

THE CAPITAL CHEMIST



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February CSW Meeting: College Chemistry Achievement Awards and FDA Presentation on Fish Oil Supplements

At this month's CSW meeting, Dr. Cynthia Srigley, a Research Chemist at the FDA's Center for Food Safety and Applied Nutrition, will give a presentation entitled, "Recent Advances in the Analysis of Long Chain Omega-3 PUFA in Fish Oil Dietary Supplements". In addition, CSW will present the College Chemistry Achievement Awards. The College Chemistry Achievement Awards are presented annually by the Chemical Society of Washington to the outstanding seniors majoring in chemistry and biochemistry from each of the area colleges and universities.

Meeting logistics can be found on the next page.

Speaker Biography

Dr. Cynthia Srigley is a Research Chemist at the United States Food and Drug Administration's (FDA) Center for Food Safety and Applied Nutrition (CFSAN) in College Park, MD. Her current research focuses on the development and validation of gas chromatography, mass spectrometry, and infrared spectroscopy methods for the determination of fatty acids and other lipids in foods and dietary supplements. Dr. Srigley received her B.S. and M.S. degrees in Animal Science from Cornell University, and her Ph.D. in Nutrition from the Division of Nutritional Sciences at Cornell University working with Dr. J. Thomas Brenna. Her dissertation research focused on the role of dietary arachidonic acid in neonatal piglet development. Dr. Srigley received her postdoctoral training in analytical methods development and validation at FDA's CFSAN. She is an active member of the American Oil Chemists' Society (AOCS) and International Society for the Study of Fatty Acids and Lipids (ISSFAL), and enjoys skiing, golfing, and traveling with her husband in their free time.



Abstract: *Recent Advances in the Analysis of Long Chain Omega-3 PUFA in Fish Oil Dietary Supplements*

Dietary supplements containing long chain omega-3 polyunsaturated fatty acids (PUFA), such as those derived from fish oil, are frequently consumed in the United States (US) and other countries to support health and reduce the risk of chronic disease. The thriving market for fish oil supplements has been met with increasing concerns regarding the safety of such products, as well as issues of authenticity and deliberate mislabeling. Questions of accuracy in label declarations for eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) have also been raised. The US Food and Drug Administration's (FDA) Center for Food Safety and Applied Nutrition (CFSAN) is currently evaluating rapid spectroscopic procedures for the determination of fats and fatty acids in foods and dietary supplements as alternatives to conventional gas chromatographic methods which are time-consuming, laborious, and involve hazardous solvents and reagents. Rapid methods are intended to reduce the total time of analysis, but they must also be as accurate, sensitive, and precise as current official methods. This presentation will focus on the development and validation of a novel Fourier-transform mid-infrared (FT-IR) spectroscopic method combined with partial least squares regression (PLSR) for the rapid quantitative prediction of long chain omega-3 PUFA in fish oil dietary supplements. This rapid screening method offers the potential to significantly improve sample-throughput and cost-efficiency for the routine monitoring of label declarations and product compositions.

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- Learn more about the February CSW Meeting
- View photos from the Project SEED Research Symposium held in September
- Volunteer for YCC, and read about their recent event
- MARM Call for Abstracts open until 3/31

February CSW Meeting Logistics

Date: Thursday, February 9, 2017

Location: University of Maryland, Chemistry Building Atrium

Time: 6:00 p.m. Social Hour / Check-in / Dinner

7:00 p.m. College Achievement Awards

7:30 p.m. Speaker Presentation, "Recent Advances In the Analysis of Long Chain Omega-3 PUFA in fish Oil Dietary Supplements" by Cynthia T. Srigley, Ph.D., US Food and Drug Administration, Center for Food Safety and Applied Nutrition, Office of Regulatory Science

Cost: \$24.00 Members / Guests \$12.00 Students

Menu: Catering will be provided by La Prima Catering, and will feature a buffet of chicken with mushrooms, vegetarian pasta, and grilled vegetables, and includes a Caesar salad, assorted dessert bars, and beverages.

Please make reservations by Tuesday, February 7, 2017, 12:00 noon, by contacting the CSW office: csw@acs.org or 202-659-2650 (messages only). Please include the names of all members in your party, including spelling. The public is invited to attend. You may attend the talk only, but reservations are appreciated. Those who make a dinner reservation, but are unable to attend, should send a check for the cost of their meal to the CSW office.

Directions: From Baltimore Avenue (US Hwy 1), enter the UMD campus using Campus Drive. At the traffic circle, bear right onto Regents Drive. Parking is available in the Regents Drive parking garage across from the Chemistry building. Parking is unrestricted after 4:00 p.m. in the non-metered spaces. Campus Drive is also accessible from University Boulevard or Adephi Road, on the west of campus. Metro: Green line to College Park. The University runs a free shuttle bus from College Park Metro Station. The bus stops at the Regents Drive Garage across from the Chemistry Building. If you need a map, one is available from the University of Maryland website, at www.umd.edu.

Project SEED Research Symposium 2016

Contributed by Allison Aldridge, CSW Project SEED Coordinator

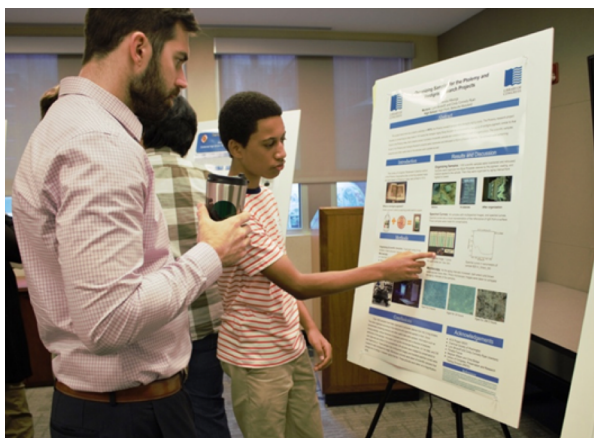
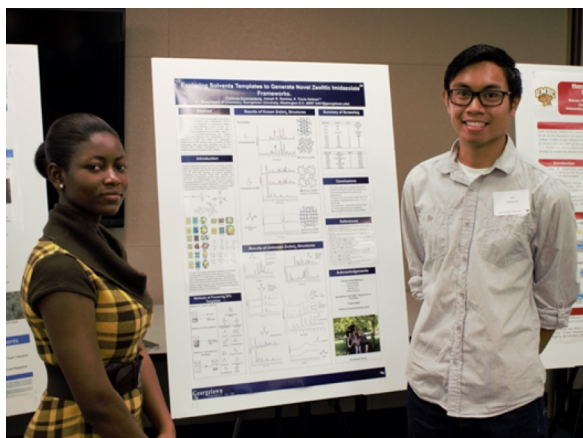
CSW's Project SEED program continues to provide chemistry-related research opportunities to economically disadvantaged high school (HS) students in the DC area. In 2016, 19 fellows completed the program, including four SEED II (returning) fellows. The students represented Washington DC (Roosevelt HS), and Maryland (John F. Kennedy HS, Highpoint HS, Wheaton HS, Centennial HS, Walter Johnson HS). The institutions that hosted the fellows were Howard University, Georgetown University, George Washington University, University of Maryland (College Park and Baltimore County), University of the District of Columbia, the Library of Congress, and the National Institute of Standards and Technology (NIST). The fellows from the University of Maryland Eastern Shore's Project SEED program, organized by Dr. Victoria Volkis (Montajha Bowen, Cierra Jennestreet, Ashley Rochford, and Alaya Lewis), joined us for the research symposium.

The CSW Project SEED committee organized a Project SEED Research symposium on September 10, 2016 at ACS headquarters. The SEED I (first-year) fellows presented posters of their research and the SEED II (returning) fellows gave oral presentations. Five CSW members served as judges (Dr. Richard Goodman, Dr. Jason Schaff, Dr. Wesley Farrell, Dr. Darrell Boyd, and Mr. Zeus de los Santos). Prizes were awarded to Zane Haug, (first place), Ashley Rochford (second place), and Anulichi Okorie (honorable mention).

Photos from the Project SEED Research Symposium



CSW SEED fellows for 2016 at the September Research Symposium.



Left: Project SEED fellow Florence Kyremanteng, with graduate student Joe Ramirez (Georgetown University) at the poster session. Her mentor, Travis Holman, was also in attendance. Right: Project SEED fellow Nicholas Mbenga, who worked at the Library of Congress, presenting his poster to CSW Board member Wesley Farrell.

Younger Chemists Committee Looking for Volunteers

ACS and CSW's Younger Chemists Committee (YCC) hosted a networking happy hour on December 14th at La Tasca DC. The turnout was excellent at nearly 40 chemists. Attendees included a variety of ACS members from local universities, government agencies, and companies. We received positive feedback on the event and are sure to host more in the future.

Thank you very much to ACS National who sponsored tapas and drinks!

YCC has a new email address. If you're interested in hearing about YCC events or want to volunteer, please email yccsw@gmail.com.

We are looking for volunteers for YCC events at the ACS National Meeting in Washington DC this fall. CSW YCC will be hosting a fun run and networking events during the meeting and coordinating with YCC national to host a symposium.

MARM 2017 Call for Papers

The call for papers for the 2017 Middle Atlantic Regional Meeting (MARM) has been issued. The meeting will take place June 4-6 at the Hershey Lodge, in Hershey, Pennsylvania. Details, including names and contact information for program and session chairs, can be found on the meeting website (<http://marm2017.sites.acs.org/>). The final program summary will be published in C&EN in the spring; the online program will be available on May 1, 2017.



Co-organized by the Lehigh Valley and Susquehanna Valley local sections, the symposium celebrates the theme of 'Elements of Transition', featuring the rapidly evolving knowledge and applications of the chemical sciences. In addition to over 50 technical symposia, the symposium will feature poster sessions, special programming on chocolate chemistry and Joseph Priestley, awards, an exposition, and more.

A sampling of the symposium sessions include "The Evolving Landscape of Drug Discovery and Development"; "Total Synthesis"; "Organometallic Chemistry"; "Active Learning: Strategies for Making it Work in Your Class"; "Chemistry of Renewable Carbon Sources"; "Nanoscience Fundamentals and Applications"; "Chemistry at Interfaces: Living on the Edge"; "Forensic Chemistry"; "Physical Chemistry of Materials"; "Advances in Nanotechnology, Polymers, Terahertz, and Analytical Research"; "Membrane Structure and Assembly"; "Protein Misfolding and Quality Control"; "Progress and Applications of Metabolomics"; and "Computational Chemistry in the Undergraduate Curriculum".

ACS's Meeting Abstracts Programming System (MAPS) opened on January 2, 2017 for abstracts. Please visit maps.acs.org to submit an abstract. Abstracts are due March 13, 2017.

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CSW Calendar of Events

February

Thursday, February 9: CSW Meeting

March

Thursday, March 23: CSW Meeting

Monday, March 27: CSW Board Meeting

April

April 2-6: ACS National Meeting, San Francisco

May

Monday, May 22: CSW Board Meeting

June 2017 and Beyond

June 4-6: MARM

August 20-24: ACS National Meeting, DC

Monday, September 25: CSW Board Meeting

Monday, November 20: CSW Board Meeting