

THE CHEMIST

Scientific Communication

The Puget Sound Chemist

Volume 75 No. 11 - November 2014

Nov 19th ► **Recreational Marijuana: Science & Society**

Please Vote! Elections for the Puget Sound Section

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Newsletter of the Puget Sound Section
of the American Chemical Society



From the Editor

THE PUGET SOUND CHEMIST

Newsletter of the
Puget Sound Section
of the
American Chemical Society

American Chemical Society
Website

<http://acs.org>

Puget Sound Section Website

<http://pugetsound.sites.acs.org>

Please address all email
correspondence to:

ACSPugetSound@gmail.com

Information validation is important for ensuring that false information is not propagated as fact.

Scientifically accurate communication is vitally important to many aspects of our lives. This publication is primarily focused on informing the Puget Sound Section of the American Chemical Society about local events and topics of scientific interest, especially those focused in the chemical sciences. One such event is coming up on November 19th, 2014 at the Fred Hutchinson Cancer Research Center. The topic is marijuana's biochemical/neurological effect on the human body and the associated implications for society at large. It is an event sponsored by both ACS and AWIS (Association for Women in Science). Read more about this event, titled 'Recreational Marijuana: Science & Society,' in the [News Briefs](#) section.

There are several science cafés in various parts of our section this month. Check them out in the [Science Cafés](#) section.

The YCC (Younger Chemists Committee) will meet on the third Thursday of the month (November 20th) at the usual location (Specialty's Café and Bakery in U-Village). Details: [YCC page](#)

See the [Calendar](#) for further details on these and other events.

[Puget Sound ACS Elections](#): Ballots are coming soon!

Cheers!



Jonathan Clark

Jonathan Clark
Newsletter Editor

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Calendar – November 2014

Calendar of Events - <http://pugetsound.sites.acs.org/apps/calendar/>

4 November 2014 - Queen Anne Science Café

Time: 7:30pm

Location: T.S. McHugh's - 21 Mercer Street, Seattle, WA 98109

7-9 November 2014 - Younger Chemists Committee Table at LSRW

Time: Friday 10:00am-2:00pm – Sat/Sun 10:00am-6:00pm

Location: Pacific Science Center's Life Science Research Weekend - 200 2nd Ave N, Seattle, WA 98109

10 November 2014 - Executive Committee Meeting

Time: 7:00pm – 8:15pm

Location: North Seattle Community College - 9600 College Way N, Seattle WA 98103

Room 2428C - South end of the 2nd floor of the Instruction Building (IB)

Campus Map: <https://northseattle.edu/locator>

10 November 2014 - Eastside Science Café

Time: 7:00pm

Location: Wilde Rover - 111 Central Way, Kirkland, WA 98033

11 November 2014 - Olympia Science Café

Time: 7:00pm

Location: Orca Books - 509 East 4th Avenue, Olympia, WA 98501

11 November 2014 - Tacoma Science Café

Time: 6:30pm

Location: The Swiss Restaurant & Pub - 1904 Jefferson Avenue, Tacoma, WA 98402

19 November 2014 – Joint ACS/AWIS Event: Recreational Marijuana: Science & Society

Time: 6:00pm – 8:00pm

Location: The Fred Hutchinson Cancer Research Center - 1100 Fairview Ave. N., Seattle, WA 98109

20 November 2014 - Younger Chemists Committee Meeting

Time: 6:30pm – 7:30pm

Location: Specialty's Café & Bakery in U-Village - 2690 NE Village Ln, Seattle, WA 98105

News Briefs

Recreational Marijuana: Science & Society

The American Chemical Society's Puget Sound Section and The Association of Women in Science invite you to a panel discussion on the scientific research and societal consequences surrounding legal, recreational marijuana use.

Wednesday, November 19th, 2014 (6:00pm-8:00pm)
Fred Hutchinson Cancer Research Center's Pelton Auditorium
1100 Fairview Ave. N., Seattle, WA 98109 – Free visitor parking

Pre-registration is required. [Register here.](#)
Get all the event details from the flyer. [View flyer.](#)

This event is jointly sponsored by:
The Association of Women in Science (AWIS - Seattle Chapter)
The American Chemical Society (ACS - Puget Sound Section)

Puget Sound Section Elections Update

The ballots will be sent out soon! Keep your eyes peeled and PLEASE VOTE!!

If voting by mail, your paper ballot must be postmarked by **November 20th, 2014.**
Likewise, online voting will close on **November 20th, 2014.**

Nick Milanovich is the Nominating Committee Chair. Other Nominating Committee members include Despina Strong and Robbyn Perdue-Anand.

Please direct your questions regarding the elections process and the offices up for election to Nick Milanovich at elections@pugetsound.sites.acs.org

Science Cafés

► These Science Cafés are free and are open to all ages. ◀

Queen Anne Science Café

"What Causes Autism Spectrum Disorder?"

Tuesday, 4 November, 2014 - 7:30pm - [T.S. McHugh's](#)

Our speaker is Raphael Bernier, Ph.D., Assistant Professor, Department of Psychiatry and Behavioral Sciences, UW. Autism spectrum disorder is now considered the most common developmental disorder. But what causes this pattern of impairments in social communication and behavior that we call autism? Recent scientific advances have helped to identify many of the causes of autism, providing insight into the development of the social brain.

- T.S. McHugh's is located at 21 Mercer Street, Seattle, WA 98109.

Eastside Science Café

"Autopsy Answers: Forensic Pathology in Washington?"

Monday, 10 November, 2014 - 7:00pm - [Wilde Rover](#)

When people die, it's up to a forensic pathologist to figure out why. What caused their death? How do we know? What can we learn from an autopsy? Join forensic pathologist Carl Wigren, M.D., to explore how death investigation works in Washington state, read the clues left behind to determine the cause and manner of death, and learn how forensic pathologists collect and preserve evidence in suspicious cases.

- Wilde Rover is located at 111 Central Way, Kirkland, WA 98033.

Tacoma Science Café

"Tuning Out The Noise"

Tuesday, 11 November, 2014 - 6:30pm - [Swiss Restaurant & Pub](#)

Join UW's Ross Maddox, Ph.D. to learn about the remarkable human hearing system, and what goes on between your ears when you focus on one sound and ignore the rest.

- The Swiss Restaurant & Pub is located at 1904 Jefferson Avenue, Tacoma, WA 98402.

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Science on Tap

- Science on Tap is another science café that meets in Seattle, WA. Information regarding the next Science on Tap event can be found on their website: <http://www.scienceontap.org>

Science Cafés

► These Science Cafés are free and are open to all ages. ◀

Olympia Science Café

"Dam removal and restoration of the Elwha River -- An Update"

Tuesday, 11 November, 2014 - 7:00pm - [Orca Books](#)

With their simultaneous decommissioning, removal of the Elwha and Glines Canyon dams represents one of the largest projects of its kind. During the 3 years of dam removal, scientists actively monitored various aspects of the physical and biological changes to the river and coastal ecosystems downstream. A major facet of the dam removal project was the controlled release of a portion of the 21 million m³ of sediment that had accumulated in the reservoirs. The release of this material and the resulting changes downstream are the focus of this talk.

Anadromous fish that had persisted in degraded spawning and rearing habitat downstream of the lower Elwha dam have started to recolonize the watershed, including in two tributaries between the former dams sites that are serving as clear water refugia in the otherwise turbid waters. With the removal of the Glines Canyon Dam in September of 2014 salmon have access to over 150 river km of spawning and rearing habitat, the majority of which is protected as wilderness inside of Olympic National Park.

This presentation will provide an update of dam removal progress, detail measurements of suspended sediment concentrations, and discuss various monitoring and evaluation studies.

Our speaker is Jeffrey Duda, Research Ecologist, U.S. Geological Survey, Western Fisheries Research Center, Seattle, WA. For over 19 years he has conducted research to determine the ecological effects of human activities on a wide variety of aquatic and terrestrial organisms and ecosystems throughout the United States. Since 2004, Jeff has developed monitoring and evaluation data on the freshwater, estuarine, and marine ecosystems before, during and following the Nation's largest dam decommissioning project on the Elwha River. He has served as leader of the multidisciplinary team of USGS researchers focused on the Elwha as part of the USGS Coastal Habitats in Puget Sound Elwha project. A firm believer in networking and building collaborative relationships, he has edited 2 volumes of research papers focused on the Elwha River, co-authored 17 scientific papers on the Elwha, and has helped organize scientific meetings of the Elwha research community, including as co-chair of the 2011 Elwha River Science Symposium held at Peninsula College.

- Orca Books is located at 509 East 4th Avenue, Olympia, WA 98501.

Younger Chemists Committee

YCC Information

We are a local section of the national Younger Chemists Committee. The YCC was chartered by the American Chemical Society to address the specific needs of younger and early-career chemists. The YCC's vision is to lead younger chemists into successful careers and active roles in the ACS and the profession.

Check out our webpage: <http://pugetsound.sites.acs.org/youngerchemistscommittee.htm>

Email any questions to Jonathan Clark (Puget Sound YCC Chair): PugetSoundYCC@gmail.com

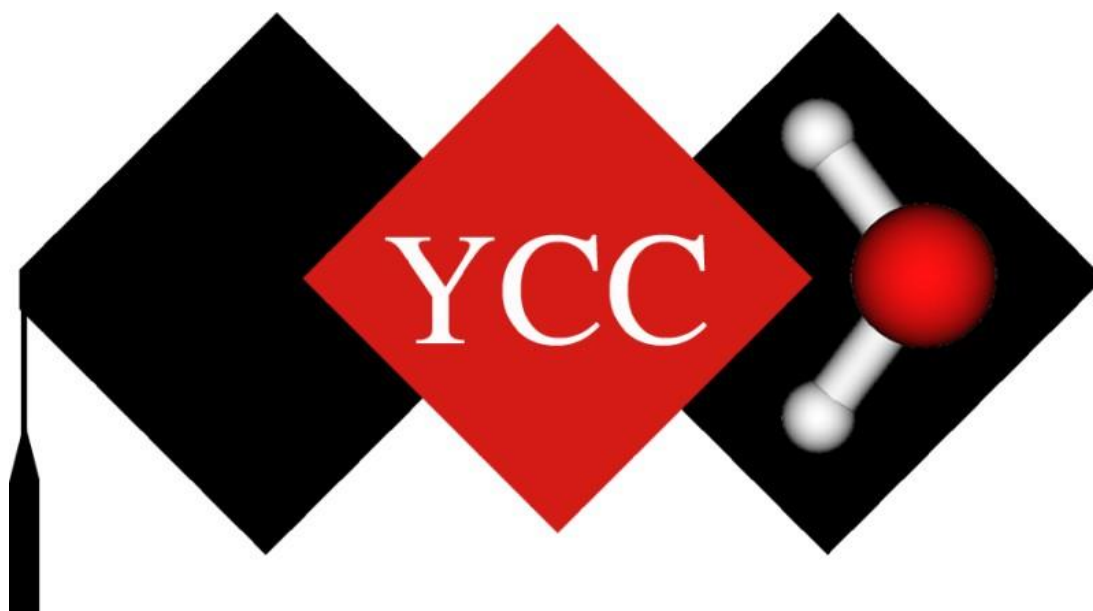
Next YCC Meeting

Thursday, November 20th, 2014 (6:30pm – 7:30pm)

Specialty's Café and Bakery in U-Village

Address: 2690 NE Village Ln, Seattle, WA 98105

Topics: Planning Future Events, Long Term Goals



Mark Your Calendar

2015 Career Event – “Careers in Chemistry”

- Emphasizing Solutions to Health Challenges in WA State -

February 11th, 2015 from 1:00pm - 5:00pm

Department of Health Laboratories

1610 NE 150th Street, Shoreline, WA 98155

Key note speaker: Dr. Romesh Gautam

(Laboratory Director, Department of Health Laboratories)

Recommended for all undergraduate science students.

Free admission and open to all.

Space is limited and registration will be required.

Stay tuned for more information as we draw closer to the event.

Keep an eye on our [website](#) for updates.

Recent Events

Pauling Award Ceremony

Held October 11th, 2014 in the Viking Union Multipurpose Room at Western Washington University, the 2014 Pauling Award Symposium was an outstanding event! It was well attended by many people including a large contingent of undergraduate students. The award went to Stephen L. Buchwald of the Massachusetts Institute of Technology for his outstanding contributions to the field of chemistry.

Melanie Sanford, Ph.D. (University of Michigan), Phil Baran, Ph.D. (The Scripps Research Institute) and David Nicewicz, Ph.D. (University of North Carolina at Chapel Hill) gave fascinating technical presentations on their work in chemistry.



The 2014 Linus Pauling Medal
is awarded to
Stephen L. Buchwald, Ph.D.
Massachusetts Institute of Technology
by the Oregon,
Portland and Puget Sound Sections
of the American Chemical Society.



Photo Credit: Dr. Amanda Murphy

On behalf of the Puget Sound Section executive board, Despina Strong would like to acknowledge WWU for a job well done hosting the 2014 Pauling Symposium on October 11. The selection committee (6 member anonymous) chaired by David Patrick did an outstanding job by selecting Stephen Buchwald from MIT as one of the most prominent chemists of our time. The symposium and other associated events were well organized and executed thanks to the Symposium chairs John Gilbertson and David Rider. The events were held in the Viking Union Building with breathtaking views of the bay. In addition to listening to the honored guest and the other three speakers, one of the highlights for me was the poster session featuring work from students from several colleges. The banquet was a celebration of Dr. Buchwald's career and was well attended by students due to the generous support of cooperate sponsors.

To David, John, David and the countless staff at WWU who helped make the 2014 Pauling Symposium such a success, thank you and congratulations for a job well done!

Recent Events

WCCTA Conference

The 2014 Annual Meeting of the Washington College Chemistry Teachers' Association was held October 9th-11th 2014 at the Sleeping Lady Resort in Leavenworth, WA

The WCCTA brings together chemistry educators from around the state of Washington and some from Oregon. They share ideas about best practices in teaching chemistry, teaching pedagogy, innovative chemistry labs, and engage in conversations on topics relevant to the WCCTA members in the beautifully relaxing atmosphere of the Sleeping Lady Conference Center. It is a great place to meet new colleagues, make friends, and network with community college and college chemistry faculty. A big thank you to the event organizers and to everyone who came!!

Recent Events

National Chemistry Week (NCW) - October 19th-25th, 2014

NCW Report - 2014

Written by: Dr. Dharshi Bopegedera (NCW Coordinator)

National Chemistry Week was celebrated in earnest throughout our section. Just based on the feedback we received:

Lindsay Groce, Chemistry Instructor at the Big Bend Community College, engaged her students in NCW and Mole Day activities. She was in the middle of her unit on dimensional analysis and stoichiometry, so she incorporated a number of candy-themed examples in her in-class problem solving (converting from Calories to kilojoules for Hershey's kisses, having students calculate the weighted average for the number of skittles per fun sized Skittle bag and then using that to figure out how many fun sized bags we could get from one mole of Skittles, etc.). She modified her density column lab to include finding densities of different candies, which the students enjoyed and when asked why most of the candies stuck in the corn syrup layer of the column, were able to deduce that those candies must primarily be made up of corn syrup. Groce had fun coming up with new examples and the students liked that they were applying their new techniques to more familiar real world items and ideas.

Dharshi Bopegedera, Co-Advisor to the Evergreen State College Chemistry Club, took student club members to the Olympia Timberland Regional Library to do "Chemistry in the Library" for K-12 students. About 60 students and their parents stopped by to do hands-on experiments on chromatography of markers, Alka-Seltzer bombs, electrolysis of water, acid-base chemistry, and the chemistry of UV detecting bracelets and cards. Parents and the library staff were thrilled to have science experiments in the library and Evergreen Chemistry Club students were delighted to interact with younger students. The library prepared a colorful poster to advertise this event to its patrons.

[Continued on next page]



Recent Events

National Chemistry Week (NCW) – Continued



The PLU Chemistry Club ACS Student Chapter and PLU Chemistry Department hosted its annual "Mole Day Eve Spooktacular" on the evening of Wednesday, October 22nd. Approximately 120 guests from the PLU campus and greater Tacoma community gathered in Rieke Science Center for an evening of eerie treats. The night kicked off with a celebration of edible carbohydrates given this year's National Chemistry Week "The Chemistry of Candy". Aside from the traditional Periodic Table of Brownies and Spooky CO₂ Punch, this year PLU Dining Services did a live cooking demonstration of caramel-making. The action then moved upstairs to the lab - lit by UV blacklights - for a series of hands-on demonstration stations staffed by PLU Chemistry Club members. Finally, members of the PLU chemistry faculty put on a show of fiery and glowing experiments. The festivities finished outside with a thermite jack-o'-lantern grand finale.



Michael Fuerte, science teacher at the Saint Louise Parish School in Bellevue, engaged his students to participate in the NCW poster contest. Fuerte and his students have participated in this contest for several years now and we appreciate his effort to make science meaningful for his students. The winning posters were sent to ACS national for judging. We wish his students well.

James Chen, chemistry professor from the South Puget Sound Community College, engaged his community in a Haiku and Poster Contest on the NCW theme and awarded fun prizes to winners.



If you celebrated National Chemistry Week in your own unique way please let us know. We love photographs as well.

Do You Haiku?
NATIONAL CHEMISTRY WEEK 2014

俳句 Haiku Contest!

1st Prize: \$75 Amazon Gift Card & Your Haiku Published in Percival Review
2nd Prize: \$50 Amazon Gift Card
3rd Prize: \$25 Amazon Gift Card

Haiku theme: Chemistry of Candy

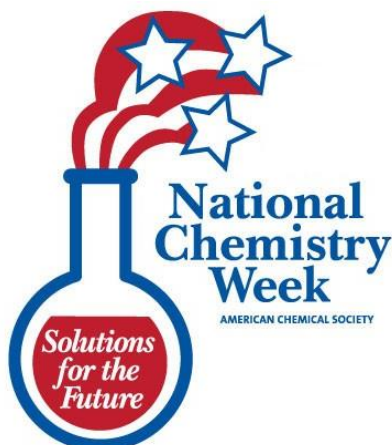
Submit your Haiku @ the Library by Friday Oct 24

Learn how to write a haiku: <http://www.spscc.ctc.edu/library/haiku-contest>

Recent Events

National Chemistry Week (NCW) – PNNL Speaker

Dr. Dayle Smith, a Senior Research Scientist at the Pacific Northwest National Laboratory (PNNL) spoke at the Evergreen State College on her work in computational chemistry on October 22nd, 2104. Dayle and her team at PNNL unravel complex structure-function relationships underlying metalloenzymatic catalysts for energy applications. Dayle joined a few of us for dinner at the Bud Bay Café afterwards.



Mole Day

Celebrated from 6:02am to 6:02pm on October 23rd each year, Mole Day is held in honor of Avogadro's number (6.02×10^{23})!



Careers

Internships

Washington Conservation Corps - <http://www.ecy.wa.gov/wcc/index.html>

Ecology Youth Corps - <http://www.ecy.wa.gov/programs/swfa/eyc/index.html>

ACS Job and Career Resources

Career Resources - <http://www.acs.org/content/acs/en/careers.html>

Employment Dashboard - <http://www.acs.org/content/acs/en/careers/salaries/dashboard.html>

Job Postings - <http://chemistryjobs.acs.org/jobs>

ACS Puget Sound Job Page – <http://pugetsound.sites.acs.org/jobsandcareerresources.htm>

ACS Resources

Online Resources for all ACS members

Explore the ACS website (<http://acs.org>) and look into the many resources available to you as a member.

Member benefits - <http://www.acs.org/content/acs/en/membership-and-networks/acs/benefits.html>

Publications - <http://www.acs.org/content/acs/en/publications.html>

ACS Webinars - <http://acswebinars.org/>

C&EN Webinars - <http://cen.acs.org/media/webinar.html>

Science Podcasts - <http://www.acs.org/content/acs/en/pressroom/podcasts.html>

ACS National and regional meetings - <http://www.acs.org/content/acs/en/meetings.html.html>

ACS Chemworx - <https://pc.acschemworx.acs.org/>

Presentations on Demand - <http://presentations.acs.org/common/default.aspx>

ACS Public Policy fellowships - <http://www.acs.org/content/acs/en/policy/policyfellowships.html>

Project Seed - <http://www.acs.org/content/acs/en/education/students/highschool/seed.html>

National Chemistry Olympiads -

<http://www.acs.org/content/acs/en/education/students/highschool/olympiad/process/competition.html>

Scholars Program - <http://www.acs.org/content/acs/en/funding-and-awards/scholarships/acsscholars.html>

SCI Scholars Internships -

<http://www.acs.org/content/acs/en/education/students/college/experienceopp/scischolars.html>

Sustainability Resources - <http://www.acs.org/content/acs/en/sustainability.html>

Get Involved - www.acs.org/getinvolved

Not a Member Yet? Join Today! - <http://acswebcontent.acs.org/joinacstoday/13NEWSAD1od.html>

Online Resources for the Puget Sound Section!

Check out our Local Section's website - <http://pugetsound.sites.acs.org>

About us - <http://pugetsound.sites.acs.org/aboutthesection.htm>

Executive Committee Meeting Minutes - <http://pugetsound.sites.acs.org/meetingminutes.htm>

Leave us a message - <http://pugetsound.sites.acs.org/askusaquestion.htm>

ACS Puget Sound Job Page – <http://pugetsound.sites.acs.org/jobsandcareerresources.htm>

Education & Olympiads - <http://pugetsound.sites.acs.org/educationolympiad.htm>

Newsletter Archives - <http://pugetsound.sites.acs.org/archivesofthechemist.htm>

Facebook page - <https://www.facebook.com/AmericanChemicalSocietyPugetSoundSection>

To subscribe to the section email list, visit: <http://www.chem.plu.edu/mailman/listinfo/pss-acs>

Roster

ACS Puget Sound - Executive Committee

Chair	Despina Strong
Interim Chair Elect	Cheryl Bick
Past Chair	Nick Milanovich
Secretary	Robbyn Perdue-Anand
Treasurer	Carole Berg
Newsletter Editor	Jonathan Clark
Councilor - Position 1 (2014)	Mark Wicholas
Councilor - Position 2 (2015)	Gregory Milligan
Councilor - Position 3 (2016)	Craig Fryhle
Councilor - Position 4 (2014)	Gary Christian
Alternate Councilor - Position 1 (2014)	Jennie Mayer
Alternate Councilor - Position 2 (2015)	Amar Yahiaoui
Alternate Councilor - Position 3 (2016)	Neal Yakelis
Alternate Councilor - Position 4 (2014)	Dharshi Bopegedera

Other Outstanding Volunteers

Career Day Committee Chair	Dharshi Bopegedera
Communications Director	Nick Milanovich
Earth Day Committee Chair	Dharshi Bopegedera
Education Committee Chair	Clarita Bhat
Finance Committee Chair	David Munch
Fundraising Committee Chair	Nick Milanovich
Linus Pauling Award Committee Chair	David Patrick
Long Range Planning Committee Chair	Despina Strong
National Chemistry Week Committee Chair	Dharshi Bopegedera
Nominating Committee Chair	Nick Milanovich
Public Relations Committee Chair	Neal Yakelis
Social Events Committee Chair	Carole Berg
Sustainability Committee Chair	Charity Lovitt
Undergraduate Symposium Committee Chair	Craig Fryhle
Webmaster	Kerry Fowler
Women Chemists Committee Chair	Robbyn Perdue-Anand
Younger Chemists Committee Chair	Jonathan Clark





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