

THE OCTAGON

NOTE: The next 2 LVACS Section Meetings are just 1 week apart



February Section Meeting
Thursday, February 27th
Science Hall, [Albright College](#)
1650 Palm Street, Reading, PA 19604

Speaker: [Kyle T. Smith](#), Penn Color, Inc., Hatfield, PA

"Mastering Particle Size Stabilization in Broadly Compatible Dispersions: Penn Color's Technical Expertise"

As Group Leader of Energy Curables at Penn Color based in Hatfield, PA, Kyle is responsible for directing the UV-cure and plasticizer dispersion research teams while providing technical & commercial support to current and new customers.

[Abstract and Bio](#)

5:30 social hour / 6:15 dinner
Science Hall Lobby
7:15 business meeting / seminar
Science Hall Room 256
Parking on Palm Street in front of Science Center: [directions](#)

Social/dinner \$20
(\$10 students/retired/unemployed)

RSVP: Pamela Artz,
partz@albright.edu

CONTACT: Pamela Artz,
partz@albright.edu



March Section Meeting
Thursday, March 6th
[Muhlenberg College](#)
2400 W Chew St, Allentown, PA 18104

Speaker: [Valerie Shurtleff](#), Merck/West Point, PA

"Invention of MK-7845, a novel SARS-CoV-2 3CL protease inhibitor"

Dr. Shurtleff, Principal Scientist in Discovery Chemistry at Merck, West Point, will be delivering the technical talk for the March LVACS meeting at Muhlenberg College. Valerie has done interesting COVID-19 vaccine development work, and will also provide insights into her career journey.

[Bio](#)

5:00 social hour / 6:00 dinner
Hoffman House, [campus map](#) #67
7:00 meeting/talk
Trumbower 130, [campus map](#) #5
Park in the student parking lot next to building #67, [Campus Map](#)

Social/dinner \$20
(\$10 students/retired/unemployed)

RSVP: <https://forms.gle/Jgejfnp47Mp3vhR78>

CONTACT: Sherri Young, sherriyoung@muhlenberg.edu

LVACS Events Calendar

February 2025

Pennsylvania Junior Academy of Sciences
Region 3 Meeting, **Saturday, February 22nd**
Northampton Community College, 8:00 AM – 3:30 PM
JUDGES NEEDED!
CONTACT: Danielle Sixsmith at mbasile@salisburyysd.org

Section Meeting

Thursday, February 27th
Science Hall, Albright College
5:30-8:30 PM
Speaker: Kyle Smith, Penn Color, Inc.
CONTACT: Pamela Artz, partz@albright.edu



March 2025

Section Meeting

Thursday, March 6th
Muhlenberg College
5:00-8:30 PM
Speaker: Valerie Shurtleff, Merck/West Point, PA
CONTACT: Sherri Young, sherriyoung@muhlenberg.edu



Reading-Berks Science and Engineering Fair

Tuesday-Thursday, March 11-13th
Bollman Gymnasium, Albright College
Judging Tuesday, March 11
Public Viewing Wednesday/Thursday, March 12/13
JUDGES NEEDED!

CONTACT: <https://rbsef.com/judging/>

Lehigh Valley Science and Engineering Fair

Friday-Saturday, March 14-15th
Rauch Field House, Lehigh University, Goodman Campus
Public Viewing Friday, March 14
Judging Saturday, March 15
JUDGES NEEDED!
CONTACT: Philip Elias, philipjelijas@gmail.com

April 2025

Section Meeting/Undergraduate Research Poster Symposium

Tuesday, April 8th – SEE PAGE 4 CALL FOR ABSTRACTS!
Speaker: Jonathan Kuo, Penn State
CONTACT: Sara Hayik, sara.hayik@desales.edu



Also In This Issue...

3. Sherri Young is LVACS Outreach Volunteer of the Year!
4. Undergraduate Research Poster Symposium is April 8th at DeSales Univ: **Call for Posters.**
5. January Meeting Report.
6. Spring Science Fairs: Volunteer your time as judges to support our young scientists!
7. 2nd Call for 2025 LVACS Awards Competitions
8. Ned Heindel Organic Chemistry Scholarship Award.
9. MARM 2025 at Seton Hall University in S. Orange, NJ.
10. IUPAC Global Women's Breakfast is 2/11/2025; February is Black History Month.
- 11-12. YCC Pages: Ruger **travel award deadline 2/7/25** and Mini ChemLuminary Awards!
13. Career Page: New ACS Career Center.
- 14-16. SCC Pages: "From Blue to Bright: The path to White LEDs" by Christopher Iatauro.
17. 2025 Executive Committee.
- 18-29. Nomination and Application Forms for 2025 LVACS Award Competitions.

Stay tuned to www.lvacs.org and our social media pages for all the latest!   
CONTACT: Nigel Sanders, LVACS secretary, newsletter editor and webmaster, nigel53.sanders@gmail.com

LVACS Announces 2025 Outreach Volunteer-of-the-Year

Sherri Young of Muhlenberg College is recognized for outreach work to strengthen the section.



LVACS congratulates Dr. Sherri Young of Muhlenberg College on being named our Outreach Volunteer of the Year for 2025. Sherri has been a great resource for the Lehigh Valley local section over the past decade. Last year alone, Dr. Young planned and led at least two major initiatives: a career-focused event in collaboration with the Muhlenberg College chemistry club and Women in STEM club, featuring ACS President Dr. Dorothy Phillips, and an annual memorial event honoring the late Dr. Ned Heindel of Lehigh University, complete with an award for excellence in chemistry. Her innovative approaches and consistent participation have set a high standard for outreach, inspiring others and significantly advancing the section's mission and vision.

In addition to her outreach efforts, Sherri directs the Muhlenberg Center for Teaching and Learning (MCTL) at Muhlenberg College, coordinating new faculty orientation programming and a peer mentoring program during the first two years of a faculty member's time at the college. The programming and peer mentoring model for new faculty span topics such as balancing teaching, research and service, making service decisions, and active learning strategies. Beyond the work she does with new faculty, the center is working on peer mentoring models for faculty and staff at all career stages, including mid-career faculty who often do not have as much support and mentoring as new faculty.

Sherri was also nominated for the ACS VOTY honor, to be announced shortly. LVACS extends its sincere congratulations to Dr. Young for her service to ACS and the Lehigh Valley section!

Second Call for LVACS Committee Members / Chairs

LVACS is always looking for volunteers who share a special interest in the many communities within our section. The Section's [new bylaws](#) passed in September, specify three standing Committees: Nominating (Mike Bertucci, Chair, bertuccm@lafayette.edu), Program (Chaired by the current Chair-elect, Carl Salter, salterc@moravian.edu) and Finance (Chaired by the current treasurer, Sherman Cox, shermdc51@gmail.com). Other Committees must be approved by the EC, providing that a member willing to serve as Chair is identified. For example, at the November Executive Committee meeting, we welcomed Yi Du (duyidoit@gmail.com) as new Chair of the Women Chemists Committee (see page 6 for a good example of a Committee-sponsored event, fully supported by the LVACS local section). Other active committees include our Younger Chemists Committee, chaired by Steve Boyer (sboyer11@esu.edu) and our Awards Committee, chaired by John Freeman (jcf2@rcn.com). There are many opportunities to start/restart committees serving other communities such as Senior Chemists, Membership, Professional Relations, Inclusion, K-12 Education, SEED/Scholars program coordinator and others. Chairing or serving on a Local Section committee can be a rewarding way to meet ACS chemists with similar interests in our local area.

Interested? Please contact Nigel Sanders, LVACS Secretary, at nigel53.sanders@gmail.com

CALL FOR POSTERS: APRIL 8TH MEETING AND ANNUAL BANQUET AT DESALES UNIVERSITY

Undergraduate Research Poster Session

Sponsored by: The Lehigh Valley Section of The American Chemical Society

Tuesday, April 8, 2025 from 4:30 pm to 6:00 pm

DeSales University Center Wood and Heritage Rooms 4:30-6:00 PM

Preceding the April meeting of the Lehigh Valley Section of the ACS

Who may participate?

Undergraduates attending a college or university within the Lehigh Valley Section of the ACS. Research may have been done at the student's home institution with a chemistry or chemical engineering faculty member, during a summer research experience elsewhere, or as a summary of the work done by an ACS Student Chapter or chemistry club.

To participate...

Students wishing to present their work must submit an abstract *themselves* at <https://forms.gle/chdYkLPTrTkxVGA16> (or by using the QR code) by **Friday, March 28, 2025**. Please email sara.hayik@desales.edu with any questions. Early submission is encouraged.



Abstract requirements (filled out in Google Forms at <https://forms.gle/chdYkLPTrTkxVGA16>)

Title (in sentence case)

Authors names and institutions

Abstract text (maximum of 150 words)

Dr. Jonathan L. Kuo from Pennsylvania State University, Department of Chemistry, will be presenting the evening's featured talk. Dr. Kuo is interested in developing transition metal catalyzed processes that approach perfect atom economy. Examples include oxidations which use O₂, or reductions which use H₂. Many of these transformations involve careful consideration of how to choreograph the movement of protons and electrons around a transition metal ion in a controlled fashion.



Other requirements and information

- **ALL** students must register by **March 28, 2025** via <https://forms.gle/chdYkLPTrTkxVGA16> (or QR code) but only one per poster need submit an abstract.
- The poster session is held before the dinner meeting (\$20 for full members, \$10 for students, retired, and unemployed guests) and our annual student awards night.
- Poster presenters will be provided with pins, poster boards, and easels for displaying the posters.
- DeSales University encourages people with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation, have any questions regarding physical accessibility or would like more information, contact Sara Hayik, sara.hayik@desales.edu



Lehigh Valley ACS January Meeting Report

“Swimming Pool Chemistry, or How to Green the Rio Diving Pool”

“Swimming Pool Chemistry or How to Green the Rio Diving Pool”

Thursday, January 23, 2025, Collier Hall of Science

Join this discussion as we review the key ideas in pool chemistry—pH, chlorine sanitation, and calcium concentration—and take a look at a new chlorination system involving electrolysis and reflect on how it all went wrong at the diving pool at the Rio Olympics.

Social Hour: 5:00 p.m.—6:00 p.m.

Dinner: 6:00 p.m.—7:00 p.m.

CHOS Atrium

LVACS Meeting and Pool Talk

7:00 p.m.—8:00 p.m.

CHOS Mellon Lecture Hall 202

Reservation Contact: June Thompson thompsonj03@moravian.edu

Hybrid Meeting Contact: Carl Salter salterc@moravian.edu

Guest Speakers



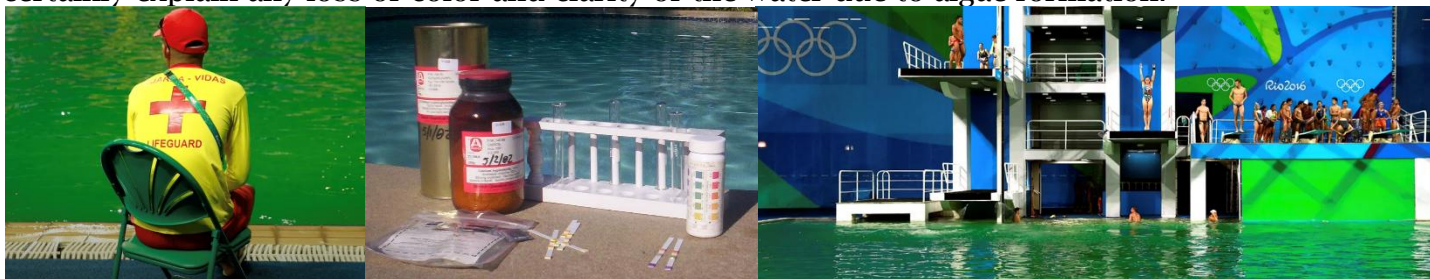
Carl Salter
 Professor of Chemistry
 Moravian University



William Farina
 Laboratory
 Coordinator and
 Instructor
 Moravian University



The 2016 Olympic summer games in Rio de Janeiro was briefly interrupted by a strange event: the sudden appearance of an emerald green coloration in the diving pool (and later the pool used for water polo matches). An [article](#) which was published in C&EN at the time ([Matt Davenport](#), *C&EN*, 2016, 94 (34), p 48, August 29, 2016) gathered speculation from a number of sources to explain the pool's color (and associated foul odor) and its rapid change from the usual appealing blue. Was it a very fast-growing algae or metal complexes? Unfortunately, the pool-management contactor in Rio finally gave up trying to remedy the situation (its still not clear exactly what measures they employed) and emptied the entire million gallons without taking a sample for analysis! The incident garnered C&EN's 'quote of the year' award from Rio spokesperson Mario Andrada during the pool cleanup efforts: “Chemistry is not an exact science.” But we do not ascribe to that conclusion so can't we make a better effort to use our general chemistry skills to explain what happened? Carl Salter and Bill Farina of Moravian University answered that question in the affirmative at our January 23rd meeting with a pool chemistry workshop enjoyed by 25 LVACS members. After taking the group through Swimming Pool Chemistry 101, they revealed the key datum: *a contractor mistakenly poured hydrogen peroxide into the diving well*. As Carl and Bill explained, hydrogen peroxide is a *de*-chlorinating agent, which means it undoes what chlorine is supposed to do: kill germs and keep water clear. Hydrogen peroxide actually *destroys* chlorine (in this case, produced by a salt electrolysis system) via: $\text{HOCl} + \text{H}_2\text{O}_2 \rightarrow \text{HCl} + \text{H}_2\text{O} + \text{O}_2 \uparrow E_{\text{cell}} = +0.7\text{V}$ and produces oxygen and chloride ions. It might surprise chemists to find that two oxidizing agents will react with each other, but that is what happens. The sudden loss of chlorine residual would certainly explain any loss of color and clarity of the water due to algae formation.



Many thanks to Carl Salter, Bill Farina and June Thompson of Moravian University for arranging an engaging [meeting](#) featuring this fascinating look into simple chemistry with wide impact!

**LVACS asks for a few hours of your time to encourage our
Local Student Researchers by being a ...**

Science Fair Judge

Pennsylvania Junior Academy of Sciences



Information: [Region 3](#)

Saturday, February 22, 2025

Northampton Community College
3835 Green Pond Road
Bethlehem, PA 18020

Morning session starts 8 am; afternoon session at 12:30

Free breakfast and lunch if you judge both!

No prior experience necessary!

CONTACT: Danielle Sixsmith at mbasile@salisbury.org

Lehigh Valley Science & Engineering Research Fair

[Information](#)

Saturday, March 15, 2025

Lehigh University, Goodman Campus
Rauch Field House, 123 Goodman Drive
Bethlehem, PA 18015

CONTACT: Philip Elias, philipjelijas@gmail.com



Reading-Berks Science Engineering Fair

[Information](#)

Tuesday, March 11, 2025

Albright College, Bollman Gymnasium
Schumo Center for Fitness and Well-Being
N. 13th St. and Richmond St. Reading, PA

Judging from 7:45 am to 4:15 pm with breakfast/lunch

[Register](#)



LVACS Annual Competitions and Awards: 2nd Call for Nominations

John Freeman, jcf2@rcn.com, LVACS Awards Committee Chair, along with the Section's Executive Committee invite members and the local community to recognize outstanding achievements in chemistry and chemical education by our colleagues. More on these awards, including past winners and forms can be found on our website, <https://www.lvacs.org/education-and-student-awards>.

[Chemagination Competition](#) (see also [Appendix I, page 19](#))

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 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 2050 and design the magazine's cover. The article must be written to fit in one of four categories: Alternative Energy, Environment, Medicine/Health, or New Materials. The winners of the LVACS local section competition will advance to MARM 2025.

[Foundation in Chemistry Scholarship Award](#) (see also [Appendix II, page 21](#))

The Lehigh Valley Section of the American Chemical Society (LVACS) is delighted to announce the 2025 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 is based on individual merit and consists of \$2000 and a plaque.

[Excellence in High School Chemistry Teaching Award](#) (see also [Appendix III, page 24](#))

The award is designed to promote excellence in Chemistry instruction at the high school level within the membership boundaries of the LVACS (Lehigh, Northampton, Berks, Monroe, Schuylkill, and Carbon Counties in PA, and Warren County in NJ). The award consists of \$2000 and a certificate of recognition. We hope that members will identify an outstanding teacher at their school and support them for the award. Additionally, we hope that members will share this with your neighborhood schools to increase awareness of the award. The winner of this award will be nominated by the Section for the ACS Division of Chemical Education Middle Atlantic Region (MARM) Award for Excellence in High School Teaching.

[Outstanding Achievement in Teaching Chemical Sciences 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). We are seeking to recognize, encourage, and stimulate high quality teaching and research at small colleges. The award consists of \$2000 and a certificate of recognition. 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. The winner of this award will be nominated by the Section for the MARM's E. Emmet Reid Award.

[Ned Heindel Organic Chemistry Scholarship Award](#) (see also [page 8, following](#))

This annual Scholarship for Organic Chemistry is for students below the junior level, currently enrolled in organic chemistry at an institution in the section, and a chemistry, biochemistry, or chemical engineering major. The competition entails taking the ACS Organic Chemistry Examination (45%), a brief, one-page letter of recommendation from the student's organic chemistry professor (10%), and an essay on a topic in organic chemistry (45%). The value of the scholarship is \$2000. Additionally, the top essay will receive \$200.

ALL OF THE NOMINATION / APPLICATION FORMS CAN BE FOUND ON PAGES 18-29

LVACS ANNOUNCES 2025 NED HEINDEL ORGANIC CHEMISTRY SCHOLARSHIP COMPETITION

Saturday April 26th at Moravian University from 9 am to 11 am

The Lehigh Valley Section of the American Chemical Society will award its annual Ned Heindel Organic Chemistry Scholarship this spring. To be eligible, students should be at or below the junior level, currently enrolled in organic chemistry at an institution in the section, and a chemistry, biochemistry, or chemical engineering major. The competition entails taking the ACS Organic Chemistry Examination (45%), a brief, one-page letter of recommendation from the student's organic chemistry professor (10%), and an essay on a topic in organic chemistry (45%). The value of the scholarship is \$2000. Additionally, the top essay will receive \$200. Details about the exam, letter, and essay follow below. **Students should indicate their interest in the scholarship by April 24th, 2025, to Dr. Godfred Fianu (fianug@moravian.edu).**

ACS Organic Chemistry Examination: The exam will be administered on **Saturday, April 26th, 2025 at Moravian University in Bethlehem, PA from 9:00-11:00 AM**. Students should report to the entry foyer of the Collier Hall of Science, which is on the Main Street Campus. Parking is available on Main Street, just in front of the Hall of Science, or in [Moravian Admissions/Visitor Parking](#). For driving directions and campus map see <https://www.moravian.edu/about/campus>. Juice and bagels will be available in the foyer at 8:30 AM.

Essay: The student should address the impact of an organic molecule or process in organic chemistry on society and his or her personal interest in it. The essay should be written at a level to interest and educate a general chemist who has completed both undergraduate-level organic chemistry courses. If a molecule is chosen, the synthesis, including key mechanistic features and structural analysis, should be covered. If a process is chosen, the physical and chemical basis for its success should be explained. Appropriate use of structures to facilitate understanding of the chemistry is expected. An additional page with references must be included. References should follow the guidelines as delineated in the ACS Style Guide. The essay should run from 1000 to no more than 1200 words in Times New Roman 12-point font with one-inch margins on all sides. The references and figures are not considered in the overall word count. Each page should have a header with the student's last name, brief essay title and page number. The winning essay after editing may be published in a future issue of the Octagon.

The essay will be rated on:

- Appropriate depth of coverage of the molecule or process
- Appropriate depth of coverage on the impact on society and student's interest
- Ease of reading, including grammar, spelling, and logical flow of the material
- Appropriate use of scholarly references & formatting

The essay should be submitted electronically to (fianug@moravian.edu) by the student before the exam begins on April 26th. The essay can be submitted at any time before the day of the exam; so, you are encouraged to get started early!

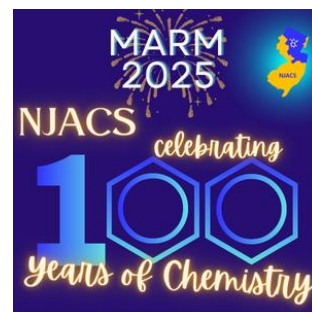
Letter of Recommendation: Professors writing a letter of recommendation on behalf of a student who is applying for the Scholarship should speak to the student's skills in lecture and laboratory in Organic Chemistry I and Organic Chemistry II. Please provide the course grade for Organic Chemistry I and comment on performance on written exams, proficiency in organic lab, and participation in course-related activities. **The letter of recommendation should be no more than one page in length, must be signed on institutional letterhead, and submitted electronically to fianug@moravian.edu by the student's professor before the exam begins on April 26th.**

Mid-Atlantic Regional American Chemical Society Meeting MARM 2025

Seton Hall University, New Jersey

May 28-31, 2025

The Middle Atlantic Region (MARM) of the American Chemical Society (ACS) contains fourteen local sections in the Mid-Atlantic Region of the United States (New York, New Jersey, Pennsylvania, Delaware and Maryland). Every year, the MARM conference is hosted by one of the local sections. This year MARM will be hosted by the North Jersey Section of the ACS (NJACS). The North Jersey Local Section extends from the Hackensack River in the East to the counties of Warren, Essex and Mercer in the West. The section currently has ~2,500 members. In 2025, we will celebrate the 100th year anniversary of the NJACS.



Plenary Speakers at MARM 2025



Morten Meldal, University of Copenhagen, Nobel Laureate

Morten Meldal is a distinguished Danish chemist known for his pioneering work in click chemistry, particularly his development of the copper-catalyzed azide-alkyne cycloaddition (CuAAC) reaction. For this work, Meldal was awarded the Nobel Prize in Chemistry in 2022, sharing the honor with Carolyn Bertozzi and Barry Sharpless. He also received the 2009 American Chemical Society Ralph F. Hirschmann Award in peptide chemistry, and the 2011 Vincent du Vigneaud Award of the American Peptide Society. Meldal has significantly influenced the fields of peptide synthesis and combinatorial chemistry, with his research facilitating advancements in pharmaceuticals and materials science. He has held various academic positions, including leading the research synthesis group at Carlsberg Laboratory and the Center for Evolutionary Chemical Biology at University of Copenhagen since 2011.

Phaedria Marie St. Hilaire, DEI Consultant, Angel investor, Strategic Advisor to ProWoc

Phaedria Marie St. Hilaire is a renowned chemist and business leader with over two decades of experience in the pharmaceutical and biotechnology sectors. She has held leadership roles at Carlsberg Laboratory and Novo Nordisk, where she was a Director and Senior Project Manager. A passionate advocate for diversity and inclusion, Dr. St. Hilaire co-founded ProWoC (Professional Women of Colour Network) in Denmark. She holds a Ph.D. in Chemistry from Duke University, a business degree from Copenhagen Business School, and executive coaching credentials from Henley Business School. Currently, she works as a DEI Consultant and Public Speaker and also serves as an angel investor, supporting diverse startups and mentoring professionals.



Rebecca Ruck, Merck

Rebecca Ruck is an Associate Vice President in the Process Research & Development organization at Merck, where she leads the Enabling Technologies group. She has played a pivotal role in innovating chemical processes to manufacture drug candidates efficiently and sustainably. Dr. Ruck earned her BS at Princeton University, her Ph.D. in organic chemistry from Harvard University, and completed NIH-funded post-doctoral research at UC Berkeley. An advocate for diversity in science, she co-founded the WCC Merck Research Award to support third and fourth year female graduate students in chemistry, as well as the annual Empowering Women in Organic Chemistry conference, and has been recognized with several awards including the ACS Award for Encouraging Women into Careers in the Chemical Sciences.

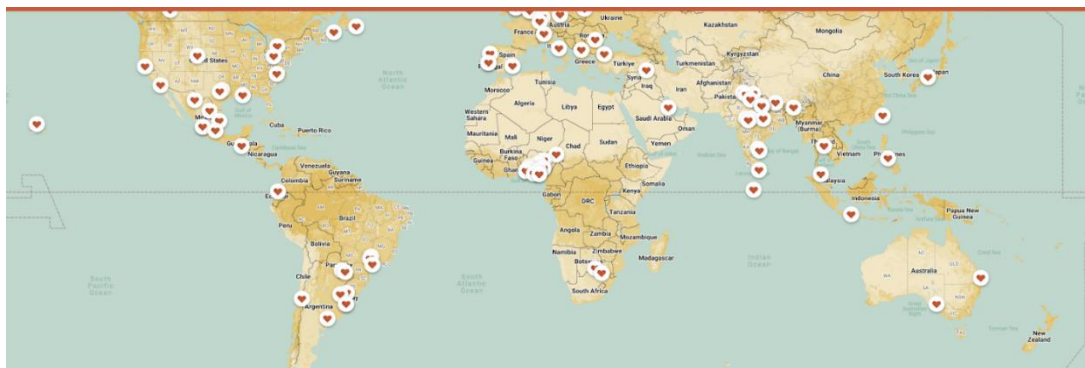


ACS Women Chemists Sponsor IUPAC Global Women's Breakfast 2025

REMINDER from Fatima Mustafa, Project Coordinator, IUPAC GWB!

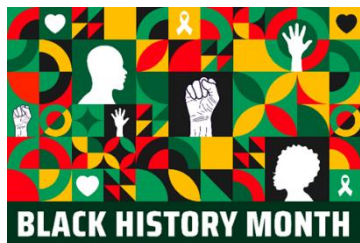
As per your continuous efforts in supporting women in Chemistry, we are glad to bring to your attention this amazing opportunity of engaging your institute/ACS local section in the IUPAC Global Women's Breakfast event, that will take place on **Feb 11, 2025** with the theme "*Accelerating Equity in Science*" in support of the [International Year of Quantum Science and Technology\(IYO\)](#) in 2025.

For more info: <https://iupac.org/gwb/>. Unlike traditional events where you register to attend e.g conferences, this is an annual global occasion where groups, institutes, universities, schools are encouraged to organize their *own event* to celebrate women in science and foster collaboration in the scientific community. As we understand everyone's busy schedule, please note that the event could be as simple as gathering over coffee for a few colleagues or as big as hosting a symposium or seminar. The format is entirely up to you—flexibility is key! *Excited to add your event to the map?*



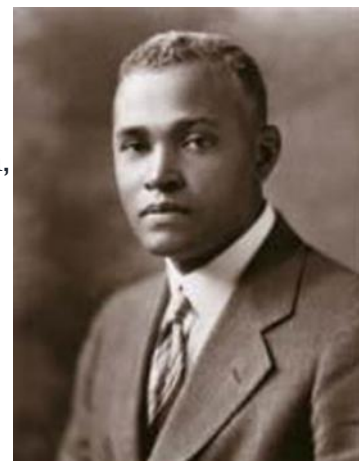
IUPAC GWB 2025 registered events globally

ACS Celebrates Black Chemists and Chemical Engineers



In celebration of Black History Month, ACS proudly honors the numerous Black chemists and chemical engineers who have overcome adversity, advanced scientific knowledge, and contributed to global change. We also recognize the Black scientists who continue to inspire us today. To showcase the achievements of these remarkable individuals, ACS Publications [curated a special selection of research and resources](#) in 2024.

Historic Black Chemist: St. Elmo Brady: St. Elmo Brady made history as the first Black American to earn a Ph.D. in chemistry. His groundbreaking achievements didn't stop there; Brady played a pivotal role in developing chemistry curricula, faculty, programs, and facilities at four major historically Black colleges and universities (HBCUs). Through his dedication, Brady and his colleagues mentored countless generations of African American chemists, leaving an indelible mark on the chemical enterprise. Brady's life and work continue to inspire all who learn about his legacy. In recognition of his lifelong contributions, ACS honored him with a [National Historic Chemical Landmark](#). This prestigious designation was celebrated at the University of Illinois, Urbana-Champaign, where Brady earned his Ph.D. in 1916, and at the four HBCUs where he held leadership roles: Tuskegee University, Howard University, Fisk University, and Tougaloo College.



Younger Chemists Committee (YCC) Page

Students! Don't forget the George Ruger LVACS Student Travel Awards for Spring 2025 Meetings!

The travel award is for a \$150 to support students from the local section traveling to an ACS Conference. For your application to be complete and considered, submit this completed form AND:

- A copy of the email notifying abstract acceptance for the conference.
- A short explanatory letter (1 page max) describing what you hope to learn from the meeting.

Eligibility:

- Any college or university student attending a school in the Lehigh Valley ACS Local Section area who is presenting at an ACS National or Regional meeting. Only one presenter per presentation is eligible.
- Preference will be given to first-time attendees.
- The award is based on merit as judged by the LVACS Executive Committee.

Post presentation requirements:

- Submit a photo and short paragraph about your experience to be published in the Octagon Newsletter.
- If possible, present at the LVACS Undergraduate Poster Session before the Awards Banquet

All applications must be completed and emailed to Steven Boyer (sboyer11@esu.edu) by the following dates:

2025 Deadlines (all are 11:59pm on given date):

- **Spring National Meeting 2/7/2025 -- DEADLINE APPROACHING!**
- MARM, NERM 5/11/2025
- Fall National Meeting 7/1/2025

Application (below and also available [here](#))

Student Name _____ Institution _____

Mailing address for check _____

Faculty Advisor Name _____

Presentation Title _____

Conference Attending _____

This conference is (circle one)	regional	national
Format of presentation (circle all that apply)	poster	oral
This is your first conference presentation:	Yes	No
Have you won a previous LVACS Travel Award?	Yes	No

Student Signature _____ Date _____

Student Name (printed) _____

Faculty Advisor Signature _____ Date _____

Faculty Advisor (printed) _____

Younger Chemists Committee (YCC) Page

Students! New! Mini ChemLuminary Awards for Chem Clubs

LVACS is accepting nominations for the following Mini ChemLuminary Awards:

Outstanding Performance by a Chemistry Club

This award recognizes a chemistry club for outstanding overall performance and for excellence in individual programs or activities for the current academic year.

Outstanding Individual Event

Recognizes a chemistry club for an innovative event, hands-on activity or demonstration during the current academic year.

**Award winners will be recognized at the LVACS Awards Banquet in April.

Eligibility:

- Any chemistry related student organization in Lehigh Valley ACS Local (does not require being an ACS Student Chapter).
- One nomination per award per school. Any additional applications will not be submitted to the committee for review.
- **The attached application must be submitted to Steve Boyer (sboyer11@esu.edu) by 11:59 pm on 3/7/2025 for consideration. (also available [here](#))**

While not required, we encourage all clubs to present a poster at the LVACS Undergraduate Poster Session on 4/8/25 at DeSales University.

Mini ChemLuminary Nomination Form

Club Name_____

Institution_____

Number of members_____

Summary of events organized

Use the following table to list events that were organized by the club during the 24-25 academic year. You may add more rows as needed. Please indicate the event you are nominating for the best individual event award by bolding the event title in the table. You may only nominate one event per school.

	Event	Approximate Number of Attendees/volunteers
Example	Mole Day Demonstrations in the Quad	50/4
1		
2		
3		
.....		

Brief event description

Provide a short (one paragraph) description for each of the events listed in the above table. Make sure the paragraphs are numbered to match the table. You may attach an appendix with any pictures, flyers, or other supporting information for the nomination. Please indicate the event you are nominating for the best individual event award by starting the description with (Event Nomination)

Example: (Event Nomination) From 2-4pm on 11/23/24, the club did chemistry demonstrations for the campus community on Named Quad. This was a collaboration event between the Chem Club and the STEM Club on campus. Members of the Chem Club organized demonstrations for the event which included Elephant Toothpaste, iodine clock reaction, and slime.

LEHIGH VALLEY ACS CAREER PAGE

Check out the Career page on our website lvacs.org/careers for a wealth of information on the services provided by LVACS and ACS to chemists at all stages of their careers. Online courses, 1-on-1 consulting, professional development grants and **the new ACS Career Center** package are some of the benefits offered to ACS members to assist in planning and executing your career.

CHECK OUT CHEMISTRY JOBS NOW! <https://chemistryjobs.acs.org/jobseeker/search/results/>



[My Account](#) | [Job Search](#) | [Manage Resumes](#) | [Create Job Alerts](#)

The American Chemical Society is proud to announce the launch of its **new and improved career center**, [ACS Chemistry Careers](#) (formerly C&ENjobs and Get Experience). From internships and REUs, to full-time research and lab positions, we have you covered in all stages of your career. [Create an account](#) and start exploring the benefits of our new career center today.

SEARCH OPPORTUNITIES



Search and apply to top **chemistry jobs** at institutions that value your credentials.



Upload your resume so employers can contact you. You remain anonymous until you choose to release your contact information.



Create **Job Alerts** and receive an email each time a job matching your specified criteria becomes available.

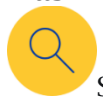
POST YOUR JOB



Post your job, or your institution's job, where the industry's most qualified chemistry professionals go to advance their careers.



Email your job directly to American Chemical Society job seekers via our exclusive **Job Flash™** email.



Search our **Resume Bank** using robust filters to narrow your candidate search.

Lehigh Valley ACS Senior Chemists Page



Reprinted from *ChemMatters*, Vol 42, No 4 (December 2024), pp 9-11. Christopher Iatauro is a Sayreville, NJ high school student

Wrapped around nearly every teenager's room is a light-emitting diode (LED) light strip. As a space becomes an extension of one's personality, it makes sense that an easily customizable light source would dominate the décor. This rise in popularity is also attributed to the LED light strips' versatility. Over the past decade, LED use has slowly begun to take over living rooms. They are also finding a place under countertops, behind shelves, and around windows.

Although it may seem they are an overnight hit, it has taken well over a century of innovation to bring LEDs to the world, and out of it, in the case of the International Space Station. LEDs are a testament to how innovation rises when engineering and chemistry mix.

EVOLUTION OF THE LED

"[LEDs] have had a profound impact on technology and society" says Steven DenBaars, a professor at the University of California, Santa Barbara. It is increasingly apparent that LEDs are our future and have been for quite some time, according to DenBaars.

The many challenges the pioneers of this light faced prove the best work takes time—lots of it. LEDs have had a complex evolution and history spanning the course of a century of observations, research, and experimentation.

"The story of LEDs could go as far back as we want it to," says DenBaars. Their story began with the discovery of electroluminescence.

DenBaars explains that in 1907, H. J. Round, an engineer in England, was the first person to observe electroluminescence—the emission of light caused by the interaction of an electric field with a solid. The first color that Round was able to

produce was yellow. He did so by applying 10 volts to a crystal of carborundum, a form of silicon carbide (SiC).

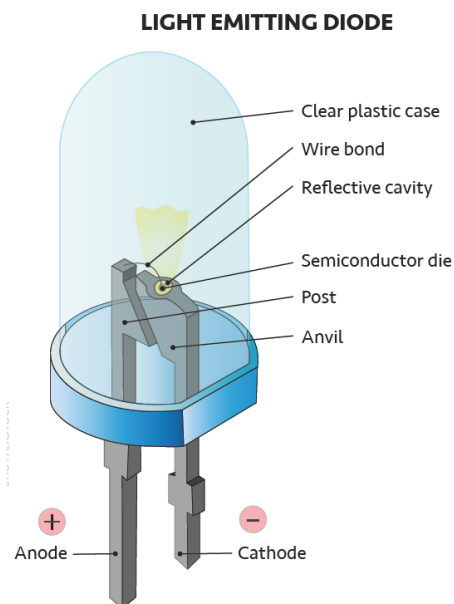
Round's observations and discoveries paved the way for the enhancement of the LED, and nearly 90 years later, another field-changing discovery would be made—this time in Japan, changing the landscape of LEDs into what we use today.

WHAT IS AN LED?

The most important aspect of the LED is the diode. A diode is a semiconductor device that, when connected to an electrical source, allows electrons to travel only in one direction. A semiconductor allows electrons to flow but generally not quite as well as a conductor.

Most metals are conductors. Semiconductors are often metalloids or compounds containing metalloids, elements shown in a descending "ladder" in the right-hand portion of the periodic table.

Lehigh Valley ACS Senior Chemists Page (continued)



Semiconductors can be doped with other elements that change how well they conduct or don't conduct electrons. For example, in a silicon-based semiconductor, a little bit of the silicon could be replaced with phosphorus, which has one more electron per atom. This extra electron cannot fit in the regular electronic structure of silicon, so it is highly mobile and greatly increases conductivity. Since the mobile component is an electron, which is negatively charged, this is called n-doping.

If instead, an element such as gallium, with one fewer electron, replaces a little bit of the silicon, then that creates a vacancy in silicon's usual electronic structure, called a hole, which is also mobile and can carry current. Since the holes are effectively positively charged, this is called p-doping. When two layers of semiconductors—one n-doped and one p-doped—are joined together, a "p-n" junction is formed.

"What provides energy to the LED in the form of an electrical current is the battery when you turn the switch on. It's this energy that gets converted into light (photons)," explains Federico Capasso, a professor in the School of Engineering and Applied Sciences at Harvard University.

The power source forces electrons from the n-type semiconductor into the holes in the p-type semiconductor; when the electron and the holes recombine, energy in the form of light is emitted.

"The photons coming out of the LED are quanta of energy," says Capasso. "Light is a wave, and its energy is quantized; that is, it's made up of packets of energy (photons). The energy of the photon is proportional to the frequency of the light wave."

You can accurately calculate the energy of a photon using Planck's constant and the frequency of the light emitted ($E=h\nu$), which Capasso notes "is one of Einstein's major discoveries."



The color produced by the LED is determined by the bonding properties of the semiconductor. When a mobile electron from the n-doped semiconductor fills in the hole in the p-doped semiconductor, how far apart in energy the two sides are will determine how much energy is released and, consequently, the frequency/wavelength of light that is emitted. For each different material, the bonding has a characteristic energy, so LEDs emit light that is narrowly focused at that energy—in other words, monochromatic light.

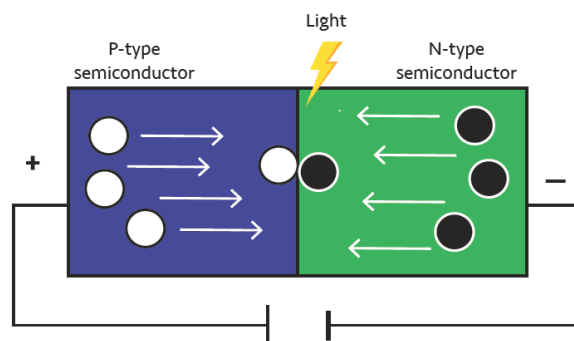
When scientists were creating LEDs, they used many different materials to try to create a desired color. So, by tweaking the elements that make up the semiconductors and thus changing the strength of the bonding, the energy released is tuned to a desired color.

BLUE LEDs

In 1962, Nick Holonyak, an engineer at General Electric, created the first red LED light. At the time, Holonyak knew that the semiconductor gallium arsenide (GaAs) could be used to make LEDs that produced light in the infrared region—light with lower energy than red light and not visible to the human eye.

He theorized that by tweaking the electronic structure of GaAs, he could change the energy of the transition of an electron into the hole and thus the wavelength of light produced. When he replaced some of the arsenic atoms in GaAs with phosphorus atoms, the bonding was strengthened, shifting the energy of the emitted light higher, from infrared to red.

Building upon Holonyak's pioneering work, the green LED was then created by



When electricity moves through the circuit, the electrons in the n-type semiconductor can recombine with the holes in the p-type semiconductor and energy is released as light.

Lehigh Valley ACS Senior Chemists Page (continued)

replacing some of the phosphorus atoms in gallium phosphide (GaP) with nitrogen.

Red and green LEDs are important, but to make a white light, they would need a blue LED as well. Scientists recognized that producing white light from LEDs would open the door for much broader applications across the world.

The race to be the first to discover and market the blue LED spurred intense innovation. Eventually, the treasured LED would be discovered by Shuji Nakamura, an engineer with Nichia, a Japanese chemical engineering company.

Building on the pioneering work that developed red and green LEDs, Nakamura used gallium nitride (GaN). Although it was difficult to produce quality crystals of GaN suitable for LED use, Nakamura in collaboration with Professors Isamu Akasaki of Meiji University and Nagoya University and Hiroshi Amano of Nagoya University persevered and used it to create efficient blue LEDs.

"Nakamura's innovations in GaN material growth, particularly his invention of the blue LED, paved the way for a wide range of applications," said DenBaars.

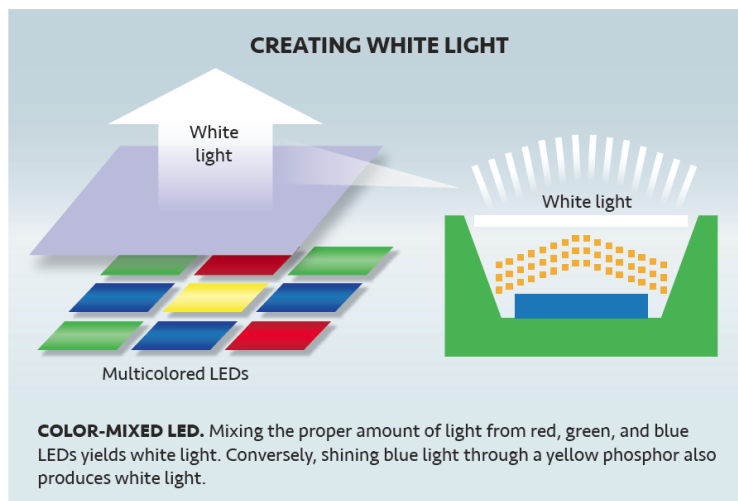
In 2014, Nakamura, Akasaki, and Amano won the Nobel Prize in Physics for the invention of the blue LED, paving the way for energy-saving white light sources.

WHITE LIGHT

The implications and uses for the LED light exploded after the discovery of the blue LED, but this is not due to a high demand for blue. It was mainly used as a key to access white light, white is obviously much more versatile and has more uses than a monochromatic, that is single color, light source.

There are several ways of using blue LEDs to get white light. One is to add a yellow phosphor to the device. A phosphor is a compound that luminesces—absorbs light and then re-emits it at a longer wavelength (lower frequency, lower energy) than the light that excited it. In some white light-producing LEDs, the blue LED illuminates a yellow phosphor and the result is white light. Two complementary colors of light mixed together produce white light.

COLOR WHEEL



Another method is to carefully mix red, green, and blue LED with a filter. This not only produces white light, but it can be tuned to provide a full spectrum of color.

INCANDESCENT LIGHT VERSUS LEDs

Customization of personal spaces in homes, offices, and dorm rooms, down to the color of its light, have had a drastic effect on sales of LED bulbs. In contrast to incandescent bulbs, LEDs can provide any color option. And the LED can be synced to detect the sound of music and change colors accordingly!

Another major reason for the success of LEDs is not merely the novelty of the colors and displays, but for their eco-footprint. According to the U.S. Department of Energy, "residential LEDs, especially Energy Star-rated products, use at least 75% less energy and last up to 25 times longer than incandescent lighting." The agency further noted "widespread use of LED lighting has a large potential impact on energy savings in the United States."

ROOM FOR GROWTH

In 2015, according to the U.S. Energy Information Administration, only 4% of homes in the United States had converted to LED bulbs. As of 2020, that number increased to 47%—an 11-fold increase in five years.

Despite all of these seemingly endless upsides, it is worth noting that not everybody is convinced of this technology. Consumer reviews of some LED lights indicate that they are not as reliable as typical light bulbs due to flickering, noise, overheating, and simply not working. While these concerns are real, some of them can be traced back to the light's quality.

"[Quality LED bulbs] last longer, are more durable, and offer comparable or better light quality than other types of lighting," according to the Department of Energy. Cheaper versions of LED lights can prove more trouble than they are worth.

"[Blue LEDs] paved the way for a wide range of applications, from energy-efficient lighting to high-resolution displays and advanced medical devices," says DenBaars.

LEDs are much more than a source of light. This tiny device, simple in design but complex in science, will no doubt be remembered as one of the more important inventions of the past century.

Christopher Iatauro is a high school student based in Sayreville, N.J. He enjoys researching and writing about topics he has lots of questions about.

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jcf2@rcn.com



APPENDICES: NOMINATION AND APPLICATION FORMS FOR LVACS AWARDS

APPENDIX I: [CHEMAGINATION COMPETITION](#)

APPENDIX II: [FOUNDATION IN CHEMISTRY SCHOLARSHIP AWARD](#)

APPENDIX III: [EXCELLENCE IN HIGH SCHOOL CHEMISTRY TEACHING AWARD](#)

APPENDIX I: CHEMAGINATION COMPETITION

The Lehigh Valley American Chemical Society (LVACS) will be holding a Chemagination Competition During the Spring of 2025. 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. Such skills will serve them well in their future careers regardless of field.

CONTEST OVERVIEW

For this event, high school students are asked to imagine that they are living 25 years in the future and have been invited to write an article for ChemMatters, a magazine for high school students that focuses on the role of chemistry in everyday life. 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.”* To view a sample ChemMatters magazine visit [acs.org](http://www.acs.org), and look under Education:

<http://www.acs.org/content/acs/en/education/resources/highschool/chemmatters.html>.

In addition to the article, students are asked to design a cover for the magazine. The article must be written as if the student is living in the year 2050, looking back at innovations that have occurred since 2025. The innovation must fall into one of the following categories:

- * Alternative Energy
- * Environment
- * Medicine/Health
- * New Materials

A few examples of areas where development is expected are: nanotechnology, energy efficiency, pollution prevention, green chemistry, sustainability, intelligent devices for sensing, proteomics, climate models, biopharmaceutical therapies, medical devices and/or implants and new energy sources.

Questions to guide your students:

1. How did this research begin? What prompted or catalyzed the idea?
2. How did this research evolve from the initial research idea to the final innovation 25 years later? What were some of the key breakthroughs?
3. How did the research team work together and collaborate over the years?
4. Remind the teams they are writing a retrospective not a forward-looking article

The local section competition will be completely electronic. Teams should submit their articles and cover design by April 7, 2025 attached to an email to lvacschemagin@gmail.com. The articles will be judged based on the MARM 2024 rules. Please refer to the [linked website for the rules](https://marm2025.com/programs-at-marm/)

The winners of the LVACS local section competition will advance to the regional meeting, MARM 2025 sponsored by Northern Jersey section of the of the ACS. This will be held on Saturday, May 31 at Seton Hall University. First place category winners from Local ACS Section’s Chemagination contests are eligible to participate. If a first-place winning team chooses not to participate, a second place team may serve as an alternate.

DEADLINES

March 15: Teams should submit their intent to participate (this allows for appropriate judge recruitment, but is not a firm deadline or a requirement for participation.)

April 7: Teams submit their articles online for the LVACS competition to lvacschemagin@gmail.com. (This is a firm deadline)

May 5: Teams notified of award status (This is a firm deadline).

May or September: Winning teams honored at the Lehigh Valley ACS meeting.

May 24: Local section winning teams submit their articles for pre-judging to MARM 2025

May 31: MARM 2025 Chemagination takes place at Seton Hall University

CONTEST GUIDELINES

ARTICLES must:

- be written by a team of two or three students; each student may be on only one team.
- be about 1000 words (figure captions are not included in the limit).
- present the chemistry/scientific concepts/ideas/principles behind the innovation.
- describe the innovation and indicate how it has improved people's lives.
- present a "history" of the changes that had to occur over the prior 25 years to develop this innovation.
- include drawings, diagrams, illustrations and descriptions of the chemistry and any technology involved in all key aspects of the innovation.
- cite a minimum of three technical references.
- include a cover design for the magazine. The cover design can be an original computer graphic or a free-hand drawing.

Displays For MARM must:

- be 24" deep, 40" wide and 48" tall or less, and be able to sit on a table, much like at a science fair display.
- include the cover of the magazine.
- be a visual representation of the article's content with a minimum of text.
- include a list of references cited.

ATTENDANCE:

- At least one member of the team must attend the competition to present the display and interview with the judges to be eligible for prizes.

SCORING:

- Winners are selected by the judges based on the quality of the article and display, and the quality and understanding of the science of the innovation.
- Criteria for scoring include scientific thought, creativity, clarity, thoroughness, and teamwork.

ELIGIBILITY/REQUIREMENTS MARM 2025:

- Each local section can submit up to four entries (1 per category).
- All students must be currently enrolled in an accredited high school or home school and be taking or have recently completed a grades 9-12 science class.
- Students and their parents are responsible for transportation to and from the meeting site. The Lehigh Valley Section of the ACS will subsidize travel up to \$100 per team
- All entries become the property of the ACS and will not be acknowledged or returned.
- The ACS, its agents, and contractors, are not responsible for lost, late, or misdirected entries.
- Acceptance of the prize constitutes consent to use the winners' names, likeness and entries for editorial, advertising, and publicity purposes.
- Prizes are not transferable.
- Taxes, if any, are the sole responsibility of the winner.
- Participants will be asked to provide a Photo Release Form signed by a parent or guardian prior to attending the regional contest.



Lehigh Valley Section

2025 Foundation in Chemistry Award

The Lehigh Valley Section of the American Chemical Society (LVACS) is delighted to announce the 2025 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 \$2000 and a certificate, which will be presented to the winner at the May or September meeting of the Lehigh Valley Section of the American Chemical Society. 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.

As an ACS member please share this information with parents students and guidance counselors. The four-part application should be completed and submitted by **April 11, 2025**. We appreciate your help and thank you for publicizing the 2025 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 \$2000 and a Certificate, 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 \$2000 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, the application form, transcript, and your essay) must be submitted by **April 11, 2025** and emailed to: lvacsfoundations@gmail.com. If you are unable to submit electronic materials please mail paper copies to the address below. Please direct any questions about this award to: John Freeman at lvacsfoundations@gmail.com

Sincerely
John Freeman
Chair of the LVACS HS Scholarship Committee
220 W Pierce
Easton, PA 18042

Eligible Colleges for Awardees:

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

2025 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 waive 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; we will consider financial need in the event we judge more than one student to be equivalent on the basis of merit.

Deadline: April 11, 2025

2025 Foundation in Chemistry Award Application Form

(To be filled out by the student)

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 program: _____

Please attach an official transcript with your most recent grades.

Please write and attach an one page essay (250 words maximum) on why you have chosen to study the chemical sciences in college.

Deadline: April 11, 2025

Applicatoin Check list

- Application form/this page
- Letter of recomendation
- Student Essay
- Student Transcript

APPENDIX III: EXCELLENCE IN HIGH SCHOOL CHEMISTRY TEACHING AWARD

THE LEHIGH VALLEY SECTION AWARD FOR EXCELLENCE IN HIGH SCHOOL TEACHING AWARD PROGRAM FOR 2025

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 \$2000 cash award and a certificate. A meal at the 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 for the following year.

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. Self-nominations with supporting letters from a colleague and the nominees area coordinator or principal are accepted. Prior winners are members of the award selection committee for 10 years post their award.

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
 - 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 ten 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.**

Submit nominations to ***John Freeman***) by e-mail attachment to LVACSTOTY@gmail.com by April 1st 2025

***Please state award title in subject line, and the candidates name ***

ACS Lehigh Valley Local Section
Award for Excellence in High School Teaching
2025 Nomination Portfolio Cover Sheet 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.

- Nominator Information Form;
- Nominee Information Form;
- Nominator Recommendation Letter of no more than 750 words send as email by Nominator with nominee's 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 10 years.
- Letters of Support (no more than 400 words) sent separately as email by principal with nominees name in subject line:
One must be from the teacher's current principal or supervisor.
Up to two 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: *APRIL 1 2025*

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 LVACSTOTY@gmail.com By April 1 2025 Please state award title in the subject line.

The-award will be announced at the May Meeting of the Lehigh Valley Section of the American Chemical Society. Dinner will be arranged

NOMINATOR INFORMATION

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

NOMINATION FORM

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

Deadline: *April 1, 2025*
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 SECTION AWARD FOR EXCELLENCE IN HIGH SCHOOL TEACHING

Deadline: *APRIL 1, 2025*

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.