



FALL 2016

IT'S ELECTION TIME!

2017 SECTION ELECTION VOTING INSTRUCTIONS

This year's election for officers of our local ACS Section will be conducted electronically. The ballot will be sent to the email address you provided to ACS in your "Yellow Book" member registration. You will receive an e-mail with a link to a survey hosted at www.SurveyMoz.com. Simply follow the link to see the ballot where you can vote for each position. The voting process is very straightforward and will take about one minute. Note that the ballot does have the option for write-in candidates, per our bylaws.

For those members who do not have an e-mail address registered, you will receive a paper ballot with a printed 2016 fall newsletter. The candidate biographies are provided in this newsletter and on our website. Ballots will be sent out on October 27, 2016 and votes must be received by November 12, 2016.

PLEASE VOTE ONLINE YOUR PARTICIPATION IS APPRECIATED!





CHEMISTRY CLUB RECEIVES ACS OUTSTANDING AWARD

LA GRANDE, Ore. (EOU) – For the seventh year in a row the American Chemical Society has recognized Eastern Oregon University's student chapter with an Outstanding Award for activities during the 2015-16 academic year.

Members of EOU's chapter will travel to San Francisco in April to receive the award at the 253rd ACS National Meeting and Exposition.

The ACS Society Committee on Education selects student chapters for awards in three different classifications: outstanding, commendable and honorable mention. This year 46 chapters were recognized as outstanding, 93 as commendable, and 145 received honorable mention. Eastern Oregon University along with Western Washington University were the only chapters honored in the Pacific Northwest.

"This is such a great accomplishment, particularly, because we are at a smaller institution," says Anna Cavinato, chemistry professor and club advisor.

"Our chapter continues to perform outstanding work and I am amazed at the level of commitment and hard work of our students. We are also very grateful to the ACS Richland Section for their continued support of our community outreach events including Girls in Science and Saturday Science, and for helping fund our trip to the national meeting."

Among the club's many noteworthy activities are outreach events to K-12 students, member participation at the national ACS meetings where students present research posters and engage in networking opportunities, and campus involvement.

For more information on EOU's Chemistry Club and related programs visit www.eou.edu/chem/club.

PRESENTING THE 2017 SLATE OF CANDIDATES

CHAIR-ELECT Ilke Arslan



Ilke Arslan received her Ph.D. in Physics from the University of California at Davis, and is currently a Senior Scientist at the Pacific Northwest National Laboratory in Richland, Washington. She has been honored by President Obama with the Presidential Early Career Award for Scientists and Engineers, and the National

Academy of Sciences as a Kavli Fellow.

Before joining PNNL, Ilke was on the faculty of the Chemical Engineering and Materials Science Department at the University of California, Davis, and still holds an Adjunct Professor position there. She has held fellowships from the National Science Foundation, the Royal Society, and the Truman Fellowship at Sandia National Labs. Her research involves understanding the atomic, nanoscale, 3-D, and in-situ dynamic properties of catalysts in the scanning transmission electron microscope.

She has a passion for outreach and mentoring of the next generation of scientists, and would therefore work through this election to involve more students and post-doctorates in the local section, strengthen ties between PNNL and WSU to increase student and post-doctoral participation, and promote the younger members of the local section for awards and opportunities across various national groups of the American Chemical Society.

CHAIR-ELECT Dev Chatterjee



Dev received his Ph.D. in Chemistry from University of Cincinnati in 2009, and has been at Pacific Northwest National Laboratory ever since, initially as a post-doctoral researcher, and then as a research scientist. He is a member of the Nuclear Chemistry and Engineering group of the

Energy and Environment Directorate. His research involves understanding the speciation and migration of various radionuclides in the nuclear waste tanks at Hanford, as well as detection and removal of various contaminants from the environment. While at Cincinnati, as a member of the Younger Chemist Committee and the local section of the ACS, Dev was actively involved in various outreach activities involving students from local middle and high schools. He is looking forward to continuing these outreach activities and promoting chemistry and chemical education through partnerships between the Richland section of the ACS, PNNL and local schools and community.



COUNCILOR Anna Cavinato



Anna Cavinato is a Professor of Chemistry at Eastern Oregon University in La Grande, Oregon where she has been teaching since 1992. She received a Ph.D. in Analytical Chemistry from the University of Bari, Italy. Prior to joining EOU, she was a research professor at the Center for Process

Analytical Chemistry at the University of Washington (1988-1992) and an Assistant Professor in the Department of Chemistry at the University of Memphis (1986-1988). She also received post-doctoral training at Oak Ridge National Laboratories (1983-1984) and the University of Tennessee Medical School in Memphis (1984-1986) working in the area of protein purification and electrochemistry. Her current research interests include the development of non-invasive methods of analysis, nanobiosensors, optical spectroscopy and multicomponent analysis.

Anna has been an active member of the American Chemical Society since 1986. She served as Chair of the Richland Section in 1999 and is currently the Alternate Councilor. She has also been Chair of the Diversity Committee since 2000. Under her leadership, the Section has greatly expanded its outreach efforts with programs such as "Girls in Science" and "Saturday

Science" promoting science to women and underrepresented groups. These efforts have earned the Richland Section multiple ChemLuminary awards. Anna is the advisor for the EOU Student Member Chapter (Chem Club) which continues to distinguish itself as one of the outstanding chapters in the nation. She is currently the Chair of the Project SEED Committee and the secretary of the Division of Analytical Chemistry. She is currently the Chair of the Project SEED Committee and the secretary of the Division of Analytical Chemistry. In 2013 she was recognized as ACS Fellow for her contributions to the science, the profession, and her service to the ACS community

Statement:

I look forward to continuing devoting my energy in helping the Richland Section increase its visibility and improve services that benefit all members. As Councilor I will work with the ACS governance to achieve these goals. Being an educator at a small undergraduate institution in rural Oregon, I highly value the opportunity to continue my involvement with the Section and work towards strengthening the Section's efforts to promote science education at all levels and reach out to a diverse membership, particularly younger people.

PRESENTING THE 2017 SLATE OF CANDIDATES

COUNCILOR Ram Devanathan



Ram Devanathan is a Technical Group Manager at Pacific Northwest National Laboratory. He obtained his Ph.D. in Materials Science and Engineering from Northwestern University. The focus of his research is on the use of molecular modeling to understand fundamental physical and chemical processes in

materials. He has published widely in the areas of the effect of chemistry on radiation tolerance of ceramics for nuclear waste disposal, atomic-level interactions in materials used in solid oxide and polymer membrane fuel cells, and selective transport of molecules and ions through membranes. He is a Fellow of the American Ceramic Society, Chair of the Richland Section of the American Chemical Society (2016), and winner of the Department of Energy's Outstanding Mentor Award.

As Councilor, I will represent the needs and wishes of the Local Section to the ACS Council, guide national policy that affects our members by actively participating in local section and national meetings, mentor early career chemists, increase chemistry literacy through local outreach, and recruit a diverse group of leaders for the local section as well as national committees and awards. I am inspired by the community spirit of ACS volunteers and look forward to working toward the realization of the vision for ACS laid out by President-Elect Dr. Allison Campbell.

YOUTH CHEMISTRY TRAINING

Special Two-Day Training Camp

The Richland Section is sponsoring a two morning class to expose local youth to the excitement of chemistry. The training will be held on the mornings of Saturdays, November 5 and 12, at Columbia Basin College's Pasco campus. The class uses the Boy Scout chemistry merit badge as a syllabus, and boy scouts who attend will be able to earn that merit badge.

Attendance at both mornings is required. However,

it's not just for scouts, and it's not just for boys, either. The class is open to any youth 13 or older. Registration is being handled through the Boy Scout Blue Mountain Council website, www. bmcbsa.org. For questions, contact Steve Krogsrud, (509)545-6749 or email at steve krogs@hotmail.com.

SECRETARY Jann Frye



Jann Frye is an analytical chemist with over 40 years of experience. She has worked at 222-S Laboratory on the Hanford site for the past 20 years as an analytical chemist supporting Tank Farms sample analysis. Jann is currently employed by Washington River Protection Solutions, Inc., and has lead the

Organic Studies group at 222-S for the last 9 years developing analysis methods and conducting analysis on Tank Farms vapor samples. Jann has a Bachelor's of Science, Cum Laude from Muskingum University, and a Master's of Science from Case Western Reserve University. Jann has been the secretary of the Richland section of the ACS for the past 3 years. She is married to John Frye, Jr. her college sweetheart, and together they have four grown children and six grandchildren.

TREASURER Sandy Fiskum



Sandy is a Richland native. She graduated from Washington State University in 1981 with a BS in Chemistry. She started her career at Lawrence Livermore (National) Laboratory in Livermore, California as an analytical chemist (primarily in the Plutonium Facility). In 1990 she started working at Battelle Pacific

Northwest (National) Laboratory as a Senior Research Scientist in radio-analytical chemistry. Sandy's experience at PNNL evolved into many projects including cesium ion exchange and sludge leach testing, K Basin and tank waste sludge characterization, tank waste simulant development, and later, experience in project management.

Sandy has worked with the local section for about six years. She was the 2011-2013 newsletter editor, and local section treasurer from 2015-present. She volunteers her time to several student outreach activities. Relevant experience includes four years as treasurer for Boy Scout Troop 228 and Richland High School 2009 Senior Class Party chairman—both required astute financial tracking and budget development/adherence—as well as two years as Richland Section treasurer. Sandy would be delighted to continue her talents in service to the local ACS section as treasurer thus contributing to the overall success of the organization.



ACS PRESIDENT-ELECT UPDATE Allison A. Campbell, Ph.D.



As a proud member of the Richland Section, I am part of a community of scientists who contribute to the solution of global challenges. I wanted to take this opportunity to provide the Section an update.

For 2017 as ACS President, my personal passions: the health of our planet, the safe practice of science, and science

literacy and advocacy will shape the vision, priorities, symposia and events planned. My Presidential Symposia for the Spring National meeting in San Francisco include Science for a Sustainable Energy Future, which highlights scientific advances for creating and storing sustainable, low carbon energy. The second symposium, Holy Grails in Chemistry - Celebrating the 50th Anniversary of Accounts of Chemical Research Journal will harken back to a 1995 issue that sought to spotlight critical areas of chemistry and will assess the progress in those areas since then.

For the Fall 2017 National Meeting in Washington, DC, I will be organizing a symposium on *The Chemistry of our*

Planet, focusing on understanding the role of chemistry in our atmosphere and climate, the health of our soil and terrestrial systems, and the availability of clean water. Additionally a symposium on Building a Safety Culture Across the Chemistry Enterprise will highlight institutional and grass roots efforts, share best practices and lessons learned, and highlight the importance a culture of safety throughout our global enterprise. This also meshes nicely with work done earlier this year with the Committee on International Activities to further promote collaborations between our members and other scientists around the world, where a successful workshop in Kuala Lumpur made good strides toward a Global Chemists' Code of Ethics.

I have designed my Presidential Symposia to have broad appeal to ACS members and to the ACS Divisions, which I am encouraging to adopt and expand the symposia themes to deepen the scientific discussions and exchanges in these areas, at Local, Regional and National venues.

I welcome your thoughts on my priorities and would love to hear your ideas. Please email me at: a.campbell@acs.org.

RICHLAND SECTION WINS AT CHEM LUMINARIES

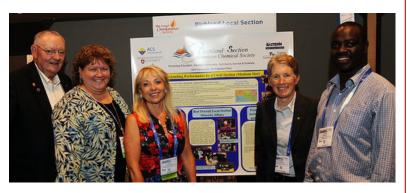
Richland Section Wins Best Overall Local Section Minority Affairs Committee

Congratulations to the Richland Section for receiving the "Best Overall Local Section Minority Affairs Committee" ChemLuminary award! The award was presented at the 18th Annual ChemLuminary Awards celebration held during the ACS National Meeting in Philadelphia, PA, on August 23, 2016. The award recognizes the numerous outreach activities conducted by the Section, particularly to Native American elementary and middle school children. Anna Cavinato and Abhi Karkamkar prepared a poster describing the Richland Section activities that was displayed during a social hour preceding the award ceremony. The Richland Section was also finalist for the following awards:

- Fostering Interactions between Local Sections and Student Chapters
- Outstanding NCW Event for a Specific Audience
- Outstanding Performance by a Local Section – Medium Size category



L to R; Madeleine Jacobs (CMA Chair), Anna Cavinato, Abhi Karkamkar, Dave Heldebrant, Richard Hermens (Richland Section), Allison Campbell (ACS President-Elect)



L to R: Richard Hermens (Richland Section Councilor), Janet Bryant, Anna Cavinato (Richland Section Alternate Councilor), Allison Campbell (ACS President-Elect), Phillip Koech

NORMalizing - NORM 2018 UPDATE

Your Richland Section is preparing for the upcoming American Chemical Society's Northwest Regional Meeting (NORM) June 24-27, 2018. The section's Local Organizing Committee (LOC) has gotten off to a great start and made significant progress in preparing for NORM. The LOC has been working diligently to reserve meeting spaces at PNNL and WSU Tri-Cities in addition to reserving lodging for visiting scientists, drafting and signing contracts with local hotels. The program chairs Vanda Glezakou and Ram Devanathan have identified a theme "POWERING THE FUTURE: Energy, Environment, Education" and begun preliminary technical programming efforts. The public relations chair Steve Krogsrud has been working with graphic designers to design the logo and promotional materials for the meeting. Watch for updates from Steve on news regarding our branding and logo for the meeting and for use in our promotions! Updates will be provided in upcoming newsletters, or alternatively members are welcome to attend

the LOC monthly meetings held before the Local Section Board meetings on the second Wednesday of each month at the WSU Tri-Cities Campus. The LOC is actively seeking a volunteer for Chair of Fundraising, plus others interested in programming niches, and encourage any interested volunteers to attend our monthly meetings and join in to help make this meeting a success.

In the interim, the LOC is lending support to our colleagues in the Corvallis, OR Section who are hosting NORM 2017, as their

meeting rapidly approaches on June 25 - 28, 2017.

For additional information, contact General Co-Chairs, David Heldebrant, david.heldebrant@pnnl.gov, or Anna Cavinato, acavinat@eou.edu.



AICHE-ACS ANNUAL PICNIC & UPCOMING ANNUAL SOCIAL

Another Successful Joint Picnic



The AIChE-ACS annual summer picnic was held on August 5, 2016 at AIChE member Greg Gauck's house. The event was attended by about 50 people. Greg tirelessly served as the grill master. There was plenty of food and beverages, good music, and a wide assortment of desserts. There were plenty of chessboards for those who wanted to play – thanks to ACS member Dave Merrill. Members had a great time enjoying the evening shade on a hot day, in plenty of great company.

Upcoming Annual Social on October 28

Our Section's year-end celebration will be held at 6pm on October 28 at the Battelle Auditorium, 902 Battelle Boulevard, Richland, Washington.

We will recognize six of our members who have completed 50 or 60 years of service to ACS, namely, Mr. Lee Fearon, Mr. Marvin Hyman, Dr. Ronald Walters, Dr. Joseph Samuels, Dr. Clarence Chinn and Mr. Peter Jackson.

In keeping with our National Chemistry Week theme of "Solving Mysteries through Chemistry," this event will feature a talk by forensic scientist, **Dr. Sonja Peterson**, from the Washington State Patrol Crime Laboratory. The title of the talk is "Examining the Evidence: Solving Mysteries with Chemistry." Light refreshments will be served.

PLEASE VOTE ONLINE
YOUR PARTICIPATION IS APPRECIATED!



NUCLEAR SCIENCE MERIT BADGE



he Nuclear Science merit badge training was held on April 9 and 16, 2016 at the Columbia Basin Community College campus. Scouts were from Troutdale, Milton Freewater, Touchet, Walla Walla, College Place, Prosser, and the greater Tri-Cities area. A total of 23 scouts representing 9 local and regional troops along with one (brave) girl venture scout attended the training session. Scouts/students demonstrated knowledge of 12 different requirements delineated in the Nuclear Science merit badge booklet to earn the merit badge. During the course of this training session, the scouts/students were exposed to at least 10 instructors fluent in some aspect of the nuclear science field, helping the students learn and complete these requirements. All 23 scouts completed all requirements to earn the Boy Scouts of America (BSA) Nuclear Science merit badge.

After an introductory lecture by Frannie Smith (Geochemist, PNNL) with help from Sandra Fiskum (Sr. Research Chemist, PNNL) explaining a little about the nucleus, radioactive decay properties, safety, and the "lingo," the scouts divided into five groups (by grade and age) for rotation through five specific workstations.

- They learned about ALARA and safety with Angie Hall (Radiation Protection Technologist, PNNL), and then they tried on personal protective equipment (gloves and coveralls).
- Frannie Smith, Angela Edwards, and David Abrecht showed the students how to build cloud chambers, and then they watched the ionization "contrails" of alpha and beta emissions from U-bearing rocks and thoriated lantern mantles.
- The scouts investigated distance and shielding effects measured from a large variety of sources available in the community with Richard Arthur (Chemist, retired PNNL).
- Bruce Pierson (Nuclear Chemist, PNNL) explained fundamentals about nuclear power plants and helped the scouts map the locations of local, national, and international nuclear power plants.
- Robert Jones (Health Physicist, PNNL) taught about radiation hazards to humans and the environment.
- Each scout/student was sent home with a nuclear science merit badge book, the Nuclear Science chart, Fundamental Particles and Interactions chart, dose equivalence chart, an energy equivalence card, homework, and a variety of supporting handouts provided by the American Nuclear Society.

On the second Saturday the scouts broke out into their assigned groups for another morning packed with information.

 Brian Hendel (Quality Auditor, Energy Northwest) proctored the scouts on examples of how energy from an atom can be used. Each student presented a segment on nuclear medicine, environmental applications, industrial applications, space explorations, radiation therapy, naval propulsion, or electrical energy, sharing what they learned with their peers.

- The scout's shared their choice of a career opportunity in a field related to nuclear science (including required education) in discussions led by Claude Landes (Health Physicist, WRPS).
- The scouts honed their knowledge of isotopes, neutrons, protons and quarks by building 3-D models of hydrogen isotopes with Jamin Trevino (Hot Cell Technician, PNNL) and Bruce Pierson.
- Ron Pawlowski (Sr. Research Engineer, PNNL) led the scouts through the labyrinth of particle accelerators and what they are used for.
- The scouts demonstrated knowledge of an extensive list of definitions via Jeopardy lead by Stephanie Doll (Chemist, WRPS) and Chelsie Beck (Chemist, PNNL), complete with buzzers and time pressures. Scouts demonstrated a lot of enthusiasm for this fun way to demonstrate skill with definitions!

As a capstone to the training, the Tri-City Cancer Center hosted the scouts on a tour of their facility led by Shelly and Liz. There the scouts saw the radiation equipment (linear accelerators) used on human patients to kill cancer cells, the shielding, the precision equipment and patient support equipment.

Special thanks to photography support provided by Brittany Davis (Engineer, Energy Northwest) and check-in support provided by Dennis Fiskum. Thanks to the support of the Richland Section ACS, Columbia Chapter of the Health Physics Society and the Eastern Washington Section of the American Nuclear Society, the scouts (and several parents) have learned a tremendous amount about the radioactive world around them. Several scouts have expressed interest in pursuing careers in the nuclear science field. This training format continues to be well received by the scouts, their leaders, and parents. The Nuclear Science merit badge training has now been offered in this format annually over the last 13 years introducing about 385 scouts

to Nuclear Science.

This class will continue to be offered annually. Any interested student in 7th grade and up may join. To add your scout/student to the waitlist for next year or if you are interested in teaching or helping, please contact Sandra Fiskum (Chemist, PNNL) at sandenf@msn.com for more information.



UPCOMING EVENTS

OCTOBER 16-22 - NATIONAL CHEMISTRY WEEK

La Grande, Oregon

OCTOBER 22 - GIRLS IN SCIENCE

"Zombie Apocalypse", Eastern Oregon Univeristy, La Grande

OCTOBER 27 - BALLOTS TO BE DISTRIBUTED

NOVEMBER 12 - VOTING & MAIL-IN BALLOT DEADLINE

OCTOBER 28 - ANNUAL SECTION SOCIAL

Battelle Auditorium, 902 Battelle Blvd., Richland, WA

NOVEMBER 5 & 12 - CHEMISTRY MERIT BADGE

Columbia Basin College, Morning Volunteers Needed Contact: Steve Krogsrud, steve_krogs@hotmail.com, 509-545-6749

NOVEMBER 12 - SATURDAY SCIENCE

"Solving Mysteries Through Chemistry", Enterprise School, Enterprise, OR, 10am - 3pm

DECEMBER 10 - ANS HOLIDAY PARTY

Tri-City Country Club, Kennewick, WA, RSVP by December 1 to 509-366-9632, www.anseasternwashington.org

NOVEMBER & DECEMBER - SECTION MEETINGS

Monthly ACS Richland Section Board Meetings at WSU-TC CIC room 223, 6:00 pm. All members are invited to attend this meeting which is held the second Wednesday of every month.

ANS HOLIDAY PARTY

The Eastern Washington Section of the American Nuclear Society together with our local Section invites you to a Holiday Party on Saturday, December 10, 2016 at the Tri-City Country Club, 314 N Underwood, Kennewick, WA. In this year of the confirmation of the Theory of Relativity by observation of gravitational waves at our own LIGO observatory, the theme of the party is a tribute to Albert Einstein. We will feature a salsa dancing lesson, a buffet dinner, and an evening of dancing to the music of Vicki and the VelveTones, and lots of door prizes. The cost for ACS members is \$35 per person.

Event Schedule:

5:30 p.m. Salsa Dancing Instruction (optional)

6:30 p.m. Buffet Dinner

6:30 p.m. Manhattan Bar Opens

8:00 p.m. Door Prizes and Announcements

8:30 p.m. Dancing to Vickie and the VelveTones

Register by December 1, 2016 by going online at www.



anseasternwashington.

org/holidayparty-2016.html
or calling Carl Holder at (509) 366-9632. Due to occupancy limits, attendance is limited to 100 participants.



VISIT THE SECTION WEBSITE FOR UP-TO-DATE CALENDAR ITEMS & MORE INFORMATION



LEARN MORE ONLINE

http://acs.labworks.org