Next Meeting:

Friday, May 17, 2019
Details coming soon...

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Summer will be here before you know it!
It’s time to Play Ball!

LVACS at the Iron Pigs
July 25th 7:05 pm.
Tickets  $20
contact Lindsey Welch
lawelch@cedarcrest.edu
Editor’s Farewell

Dear LVACS Members,

I have served as editor of the Octagon since 2003 and webmaster since 2001. So it is with mixed emotions that I say farewell to that role. At an average 8 issues per year, I have authored more than 150 Octagons - from the days of print shops, folding, stapling and snail mail to an all online forum in color with images to spice things up. Our look has changed over the years but our masthead is a distinctive feature of the section and I hope it will remain. I am sure the new editor will serve the section well.

When I first began our online presence in 2001 with a simple little site, we were one of the few sections with a presence on the web. How much has changed! Yet another change is coming soon. A bit more than two years ago the section moved from its own URL, LVACS. net to the national ACS supported platform, Webs. This May, Webs will no longer be supported and it is time for a new look and a new online platform. I leave that task to the new leadership as my busy life hasn’t room for that transition.

I have enjoyed working with a number of different sets of officers and active members of the section, but it is time to move on. In the words of one of my heroes, Winnie the Pooh,

“I always get to where I am going by walking away from where I have been.”

Quests are funny things that way.

Sincerely,

T. Michelle Jones-Wilson, Ph.D.
Octagon Editor 2003-2019
LVACS Scholarships

2019 Foundation in Chemistry Award

The Lehigh Valley Section of the American Chemical Society (LVACS) is delighted to announce the 2019 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 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 May 1, 2019. We appreciate your help and thank you for publicizing the 2019 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 must 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 postmarked by May 1, 2019 and mailed to:
John Freeman, Chair of the LVACS HS Scholarship Committee
220 W Pierce, Easton, PA 18042

Please direct any questions about this award to: John Freeman jcf2@rcn.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
2019 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: May 1, 2019 (postmarked)
2019 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 essay (250 words maximum) on why you have chosen to study the chemical sciences in college.

Deadline: May 1, 2019 (postmarked)

EMPOWERING WOMEN IN ORGANIC CHEMISTRY
Friday, June 28, 2019, University of Pennsylvania, Philadelphia, PA

Recent data and publications show a persistent lack of women pursuing and maintaining careers in Organic Chemistry. Evidence indicates that providing an opportunity for women to meet, network, and share scientific and career strategies is one effective approach to encourage women to enter and maintain careers in science. To meet this need, the first annual Empowering Women in Organic Chemistry Conference will be on Friday, June 28, 2019 at the University of Pennsylvania, Philadelphia, PA. This meeting is for women (students, post-docs, faculty, and professionals) who work or plan to work in the field of Organic Chemistry broadly defined, from all types of institutions (academic, industry, biotech, non-profit and government). The meeting will consist of both science and career topics to provide support and guidance for the next generation of women chemists, as well as provide opportunities for professionals to learn up-to-date science, network, and share experiences. This one-day event will include talks from organic chemists in industry and academia, a dynamic poster session, panel discussions, and many opportunities for networking. Professor Geraldine (Geri) Richmond (University of Oregon), past-president of AAAS, National Medal of Science awardee, and co-founder of COACh, will give the keynote lecture. Graduate students, postdocs, faculty, and professionals are invited! See ewochem.org/EWOC for more information and to register.
Organic Chemistry Scholarship

DEADLINE APPROACHING!

The Lehigh Valley Section of the American Chemical Society will award its annual Scholarship for Organic Chemistry this spring! To be eligible, students should be 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 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 $1000. Additionally, the top essay will receive $100. Details about the exam, letter, and essay follow below. Students should indicate their interest in the scholarship by April 26th, 2019 to:

Dr. Michael Bertucci bertuccim@moravian.edu

ACS Organic Chemistry Examination: The exam will be administered on Saturday, April 27th, 2019, at Moravian College, 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. For driving directions and campus map see https://www.moravian.edu/about/campus. Juice and bagels will be available at 8:45 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 sophomore-level organic chemistry. 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.

Submission: The essay should be submitted electronically to: bertuccim@moravian.edu by the student before the exam begins on April 27th. The essay can be submitted at any time before the day of the exam; if you have a busy semester coming up, 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 Lehigh Valley ACS 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. If possible, address the student’s quantitative skills by commenting on her or his performance in quantitative analysis or its local equivalent. The letter of recommendation must be signed on institution letterhead and submitted to bertuccim@moravian.edu by the student’s professor before the
The Mid-Atlantic Regional Meeting (MARM)
University of Maryland-Baltimore County
May 30 - June 1, 2019
https://marm2019.org/

Chemagination Competition
Dear High School Teachers,

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. Such skills will serve them well in their future careers.

High school students are asked to imagine that they are living 25 years in the future, 2044 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 2044. 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 to LVACS Competition @yahoo.com by May 1, 2019. The articles will be judged based on the MARM 2019 rules. Please refer to the following pages in this issue of the Octagon for the official rules or see marm2019.org/chemagination/.

The winners of the LVACS local section competition will advance to the regional meeting, MARM 2019 At the University of Maryland Baltimore campus on June 1 from 12:00 Noon to 5:00 PM. The Lehigh Valley section will provide up to $400 for documented travel expenses per team. If a first place winning team chooses not to participate, a second place team may 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. Articles for the MARM 2019 Chemagination Contest must be submitted by May 22.

KEY DEADLINES
May 1 Teams submit their articles for the LVACS competition.
May 15 Teams notified of placing
May 22 Local Section Winning Teams submit their articles for pre-judging to MARM 2019.
June 1 MARM Chemagination Competition takes place at Hershey Lodge, Hershey, PA.

Please send entries and questions to: John Freeman immediate past chair. LVACSchemagin@gmail.com
2019 MARM CHEMAGINATION DESCRIPTION AND RULES

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, 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 2044, looking back at innovations that have occurred since 2019. 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.

Evaluation of the entry is based upon:
(1) the written article which is submitted in advance,
(2) the presentation of the innovation on a self-standing display and
(3) knowledge of and soundness of the science as demonstrated in interviews with judges (much like science fair judging).

RULES

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 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 contest 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:
• 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.
• 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, misdirected, or postage-due 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 contest.

KEY DEADLINES
March 15 Local ACS Sections notify the 2019 MARM Chemagination co-chairs of their intent to participate in the 2019 MARM Chemagination Competition.

May 1 Local ACS Sections submit their estimate of the number of teams they will be sending to the 2019 MARM Chemagination Competition.

May 15 Local ACS Sections confirm the number of participating teams and submit the article titles and contact information for each student. (The submission process will be announced at a later date.)

May 22 Teams submit their articles for pre-judging.

June 1 The 2019 MARM Chemagination Competition takes place during MARM 2019 at University of Maryland, Baltimore County.
DEADLINE APPROACHING

2019 CCEW Illustrated Poem Contest
Take Note: The Chemistry of Paper

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

Contest Deadline: Monday, April 29, 2019

Prizes: ACS-themed Prizes

Contact: Dr. Lindsey Welch (lawelch@cedarcrest.edu)

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, “Take Note: The Chemistry of Paper.” 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 paper chemistry include:

Bioplastics Cellulose Fiber Lignin
Plastic Polymer Pulp Slurry

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 NGW theme, word choice and imagery, colorful artwork, adherence to poem style, originality and creativity, and overall presentation.
- All entries must be original works without aid from others. Poems may be submitted by hand on an unlined sheet of paper not larger than 11" by 14" or scanned and sent via email. Illustrations may be created using crayons, watercolors, other types of paint, colored pencils, or markers. The illustration may also be electronically created by using a digital painting and drawing app on a computer, tablet, or mobile device.
- The text of the poem should be easy to read and may be typed before the hand-drawn or digital illustration is added, or the poem may be written on lined paper, which is cut out and pasted onto the unlined paper with the illustration.
- No clipart or unoriginal images can be used.
- Only one entry per student will be accepted; all entries must include an entry form. If the illustration is created using a digital painting or drawing app, the name of the program must be included on the entry form.
- All illustrated poems and/or digital representations of the poems become the property of the American Chemical Society.
- Acceptance of prizes constitutes consent to use winners’ names, likenesses, and entries for editorial, advertising, and publicity purposes.
## 2019 LVACS OFFICERS

<table>
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Concluding May 2019