

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 CVS-ACS, the Younger Chemists Committee (YCC), and our recent awards. Further, we present opportunities for you to connect with the ACS community both locally and nationally! We are actively looking for volunteers. Enjoy the read, and reach out if you have suggestions, perspectives, or wish to connect!

Talk: Vaccine Development, cGMP Manufacturing and Regulatory Considerations

Speaker: Vaneet K. Sharma, Ph.D., International AIDS Vaccine Initiative (IAVI) - March 2nd, 2021

Dr. Sharma discussed various aspects of the vaccine production, focusing on examples for recombinant protein vaccines. In their vaccine work, IAVI selects a specific cell substrate for suitability based upon the properties of the target vaccine antigen, performs upstream development followed by downstream purification and QC testing at a contract development and manufacturing organization (CDMO) to release the cGMP drug product for the clinical trial. Each vaccine candidate has technical and regulatory issues that must be addressed during product development.

ACS National Meeting, April 5th – 16th, 2021

Conference Buddy Program

The Conference Buddy Award was designed to encourage local section members to attend the virtual ACS National Meeting held in April 2021 (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.

The Conference Buddy Award supported 13 mentees - undergraduate and graduate students from CCSU, UMass Amherst, and UConn. The following CVS members served as mentors: Mark Peczuh (Secretary), Curtis Guild (Member-At-Large), Cristian Aviles Martin (YCC) and Jessica Martin (YCC).

4th Undergraduate Career Workshop in Sciences - VIRTUAL, March 12th, 2021

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. CVS/ACS Careers: <https://www.linkedin.com/groups/8760442/> 20 attendees

Presenters

Dr. Treese Hugener, Raytheon Technologies
Dr. Chris Liebold, J.M. Smuckers & Co.
Dan Lettiere, Pfizer Corporation

Special Guest

Dr. Jefferson Tilley, TCHEM consulting, former ACS career advisor

Connecticut State Science Olympiad

On March 27th 53 Students from 17 schools (47 students in MA and CT) participated in the local exam virtual event. On April 17th and 24th, 2021, 12 students took the national exam remotely.

Local Exam Awardees

Mingwen Duan, East Lyme - *National Exam Honors Study Camp Awardee (out of 20 finalists)*
Jiarui Peng, East Lyme - *National Exam Honors*
Colin Zhang, East Lyme
Edward Park, Loomis Chaffee
Jessica Luo, Loomis Chaffee - *Honorable Mention*
Edward Liu, Taft School
Brian Chi, Taft School
Rebekah Hong, Amherst Regional
John Park, Northfield Mount Hermon
Bon A Koo, Northfield Mount Hermon
Ehtan Zang, Deerfield Academy
Leonard Liu, Glastonbury High

Study Camp Awards: Only the top 20 students in the US attend the study camp.

2021 CVS Undergraduate Research Symposium VIRTUAL,
April 24th, 2021

The undergraduate research symposium is a chance for students to present their research. For this first-time virtual event, students presented 8 posters and 15 talks.

Breakout Sessions included

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

Awardees

- Ariana Gazaferi (Anna J. Harrison talk)
- Julia Kudewicz (Anna J. Harrison poster)
- Mitchell Buckley (CVS talk)
- Jacob Collins (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. Harrison 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
“Empowering Academic Researchers to Strengthen Safety Culture” – February 7th, 2021

The workshop was designed for graduate students and postdocs working in STEM departments, as well as for faculty and safety professionals interested in supporting the development of Laboratory Safety Teams (LST) and the strengthening of safety culture.

Jessica Young, Shaw Research Group, University of Iowa
<http://dchas.org/2020/12/31/1st-workshop/>

Chemists Celebrate Earth Week

Illustrated Poem Contest - April 19th - 23rd, 2021

Grades 3-5: Leah Gordon, 5th Grade, Jumoke Academy, Teacher: Amy Coan

Grades 6-8: Oralee Scott, 6th Grade, Jumoke Academy, Teacher: Amy Coan

New Haven Chapter of ACS – Events

Talk: The Chemistry of Violin Making Through the Ages

Speaker: Dr. Joseph Nagyvary - April 8th, 2021

The research of the classical violin has been the domain of physicists for over 200 years. The first chemists who did some material analysis, J. Michelman and L. Conday, were handicapped by the lack of sensitivity of the analytical tools of their times. In 1978 at Texas A&M University I was first to apply some modern methods of material analysis, like neutron activation analysis, EDX and SEM for studying the wood and varnish of the famous masters of Cremona, Italy. I proposed a seminal role for chemistry in making the Stradivarius what it is even today, still a *non plus ultra*. Beyond my own work, in my zoom presentation I shall review the rich contributions of analytical chemists from France, Germany, Switzerland, Italy, and Taiwan. With the recently gained knowledge we have even more reason to be awed by the complexity of the Stradivarius and Guarneri del Gesu violins. Finally, we also possess the tool kit to realistically recreate them.

Talk: Cheers to Better Beers. Beer Filtration for Improved Quality

Speaker: Dr. Ana Martinez Saenz de Jubera, Applications Engineer at 3M - May 19th, 2021

Dr. Ana Martinez is an Applications Engineer at 3M, specializing in separation and purification sciences. Ana works with breweries both large and small to help them optimize their beer filtration processes. In this talk, Dr. Martinez briefly reviewed the process of beer making, why brewers opt to incorporate filtration solutions in their processes, and finally the different types of separation techniques that can be used. The chemistry and role of different filtration products used by brewers such as activated carbon, non-woven filter, membrane filters, and diatomaceous earth filters were discussed.

New Haven Science Fair, May 19th, and 20th, 2021

Best chemistry projects, grades K-5

1st place: #30–*COVID Mask Testing*; Teacher: Mr. Ward

2nd place: #29–*What Makes Ice Melt?* by Ms. Anthony's Class

3rd place: #53–Yenalise Acquino, Joseph Pimentel, & Mateo Ortega

Best chemistry projects, grades 6-12

1st place: #62–*Heat Conduction & Retention in Metals*, by Aeriana Blackmon

2nd place: #92–*What makes Ice Melt Most*, by Xena D'Costa & Sharye Martindale

3rd place: #113–*Constructing the Ideal Hand Warmer*, by Isaac Kleppner & Christopher VanTassel

Upcoming Events

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

Speaker: Dr. Christian Brueckner, University of Connecticut
– Date: TBD (Oct/Nov 2021)

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

Abstracts must be submitted by July 30, 2021 at <https://bcce2022abstractcentral.com/>

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

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>

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

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:

2021 – Sourav Chakraborty schakraborty@ccsu.edu

2022 – Neil Glagovich glagovichn@ccsu.edu

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.

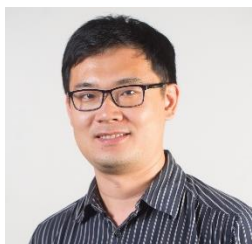
Establishment & Support: The John S. Burlew Award was established in 1986 by the Connecticut Valley Section of the ACS.

2020 Awardee:

Dr. Mingxu You

Department of Chemistry,
University of Massachusetts

Dr. You is awarded Burlew Award (2020-21) for his outstanding contribution in chemistry particularly in DNA and RNA nanotechnology. He has co-authored over 70 journal articles and 3 book chapters.



and initiatives to ease their transition into a professional career.

Am I a “younger” chemist?

While the national YCC defines younger chemists as members under the age of 35, our organization also interprets this as a member without an established career track. This means the defining concept in whether you can join us is simply your professional experience

What do we do as an organization?

We plan and host events that are dedicated towards the early career population of the Connecticut Valley Section of the ACS. This includes but is not limited to undergraduate and graduate students, postdoctoral associates, non-tenured faculty, associates and scientists from colleges, universities, corporations, and companies within the local section. Some of our past events and programs include: Brewery takeovers, Local Company hosted networking events, and ACS conference scholarships. In the future we plan to host more industry hosted networking events, and to revive our yearly new member welcome extravaganza event. Furthermore, look out for information on our Graduate and Postdoc Career Development Workshop scheduled for early 2022.

ACS Membership Milestones:

50-60-70-year members

Years	Salutation	First Name	Last Name
50 years	Dr.	Edward	Gray, Jr.
50 years	Dr.	W.	Howe
50 years	Mr.	John	LaMattina
50 years	Dr.	Julianne	Smist
60 years	Dr.	George	Fleck
60 years	Dr.	Lawrence	Friedman
60 years	Mr.	Terence	Munnlley
60 years	Dr.	Alan	Wright
70 years	Dr.	James	Bobbitt
70 years	Dr.	Ferdinand	Rodriguez
70 years	Dr.	Robert	Simon

Younger Chemists Committee (YCC)

What is the YCC?

The Younger Chemists Committee (YCC) is a subset of the American Chemical Society focused on advocating and providing resources to early-career chemists and professionals in the chemical sciences and related fields. At the national level the YCC ensures the establishment of local section YCC's and that the Society addresses the needs of early professionals in the chemical field.

Who is the CVS-YCC and what are their goals?

At the Connecticut Valley local section level, the YCC is composed of a group of graduate students and early-career professionals that came together to offer specifically tailored professional development events and resources to younger chemists in Western Massachusetts and most of Connecticut. Our ultimate goal is to involve early-career chemists in local and national ACS programs

2021 Members Engaging through Technology (METT)

Grant winner: “CVS – Younger Chemist Committee Graduate Career Symposium”

2020 Local Section Innovative Projects Grant (IPG)

winner (in collaboration with NSYCC): “Career Development in Real time: A Joint Younger Chemists Committee Symposium”

Join Us:

To join our organization please email acs.cvs.ycc@gmail.com You can also find us on LinkedIn as the group American Chemical Society Connecticut Valley Section Younger Chemists Committee (ACS-CVS-YCC) Group Link: [\(https://www.linkedin.com/groups/12175303/\)](https://www.linkedin.com/groups/12175303/)

We look forward to hearing from our local section membership and hosting in person events again in the near future.

Connecticut Valley Section ACS – Executive Board

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