

THE CAPITAL CHEMIST

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

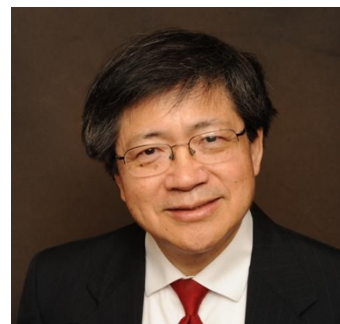
CSW Virtual Meeting - December 8, 2021, 7:00 p.m. – “Future Prospects of Chemistry: New Frontiers and Sustainability”

There is no charge to attend, but you must register in advance. Register Now: <https://american-chemical-society.zoom.com/meeting/register/tZwpdOisrz0vG91wrrsZrmOirNkktWcblpOo>

Speaker Bio

H. N. Cheng is the ACS President in 2021. He has been active with ACS for many years and has served in many leadership roles at local, division, and national levels. He obtained his B.S. from UCLA and his Ph.D. from the University of Illinois at Urbana-Champaign. He currently works at the USDA Southern Regional Research Center in New Orleans. Over the years, he has been involved with the use of agro-based materials, biocatalysis, green processing, and green methodology. He has also contributed to polymerization theory and polymer NMR. He has authored or co-authored 290 papers and 26 patent publications. He has organized 45 symposia at national meetings since 2000 and edited 23 books.

He was selected as a Fellow of the ACS (2009), a Fellow of the ACS Polymer Chemistry Division (2010), and a Fellow of the ACS Agricultural and Food Chemistry Division (2018), among other recognition and awards.



Abstract

As I listened to ACS members, colleagues, and students during the past 18 months, a topic that often came up pertained to the future prospects of chemistry. In this talk, I shall use several recent developments to build a picture of new frontiers and future opportunities in chemistry – a field that cuts across interdisciplinary boundaries and traditional dimensions. In fact, there is no shortage of growth and emerging areas within chemistry; examples include biochemistry, nanotechnology, advanced materials, catalysis, pharmaceutical and agrichemical development, quantum computing, and computer applications. An excellent example of new frontiers is sustainable green chemistry. In fact, in 2015 the United Nations adopted 17 sustainable development goals (SDGs) to be achieved in 2030. In this talk, I will provide an overview of the sustainability initiatives at ACS and my Presidential platform. I will also cover selected polymer research and development (R&D) areas that are related to sustainability. The following examples will be shown: 1) to use natural renewable raw materials (e.g., polysaccharides, proteins, and triglycerides) as source materials for new chemistry and products; 2) to exploit biocatalysts (e.g., enzymes and micro-organisms) for chemical and polymer conversions; 3) to apply green chemistry concepts to conversion and processing; and 4) to develop green methodologies to promote the development of green products. In view of the strong interests relating to new frontiers and sustainability, we can expect to see continued R&D and commercial activities relating to these fields in the future.

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Inside this issue:

- Don't forget to vote in the CSW election!
- Apply for the CSW Student Travel Award
- Nominate a colleague for the Hillebrand Prize, Gordon Award.

Reminder: CSW Elections Close November 15th!

If you are a full CSW member and have a valid email address on file with the American Chemical Society, then on or about October 18th you received an email with instructions for accessing the secure voting website and candidate statements, along with a unique voter ID code. The ballot was sent to the same email address at which you receive official communications from ACS. If your email account has strong spam filters, please "white list" elections@vote-now.com and election.ballot@vote-now.com in order to ensure that you receive your voter ID code. If you have no email address on file with ACS, or if the emailed ballot was returned as undeliverable, a paper ballot with voting instructions and candidate statements was mailed to the address on file with ACS. Candidate statements are posted on the CSW website (<https://capitalchemist.org/candidates-full-list-2022/>). As in previous elections, voting will close at 11:59 p.m. on November 15th. Just click, read, and vote! If you haven't voted in prior CSW elections, please take this opportunity to do so, and help shape the future direction of CSW. If you have questions about the voting process, or if you did not receive a ballot by October 25th, please contact us at csw@acs.org.

CSW Elections: Candidates

President-Elect (vote for 1)

Alessandra Zimmerman

Secretary (vote for 1)

Brian Rolczynski

Councilor (vote for up to 3)

Allison Aldridge

Richard Goodman

Monika Konaklieva

Stephanie Moffitt

Janice Reutt-Robey

Matthew Windsor

Alexander Zestos

Manager (vote for up to 6)

Kristy Crews

Leila Duman

Bryan Ericksen

Carissa Hunter

Xiaoyong Lu

Lee Nagao

Candidate Statements can be found on the CSW website at <https://capitalchemist.org/candidates-full-list-2022/>.

CSW Student Travel Award Deadline December 1st

The ACS National Meeting for Spring 2022 will be held in San Diego, March 20-24, 2022. This will be a hybrid event (in-person and virtual).

The Chemical Society of Washington is pleased to announce a student travel award to defray travel and/or registration costs to the Spring 2022 National ACS meeting in San Diego. Eligible expenses include meeting registration, travel expenses, airfare and lodging. Applicants should submit the following by Midnight December 1, 2021 to CSW (email: csw@acs.org):

1. A cover letter stating how and why attending this ACS meeting will promote his/her career;
2. The applicant's CV;

3. A letter of recommendation from the student's mentor explaining why the student deserves the award and how this will help his/her professional development;
4. An accepted abstract with proof of acceptance.

Learn more about how to submit an abstract for the National ACS Meeting on the ACS website:

<https://www.acs.org/content/acs/en/meetings/acs-meetings/abstract-submission/call-for-abstracts.html>

Within three weeks of returning from the ACS meeting, the awardees should submit receipts for any or all of the eligible expenses described above, after which the Treasurer of the Chemical Society of Washington will issue a check to each of the awardees.

The award is open to students who are graduate and undergraduate students in the jurisdiction of the Chemical Society of Washington. The award is not intended for post-doctoral fellows. There will be a maximum of four awards. Each award will be for up to \$1,000 of eligible expenses based on the review of the above materials.

After returning from the conference, awardees will be asked to draft a short (1-page) summary of their experiences for posting to the Capital Chemist website and to present their posters, if applicable, at one of the upcoming CSW dinner meetings.

Call for Nominations for the 2021 William F. Hillebrand Prize

Nominations are being accepted for the **2021 Hillebrand Prize Award**. The deadline to submit a nomination is November 15, 2021.

Nominations are invited for the 2021 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, 2021. The awardee will be announced before the end of the year, and the Prize will be presented at the CSW dinner meeting in March 2022, or at a date mutually agreeable.

If you have any questions about the award or the procedure for nominating someone for the award, please contact our office at csw@acs.org.

Call for Nominations for the 2021 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 2022 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, 2021. The nomination should be submitted electronically to csw@acs.org. Please contact the Chair of the Awards Committee, Darón Freedberg (Daron.Freedberg@fda.hhs.gov), if you have any questions.

Call for Nominations for the 2021 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 2022 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 on the CSW website: https://capitalchemist.org/wp-content/uploads/2020/04/Schubert_nomination_form.pdf

Completed nomination forms can be sent directly to csw@acs.org. All nominations must be submitted by November 15, 2021. Please contact the Chair of the Awards Committee, Darón Freedberg (Daron.Freedberg@fda.hhs.gov), if you have any questions.

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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

CSW Correspondence

CSW, 1155 16th Street, NW, O-218
Washington, DC 20036
202-659-2650 voice
email: csw@acs.org
www.capitalchemist.org

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The **Chemical Society of Washington (CSW)** is the local ACS Chapter for the Washington, DC area and serves approximately 3,500 members.

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CSW Calendar of Events

November 15: Nominations deadline for Hillebrand Prize, Gordon Award, and Schubert Award

November 15: Last day to vote in the CSW Election

November 18: CSW Board Meeting

December 1: Deadline to apply for CSW Student Travel Award