElmUT09 Meeting ID: 803 426 209 Password: 001969 Thursday, April 16th 3:30 pm "Plants! Perfect Planet Protectors!" including activities for kids (Jeanne Berk) Saturday, April 18th 11:00 am "(Re)Cycling Water" including water purification demo (Greglynn Gibbs) Saturday, April 25th 11:00 am "Earth Friendly Plastics" including making waterpods demo (Greglynn Gibbs) [more links will be posted as the dates approach]

...and take a look at the CCEW 2020 issue of *Celebrating Chemistry* (featuring our very own George Ruger on p 3!): <u>https://www.acs.org/content/acs/en/education/outreach/celebrating-chemistry-editions.html</u>

Also, ACS Reactions Video has fascinating and useful content on the fight against COVID-19: "Can Soap REALLY Kill the Coronavirus?" <u>https://www.acs.org/content/acs/en/pressroom/reactions/videos/2020/can-</u> <u>soap-really-kill-the-coronavirus.html</u>

"Coronavirus vaccine: Where are we and what's next?"

https://www.acs.org/content/acs/en/pressroom/reactions/videos/2020/coronavirus-vaccine-where-are-we-and-whatsnext.html



Spring 2020 LVACS Events

DUE TO THE COVID-19 EMERGENCY, THESE LVACS

AND RELATED EVENTS HAVE BEEN CANCELLED:

- March 14th Lehigh Valley Science and Engineering Research Fair

- March 16th meeting at Muhlenberg - High School Teachers Night

- March 16th -19th Reading-Berks Engineering Science Fair

- March 18th WISE Forum Dinner cancelled; Panel TBA

- March 21st Chemistry Olympiad Testing at Muhlenberg

- March 22nd -26th ACS Spring National Meeting in Philadelphia

- April 15th meeting at DeSales - Student Poster Night

- April18th CCEW Kick-off at Da Vinci Science Center

- April 25th Da Vinci Science Center Hall of Fame Gala

- April 25th Organic Chemistry Award Exam at Moravian College

- May 17th LVACS Awards Night at Two Rivers Brewing

- June 12th MARM 20/20 at CUNY, NYC

<u>April</u>

Chemists Celebrate Earth Week (CCEW) April 19-25 "Protecting Our Planet Through Chemistry" Combined with 50th Anniversary of Earth Day **GROUPS ARE ADVISED TO CANCEL/POSTPONE ALL IN-PERSON EVENTS: THINK REMOTE OR ATTEND OUR WEBINAR SERIES (see page 6)!** Poetry Contest will be held as planned (electronic submissions) CONTACT: Lindsey Welch [lawelch@cedarcrest.edu]

<u>May</u>

<u>June</u>

Regional Chemagination Competition Date and Venue TBA

<u>July</u>

Special Event: Iron Pigs Game vs Durham Bulls Friday, July 31st 7:05 pm Tickets (all seating in the Pig Pen): \$20 (includes \$10 food/beverage credit) CONTACT: Lindsey Welch [<u>lawelch@cedarcrest.edu</u>]

In This Issue...

3-4. March 24th Webinar on Remote Teaching and Learning Report

5. LVACS Student Virtual Poster Session & Senior Awards update

6. Chemists Celebrate Earth Week (CCEW) Goes Digital

7. CCEW Poetry Contest: new electronic entry portal

8. LVACS Standing Committees

9. Da Vinci Science Center closure; postponement of Hall of Fame Gala

10. MARM cancellation; Chemagination Competition update

11. LVACS Annual Awards Postponement; ACS Fellows Call for Nominations extended to April 10th

12. Iron Pigs Game July 31st and February 29th Phantoms Hockey Game Pictures

13. Reading Science Center Preview Report

14. March 4-6 Made-In-America Career Fair and March 10th NCC HS Career Day Reports

15. 2020 Executive Committee

Appendix: Award Nomination Forms



LVACS March 24th WEBINAR TAKES CHEMISTRY REMOTE



"Teaching and learning chemistry online - the new normal"

Jamie Young, a chemistry lecturer at Johns Hopkins University, is recording videos for his lab classes. (George Heitmann/THE MORNING CALL; photo: Ulysses Muñoz/The Baltimore Sun)



This Zoom webinar on 'remote' education, now mandated in our area by the spread of the coronavirus, was organized and moderated by Lorena Tribe of PSU/Berks. Five speakers covered several topics of great interest to both teaching faculty and students: online labs including simulations, hybrid labs, online exams, use of first principles computational software and teaching large classes from home without losing student feedback. The speakers were Ike Shibley of Penn State/Berks, David Aurentz of Penn State/Berks, Kevin Range of Lock Haven University and Anne and John Gorden of Auburn University. <u>Ike Shibley</u>

Dr. Ike Shibley joined Penn State in 1996. He teaches a variety of courses including general chemistry, organic chemistry, biochemistry, nutrition, bioethics, and philosophy of science. His biochemical research interest focuses on fetal alcohol syndrome: his laboratory uses a chicken embryo model to assess the damage done to the developing embryo after ethanol exposure.

Ike focused on the practice of giving online exams. While multiple-choice formats are the easiest to implement, written responses can also be handled without too much difficulty. It does take some additional time to craft a good online exam, especially if many chemical structures must be imbedded. A key to avoiding cheating is to enforce strict time boundaries. Some faculty use additional virtual proctoring tools such as LockDown Browser^{*}, Honorlock^{*} or Examity^{*} but Ike emphasized that comparisons he has made between online and live exams have indicated little difference in scores.



LVACS March 24th WEBINAR (continued)

Dr. David J. Aurentz is an Assistant Professor of Chemistry at Penn State Berks. His research is focused on the application of solid state nuclear magnetic resonance (NMR) spectroscopy to structures of materials such as zeolites. Aurentz studies the physical state of water when associated with materials such as zeolites, glasses, gels and cement and employs deuterium (2H) NMR to probe deuterated water (D_2O) in these hydrated materials.

David discussed online labs. His experience grew partly out of the Late Nite Labs^{*} concept, which had been used at PSU/Berks for some time as part of a 'hybrid' (blended) approach to teaching laboratory general chemistry. A '5-pack' of virtual labs had been included as part of the second semester offering. The chemistry lab simulation allows the student to 'drag and drop' equipment and materials and observe the result. Pre-lab preparation, testing and reporting are included as options in the software. Apart from the current need to do everything online, this can be usefully employed to augment a regular lab or to substitute whenever needed (equipment/materials not available/too hazardous for the lab or weather events, etc.).

Dr. Kevin Range is the chair of the chemistry department at Lock Haven University. He teaches Forensic Chemistry, Quantum Chemistry, Spectroscopy and Introduction to Computational Chemistry. His current interests include: Heat of formation of ketene, Triazine and other interesting N₃H₃ *species and derivatives and Electron Energy Analysis, applying state-of-the-art electronic structure calculations to study the structures.*

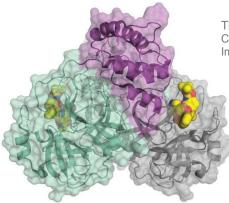
Kevin presented an overview of the application of WebMO, a free World Wide Web-based interface to computational chemistry packages [webmo.netfreeware], that allows students to visualize MOs, bonding vs antibonding effects and molecular structures. An additional capability is simulation of vibrational modes and frequencies, allowing comparison of calculated IR bands (e.g. of polymer films) to experimental spectra.

Drs. Anne and John Gorden are Associate Professors of Chemistry and Biochemistry at Auburn University. In addition to teaching Organic and Advanced Organic chemistry, Anne has an active research group with interests in synthetic chemistry, green (or greener) chemistry, and coordination chemistry. Current projects include ligand supported transition metal catalysts for Green chemistry, the development of sensors and sensing materials for actinides and fundamental actinide chemistry. John teaches General Chemistry and is interested in metal complex catalysis.

Anne and John have been teaching large (~200) chemistry classes (general and organic) from their home 'environment' (kids, dogs, ...) by Zoom while trying to continue their commitment to 'active' learning. They have a home-made white board set up which is on-camera as well as a second webcam attached to a lamp illuminating a desk area. They record each class so that students who cannot attend (may now be located in a different time zone!) will be able to view it. Other features in Zoom that can be used to make the sessions more 'active' are: shareable, tablet-style white boards, live polling/uploading of quiz results and break-out rooms for teams with set reconvening periods. Basically, they emphasized that anything you can do to keep student feedback level high will help. Surprisingly, this can sometimes be better online than live!

The webinar was followed by a brief Q&A session. A recording of the event can be accessed through the following link: <u>https://psu.mediaspace.kaltura.com/media/LVACS+learning+and+teaching+online+meeting/1_yr8y94hl</u>





The novel coronavirus main protease dimer bound to an inhibitor (yellow). Courtesy, Laura Howes, C&EN, March 30, 2020 Image Credit: © H. Tabermann/HZB

α-Ketoamide inhibitor

ANNUAL UNDERGRADUATE RESEARCH POSTER SESSION AND UNDERGRADUATE SENIOR AWARDS DESALES UNIVERSITY, CENTER VALLEY, WEDNESDAY, APRIL 15TH 5:00 PM

Lehigh Valley section undergraduates: are you doing research you'd like to talk about? Well, research on COVID-19 treatments hasn't come quickly enough to allow you to take advantage of this annual opportunity for in-person networking in the Lehigh Valley area; <u>HOWEVER</u>... we <u>are</u> sponsoring a webinar version to be announced shortly, so let us know if you'd like to present your interesting findings with social (but not intellectual) distancing!

RSVP deadline: April 10, 2018 for abstracts,

CONTACT: Nigel Sanders [nigel53.sanders@gmail.com]

RSVP including if you want to present online at https://forms.gle/ejux8JTMM5k5ETNT8

UNDERGRADUATE SENIOR AWARDS

We will still be honoring the top graduating seniors in chemistry and chemical engineering from our Lehigh Valley section's 4-year colleges: Albright, Alvernia, Cedar Crest, DeSales, East Stroudsburg, Kutztown, Lafayette (2 – chemistry and chemical engineering), Lehigh (2 – chemistry and chemical engineering), Moravian and Muhlenberg. Stay tuned for an online 'BEST AND BRIGHTEST' for 2020 as well as recognition in this newsletter and our social media over the next month.

CONTACT: Pamela Kistler, Cedar Crest College [pdkistle@cedarcrest.edu]







CHEMISTS CELEBRATE EARTH WEEK 20/20 GOES DIGITAL

Celebrate Digital Earth Day with New Resources for CCEW: April 19-25

Chemists Celebrate Earth Week (CCEW) is a public awareness campaign during which ACS members, AACT members, and other chemistry enthusiasts coordinate events and communicate the importance of chemistry for maintaining a healthy environment. CCEW will take place during the week of Earth Day, April 19-25, with the theme "Protecting Our Planet through

Chemistry." Due to COVID-19, the campaign has gone fully digital with instructions for planning virtual events and an updated suite of educational resources.

Learn how to plan <u>Virtual Demo Events</u> and <u>Digital Illustrated Poem</u> <u>Contests</u> for K-12 audiences, and <u>Virtual Teach-Ins</u> for higher education and adult audiences. Amplify the campaign on social media using the hashtags #CCEW, #EarthDay2020, and #chemistry. Help show collective action by adding your virtual events to Facebook and submitting your photos, videos, and screenshots to the <u>CCEW 2020 Photo Album</u>. If you don't have time to plan events, you can still utilize and share these digital educational resources with teachers in need:

- Celebrating Chemistry Coloring Book (grades K-2)
- Endangered Elements Color by Numbers (PDF) (grades 3-6)
 - <u>ChemCatcher (PDF)</u> (grades 9-12, undergraduate)
 <u>Earth Day 50th Anniversary Timeline (PDF)</u> (grades 9-12,

undergraduate)

• and more educational resources, organized by age group!

And, of course, the CCEW 2020 version of Celebrating Chemistry with an article by our own George Ruger (p 3): https://www.acs.org/content/acs/en/education/outreach/celebrating-chemistry-editions.html

In view of these guidelines, the LVACS CCEW kick-off event planned for Saturday, April 18th at the Da Vinci Science Center in Allentown, PA <u>HAS BEEN CANCELLED</u>. We have scheduled several web-based CCEW-themed events to replace in-person events.

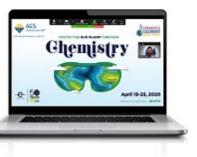
Thursday, April 9th 12:00 noon "Protecting our Planet through Chemistry" discussion (Nigel Sanders/George Ruger) https://zoom.us/j/803426209?pwd=c3R0OUxZZUpZN2xmUXhqL3BrWEImUT09 Meeting ID: 803 426 209 Password: 001969 Thursday, April 16th 3:30 pm "Plants! Perfect Planet Protectors!" including activities for kids (Jeanne Berk) Saturday, April 18th 11:00 am "(Re)Cycling Water" including water purification demo (Greglynn Gibbs) Saturday, April 25th 11:00 am "Earth Friendly Plastics" including edible waterpod-making demo (Greglynn Gibbs) More links will be posted as the dates approach.

If anyone plans to conduct an ONLINE activity geared for CCEW, we can help to publicize it.

CONTACT: Lindsey Welch [lawelch@cedarcrest.edu] or Nigel Sanders [nigel53.sanders@gmail.com]









THE ANNUAL CCEW POETRY CONTEST IS STILL ON!

Part of CCEW each year is the poetry contest where K-12 students give us their 'spin' on Earth Week and its theme. The contest is electronic this year. Follow the link in the flyer below to enter.



2020 CCEW Illustrated Poem Contest Protecting Our Planet through Chemistry



The Lehigh Valley Section of the American Chemical Society (ACS) is *hosting an illustrated* poem contest for students in Kindergarten through 12th grade. Entries must be sponsored by a local school or community group for verification purposes.

Contest Deadline: May 3, 2020 at 11:59 PM Eastern Local Prizes: Earth Day 2020 Gifts / Gift Card (TBD) Local Contact: Dr. Lindsey A. Welch (<u>lawelch@cedarcrest.edu</u>) Submission: Submit entries online at <u>bit.ly/CCEWpoems</u>

Winners of the Lehigh Valley 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 CCEW theme, "Protecting Our Planet through Chemistry." 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 sustainable chemistry include:

Green chemistry Environment

Pollution

Entries will be judged based upon:

Artistic Merit - use of color, quality of drawing, design & 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 yearly theme (Protecting Our Planet through Chemistry), 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. Physical drawings may be scanned or captured via camera and submitted to the online form. 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. If the illustration is created using a digital painting or drawing app, the name of the program must be included on the entry form.
- 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.
- Students must be sponsored by a school or another sponsoring group (e.g. Homeschool Association, Boys and Girls Club, Scout Troop, 4-H, etc.).
- 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.



LVACS Standing Committees: Opportunities to Volunteer

Besides the elected positions that make up our Executive Committee (see back page of this newsletter), your local section also has several standing committees that assist in the planning of section activities as listed below:

<u>Committee: Name of Chair / email</u>

Awards: John Freeman / jcf2@rcn.com

Chemistry Olympiad Coordinator: Gail Marsella / <u>gailmarsella@muhlenberg.edu</u>

Education/SEED coordinator: Jeremy Heyman / jheyman@northampton.edu

Environmental Improvement:

Long Range Planning: Nigel Sanders / <u>nigel53.sanders@gmail.com</u>

Membership: Greglynn Gibbs / <u>gdw104@psu.edu</u>

Minority Affairs: Celia Williams / <u>lvacscma@gmail.com</u>

National Chemistry Week/CCEW: Lindsey Welch / lawelch@cedarcrest.edu

Newsletter Editor: Nigel Sanders / <u>nigel53.sanders@gmail.com</u>

Professional Relations/Career Counseling: Greglynn Gibbs / <u>gdw104@psu.edu</u>

Public (or Government) Affairs:

Public Relations: Jennifer Mehalshick / jennifer.mehalshick@outlook.com

Safety: Caroline Multari / <u>caroline.multari@gmail.com</u>

Senior Chemists: John Freeman / jcf2@rcn.com

Webmaster:

Women Chemists:

Younger Chemists:

All of these committees are looking for additional committee members including a few chairs. What are your interests? Please consider volunteering for one of our committees! Get more information from any of the committee chairs above or LVACS Chair, George Ruger [gruger04@yahoo.com] or LVACS Secretary, Nigel Sanders [nigel53.sanders@gmail.com].

Da Vinci Science Center Temporarily Closed -April 25th, 2020 Hall of Fame Gala Postponed



Open for Exsciting Possibilities"

March 13, 2020

As I'm sure you are aware, there are more and more concerns about the COVID-19 (novel coronavirus) and the risk of attending events with large groups of people. We are receiving word from several of our corporate partners that they are mandating that employees avoid events for the next 60 days to err on the side of precaution.

To that end, we have made the decision to postpone the Hall of Fame Awards Gala scheduled for April 25th. The Da Vinci Science Center considers the health and safety of our guests our top priority.

We would still like to host the event, in some form, at a later date. We will continue to monitor and evaluate the situation and will be in touch with updates as they occur. We are currently evaluating options that would enable us to continue with the event in a reprogrammed format. We are looking forward to celebrating and recognizing the honorees!

Thank you for your help. Please stay healthy!

Warmest regards, Judy Belaires, CFRE Director of Philanthropy and Special Assistant to the CEO Da Vinci Science Center

Note: LVACS is this year's recipient of the Grand Maestro Award honoring a Da Vinci Science Center partner in recognition of its substantial contributions to the scientific community and the Center.

The Da Vinci Science Center is temporarily closed to conform with federal and state guidelines concerning the novel coronavirus emergency.

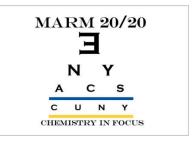
Support your section and the STEAM-promoting activities of the Da Vinci Science Center by making a donation to the Center. Contact Judy Belaires: <u>judy@davincisciencecenter.org</u> (484)-664-1002 ext. 102.

For more information about LVACS activities at Da Vinci contact Nigel Sanders [<u>nigel53.sanders@gmail.com</u>]



MARM 20/20 IN NYC HAS BEEN CANCELLED

Mid-Atlantic Regional Meeting (MARM) "Chemistry in Focus" City University of New York, NYC Friday, June 12th, 8:30 am – 9:00 pm





Chemagination

Registration: https://www.marm2020.org/Registration/

Mid-Atlantic Region Chemagination Competition Date and Venue TBA

Lehigh Valley Competition IS STILL ON! High School Teachers: Sign up your team for Chemagination 2020!

The Lehigh Valley American Chemical Society (LVACS) will be holding a Chemagination Competition. Chemagination is a great learning experience for students. In addition to increasing their knowledge of science and chemistry, they can improve their creative, teamwork and public speaking skills.

High school students are asked to imagine that they are living 25 years in the future, 2042, and are writing for ChemMatters, a magazine for high school students that focuses on the role of chemistry in everyday life. The editor chooses them to write the cover article for the next issue of the magazine describing a recent breakthrough or innovation in chemistry and its applications that improve the lives of those living in 2042. Along with the article they have the honor of designing the magazine's cover. The subject of the article is: "Describe a recent breakthrough or innovation in chemistry (and/or its applications) that has improved the quality of people's lives today." The article must be written to fit in one of four categories: Alternative Energy, Environment, Medicine/Health, or New Materials.

The local section competition will be completely electronic. Teams should submit their articles and cover design by April 15, 2020. The articles will be judged based on the MARM 2020 rules: https://www.newyorkacs.org/meetings/MARM2020/2020 MARM CHEMAGINATION.pdf The winners of the LVACS local section competition will advance to the Mid-Atlantic Regional competition, sponsored this year by the New York Section of the ACS. *The date and venue of this regional competition are not yet known*. First place category winners from Local ACS Section's Chemagination contests are eligible to participate in MARM 2020. If a first-place winning team chooses not to participate, a second-place team can serve as an alternate. The regional competition will be judged on a poster session, in addition to the article, followed by a presentation or other activity for the students and the award ceremony.

CONTACT: John Freeman, LVACS Chemagination Coordinator [lvacschemagin@gmail.com]

Lehigh Valley Section 2020 Awards Postponed to September Meeting at Da Vinci Science Center



Open for Exsciting Possibilities

LVACS will delay its annual awards and the ACS 50/60-year awards until the Thursday, September 17th section meeting scheduled to be held at The Da Vinci Science Center.

The awards for Excellence in High School Teaching, Excellence in Small College Teaching, Volunteer Service, Advancing Diversity and The Foundations in Chemistry Award for a High School Senior matriculating to a Lehigh Valley area college will be presented to five outstanding members of our chemistry community. The chairs for the event, John Freeman and Lorena Tribe, *continue to seek nominations for the following three awards*:

ACS LEHIGH VALLEY LOCAL SECTION AWARD FOR EXCELLENCE IN HIGH SCHOOL TEACHING

ACS LEHIGH VALLEY LOCAL SECTION AWARD FOR EXCELLENCE IN TEACHING AT SMALL COLLEGES

FOUNDATIONS IN CHEMISTRY AWARD FOR A HIGH SCHOOL SENIOR MATRICULATING TO A LEHIGH VALLEY AREA COLLEGE

The nomination forms for these three awards are attached in an Appendix the back of this newsletter. Please follow the instructions and submit the completed forms to the designated email address listed on the form. Due to the COVID-19 pandemic, the deadline for nominations for the first two has been extended to Friday, May 15th – many of our teachers have been going 'above and beyond' during this crisis *so recognition of this type is needed now more than ever*!

CONTACTS: John Freeman [jcf2@rcn.com]; Lorena Tribe [lut1@psu.edu]

ACS Fellows Program: Nominate a Colleague for this signal ACS honor





The American Chemical Society (ACS) Fellows Program was created by the ACS Board of Directors in December 2008 to recognize members of ACS for outstanding achievements in and contributions to science, the profession, and the Society. **The nomination period for the 2020 Class of ACS Fellows has been extended to** <u>Friday, April 10, 2020</u>.

More information may be found here: <u>https://www.acs.org/content/acs/en/funding-and-awards/fellows.html</u>

ACS Chemistry







2020 LVACS NIGHT AT THE BALLPARK Friday, July 31st @ 7:05 pm Lehigh Valley Iron Pigs vs Durham Bulls Celebrate Summer with LVACS in the Coca-Cola Park Pig Pen!

[In-Seat Food & Beverage Service]

Reserve your seats now!

Tickets \$20 (includes \$10 food/beverage credit) CONTACT: Lindsey Welch [lawelch@cedarcrest.edu]



Nigel Sanders, LVACS secretary, ready to depart on the Phanboni ride with Laurie Caslake, Professor and Chair of Biology at Lafayette College and Anne Marie Exarhos, Assistant Professor of Physics at Lafayette College. Thanks to Kelley Caflin for arranging another great hockey event [yeah, we lost 4-2...]!

READING SCIENCE CENTER HOSTS SNEAK PREVIEW OF INTERACTIVE EXHIBITS



Cell Lab Coordinator, Kayla Aulenbach, teaches kids about DNA.



Penn State Chemistry Adviser and LVACS Membership Chair, Greglynn Gibbs, teaches kids how to make slime.

The Reading Science Center opened its doors for a few hours on Saturday, January 18th, giving the public a sneak preview of their new facility and exhibits in works. Still under construction, the Science Center is located on the lower level of 645 Penn Street. With a quick elevator ride to the bottom floor, guests enjoyed a tour by science center staff showcasing new exhibits, face painting, and live demonstrations for kids. The Reading Science Center hopes to benefit the city of Reading and the surrounding areas by providing educational and entertaining hands-on science experiences for the community, schools, and families. According to staff at the sneak preview, the science center mission is to encourage STEM careers and inform the community about scientific activities in the Reading area. There is still work to be done. The science center is still a construction zone. Touring the facility, scaffolding lines the main staircase and construction equipment can be seen everywhere. Don't worry, the construction equipment won't be around for long. The staff are excited to get the science center up and running. When completed, the center will host educational classrooms, multiple exhibits, and a science lab.

Due to COVID-19, the planned April opening of the Center and the May Open House have been indefinitely postponed. <u>https://www.readingsciencecenter.org/</u>

Source: Reading Magazine – © January 19, 2020



Guests play with a giant Newton's cradle.





LVACS MEMBERS HIGHLIGHT CHEMISTRY AT LOCAL CAREER EVENTS FOR ELHI STUDENTS

The Lehigh Valley local section was well represented at recent career events in the area with students from elementary to high school. The events included the Made-in-America Career Days at The Da Vinci Science Center and High School Career Day at Northampton Community College / Monroe Campus.

<u>Made-in-America Career Days, March 4-6, 2020</u> <u>at Da Vinci Science Center</u>



Photo courtesy Da Vinci Science Center

Nigel Sanders, John Freeman and Carl Salter were on hand to tell students about chemistry, chemistry careers and do some cool chemistry demonstrations with them! We weighed air and pennies (old vs new), made water pods (Ca alginate) and showed how absorbed colors relate to observed colors. About 400 students, mainly middle school with some elementary grades, attended the event. Our LVACS visitors carried away lots of ACS 'swag' to remind them that chemistry is fun and engaging!



High School Career Day, March 10, 2020 at Northampton Community College, Monroe Campus

Nigel Sanders and Jeremy Heyman spoke to several groups of high school students about their experiences as chemists and scientists during this morning of career discernment for Monroe county schools. Nigel described what it was like working in new product and process development in chemical industry while Jeremy told about his transition from a research to an educational career. The students in all three sessions were attentive and had lots of good questions for us: definitely a learning experience for all!



APRIL 2020 VOL. 103, NO. 4

LEHIGH VALLEY SECTION OF THE AMERICAN CHEMICAL SOCIETY **2020 EXECUTIVE COMMITTEE**

COUNCILORS

OFFICERS

Chair: George Ruger gruger04@vahoo.com



Jeanne Berk (term ends 12/31/21) irberk@cedarcrest.edu

Kelley Caflin (term ends 12/31/20)



Chair Elect: **Roger Egolf** rae4@psu.edu







ALTERNATE COUNCILORS

caflinacs@vahoo.com

Lorena Tribe (term ends 12/31/20) lut1@psu.edu



Secretary/Newsletter Editor: **Nigel Sanders** nigel53.sanders@gmail.com nsanders5@esu.edu

Treasurer: **Tesia** Chciuk tvc212@lehigh.edu



Celia Williams (term ends 12/31/21) lvacscma@gmail.com





The Octagon Newsletter is published by the Lehigh Valley Section of the American Chemical Society to provide information to section members and the public about activities and programs which support the section mission "To promote the chemical sciences in the Lehigh Valley section for the benefit of our members and our community." Send all queries to the editor at: <u>nigel53.sanders@gmail.com</u>

APPENDICES: LVACS AWARD NOMINATION FORMS

THE ACS LEHIGH VALLEY LOCAL SECTION AWARD FOR EXCELLENCE IN HIGH SCHOOL TEACHING AWARD PROGRAM FOR 2020

Purpose: To recognize, encourage, and stimulate outstanding teachers of high school chemistry in the Lehigh Valley Section of the American Chemical Society

Nature: The Section Award consists of a cash award and a certificate. The meal at the September 17th meeting of the Lehigh Valley section of the ACS at which the award will be presented will be paid. A certificate will also be provided to the recipient's institution for display. The Winner's Application will be forwarded to the Mid Atlantic Regional ACS Division of Chemical Education Award for Excellence in High School Teaching

Who May Nominate? Any individual, except a member of the award selection committee or currently enrolled student of the nominee, may submit one nomination or support form in any given year.

Who is Eligible? The nominee must be actively engaged in the teaching of chemistry or a chemical science in a high school (grades 9-12) on at least a half-time basis in Berks, Schuylkill, Carbon, Lehigh, Northampton or Monroe counties in PA and Warren County NJ. The nomination should clearly demonstrate as many of the following attributes as possible:

- The quality of the nominee's teaching; unusually effective methods of presentation should be emphasized;
- The nominee's ability to challenge and inspire students;
- Extracurricular work in chemistry or a chemical science by the nominee, including science fairs, science clubs, and activities that stimulate the interest of young people in chemistry and related sciences;
- A willingness to keep up-to-date in the field, as evidenced by the pursuit of a higher degree in chemistry or a chemical science, enrollment in refresher courses and summer institutes, regular attendance at scientific meetings, membership in professional organizations, and other means of self-improvement;
- Evidence of leadership and/or active involvement within the profession.

Required components of Nomination Portfolio:

- The Awards Committee will consider only complete nomination portfolios.
- A complete portfolio shall consist of
 - o A Nomination Portfolio Check List (see Page 3), which shall serve as the Portfolio Cover Sheet;
 - Nominator Information Form (see page 5);
 - Nominee Information Form (see page 6);
 - Nominator Recommendation of not more than 750 words submitted by the nominator according to the guidelines outlined on the Recommendation Form (see page 7);
 - A current 2 page curriculum vitae or resume that includes a list of the nominee's honors, professional activities, and additional evidence of service to the profession; **NOTE: Limited to no more than two pages and the activities listed must have occurred within the past five years.**
 - A statement by the nominee of not more than 500 words that describes the nominee's teaching philosophy or commitment to the profession;
 - 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 American Chemical Society, who are familiar with the nominee's achievements, or former students and parents of former students.
 - NOTE: Some commentary on student reaction to the work of the nominee in either the nominating letter or that of the current principal or supervisor is essential for a well-rounded portfolio.

THE ACS LEHIGH VALLEY LOCAL SECTION AWARD FOR EXCELLENCE IN HIGH SCHOOL TEACHING

2020 Nomination Portfolio Check List

The following items are required components for a Nomination Portfolio. Please check each item contained in the portfolio. This list, submitted by the nominator, will serve as the cover to every submitted portfolio.

n;
ľ

Nominee Information Form;

Nominator Recommendation Letter of no more than 750 words send as email by Nominator with nominees name in subject line.

Nominee's Statement on Teaching Philosophy of no more than 500 words;

Nominee's Current CV:

A 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.

Letters of Support (no more than 400 words) sent separately as email by principal with nominees name in subject line:

<u>One must</u> be from the teacher's current principal or supervisor. <u>Up to two</u> additional letters of support may be sent by colleagues, members of the American Chemical Society who are familiar with the nominee's achievements, or former students and parents of former students.

Nominator's

Name:_____

Date:_____

NOMINATION FORM

THE ACS LEHIGH VALLEY LOCAL SECTION AWARD FOR EXCELLENCE IN HIGH SCHOOL TEACHING Deadline: *MAY 15, 2020*

Any individual, except a member of the award selection committee or current students of the nominee, may nominate or support *only* one nominee during any given award year. Submit to *JOHN FREEMAN* via e-mail at <u>LVACSTOTY@gmail.com</u> by May 15, 2020 Please state award title in the subject line.

The award will be presented at the September 17th Meeting of the Lehigh Valley Section of the American Chemical Society.

Name:	
Company or Institutional Affiliation:	
Present Position (Exact Title):	
Address:	
City:	
State and Zip:	
Telephone:	
Fax:	
e-mail:	
Relationship to Nominee	

NOMINATOR INFORMATION

NOMINATION FORM

THE ACS LEHIGH VALLEY LOCAL SECTION AWARD FOR EXCELLENCE IN HIGH SCHOOL TEACHING Deadline: *May 15, 2020*

NOMINEE INFORMATION

Name:	
Present Position (Exact Title):	
School:	
Address:	
City:	
State and Zip:	
Telephone:	
Fax:	
e-mail:	
Website: if appropriate	

• Give your current teaching assignment including course titles and grade levels. What is your involvement in extracurricular activities

• On a separate sheet, provide a statement of not more than 500 words in which you present your teaching philosophy or otherwise describe your commitment to the profession.

NOMINATION FORM

THE ACS LEHIGH VALLEY LOCAL SECTION AWARD FOR EXCELLENCE IN HIGH SCHOOL TEACHING

Deadline: MAY 15, 2020

RECOMMENDATION STATEMENT OF NOMINATOR

Submit a narrative statement of no more than 750 words that describes and comments upon the following:

- The quality of the nominee's teaching. Unusually effective methods of presentation should be emphasized;
 - NOTE: Some commentary on student reaction to the work of the nominee in either the nominating letter or that of the current principal or supervisor is essential for a well-rounded portfolio.
- The nominee's ability to challenge and inspire students;
- Extracurricular work in chemistry or a chemical science by the nominee, including science fairs, science clubs, and activities that stimulate the interest of young people in chemistry and related sciences;
- A willingness to keep up-to-date in the field, as evidenced by the pursuit of a higher degree in chemistry or a chemical science, enrollment in refresher courses and summer institutes, regular attendance at scientific meetings, membership in professional organizations, and other means of self-improvement;
- Evidence of leadership and/or active involvement within the profession.

ACS LEHIGH VALLEY LOCAL SECTION AWARD FOR EXCELLENCE IN TEACHING AT SMALL COLLEGES

You are cordially invited to nominate a colleague to be recognized at the annual awards program of the Lehigh Valley Section of the American Chemical Society (LVACS) to be held on Thursday September 17, 2020. The event will feature dinner followed by a keynote speaker and the award recognition program.

We are seeking to recognize, encourage, and stimulate high quality teaching and research at small colleges. Please send the nominee's short curriculum vitae, list of publications, and evaluation of the nominee's achievements as a teacher in a small college. This document should clearly demonstrate the candidate's attributes: the quality of the candidate's teaching; organization and efficiency of lab work; research and/or development work; ability to challenge and inspire students; extra-curricular work in chemistry; courses, meetings, presentations, awards, etc. Seconding letters are not essential but as many as three may be included with each nomination. Letters may include careful evaluations of the teacher's abilities by their superiors, associates, or by local section members.

Please contact Lorena Tribe at <u>lut1@psu.edu</u> for any questions pertaining to the nomination for this award. The deadline for reception of your emailed application is May 15, 2020.

2020 Foundation in Chemistry Award

The Lehigh Valley Section of the American Chemical Society (LVACS) is delighted to announce the 2020 Foundation in Chemistry Award. The award, designed to promote the chemical sciences at the college level, will be given to a high school senior who will be majoring in chemistry, biochemistry, or chemical engineering and attending a college or university in the Lehigh Valley Section. This scholarship award consists of \$1000 and a plaque, which will be presented to the winner at the May meeting of the Lehigh Valley Section of the American Chemical Society on Sunday, May 17th at our Awards meeting. We have enclosed the guidelines for the award and the application materials. Please post the flyer and feel free to make additional copies as needed.

Please share this information with parents students and guidance counselors. The four-part application should be completed and submitted by April 10, 2020. We appreciate your help and thank you for publicizing the 2020 Foundation in Chemistry Award. We look forward to many worthy applications.

Instructions: The Foundation in Chemistry Award is sponsored by the Lehigh Valley Section of the American Chemical Society (LVACS) to promote the chemical sciences at the college level. This award, consisting of \$1000 and a plaque, will be awarded annually to a high school senior within the membership boundaries of the LVACS (Lehigh, Northampton, Berks, Monroe, Schuylkill, and Carbon Counties in PA, and Warren County in NJ) to attend a college in the Lehigh Valley area (eligible colleges are listed below) and intending to major in chemistry, biochemistry, or chemical engineering. The \$1000 check will be given to the student for defraying college expenses.

The applicant for this award should have completed one year of college preparatory chemistry, four years of mathematics, and one semester of college preparatory physics by high school graduation.

The application, which is attached to these instructions, will be evaluated on merit by the LVACS HS Scholarship Committee. The completed four-part application (nomination letter from your chemistry teacher sent independently as a separate email, the application form, transcript, and your essay) must be emailed by April 10, 2020 to: lvacsfoundations@gmail.com

Please direct any questions about this award to: John Freeman c/o lvacsfoundations@gmail.com.

Eligible Colleges for Awardees:

Albright College	Alvernia College
Cedar Crest College	DeSales University
East Stroudsburg University	Kutztown University
Lafayette College	Lehigh Carbon CC
Lehigh University	Moravian College
Muhlenberg College	Northampton County CC
Penn State-Berks	Penn State-Lehigh Valley
Penn State-Schuylkill Valley	Reading Area CC
Warren County CC	

2020 Foundation in Chemistry Award Nomination Form

(To be filled out by the student)	
Student's Name:	
Chemistry Teacher's Name:	
e-mail address:	
School Address:	
I hereby waive my	right of access to this recommendation
do not wai	ve my right of access to this recommendation

(To be filled out by the teacher)

Please submit a letter of recommendation (as an attached letter) addressing such issues as the above student's knowledge of chemistry and the sciences, initiative, leadership potential, and potential as a student in the chemical sciences at college. Any additional information about the student's financial need would be appreciated as we will consider financial need in the event we judge more than one student to be equivalent on the basis of merit. Please submit your letter as a PDF or word attachment to an email with the students name in the subject line to <u>lvacsfoundations@gmail.com</u>.

Deadline: April 10, 2020

Foundation in Chemistry Award

Application Form

(To be filled out by the s	tudent)	
Full Name:		
Home Address:		
Home Phone #:		
e-mail address:		
High School:		
Names and addresses of	your legal guardians:	
		_
		_
		_
College you will attend:		
Proposed major degree p	program:	
	- · · ·	les. If there are issues with generating a PDF please
mail a hard copy to: John	n Freeman, 220 W Pierce St, Easton PA 180	<u>042 by April 8, 2020</u>

Please write an essay using this page as a cover page (250 words maximum = approximately ½ page using 12 point font) on why you have chosen to study the chemical sciences in college and email it to <u>lvacsfoundations@gmail.com</u>.

Deadline: April 10, 2020