THE CAPITAL CHEMIST



A Publication of the Chemical Society of Washington Section of the American Chemical Society

September 17th Virtual Meeting featuring Dr. Christopher Avery

CSW is happy to announce the September (virtual) meeting will feature a presentation by Dr. Christopher W. Avery, Chair of the ACS Committee on Environmental Improvement, on "The ACS Committee on Environmental Improvement: Creating a hub for the future of the chemical enterprise."



The Committee on Environmental Improvement (CEI) is a governance committee of the American Chemical Society. Charged with a variety of roles within ACS, CEI functions as a main hub of work for all things environment-related, including developing policy statements, identifying partnerships, and driving the conversation within the chemistry community around sustainability writ large. As such, CEI is a unique hub of both traditional bench-focused

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- Learn about the new CSW Committee on Minority Affairs
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- Catch up on the governance issues and actions from the ACS Council Meeting
- Nominate a member for an award

chemistry expertise as well as non-traditional chemistry expertise. It is the interaction between these two professional spaces around a shared priority that allows for highly effective and collaborative work.

This talk will discuss how ACS governance works, how CEI fulfills its charge within ACS, some major efforts CEI participates in, and what future sustainability work for the Society can and should be. A significant portion of time will be dedicated to discussion and debate to provide opportunity for the audience to participate in driving the agenda of CEI in the future.

September 17, 2020 12:00 PM Eastern Time

Please Register in advance for this meeting

https://american-chemical-society.zoom.com/meeting/register/tJwkdumupjguGNXvpl6ltd8AUXzfr14Ruccl

Christopher W. Avery, Ph.D.

Chris Avery, Ph.D., is the Senior Manager for Global Climate Assessments at ICF, an international science consulting firm based in Fairfax, VA. Currently, Dr. Avery serves as the Chief of Staff for the National Climate Assessment at the U.S. Global Change Research Program (USGCRP). In this role, he manages the development, review, and publication of the National Climate Assessment. Prior to his current position, Dr. Avery worked as a Senior Advisor and Director of Communications for the National Council for Science and the Environment. Before that, Dr. Avery worked as a Senior Advisor in the U.S. Department of Energy (DOE). Dr. Avery worked with DOE's clean energy technology division to facilitate engagement with state and local governments, non-governmental organizations, renewable energy



industries, and the Department of Energy's National Labs. He advised high-level Administration officials and external stakeholders on strategy, policy, and public engagement opportunities. His fields of policy expertise include climate, energy, environment, and clean technology.

Dr. Avery was a 2011-2012 ACS Congressional Science Policy Fellow, working in the United States Senate as a science advisor. Dr. Avery worked for Senator Chris Coons on the Senator's energy and environment legislative team, with additional involvement in federal procurement and scientific integrity issues. He also served as a Mirzayan Science & Technology Policy Fellow at the National Academies, and worked for the Board on Science, Technology & Economic Policy. He participated in multiple projects related to intellectual property, energy technology, greenhouse gases, tax codes, standards setting and water rights. Dr. Avery earned a Ph.D. in analytical chemistry and a graduate certificate in science, technology, and public policy from the University of Michigan.

New CSW Committee on Minority Affairs

Introducing the addition of the Committee on Minority Affairs to the Chemical Society of Washington. We are excited to add this committee and look forward to serving in the community. The





first virtual meeting for volunteers will be held September 17th, 2020. Details will follow in an email. If you would like to get involved, please email LaKesha Perry at <u>Inperry@yahoo.com</u>.

Background & Motivation: The Chemical Society of Washington (CSW) currently has approximately 3,417 active members that answered a short demographics survey. Out of the number of the members that participated in the survey, less than 6% identified as being a part of an underrepresented minority group (African American, American Indians/Alaska Natives and Latinos) in the STEM fields. The goal of the Committee on Minority Affairs will be to increase the membership and participation of underrepresented minority groups within CSW through the use of resources and volunteer efforts provided by the Board of Managers. The effort will promote CSW's involvement in advancing diversity and inclusion within the American Chemical Society and overall broader chemical enterprise.

Purpose Statement:

To advance diversity and inclusion in the Chemical Society of Washington (CSW) and the broader chemistry enterprise.

Objectives:

- Sustain and dynamically develop a programmatic presence within the CSW community
- Increase the number & participation of racially & ethnically underrepresented scientists within CSW membership
- Promote the recognition of the professional accomplishments of minorities
- Provide mentoring to minority students
- Identify and collaborate with minority-friendly educational institutions and businesses

National Chemistry Week - October 18-24, 2020

National Chemistry Week (NCW) is a public awareness campaign that promotes the value of chemistry in everyday life. ACS members and chemistry enthusiasts celebrate NCW by coordinating events and communicating the importance of chemistry. Each year the American Chemical Society's (ACS) NCW campaign reaches millions of people with positive messages about the contributions of chemistry to their daily lives. NCW

is a community-based annual event that unites ACS local sections, businesses, schools, and individuals in communicating the importance of chemistry to our quality of life. It is the one time during the year that chemists, regardless of background, unite with the common goal of spreading the word that chemistry is good for our economy, our health and our well-being.

Stick with chemists across the world in celebrating #NationalChemistryWeek 2020 with the theme "Sticking with Chemistry" from October 18-24, 2020. Explore the world of glues and adhesives! An adhesive is something used to stick things together. There are all sorts of adhesives for different uses and they stick in many different ways. You will learn more about the chemistry of glues and adhesives in this year's issue of *Celebrating Chemistry*. The electronic version of the *Celebrating Chemistry* newsletter is available from the ACS NCW website (www.acs.org/ncw).

This year, NCW will be a virtual event. Be sure to check the October issue of the Capital Chemist for some of the fun virtual events that the Chemical Society of Washington (CSW) and the ACS Office of Community Activities will be hosting for NCW 2020. More information about local activities will be posted on the CSW (<u>www.capitalchemist.org</u>) website as they become available. For further information or to volunteer, contact the CSW NCW coordinator, Kim M. Morehouse, via e-mail at csw@acs.org, or by phone at 301-384-7311.

NCW 2020 Illustrated Poem Contest - entries due by October 26, 2020

Each year as part of National Chemistry Week (NCW) activities, the American Chemical Society (ACS) sponsors an illustrated poem contest for students in Kindergarten - 12th grades. Schools are encouraged to have a contest within the school as part of their classroom studies and submit one entry per grade category. CSW will be sponsoring a local NCW Illustrated Poem contest. The National illustrated poem contest is focused on "Where's the Chemistry?" Participants are encouraged to explore topics related to the chemistry associated with glues and adhesives. Write and illustrate a poem using the National Chemistry Week theme, "Sticking with Chemistry." Your poem can be

in any style as long as it is no more than 40 words. All entries must be received no later than Sunday, October 26, 2020. Entries should be submitted using the ACS NCW Illustrated Poem entry website (<u>https://www.acs.org/content/acs/en/education/outreach/ncw/plan-an-event/illustrated-poem-contest.html</u>). Additional information on the contest, as well as NCW, is available on the ACS web site (<u>www.acs.org/ncw</u>).

Project SEED 2020 Goes Virtual

Due to the Covid-19 pandemic, it was necessary for Project SEED to cancel in-person research for summer 2020, but that did not mean that students were left without a wonderful Project SEED program. A total of 291 students from across the country completed the first ever Project SEED Virtual Summer Camp (VSC), which took place from July 1 to July 31.

Project SEED Fellows (high school students coming from qualifying families) were organized into cabins of 8 to 10, with two undergraduate students serving as Cabin Leaders. There were then 1 to 4 cabins organized into Campsites, run by Project SEED







volunteers, both veterans and newcomers. The students met at least twice per week in their cabins and once per week as a campsite. CSW staffed three campsites: Camp Gamma was headed by Wes Farrell (USNA) and Faye Rubinson (Georgetown University), Camp Delta by Alexandra Tarabolletti (UDC), and Camp Theta by Jamie Shetzline (Library of Congress).

The virtual experience included programming in three basic areas: Research basics and preparedness (online lab safety courses and activities, ethics, reading technical papers), professional etiquette and college readiness (resumes and person statements, communication tips), and chemistry-related careers (chemists talking about their work and a panel discussion). There were assignments and activities associated with these. In addition, the program featured "Research Hikes" in which speakers talked about their individual research interests as well as their career paths and interactions with students and peers.

2020 CSW High School Chemistry Olympiad

As with so many other planned events this year, the Covid-19 Pandemic had its effect on the U.S. High School Chemistry Olympiad in its 37th year. This is an annual program for high school students organized by the American Chemical Society (ACS) and was forced to become a virtual program in April. The Chemical Society of Washington (CSW) is proud that it was able to maintain its participation continuously for all 37 years. The CSW conducts its Local Section Olympiad at two levels; the first level is the Local Section examination in March and the second level is the U.S. National Chemistry Olympiad (USNCO) examination in the latter half of April. For the National exam, ACS allots each Local Section a number of student places based upon the Section membership with the rule that a maximum of two students can be from one school. About 1000 students across the U.S. take the National exam, and the twenty students who have the highest scores are invited to the study camp in June at the University of Maryland – College Park campus. Four students from the study camp attendees are selected for the U.S. team to participate in the International Chemistry Olympiad in July.

The CSW's Local Section Olympiad went as normal until around mid-March. An online registration form was developed for the CSW website with which the chemistry teachers could register their students for the Local Section Examination. Each school that responded to the February invitation letter to participate could register up to a maximum of 20 students. The Local Section (LS) Exam was purchased from National ACS and consists of 60 multiple choice questions. A little less than 250 LS Exams were sent to 24 chemistry teachers. This is the highest number of high schools that has participated in the CSW Olympiad. Of the 24 schools, eleven were in Maryland, ten in Virginia, and three in Washington, D.C. The teachers administered the exam to the students they had selected during the period of March 1-13 and returned the answer sheets to the CSW Coordinators for grading with the answer key supplied by ACS. The students to take the USNCO exam were selected from the top scores with a maximum of two students per high school. All the students who took the Local Section Exam received Certificates of Participation as did their teachers. Two students who scored 50-60 received Certificates of High Honors, and seven students who scored 40-49 received Certificates of Honors.

The coronavirus pandemic completely changed the way the USNCO exam was administered this year. By mid-March, ACS had already deleted the Laboratory Practical, so the two written exams comprised the 2020 National Exam. Because of the increasing pandemic and the restrictions placed on public gatherings, CSW decided not to participate in the National Exam to be given in-person and so notified the chemistry teachers. About mid-April the ACS Olympiad Office notified CSW that the National Exam was to be given virtually with remote proctoring. Proctoring for the first written exam Part I, which is a 60 multiple choice question exam, was to be arranged by the Local Sections. After a short learning curve about remote proctoring on our part, two of the high school chemistry teachers agreed to proctor Part I. 21 students took the Part I Exam under the auspices of CSW on Sunday, April 26th; one student, William Xu from Thomas Jefferson High School for Science and Technology, had automatically qualified for the 2020 National Exam because of his attendance at the 2019 Study Camp. 778 students across the U.S. took the Part I exam, and the 150 students who scored the highest were invited to take the Part II Exam on the following Sunday, May 3rd for which ACS supplied the remote proctoring. Five of the CSW students qualified for and took the Part II Exam, which is a problem solving and free response exam.

The scores of the Part I and Part II exams were combined for the total National Exam scores of the 150 students. The 20 students who scored the highest on the National Exam were invited to the virtual Study

Camp, which was held May 31 – June 12 in collaboration with the Chemistry Department of the University of Maryland at College Park, MD. From CSW, Kaien Yang of Thomas Jefferson High School for Science and Technology attended the 2020 US National Chemistry Olympiad Virtual Study Camp. Four of the CSW students attained High Honors on the National Exam: Joshua Jones from Langley High School, Christopher Tong from Montgomery Blair High School, and William Xu and Kaien Yang from Thomas Jefferson High School for Science and Technology. Kwanwoo Park from Langley High School earned Honors.

The 21 students who participated in Part I of the National Exam are listed below along with their teachers and high schools. The five students who took Part II are marked with an asterisk.

Student	Chemistry Teacher	High School	City, State
Advay Janardhan	Maura Barron	Academies of Loudoun	Leesburg, VA
Hamza Alsamraee	Ashley Saccomando	Centreville High School	Clifton, VA
Braden Desman	Ashley Saccomando	Centreville High School	Clifton, VA
Huy Nguyen	Latha Shankar	Chantilly High School	Chantilly, VA
Sydney Pham	Xu Duan	Holton – Arms School	Bethesda, MD
Lauren Cooke	Xu Duan	Holton – Arms School	Bethesda, MD
Cameron Wells	Komal Jain	Lake Braddock	Burke, VA
		Secondary School	
* Joshua Jones	Leah Puhlick	Langley High School	McLean, VA
* Kwanwoo Park	Leah Puhlick	Langley High School	McLean, VA
 * Christopher Tong 	Erik Lodal	Montgomery Blair High	Silver Spring, MD
Caleb Zhao	Erik Lodal	School	
Christine Zhou	Stuart Albaugh	Richard Montgomery	Rockville, MD
Alex Karbowski	Stuart Albaugh	High School	
Samuel Rhee	Leslie George	Saint Alban's School	Washington, DC
Young Chen	Robert Mandes	Stone Bridge High	Ashburn, VA
		School	
* William Xu	Adam Smolinsky	Thomas Jefferson High	Alexandria, VA
* Kaien Yang	Adam Smolinsky	School for Science and	
Zoe Lu	Adam Smolinsky	Technology	
Brant Jiang	Brett Bentley	Thomas Wootton High	Rockville, MD
Grace Li	Brett Bentley	School	
Derek Yan	James Nugent	Winston Churchill High	Potomac, MD
		School	

In May it was announced that the 52nd International Chemistry Olympiad (ICO) would be virtual and consist of the theoretical exam only. A total of 235 students from 60 countries competed in the remote access Olympiad, which was coordinated from Istanbul, Turkey on July 25. The U. S. Team took home four gold medals in an extraordinary performance at this ICO, including the first place medal. Alex Li from Lexington High School, MA won the Top Gold medal, placing first in the overall ranking of students. Gold medals were earned also by Alec Zhu of Lexington High School, MA who placed 8th, Ananthan Sadagopan from Westborough High School, MA in 12th place, and Anugrah Chemparathy of Dougherty Valley High School, CA in 24th place.

We thank very much Mr. Xu Duan, chemistry teacher at Holton-Arms School, and Mr. Brett Bentley, chemistry teacher at Thomas Wootton High School, for remote proctoring Part 1 of the National Exam for CSW. We want to commend the following individuals from the ACS Chemistry Olympiad Program for the tremendous effort they expended to make sure there was a Chemistry Olympiad this year in spite of the COVID-19 pandemic: Lily Raines, Ph.D., Manager of Office of Science Outreach, Margaret Thatcher, Program Specialist, Joshua Pak, Chair, and the members of the ACS USNCO Subcommittee.

Respectfully submitted by India James and Regina Cody, CSW Chemistry Olympiad Co-Coordinators

Summary of Governance Issues and Actions from the ACS Council Meeting

We are pleased to present you with the Councilor Talking Points from the recent meetings of the ACS Board of Directors and Council held virtually from August 13 – 21. We hope that you will find this document helpful.

View/Download: https://capitalchemist.org/wp-content/uploads/2020/08/ACS-Council-talking-points.pdf

Call for Nominations for the 2020 William F. Hillebrand Prize

Nominations are being accepted for the **2020 Hillebrand Prize Award**. The deadline to submit a nomination is November 15, 2020.

Nominations are invited for the 2020 Hillebrand Prize, awarded annually for original contributions to the science of chemistry by a member or members of the Chemical Society of Washington (CSW), the local section of the American Chemical Society. The Hillebrand Prize is the most prestigious honor given each year by CSW and is recognized nationally as a mark of significant accomplishment in chemistry. The Hillebrand Prize originated in 1924 and is named for Dr. William F. Hillebrand (1853- 1925), an internationally-recognized pioneer in analytical chemistry and one of Washington's most distinguished early chemists.

The prize carries an honorarium of \$2000. Many previous Hillebrand Prize recipients have won numerous other national and international awards, including three who have received the Nobel Prize. See the list of award winners: https://capitalchemist.org/2018/06/hillebrand-prize-recipients-by-year/.

The nominating package should contain the following:

Nominating Letter – limited to 1000 words

The letter should focus on the chemical accomplishments of the nominee, rather than the bio of the nominee, from a broad standpoint, leaving the finer points to those submitting seconding letters. Biographic details (degrees, positions held, major activities etc.) will be given in the nominee's CV. The letter should begin with the major theme(s) in the nominee's research career with perhaps a summary of how these evolved over the years to create breakthroughs or push the field in a new or very productive direction.

Describing the nominee's major contribution(s) is extremely important and should be the bulk of the letter.

There is no preference or restriction for the specific area of contribution so long as it represents a significant accomplishment in chemistry. Anything is fair game; synthetic or analytical, experimental or theoretical, bio- or inorganic, etc. This section might detail such things as: the major techniques used in their research and how these were applied to a specific area to bring about significant results not previously achievable; if their research resulted in the development of a new experimental/instrumental technique or use of an existing technique in an innovative new way; how techniques the nominee developed became standard in that area; the impact the nominee's work had on influencing other areas of research; development of new reagents, catalysts or reaction conditions; development of a new computational method or theoretical approach; etc. The nominator should provide evidence in support of these statements. This could include information about: the number of citations, impact factors of certain articles (or aggregate numbers), especially influential articles/book chapters, important invited talks, previous awards by other societies, patents, funding, important leadership positions, etc. Mentioning an extremely productive collaboration is possible so long as the role/contributions of the nominee are clear. The award is not given for mentoring students (as a specific criteria) but nominators often mention if this has occurred, especially if these students have gone on to significant posts on their own.

Two Seconding Letters – limited to 500 words each

It is helpful if these be from established experts in the nominee's field, and best if they are from experts at institutions other than the nominee's unless a notable expert in the nominee's area is also from the nominee's institution.

Curriculum Vitae - the candidate must be a member of CSW

The CV should strongly emphasize individual academic backgrounds, appointments, publications, presentations, and patents.

List of Publications

This is critical in determining the specific scientific contribution of the nominee or team.

Proposed Citation – limited to 25 words

This is a brief statement that should be understood by chemists in almost any area. It should avoid highly specialized language but still give the reader the area of accomplishment and why this is a significant accomplishment in chemistry. In some ways it is a one or two sentence abstract of the first paragraph of the nominating letter. Since this is only 25 words, you may simply want to provide 1 or 2 examples of previous awardees.

We strongly recommend that the nominator collect all materials and forward in one email, preferably as PDF files(s), to csw@acs.org. Nominations will be active for three years.

If you would like to verify the eligibility of an individual as a nominee or nominator, please contact the CSW Administrator at csw@acs.org. All materials must be received by November 15, 2020. The awardee will be announced before the end of the year, and the Prize will be presented at the CSW dinner meeting in March 2021.

If you have any questions about the award or the procedure for nominating someone for the award, please contact our office – csw@acs.org or 202.659.2650 (voicemail only).

Call for Nominations for the 2020 Charles L. Gordon Award

Named after Charles Gordon for his years of service as managing editor of the *Capital Chemist*, the Charles L. Gordon Memorial Award is given in recognition of exemplary service by a CSW member to the profession of chemistry, to the science of chemistry, and/or to the Chemical Society of Washington. Nominations are invited for this award, consisting of a plaque that will be presented at the March 2021 CSW dinner meeting. A written nomination should include a description of the accomplishments on which the nomination is based. Additional documentation that includes seconding letters and the nominee's CV are welcome.

Completed nominations for the Charles L. Gordon Award are due on or before November 15, 2020. The nomination should be submitted electronically to <u>csw@acs.org</u>. Please contact the Chair of the Awards Committee, Bradley Scates (<u>bascates@gmail.com</u>), if you have any questions.

Call for Nominations for the 2020 Leo Schubert Memorial Award

The Chemical Society of Washington (CSW) is pleased to announce the call for nominations for the Leo Schubert Memorial Award to recognize an outstanding teacher of high school chemistry in the Washington, D.C. area. The award was established in 1979 to honor Dr. Leo Schubert, a chemistry professor at American University who devoted much of his career to developing programs for high school teachers and students. The Schubert award consists of a \$500 honorarium and a certificate, which will be presented at the March 2021 CSW dinner meeting.

Nominations for the award must be comprehensive in describing the nominee's accomplishments in areas such as innovation in teaching, writing curricula, outside teaching, papers published, involvement in science fairs, and postgraduate study. The application may also include supporting letters, as well as any supporting documents that concisely illuminate the nominee's accomplishments.

To be eligible for the CSW Schubert award, the nominee must currently teach chemistry at a secondary school in the geographic region of the Chemical Society of Washington, which includes metropolitan Washington, D.C. and the neighboring counties in Maryland (Montgomery, Prince George's, Charles, Calvert and St. Mary's Counties) and Virginia (Arlington, Fairfax and Loudoun Counties). The region of CSW also includes six counties on the Eastern Shore of Maryland: Caroline, Talbot, Dorchester, Wicomico, Worcester, and Somerset.

Nomination form: https://capitalchemist.org/wp-content/uploads/2020/04/Schubert nomination form.pdf

Alternatively, a pdf version of the nomination form can be obtained by an email request to <u>csw@acs.org</u>. Completed nomination forms can be sent directly to csw@acs.org. All nominations must be submitted by November 15, 2020. Please contact the Chair of the Awards Committee, Bradley Scates (bascates@gmail.com), if you have any questions.

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local ACS Chapter for the Washington, DC area and serves approximately 3,500 members.

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CSW Calendar of Events

September 17: CSW Virtual Meeting September 17: CSW Minority Affairs Committee Virtual Meeting September 28: Virtual CSW Board Meeting October 18-24: National Chemistry Week October 26: Illustrated Poem Contest Deadline November 15: CSW Award Nominations Due