THE

CAPITAL CHEMIST



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

Mark your calendars! CSW Dinner Meeting Dates Announced

The following are the dates of the remaining CSW meetings in 2019. Details about each meeting will be available on the CSW website.

CSW Dinner Meeting - Thursday, October 10, 2019

Location: Department of Chemistry Atrium - University of Maryland

Topic: NCW Theme "Marvelous Metals"

Speaker: Dr. Janice Reutt-Robey, Professor and Chair, Department of Chemistry and Biochemistry, University of Maryland

CSW and WCDG Joint Dinner Meeting - Thursday, November 14, 2019

Location: ACS Headquarters, Marvel Hall - Washington, DC

Topic: Shape-selective chromatographic separations

Speaker: Dr. Lane Sander, NIST, Chemical Sciences Division

Volume 69, Number 6 September 2019

Inside this issue:

- Nominate a friend or colleague for a CSW award
- This year's NCW theme is, "Marvelous Metals"
- Volunteer for the Spooky Science Expo or the DMV STEM Career Fair

CSW and SCC Joint Luncheon Meeting - Saturday, December 14, 2019

50, 60 and 70 Year ACS Member Recognition Luncheon

Location: Alfio's La Trattoria - Chevy Chase, MD Topic: "Tragedies Require Chemical Solutions"

- Report on past tragedies solved by chemists
- Chemical background of fentanyl
- Current status and the role of chemists in fighting the opioid crisis.

Speaker: Lois Beaver, FDA, Retired

Call for Nominations: Hillebrand, Gordon, & Schubert Awards

Call for Nominations: William F. Hillebrand Prize

Nominations are invited for the 2019 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 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 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 1, 2019. The awardee will be announced before the end of the year, and the Prize will be presented at the CSW dinner meeting in March 2020.

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: 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 March 2020 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, 2019. The nomination should be submitted electronically to csw@acs.org. Please contact the Chair of the Awards Committee, Bradley Scates (bascates@gmail.com), if you have any questions.

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 2020 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. 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 November 15, 2019.

Download the 2019_Schubert_nomination_form.

National Chemistry Week (NCW) - October 20-26, 2019



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.

This Year's National Chemistry Week theme is "Marvelous Metals!" focusing on metals. You will learn more about the chemistry of metals in this year's issue of *Celebrating Chemistry*. Metals are chemical elements or mixtures of elements that are good conductors of electricity and heat. Precious metals such as gold, silver, and copper were some of the first elements identified by humans. Did you know that 76% of the elements in the periodic table are metals? Scientists have been studying the elements for hundreds of years. In fact, the modern periodic table is just a way to organize the elements and describe how they are related to each other. It is based on the work of a chemist named Dmitri Mendeleev. This year is the 150thanniversary of Mendeleev's periodic table! The yearlong celebration is called the "International Year of the Periodic Table of Chemical Elements" or "IYPT 2019." The electronic version of the Celebrating Chemistry Newsletter is available from the ACS website (www.acs.org/ncw).

The Chemical Society of Washington (CSW), along with the ACS Office of Community Activities, is planning several NCW events. Volunteers are needed for these outreach activities. We are in the early stages of planning the events, so watch for additional information in the October Capital Chemist, or on the Capital Chemist and CSW webpages.

You can contribute to the NCW campaign by performing chemical demonstrations at a neighborhood school (consider having an illustrated poem contest); conducting hands-on activities with children at museums, malls, or libraries; or writing articles or letters to the editor of your local paper. If you would like to lead an activity at your local school or library, CSW will provide you with some grade specific materials to hand out to the students, as well as some simple demonstrations that you can use.

More information about local activities will be posted on the CSW (www.capitalchemist.org) web site as they become available. For further information, or to volunteer, contact the CSW NCW coordinator, Kim M. Morehouse via e-mail at Kim.Morehouse@FDA.HHS.GOV, or by phone at 240-402-1889 (day) or 301-384-7311 (evening).

2019 NCW Illustrated Poem Contest - Marvelous Metals

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

View/Download a PDF of the details.

View/Download Contest Entry Form.

Contest Deadline: November 1, 2019 Prizes: Chemistry Themed Tee Shirt

Contact: Kim Morehouse, kim.morehouse@fda.hhs.gov

Winners of the Chemical Society of Washington 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 NCW theme, "Marvelous Metals." 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 metals include:

- Alloys
- Conductors
- Electricity
- Electrons
- Magnetism
- Metalloids
- Minerals
- Rust

Entries will be judged based upon:

- Artistic Merit use of color, quality of drawing, design, and 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 NCW 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.

Volunteers Needed for STEM Outreach Events in October

If you're available to volunteer for one or both events below, contact Allison Aldridge at Allison457@aol.com

3rd Annual Spooky Science Expo

Saturday, October 5, 2019 3:00 pm – 6:00 pm Watergate at Landmark Terrace Lounge 211 Yoakum Parkway Alexandria, VA 22304

3rd Annual Spooky Science Expo

The Watergate Youth Committee Science Club is community organization that will be holding its third annual science event this year. This event will provide children with interactive demonstrations. This event celebrates the third anniversary for the club that meets the 2nd and 4th Friday of every month.

For more information, contact Zohreh Khoshnamak Watergate At Landmark, Science Club Chair and Youth Committee Member khoshnamak@gmail.com

(571) 421-6181



4th Annual DMV STEM Career Fair

Saturday, October 12, 2019 10:00 AM – 2:00 PM EDT

University of the District of Columbia- Student Center 4200 Connecticut Avenue Northwest Washington, DC 20008

4th Annual DMV STEM Career Fair

This family-fun event will provide K-12 students an opportunity to explore STEM careers and meet and

interact with professionals in the respective fields. This event is free and open to the public but pre-registration is strongly suggested; you can register for the event at https://www.eventbrite.com.

This is SEM Link's signature event through their Math and Science Career Academy, which is SEM Link's program that exposes students to STEM through hands-on activities, real-world applications and career exploration.



CSW-WCC at the STEM Innovation Spark Her Conference 2019

On May 18, 2019, CSW's Women's Chemist Committee performed two chemistry demonstrations with middle school girls in Upper Marlboro, Maryland. The event was sponsored by STEMisHER, it included mathematics, robotics computer science, and medicine. STEMisHER is a conference which brings women leaders in STEM and middle-school girls together to provide the girls with hands-on tabletop exercises and experiments. The purpose of the conference is two-fold, 1) provide data regarding the state of girls and women in STEM and 2) to provide the girls with role models. CSW's LaKesha Perry discussed and provided an



overview on the chemical properties of concrete and assisted the girls in making concrete charms. CSW's Allison Aldridge discussed chemiluminescence and its properties and helped the girls perform a chemiluminescence reaction. The girls also received glow sticks as take-home gifts.



The Capital Chemist

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

Capital Chemist Staff

Voice: 202-659-2650

Email: thecapitalchemist@gmail.com

Twitter: @CapitalChemist

Chair, Publications

Sara Orski

Editor, Business Manager

Jessica L. Rasmussen

Publisher

Chemical Society of Washington

Advertising Manager

MBO Services

PO Box 1150, Marshfield, MA 02050 Vince Gale, Advertising Manager vincegale@mboservices.net 781-837-0424 voice

CSW Correspondence

CSW, 1155 16th Street, NW, 0-218 Washington, DC 20036 202-659-2650 voice

email: csw@acs.org
www.capitalchemist.org

CSW assumes no responsibility for the statements and opinions advanced by the editor or contributors to its publication or the products and services advertised herein. Copyright ©2019, CSW.

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

2019 Officers

President

Christopher Avery

President-elect

Darryl A. Boyd

Past President

Allison Aldridge

Secretary

LaKesha N. Perry

Treasurer

Wesley Farrell

Connect with us on Facebook at www.facebook.com/ACSCSW.

CSW Calendar of Events

September 16: CSW Board of Managers Meeting

October 10: CSW Dinner Meeting

November 1: Hillebrand Prize Nomination Deadline

November 14: CSW/WCDG Joint Meeting

November 15: Gordon and Schubert Award Nomination

Deadline

November 21: CSW Board of Managers Meeting

December 14: CDW/SCC Joint Meeting