



WELCOME STATEMENT

Welcome to the 2021 ACS Connecticut Valley Section Newsletter! It is a joy to be with you as the scientific community continues to contribute and adapt to the world we have experienced over the last year. The Connecticut Valley Section of the ACS applauds the efforts of the students, faculty, volunteers, and members who have persevered during the challenge of the COVID-19 pandemic. The CVS chapter activities moved to a virtual platform during this time with the help of incredible volunteers and members, where we continued to welcome participation with area schools, universities and organizations. In this newsletter, we bring you news from the Younger Chemists Committee (YCC), our recent awards and event calendars (including talks on vaccine development, color of eggshell), and opportunities for you to connect with the ACS community both locally and nationally! Enjoy the read, and reach out if you have suggestions, perspectives, or wish to connect!

Talk: The Chemistry (and a little bit of Biology) on Eggshells

Speaker: Christian Brueckner, UCONN – October 26th, 2021

Bird eggs are filled with wonder, deep symbolism, and culinary delight. Eggshells are also fascinating from biological and chemical points of view. This talk will be richly illustrated, primarily non-technical, and geared toward a science-curious audience. I will briefly introduce eggshell shapes, materials, and eggshell colorings from the points of view of a life-long but non-expert birder and synthetic organic chemist. Drawn from wellestablished knowledge as well as most recent findings, biological function is linked to mechanical principles, color theory, as well as materials and dye chemistry. Special focus will be on the chemistry of eggshell pigments and their link to 'the pigments of life'.

Talk: The Imprinting-Homing Mechanism of Anadromous Fish

Speaker: Steve Gephard, State of CT-DEEP (ret) – November 11, 2021

Anadromous fish are species that migrate from saltwater to freshwater to spawn. Examples include salmon, shad, river herring, striped bass and sturgeon. These fish typically leave natal freshwater streams as relatively small juveniles and return after years in the ocean as large adults. The adults generally return to the same freshwater body of water from which they departed as juveniles. This life history requires two complex processes: physiologically changing from a freshwater fish to a saltwater fish and then vice versa, and finding their way 'home'. The latter mechanism is referred to as

imprinting/homing and it takes advantage of the unique organic chemical components in the water of the home streams. This mechanism can be disrupted by both natural substances and anthropogenic chemicals in the water. Conservation of these important 'runs' of fish require that our waterways remain free of not only the well-known pollutants such as sewage but also some lesser known covert chemicals that can do damage at extremely low concentrations.

2021 EUS YCC Partnership Research Symposium & Chemistry Career Expo

August $2^{nd} - 6^{th}$, 2021

The Connecticut Valley YCC has partnered with several other local section YCCs to form the Eastern US YCC Partnership. The Career Expo will take place on **Friday**,

The symposium is held to have early career (undergrads, grad students, postdocs, or industry) chemists to present their research work. As well as to provide an outlet for networking and exposure to some potential employers. Most of the participants will likely be looking at either academic or industry research careers and will be in school or recently graduated. There will be mostly chemists from the US, with some participation from students in Brazil. The person that attends your company does not need to be based in CT since the symposium is virtual.

National Chemistry Week

October 17-23, 2021 Fast or Slow, Chemistry Makes it Go! UConn, Central, UMass, St. Joseph

August 6th, from 4:00 - 7:00 pm ET

NCW is a community-based program of the American Chemical Society (ACS). This annual

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program unites ACS local sections, student chapters,

technical divisions, businesses, schools, and individuals in communicating the importance of chemistry to our quality of life. NCW occurs annually during the third week of October, typically the same week as Mole Day. About - National Chemistry Week (NCW) - American Chemical Society (acs.org)

Get feedback from board and specific activity. Find out activities, get photos, create collage, community event – discuss with next eBoard meeting.

4th Annual Symposium on Applied Synthesis, Connecticut College

September 11, 2021 Neil has info – follow up with him on info. Sponsored by Pfizer.

ACS National Meeting, April xx, 2022, Fall August

Info about ACS National Meeting. Get info from website.

Conference Buddy Program – YCC Program Virtual – possibly travel, need info

The Conference Buddy Award was designed to encourage local section members to attend the virtual ACS National Meeting held in April 2022 (referred to henceforth as Mentees). The award paid for registration, partnered each Mentee with an active local section member (referred to henceforth as Mentors) who helped them navigate the virtual conference and with the design of elevator pitches. CVS also hosted 2 virtual networking and social events during the meeting in collaboration with the ACS New Haven Local Chapter.

Christian or Caroline - contact for info

4th Undergraduate Career Workshop in Sciences - VIRTUAL, TBD, 2022

The Undergraduate workshop focused on job applications with a panel of career experts and hiring managers to assist with transitioning into graduate school or industry, resume tips, social media platforms and more. Sponsored by CVS-ACS and Central CT State University.

Potentially talk with undergrads in Nov – prep for internships and grad school

Feb/Mar – virtual event, industry job application.

Info from Sourav

Connecticut State Science Olympiad

On March xx, 2022 local exam virtual event.

On April xx and xx, 2022, national exam remotely.

The Chemistry Olympiad is a competition designed to stimulate interest and promote achievement in high school chemistry. It brings together the world's most talented young chemistry students, teachers, and schools. The selection process is to identify the most high-performing students who will then compete at the International Chemistry Olympiad (IChO). The selection process in the U.S., aka the USNCO competition, consists of a multi-tiered competition; generally, it first involves a local competition, aka the Local Exam, and it is then followed by the U.S. National Chemistry Olympiad competition, aka the **USNCO** National Exam, both competitions being sponsored by the American Chemical Society (ACS), and administered by its local sections. The top 20 students at the USNCO National Exam are then invited to attend a 2-week study camp, and 4 students, along with 2 alternates, end up being chosen to represent the United States at the International Chemistry Olympiad competition which typically takes place in July, and in a different country each year (this year's IChO competition will take place in Paris, France).

Info from Edward Fitzgerald

2021 CVS Undergraduate Research Symposium VIRTUAL,

April xx, 2022

The undergraduate research symposium is a chance for students to present their research.

Info from Kevin Kittilstved

Breakout Sessions included

Careers in Industry Graduate School Grad Student Panel Get the Most out of Professional Events Applying to Graduate School

Awardees

(Anna J. Harrison talk) (Anna J. Harrison poster) (CVS talk) (CVS Poster)





Dr. Anna J. Harrison, 1912 - 1998

First Woman ACS President

Ph.D. 1940 Univ. of Missouri, Physical Chemistry Dr. Harrison worked on toxic gases or "smokes". Dr. Harrison is noted for chemical research in molecular spectroscopy in the far ultraviolet region of spectrum. As an international leader in chemical education, Dr Harrison viewed chemical profession as fundamental to the improvement of science education, public awareness of science, and public welfare. Active nationally and internationally as a supporter of women in science. Dr. Harrision was celebrated for inspiring numerous young women to pursue careers in science.

1945 – 1979: Mount Holyoke College, Professor of Chemistry

ACS Chemical Safety Workshop

ACS Division of Chemical Health and Safety Workshop February xx, 2022

Chemists Celebrate Earth Week

Illustrated Poem Contest - April xx-xx, 2022 Ask industrial eBoard members – discuss at board meeting

New Haven Chapter of ACS – Events

Talk: TBDSpeaker: TBD

Talk: TBDSpeaker: TBD

ACS New Haven Section Student Research Symposium

December 4, 2021 9am – 3pm

Keynote Speaker: Dr. Scott Miller, Professor at Yale in the

Chemistry Department

New Haven Science Fair, May xx and xx, 2022

Best chemistry projects, grades K-5

1st place: 2nd place: 3rd place: Best chemistry projects, grades 6-12

1st place: 2nd place: 3rd place:

Upcoming Events

Biennial Conference on Chemical Education, 2022

Purdue University: July 31st – Aug 4th, 2022

Sponsored by Division of Chemical Education (DivCHED) of the ACS. The conference is designed for chemical educators at all levels: K-12, secondary school, undergraduate, graduate, and post-secondary chemistry faculty. (Do not need to be an ACS or DivCHED member to attend.) Conference themes are:

- (1) Classroom Practice and Learning Environments
- (2) Curriculum and Cognition
- (3) Assessment and Research Methods
- (4) Professional Development

More information at: https://www.bcce2022.org/

American Society of Photobiology, 2022

50th Annual Meeting: April 2022, Albuquerque, NM *KC Smith Bridge to the Future Awards*

High school students who compete in their local science fairs for 2021/2022 will be able to submit their photobiology-related project posters (as 5 minute videos) to Committee of American Society for Photobiology members to compete for one of ten travel awards to the 50th Annual Meeting in Albuquerque NM. These students will present their posters to a panel of judges.

Video submissions deadline: March 1, 2022 Ten travel awardees: March 21, 2022 Presentation and awards: April 10 – 12, 2022

Northeast Regional Meeting – NERM ACS, 2023

Local Organizing Committee and NESACS Board of Directors decided to postpone NERM 2021 to June 2023. Professor Hicham Fenniri, General Chair NERM 2021 https://www.nesacs.org/nerm.html#nerm2021

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CONGRATULATIONS!

The 2021 Division of Chemical Education Outstanding Service to the Division Award goes to **Frank Torre**. Frank has been a member of the Division since 1973. He served on the program committee and was later the Program Chair. He served in the Char secession 2012-2015.

Frank chaired many General Papers at the National Meetings when he was on the program committee and later as program chair from 1994 to 2004. At the forefront of using technology, in 1999 he organized a symposium on using technology to teach chemistry. He also was Chair of the Recognition Committee for three years, chaired the Finance Committee when he was Past Chair of the Division, and is currently a member of the Division Finance Committee and treasurer of the Board of Publications.

Frank Torre is a CVS-ACS Executive Board Councilor.

John S. Burlew Award

Purpose: To recognize outstanding contributions to chemistry by an ACS - CVS member.

Eligibility: All members of the CVS are eligible. A nominee must have made an outstanding contribution to chemistry. The nominee must also be a member of CVS and must not have received an award from ACS or other technical or scientific organizations for the same contribution(s). For more information, contact:

Neil Glagovich glagovichn@ccsu.edu

Sourav Chakraborty schakraborty@ccsu.edu

Establishment & Support: The John S. Burlew Award was established in 1986 by the Connecticut Valley Section of the ACS.

2021 Awardee:

Dr. John S. Burlew, 1910 - 1996

Ph.D. 1934 Johns Hopkins Univ, Chemistry Dr. of Science 1956 Drexel Institute of Tech American research scientist, researcher. Decorated President Medal of Merit winner 1948. Dr. Burlew had a long research career from the National Defense Research Committee, Cambridge Corporation, Franklin Institute and Carrier Corporation. From 1966 – 1994 Dr. Burlew had a distinguished service record for CVS-ACS, from section chairman, 15th NERM Chairman, and a chair of the Long Range Planning Committee.

ACS Membership Milestones:

50-60-70-year members

| Years | Salutation | First Name | Last Name |
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Milestone Members Award Dinner

TBD – based on Delta, et.al

Dr. You to speak about his winning the Burlew award and his research

Younger Chemists Committee (YCC)



Eastern USA Younger Chemists booth promo offering care

Symposium & Career Expo Aug 2, 2021 - Aug 6, 2021

On the week of August 2nd, members of the Connecticut Valley LS YCC in collaboration with YCC's across the eastern US seaboard as well as multiple international committees hosted the Eastern US YCC Research Symposium and Career Expo. Students at both the undergraduate and graduate level from multiple states, as well as India and Brazil presented their research at various poster and talk sessions.

The goal of this event was to promote collaboration, unity, and support amongst local sections by providing a virtual platform where younger chemists can share research accomplishments and network with local employers in a professional setting. On the last night of the conference the Career Expo hosted a variety of companies such as Pfizer, GSK, Evonik, and various graduate departments from universities such as Temple University and Illinois Institute of Technology. From our own local section we had Cristian Aviles-Martin, chair of our LS YCC, as part of the organizing team hosting sessions specialized in organic and analytical chemistry. Additionally, on behalf of our executive board member at large Mary Palliardi joined by her colleague Jessie Davis a scientific associate from Henkel of America hosted a

booth promoting opportunities and offering career advice.



Screenshot of virtual career expo room in Gather.Town platform (Photo Credit: <u>Salsabil Abou-Hatab</u>, Temple University)

On behalf of the CVS YCC, we hope to provide more frequent opportunities to help the professional development of the underserved early career chemist in the Connecticut Valley Region. We are currently planning a graduate career symposium for January. 2022. If any university faculty, industry researchers, or chemists in any field of work are interested in presenting their point of view on career development for the early career chemist please reach out to acs.cvs.ycc@gmail.com with the subject line "career symposium volunteer". Formal requests will go out in the month of October. Registration information for symposium will be available at a later date. Finally, if you are interested in joining the efforts of the CVS YCC register here: https://forms.gle/gyzfhE1eTHo6qjJ39

Connecticut Valley Section ACS – Executive Board

Chair: Dr. Sourav Chakraborty Central Connecticut State University

schakraborty@ccsu.edu

Chair-Elect: Dr. Neil Glagovich Central Connecticut State University

University <u>peczuh@gmail.com</u> glagovichn@ccsu.edu

Treasurer: Dr. Ellen Anderson

Secretary: Dr. Mark Peczuh

University of Connecticut

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Retired -University of

Saint Joseph profeanderson@yahoo.com

Councilor

Dr. Michael Knapp: 2020 - 2022 University of Massachusetts,

Amherst

mknapp@chem.umass.edu

Dr. Frank J. Torre: 2020 - 2022 Retired - Springfield College

ftorre@spfldcol.edu

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Dr. Julianne M. Smist: 2021 - 2023 Retired - Springfield College

jsmist@spfldcol.edu

Dr. Kevin Kittilstved: 2020 - 2022 University of Massachusetts kittilstved@chem.umass.edu

Alternate Councilor

Edward C. Fitzgerald: 2019 - 2021

Trinity College

edward.fitzgerald@trincoll.edu

Dr. David Myers: 2020 - 2022 Bard College of Simons Rock myersd@simons-rock.edu

Dr. Sharon M. Palmer: 2021 -2023 Amherst Regional High School Spalmer58@gmail.com

Members-At-Large

Dr. Marisa Blauvelt: 2020 - 2021

Springfield College

 $\underline{mblauvelt@springfield.edu}$

Dr. Nilda Alicea-Velazquez: 2020 –

2021 Central Connecticut State

University

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Mary Palliardi: 2020 - 2021

Henkel of America

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Dr. Curtis Guild: 2021 - 2022 Cytiva Centaur Tech, LLC. curtisguild@gmail.com

Becca Farri: 2021 – 2022 becca.farri@gmail.com

Rebecca A. Lucht: 2021 – 2022

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