



ACS

Chemistry for Life®

OCACS Elements

The Orange County Local Section wants to hear from you. If you would like more information about our section or how you or your company can contribute to our Section's efforts, please visit our website or contact us at OCACSCChair@gmail.com.

Visit our Website

OCACS Executive Committee Update

The OCACS Executive Committee met last night (January 9) in Irvine to catch up after the holidays and to discuss the 2018 year ahead.

Robert Cohen, our Treasurer, reviewed the final 2018 budget with the committee, and it was approved by an unanimous vote.

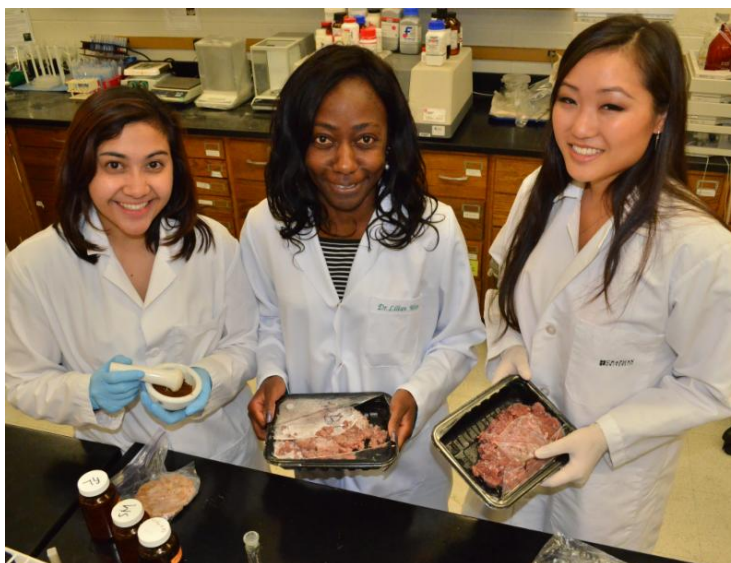
The Committee's big discussion of the night was about public affairs - specifically the 2018 elections and science. We are going to be working on a set of questions for our California candidates that specifically target their views and votes on scientific issues. Our goal is to get all of the candidates on our California and Orange County ballot on the record, so that we can release a non-partisan science "checklist" to our section members in early October. We need people who want to do online research, candidate outreach, and data consolidation and analysis. The expected time commitment per person is 1-3 hours/month, depending on how active you want to be. The larger the committee, the more candidates we can get on the record. If you want to join the team this year to work on this important survey/project, contact Dr. Sandra Thompson at OCACSCChair@gmail.com.



The Committee closed the evening by discussing the 2017 Annual Report for the Section and the February Newsletter. The content deadline for this Newsletter is February 2.



Dr. Lilian Were will be our January Dinner Meeting speaker on January 18. Her talk entitled "Chlorogenic Acid Oxidation-induced Greening: Formation, Control and Effect on Nutrition" will be given after dinner, which starts at 6:00 PM. If you want to attend the presentation only and not have dinner, you can join us for free. Please RSVP however, so that we can ensure we have adequate seating.



Proteins and polyphenols influence both sensory and nutrition properties in foods. The complexation of proteins with phenolic compounds can cause discoloration, loss of solubility and nutritional value which may affect quality of foods. A common phenolic acid in many fruits and vegetables is chlorogenic acid. Chlorogenic acid reactions with various food components can lead to changes in organoleptic properties: color and flavor. In this talk, mechanism of chlorogenic acid-induced color reactions will be presented. Strategies for controlling chlorogenic acid oxidation induced greening, and subsequent effect on nutrition will be addressed, using cookies as the food matrix.

Dr. Were's background is in food science, with specific training and expertise in food chemistry having worked on protein based edible films, plasminogen activators in milk, and antimicrobial encapsulation in liposomes for enhanced efficacy against bacteria. Her current research is focused on determining the preservative and sensory properties of phenolic and melanoidin coffee, mushroom and sunflower compounds, with the overall goal of enhancing the quality and shelf life of food. Her laboratory characterizes bioactive compounds in phenolic containing foods and determines their effect on chemical and microbial shelf life extension in food.

Please contact us as soon as possible to make a reservation to attend this presentation, but no later than noon on Tuesday, January 16, 2018 at ocacs@sbcglobal.net.

Photo courtesy of Chapman University, CHATTER blog

OCACS High School Chemistry Teacher of the Year Award - Submission Deadline

The Orange County section of the American Chemical Society (OCACS) has initiated an [award for Chemistry Teacher of the Year](#), to be awarded for the second time in 2018.

The Orange County Chemistry Teacher for 2017 was Kelli Gaines of Trabuco Hills High School.

All nominees must be full-time teachers in Orange County at either a public or private high school. It is not necessary to be a member of ACS to be eligible. Nominations may be submitted by teachers and administrators at High Schools in Orange County, CA (i.e. teachers may nominate their colleagues).

1. To nominate a high school chemistry teacher, select the Nominator button below, fill out the [Nomination form](#) and click Submit. The deadline for submission is midnight, **January 31, 2018**.
2. Nominees who have been officially advised by email from OCACS that they have been nominated for this Award should select the Nominee button below. Initial screening questions must all be answered and submitted online before midnight, February 4th, 2018.

All submissions will be screened by members of the OCACS Education Committee, and further information will be sought from finalists in order for us to make a final determination.

The award will be presented at the high school awards dinner in May, 2018. The winning candidate will be given a plaque, a year's membership in the American Association of Chemistry Teachers (AACT), and \$300.

If you have any questions about this award, please contact [Carol Grimes at cgrimes@gwc.cccd.edu](mailto:cgrimes@gwc.cccd.edu)



Don't miss our upcoming events and meetings and for more information, please visit our [website](#).

January 18: OCACS Dinner Meeting

January 25: OCACS Environmental Committee Meeting and Presentation

February 2: Newsletter Content Deadline

February 8: OCACS Executive Committee Meeting

Environmental Committee

We are pleased to announce that **Dr. Stephen Lyon, Principal Consultant with SRL-Environmental, LLC** will be our next speaker for the very first 2018 OCACS Environmental Group meeting on Thursday, January 25, 2018.

The title of Dr. Lyon's presentation is "Journey to the World of Applied Ecology". More details about his presentation will be provided very soon. Dr. Lyon has 37 years of research experience

in water and wastewater treatment and microbial ecology. He has in-depth knowledge of conventional and alternative wastewater treatment systems, bioremediation, hazardous waste treatment, artificial and natural wetlands ecology, groundwater recharge, and biogeochemical fouling. He has a suite of skills that spans eighteen orders of magnitude in the disciplines of environmental microbiology, virology, chemistry, limnology and waste water/storm water treatment. His current area of research deals with the microbiome of the built environment.



Our meeting will be held at Kennedy/Jenks Consultants' Irvine Office ([3210 El Camino Real, Suite 150, Irvine, CA 92602](#)). The meeting will start at 7:30 pm. Please mark your calendar and plan to join us for Dr. Lyon's presentation.

Note: Dr. Lyon will be presenting his presentation remotely from Wisconsin. We will still meet at the Kennedy/Jenks Irvine office.

If you want information about our Environmental Committee, please contact:

[Dr. Ganesh Rajagopalan](#), Kennedy/Jenks Consultants

[Dr. Keisuke Ikehata](#), Pacific Advanced Civil Engineering (PACE)

6 C Carbon 12.0107	2 1 4 H Hydrogen 1.00794	99 2 8 18 32 29 8 2 Es Einsteinium (252)
12 2 8 18 18 7 Mg Magnesium 24.3050	53 2 8 18 18 7 I Iodine 126.90447	16 2 8 8 6 S Sulfur 32.066
22 2 8 10 2 Ti Titanium 47.867	88 2 8 18 32 18 8 2 Ra Radium (226)	39 2 8 18 9 2 Y Yttrium 88.90585

Get Involved & Support OCACS

If you want to network with over 1300 chemists in Orange County, host a technical tour, speak at one of our dinner meetings or science cafes, explore leadership opportunities, or advertise with our Section, please visit our [website](#) or E-mail us at OCACSLocalSection@gmail.com and OCACSChair@gmail.com.

We would love to hear from you!

OCACS Executive Committee

Chair	Dr. Sandra Thompson	OCACSCChair@gmail.com
Chair-Elect	Dr. Keisuke Ikehata	kikehata@pacewater.com
Past Chair	David Marec	dmarec@roadrunner.com
Treasurer	Robert Cohen	cohenr@sbcglobal.net
Secretary	Dr. Sangeeta Dey	sangeetadeys@gmail.com
Councilor	Dr. Rabin Lai	rabin@academysavant.com
Councilor	Robert Cohen	cohenr@sbcglobal.net
Councilor	Dr. Sanda Sun	sanda.sun@gmail.com
Alt. Councilor	Dr. Keisuke Ikehata	kikehata@pacewater.com
Alt. Councilor	David Marec	dmarec@roadrunner.com
Alt. Councilor	Dr. Sandra Thompson	OCACSCChair@gmail.com
Education Comm. Chair	Dr. Carol Grimes	cgrimes@gwc.cccd.edu
Education Comm. Sec.	Judy Bechtold	bechtoldjudy@gmail.com
Environmental Chemistry	Dr. Ganesh Rajagopalan	rganesh@kennedyjenks.com
Kids & Chemistry	Dr. Sanda Sun	sanda.sun@gmail.com
Website	Dr. Rabin Lai	rabin@academysavant.com
Awards	Dr. Sanda Sun	sanda.sun@gmail.com