

THE CAPITAL CHEMIST

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

Joint Virtual CSW/WCDG Meeting on September 15th

Please join us for this joint virtual meeting of the Chemical Society of Washington (CSW) and the Washington Chromatography Discussion Group (WCDG). The meeting will be held via Zoom on September 15, 2021, at 12:00 Noon. There is no charge to attend, but you must register in advance.

Register now: https://american-chemical-society.zoom.com/join/zoom-join?zmt=1&join_source=cswwcdg

Speaker Bio



Tongtong Xu, Ph.D.,
Senior Scientist II
Food Chemicals Codex

Tongtong is a Senior Scientist supporting the Food Chemicals Codex (FCC), managing development and modernization of FCC standards for food ingredients, as well as the development of general tests detecting potential adulterants in vulnerable food ingredients. She formerly worked at the American Beverage Association, monitoring the research landscape of the relevant ingredient safety and nutrition issues that may potentially impact the beverage industry. Before that, Tongtong worked at the FDA, evaluating the ingredients generally recognized as safe for their intended use in animal foods. She has a background in food science, with more than 8 years of experience in the area of food ingredient safety, nutrition, and food additive regulations. Tongtong holds a Ph.D. in Food Science from Pennsylvania State University.

Abstract: "Detection of undeclared sweeteners in steviol glycosid by LC/MS"

Because of growing concerns about the need for added sugar reduction in food products and consumer's preferences for "clean label" products, the food and beverage industry are taking their efforts towards calorie reduction through product reformulation using low- and no-calorie sweeteners from natural sources. Steviol glycosides, which are obtained from the leaves of *Stevia rebaudiana* Bertoni using various processing techniques, consist of a mixture of compounds containing a steviol backbone conjugated to sugar moieties. These products have been used globally as sweeteners in recent years, and the availability of various formulations created to suit the needs of a range of food manufacturers, as well as their consumer desirability, have led to increased usage. In fact, the worldwide market for stevia extracts is expected to reach 700 million US dollars in 2024. The price of steviol glycosides is considerably higher than many other low- and no-calorie sweeteners, therefore making them vulnerable to adulteration with less expensive and less desirable high-intensity sweeteners. As a part of ongoing efforts to assist the food industry and regulators in combating economically motivated adulteration, the *Food Chemicals Codex* (FCC) has developed, validated, and published a proposed LC-MS method to detect the presence of nine potentially undeclared low- and no-calorie sweeteners in steviol glycosides. As a source of global food standards, the FCC seeks to increase the role of public standards and guidance methods, including this publication, to protect consumers and food manufacturers from the growing trend of food adulteration.

Volume 71, Number 6
September 2021

Inside this issue:

- Join us virtually for the September CSW/WCDG Meeting
- Remember our dear colleague, Dr. Joseph Antonucci
- Apply for a Student Travel Award
- Read about this year's National Chemistry Week theme

In Memoriam: Dr. Joseph Antonucci

The Chemical Society of Washington (CSW) remembers a long-time CSW board member, Dr. Joseph Antonucci, who served as CSW President, Councilor, leader of the local Senior Chemists Committee, and beloved mentor.

Joseph M. Antonucci passed away on Monday, April 26, 2021 at his home in Kensington, MD of natural causes.

Joe was born July 23, 1931 in New York, NY to the late Mary Perna and Augustino Antonucci. He graduated Summa Cum Laude, St. John's University (NYC) in 1953 and received his PhD from the University of Maryland in 1959. Joe worked as a Research Chemist for the National Institute of Standards and Technology (NIST) for over 51 years, as well as for the American Dental Association (ADA).

During his career, Joe authored and co-authored dozens of papers and earned numerous awards for his work in the area of dental polymers. Even after retirement, Joe continued to mentor aspiring research chemists. While Joe worked hard, he also enjoyed life to the fullest. He and Judy were avid theatergoers and attended events of all kinds at the Kennedy Center and Strathmore Hall. After Judy's passing, Joe took up her mantle by volunteering at the performing arts centers. Joe also enjoyed baseball, both following various professional teams and playing softball recreationally. Joe was a good friend, a trusted-colleague, and remained a humble person. While the scientific community will remember Joe for his many patents and contributions to polymer science and dental materials, all of those who interacted with Joe will remember him as a kind-hearted person with a giving nature.

His beloved wife, Judy died in 2016. He will be remembered by many loving friends and colleagues.

In lieu of flowers, contributions may be made to Montgomery Hospice at <https://montgomeryhospice.org/donate-now/>

Share a memory or tribute at <https://www.pumphreyfuneralhome.com/obituaries/Joseph-Antonucci?obld=20920831>



Dr. Joseph Antonucci, beloved mentor, colleague, and friend

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.

View the details 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.)

National Chemistry Week - October 17-23, 2021



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.

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, we will celebrate NCW October 17-23, 2021 with the theme of "Fast or Slow... Chemistry Makes It Go!" Everything around us is made of molecules, including the air we breathe, the objects we touch, and the bodies we use to run, learn, and laugh. Molecules are very small and can't be seen with the naked eye, but they are very important! Every molecule is made of two or more atoms, which are the building blocks of matter, like the individual bricks in a Lego sculpture. Molecules are in constant motion at all times. When they're in a solid phase, they vibrate against each other. When they're in a liquid phase, they slide past each other. And when they're in a gas phase, they are very spread out. Chemistry is the study of these atoms and molecules, their properties, and their changes. Molecules can change into other molecules as they go through chemical reactions, which happen when molecules break the chemical bonds that hold them together or combine to make new bonds with other molecules, forming new molecules. The starting substances in a reaction are the

reactants, and the substances produced at the end of a reaction are called products. Some chemical reactions are so slow that you can't observe a change right away (such as the formation of rust on a piece of metal), and others are so fast that you might miss them if you blink (like when a firecracker pops).

To find out more about what kind of things cause chemical reactions or what makes

them go fast or slow can be found in this year's issue of *Celebrating Chemistry*. The electronic version of the Celebrating Chemistry Newsletter is available from the ACS website (www.acs.org/ncw).

This year, CSW is planning on having some in-person events for NCW as well as some virtual events. Be sure to check the October issue of the *Capital Chemist* for more information on these fun events that the Chemical Society of Washington (CSW), and the ACS Office of Community Activities, will be hosting for NCW 2021.

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 via e-mail at csw@acs.org.

National Chemistry Week Illustrated Poem Contest Submissions Due October 24, 2021

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. Write and illustrate a poem using the National Chemistry Week theme, "Fast or Slow ... Chemistry Makes It Go!" 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 24, 2021. Entries should be submitted using the ACS NCW Illustrated Poem entry website

(<https://www.acs.org/content/acs/en/education/outreach/ncw/plan-an-event/illustrated-poem-contest.html>). Additional information on the contest, as well as NCW, is available on the ACS web site (www.acs.org/ncw).

@ACS_CSW

capitalchemist.org



Hooded: A Black Girl's Guide to the PhD

October 7th, 2021 7:00 pm

Sponsored by ACS- Chemical Society of Washington, Committee on Minority Affairs



Dr. Malika Grayson is the founder of STEMInist Empowered LLC. An organization focused on the empowerment of Women of Color who pursue graduate degrees through personal statement reviews and graduate mentorship. A Fortune 100 global speaker, bestselling author, and mechanical engineer. She has given dozens of workshops and keynotes and is the recipient of many honors including Zellman Warhaft Commitment to Diversity Award, National Society of Black Engineers – Mike Shin Award for Distinguished Member of the Year, Adelphi University's Top 10 Alumni Under 10 and BEYA STEM's Modern Day Technology Leader. Her work in STEM has led to her being named one of Trinidad and Tobago's 40 Under 40 Youth Influencers by the country's Ministry of Youth and Sports Affairs. She is also the author of the best-selling book "Hooded: A Black Girl's Guide to the PhD" and has been featured in a number of publications and books including US Black Engineer and Information Technology magazine, Radiations magazine the Wall of Wonder. Her main keynotes and workshops are based on her experiences both in academia and industry and focus on: Networking for Mentoring, Canceling Imposter Syndrome, Navigating the Impossible, Success through Resilience, and Diversity, Inclusion and Representation In STEM. She has given keynotes globally at numerous schools, universities, and organizations, and remains passionate about sharing her experiences to encourage others on their STEM journey.

Distinguished Author:

MALIKA GRAYSON, PHD

INFO@MALIKAGRAYSON.COM | MALIKAGRAYSON.COM

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

CSW Correspondence

CSW, 1155 16th Street, NW, O-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 ©2021, CSW.

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

2021 Officers

President

Jennifer Tanir

President-elect

LaKesha Perry

Past President

Darryl A. Boyd

Secretary

William Hickling

Treasurer

Reyniak A. Richards

CSW Calendar of Events

September 15: Joint CSW/WCDG Meeting

September 20, 7pm – 9pm: CSW Board of Managers Meeting