THE

CAPITAL CHEMIST



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

CSW Science Cafe Series

CSW is launching a Science Café Series, a chance to discuss science and technology issues with experts in the casual atmosphere of a DC restaurant. Please join us for our inaugural event!

Complex Variables: Understanding Science and Policy at the Federal Level

Thursday, November 15th, 6:30 pm

Local 16 | 1602 U Street NW Washington, DC 20009

Join Carl Maxwell, manager of Energy and Environment Policy for the ACS Office of External Affairs and Communications, for a discussion about how the election results for the 116th Congress will impact science and technology policy.

This event is FREE and open to all ages and backgrounds.

For any questions please contact cswsciencecafe@gmail.com.

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Inside this issue:

- Attend this month's CSW Meeting with Dr. Sunita Satyapal
- Don't forget to vote in this year's CSW election!
- Learn about the Student Travel Award to help offset the cost of attending an ACS National Meeting
- Register for the DC MIT Club's STEM teacher seminar

CSW Dinner Meeting - November 8, 2018

Dr. Sunita Satyapal

Director, Fuel Cell Technologies Office Office of Energy Efficiency and Renewable Energy U.S. Department of Energy

"Innovation and Emerging Technology Perspectives in Hydrogen and Fuel cells at the U.S. Department of Energy"

Biography

Sunita Satyapalis the Director for the U.S. Department of Energy's (DOE) Fuel Cell Technologies Office within the Office of Energy Efficiency and Renewable Energy. She has been responsible for roughly \$100 million per year in hydrogen and fuel cell research and development activities and has over two and a half decades of experience across academia, industry and government, including at United Technologies and as a visiting professor at Vassar College. She joined DOE in 2003, serving first as hydrogen storage lead and then chief engineer, and has been the Director since 2010. She has numerous publications, including in Scientific American, 10 patents, and a number of recognitions including a Presidential Rank Award. She received her Ph.D. in Physical Chemistry from Columbia University and did her postdoctoral work in Applied and Engineering Physics at Cornell University.



Abstract

Today the technology around generating efficient and sustainable energy is rapidly evolving and hydrogen and fuel cells are emerging, versatile examples within a portfolio of options. Dr. Sunita Satyapal will provide an overview of the U.S. Department of Energy's (DOE) activities within the Office of Energy Efficiency and Renewable Energy (EERE) focusing on hydrogen and fuel cell technologies. This is an exciting time in the fuel cell industry with several thousand commercial fuel cell vehicles now sold or leased, hundreds of fueling

stations worldwide, and more than a quarter of a million stationary fuel cells providing clean, reliable power. DOE's Fuel Cell Technologies Office (FCTO) addresses key technical barriers faced by hydrogen and fuel cells through a comprehensive portfolio of early-stage research and development (R&D) with the potential to meet technical and cost targets that enable competitiveness with incumbent technologies in the market, aligned with national priorities.

The presentation will cover DOE's H2@Scale initiative which will enable innovations to generate cost-competitive hydrogen as an energy carrier, coupling renewables, as well as nuclear, fossil fuels, and the grid, to enhance the economics of both baseload power plants (nuclear and coal with sequestration) and intermittent solar and wind, enhancing resiliency and avoiding curtailment. Hydrogen can be stored, distributed and used as a fuel or feedstock in transportation, stationary or back-up power and multiple industrial sectors, while creating an additional revenue stream for existing baseload and variable generation assets. The presentation will also provide an overview of national and regional efforts within the United States related to hydrogen and fuel cells and potential opportunities within the region.

Meeting Logistics

Date: Thursday, November 8, 2018
Time: 6:00 p.m. Check-in/Social Hour

6:30 p.m. Dinner

7:00 p.m. Presentation

Location: ACS Headquarters - Marvel Hall - 1155 16th St., N.W., Washington, DC

Menu: Meal will be catered by Gepetto Catering and will feature Teriyaki London broil (grilled skirt steak topped with fresh ginger, lemongrass, cilantro and soy), Lemon Caper Salmon Fillet (roasted salmon fillets presented with a lemon, caper and rosemary sauce). Grilled seasonal vegetables, gorgonzola green salad, rolls & butter. Vegetarian (Vegan) Option:Penne Pasta with Tomato Basil Sauce. Dessert: Assorted cake slices. Assorted beverages will be provided.

Cost: \$22 (Members and guests) / \$11 (Students and High School Teachers)

RSVP by noon on Tuesday, November 6,to csw@acs.org (preferred) or by phone (messages only: 202.659.2650). Please provide the names in your party when you RSVP, and if you wish to have the meat or vegetarian option. 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.

Parking: Parking is available in nearby commercial parking garages. Please be aware that garage closing times vary. Parking is also available on the street after 6:30 pm, but be aware that most parking meters are in effect until 10:00 pm and may be limited to 2 hours. You should check the individual meters for details and payment methods as some are no longer coin-operated.

Metro: Blue/Orange/Silver Line (McPherson Square or Farragut West) or Red Line (Farragut North)

REMINDER – CSW Election Voting Closes 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 11 you received an e-mail 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 <u>CSW website</u>. As in previous elections, voting will close at 11:59 pm on November 15. 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 new voting process, or if you do not receive a ballot by October 21, please contact us at csw@acs.org.

Student Travel Awards for ACS National Meetings

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

- 1. A cover letter stating how and why attending this ACS meeting will promote his/her career, including a valid email address and mailing address;
- 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.

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 available for each National meeting. Each award will be for up to \$500 of eligible expenses based on the review of the above materials.

After returning from the conference, awardees will be asked to draft a short 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.

Attention: DMV Middle and High School STEM teachers

The DC MIT Club has arranged a one-day seminar for local STEM teachers on Tuesday, November 6, 2018. This year the event is hosted by Northrop Grumman in McLean, VA. Registration is now open (but limited). Details can be found at http://bit.ly/2zwiYHA.

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



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

CSW Calendar of Events

November 8: CSW Meeting

November 15: CSW Science Cafe

November 15: Voting Deadline for CSW Election

November 28: Board of Managers Meeting

December 1: Student Travel Award Application

Deadline

December 15: CSW Meeting