THE

CAPITAL CHEMIST



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

Thank you from the President

It is true that time flies when you're having fun. I'm taking this opportunity to say thank you to all the members who planned and participated in CSW events this year. It has been my pleasure working with you and making new friends. A special thank you to the Board for their service in managing CSW as well as those who agreed to be candidates for the 2019 election.



I'm grateful to the dinner meeting speakers who delivered great presentations. Interesting subjects included award presentations, diverse chemistry topics & diversity of chemistry, fuel cell technologies, reference materials for foods and dietary supplements, Saharan dust aerosols, and scientific integrity. We will be celebrating CSW's 125th anniversary as an ACS local section as well as honoring our 50-year and higher members at a special December luncheon.

Volume 68, Number 9 December 2018

Inside this issue:

- Attend this month's CSW Meeting and celebrate our 50+ year members!
- Submit your nominations for the Hillebrand Prize, and the Gordon and Schubert Awards
- Register for the 2018 Dupont Summit
- Read about this year's NCW Activities, and other volunteer opportunities our members were involved with

CSW hosted a successful Career Day sponsored by the Younger Chemist Committee. Please join us for future career events in 2019 because CSW applied for and received a \$3000 Local Section Innovative Project Grant (IPG) entitled, Chemists on the Horizon - Helping Chemistry Graduates Transition to Chemical Professionals and a \$1000 Corporation Associates Local Section and International Chapter Grant for a CSW Career Day. Thank you to all those involved in submitting proposals for the section.

A new event at CSW is the Science Café. CSW applied for and received a \$1000 Members Engaging Through Technology (METT) Grant to assist the cafe in reaching more of our members and potentially other local sections. The technology will also be used in other ways to bring programs to more members across our section. I think it is going to be another successful program. We also re-instated the Women's Chemist Committee and the Environmental Improvement Committee. I appreciate the members' hard work on these programs, and I encourage other members to get involved with CSW in 2019.

CSW's outreach and educational programs are doing well. You may have time to commit to one outreach event a year, such as Chemists Celebrate Earth Day, Chemathon, National Chemistry Week, and school events. I participated in several this year and found them fun and rewarding. We are fortunate to be near ACS headquarters because CSW members also participated in the events they held, such as Chemistry Day at the Smithsonian National Air & Space Museum, during National Chemistry Week; the 2018 USA Science & Engineering Festival; and the 2018 UnidosUS Family Expo. Thanks again to all the volunteers who helped CSW connect with our communities. I look forward to meeting new volunteers in 2019 in my role as past president.

Finally, we celebrated the 50th anniversary for Project SEED. The national program launched a "50 Forward" campaign to move Project SEED forward for the next 50 years. CSW has a local Project SEED program and I contributed to the Noel Turner Memorial Fund this year to help keep our program strong. I implore you to do the same. Checks payable to the Noel Turner Fund can be sent to the CSW Local Section Office, 1155 Sixteenth Street, NW, Washington, DC 20036. Thank you to all the mentors and educators who recruit students for our Project SEED program.

I wish you and yours Happy Holidays and a Happy New Year.

Join us on December 15th to celebrate our 50+ year members in ACS!

At our December meeting, CSW will celebrate our 50+ year ACS members. See the full list of honorees.

Dr. Teri Quinn Gray, Global Technology Portfolio Leader with Transportation & Advanced Polymers with DowDupont, will present on "The Chemical Society of Washington (CSW) and the American Chemical Society (ACS): The Past, Present and into the Future."

Meeting Logistics

Date: Saturday, December 15, 2018
Time: 11:30 a.m. Check-in/Social Hour

12:00 Noon Lunch 1:00 p.m. Presentation

Location: Alfio's La Trattorio Restaurant

4515 Willard Avenue

Chevy Chase, Maryland 20815

Menu: Choice of entrée (Chicken Dorati, Veal Piccata, or Eggplant Parmigiano), served with house salad, bread, beverage (coffee, tea or soft drink), and dessert. Alcoholic beverages available for purchase.

Cost: \$30 (Members and guests) / \$15 (Students and High School Teachers)

RSVP by noon Wednesday, December 12, to csw@acs.org(preferred) or by phone (messages only: 202.659.2650). Please provide the names in your party when you RSVP. The public is invited to attend. You may attend the talk only, but reservations are appreciated. If you need any further information or would like to make a reservation, please contact the CSW office by email at csw@acs.org or by voicemail at 202.659.2650. Space is limited.

Biography, Dr. Teri Quinn Gray, DowDuPont

Teri is the Global Technology Portfolio Leader with Transportation & Advanced Polymers at DowDuPont. Just prior, she worked as Regional Technology Manager serving the USA, Canada, and Mexico in DuPont Performance Materials, and as New Product Commercialization Manager with DuPont Crop Protection.

Dr. Gray joined the American Chemical Society (ACS) Board of Directors in January 2018, is a founding member of the ACS Diversity & Inclusion Advisory Board, and served on the ACS Women Chemists Committee in various roles over 10+ years. Teri's passion for educational opportunities for all children affords her the opportunity to serve on several boards, including the Executive Committee for the Delaware Foundation for Science & Math Education, the Delaware Campaign for Action Now (DECAN), the Community Education Building (CEB), and Zip Code Wilmington. Teri served as President of the Delaware State Board of Education for 8 years, appointed by Governor Jack Markell in 2009, and co-chair of the Delaware STEM Council since 2012.



Her community outreach includes working with the Bear-Glasgow YMCA of DE Community Gifts Campaign, serving as Executive on Loan to United Way of Delaware, and various leadership roles within the Episcopal Diocese of Delaware.

In 2014, Dr. Gray received Delaware's 25thAnnual Strong, Smart, and Bold Award from Girl's Inc. for her civic leadership and as a role model for girls; and soon thereafter, she was honored with the distinguished Willoughby Award from Junior Achievement of Delaware to encourage volunteerism and advocacy in STEM.

She holds a B.S. in Chemistry from Jackson State University in Mississippi; earned a Ph.D. in Analytical Chemistry from the University of Maryland College Park, and worked as National Research Council Postdoctoral Fellow at the National Institute of Standards & Technology prior to joining DuPont in 1997. She loves reading, blues, red wine, and "circle time" with family. Teri and her husband, Bernard, live in Newark, DE and have one son and a 9-month old grandson.

Abstract, The Chemical Society of Washington (CSW) and the American Chemical Society (ACS): The Past, Present and into the Future

CSW and ACS have a rich history and a bright future. This talk will highlight some of CSW's history, current programs, and the strategic plan taking ACS into the future.

Hillebrand Prize Call for Nominations

Nominations are invited for the 2018 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 at http://www.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 as 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 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 Monday, January 7, 2019. The Prize will be presented at the CSW dinner meeting in March 2019.

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.

Call for Nominations: 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 2018 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.

The CSW Schubert Award nomination form is available directly via The Capital Chemist website: http://www.capitalchemist.org/wp-content/uploads/2018/11/Schubert-Nomination-Form.pdf. Alternatively, a pdf version of the nomination form can be obtained by an email request to csw@acs.org. Completed pdf nomination forms can be sent directly to csw@acs.org. All nominations must be submitted by Monday, January 7, 2019.

Call for Nominations: Charles L. Gordon Memorial 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 February 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 by Monday, January 7, 2019. The nomination should be submitted electronically to csw@acs.org. Please contact the Chair of the Awards Committee, Philip DeShong (deshong@umd.edu), if you have any questions.

Register for the 2018 Dupont Summit

The Policy Studies Organization invites you to attend the 2018 Dupont Summit on Science, Technology, and Environmental Policy. The registration fee is \$250. Breakfast, lunch, and refreshments will be provided throughout the day at no additional cost. We encourage you to invite colleagues and friends as well.

Date: Friday, December 7, 2018

Place: Quaker Meetinghouse, 2111 Florida Ave NW, Washington DC

Information and program

Registration

National Chemistry Week Wrap-Up

Each year the American Chemical Society's (ACS) National Chemistry Week (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. This Year's NCW theme, "Chemistry is out of this world!" focused on astrochemistry, in which students learned more about the chemistry of outer space.

Chemistry Day at the Smithsonian National Air & Space Museum

On Tuesday, October 23rd(mole Day), the ACS took over the Smithsonian's National Air & Space Museum for a full day of hands-on activities, speakers, and stage demonstrations to teach museumgoers and middle school students about the importance of chemistry, all in the name of NCW. All the attendees participated in hands-on activities and received giveaway bags with copies of the Celebrating Chemistry focusing on "Chemistry is Out of This World." Local volunteers from several colleges, universities and the Chemical Society of Washington (CSW) assisted ACS staff with this event. It was a great event and showed over 320 kids and their guardians just how fun chemistry can be. Nearly all event attendees reported that they learned something new or interesting at the event, and that they would attend another event like this in the future. Pictures from the event can be found on the ACS Flickr page at https://www.flickr.com/photos/airandspace/43721308630/.

National Chemistry Week at Rockville Town Square

On Saturday, October 27th, CSW, the City of Rockville, and Rockville Town Square hosted a day of hands-on activities to teach students about the importance of chemistry, and to celebrate NCW. This year's CSW NCW program was a part of the NICE Net "Let's Do Chemistry" campaign. The program utilized six of the kit's developed for the campaign. Volunteers from CSW, The Rockville Maker Space, and students from Richard Montgomery High School assisted over 90 attendees with the activities.

The Hands-on Chemistry Kits/Activities were:

- · Chemistry is Colorful
- Chemistry Makes Scents
- Molecules in Motion
- Nature of Dye
- Sublimation Bubbles
- Fun with Gum and Chocolate

The participants received give away bags that included a copy of the NCW 2018 edition of *Celebrating Chemistry*, where they could learn more about the chemistry of outer space.

Fall CSW Volunteer Activity Roundup

DMV STEM Career Fair

CSW volunteers attended the 3rd Annual DMV STEM Career Fair at the University of the District Columbia and the Watergate at Landmarks Youth Spooky Science Night in Alexandria, Virginia on October 13.

At the DMV STEM Career Fair, the volunteers made fake snow and sodium alginate worms with the attendees and included a poster on polymers. Glow sticks were given away after learning about chemiluminescence on a poster. Over 300 people pre-registered for the event. The volunteers were Satyaveda Bharath, Kristy Crews, Rachelle Jacobson, Xiaoyong Lu, Ryan Nieuwendaal, Brianne Nunez, LaKesha Perry, Joan Walker, Warren Wang, Ewelina Witko and Alessandra Zimmermann.

Youth Spooky Science Night

The Youth Spooky Science Night was a celebration of the community science club's one-year anniversary. CSW volunteers Samantha DeCarlo and Elizabeth Diessner helped with bubble activities at the Halloween-themed event and handed out ACS literature. The children learned about bubbles and surface tension.

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- Hospitals for technical and research personnel

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- www.mboservices.net
- http://membership.acs.org/ W/WashDC/career.html



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The Chemical Society of Washington(CSW) is the local ACS Chapter for the Washington, DC area and serves approximately 4,000 members.

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CSW Calendar of Events

December 1: Student Travel Award Application Deadline

December 15: CSW Meeting

January 7: CSW Award Nominations Deadline for Hillebrand Prize, Schubert, and Gordon awards