Dear Alumni and Friends,

It has been another busy and eventful year in the Department of Chemistry. As this will be my final year as chair, I have taken a moment to reflect on the experience, and there are many people that I am indebted to that helped me survive a job that switches often and unexpectedly between drudgery and mayhem. Without wanting to discount the work of so many, I must especially thank our amazing “secretary”, Lisa Stowe, who made me look good on so many occasions.

There are two department accomplishments of which I am particularly proud. The first is the establishment of our Professional Advisory Committee, which has been meeting twice per year since May 2018. I always come away from these meetings with lots of good ideas about how to better serve our students and I feel very fortunate to work with such a thoughtful and professional group. One of the suggestions the group made was for the department to encourage students to network to find job and internship opportunities. A step the department has taken in that direction is to create a LinkedIn page — please follow us so we can widen the network: www.linkedin.com/in/cwu-chemistry-dept

The second accomplishment is the development of several online Chemistry offerings — CHEM 110 (a prep course for general chemistry developed by Dion Rivera) and CHEM 101 (developed by Tim Sorey and JoAnn Peters) that includes a “kitchen chemistry” lab component.

I also need to relate the news that my colleague of twenty years, JoAnn Peters, will retire at the end of this academic year. I certainly have mixed feeling about this! I am very excited for JoAnn and her partner Kent to enjoy their new home in northern Minnesota, and I know they are looking forward to many new adventures. However, she will be greatly missed in our department. She was a model colleague, outstanding teacher and researcher, and a respected leader. Best of luck JoAnn — we won’t be the same without you. Of course, the flip side of this is that we have started the search for a replacement and a new colleague will be joining us next fall. The department has asked JoAnn to present a seminar in the spring after which we will honor her with a retirement reception — stay tuned for more on that.

Once again, I am extremely grateful to have worked with such a talented group of faculty, staff and students. Although there were many challenges, I am proud of the work I did as department chair and I know the department will be in good hands when Dion Rivera takes over the job with the help of Todd Kroll as Associate Chair. Here is wishing all of you a healthy, happy and productive 2020.

Anthony Diaz
Research Highlight...

Celebrating 26 years of contributions by numerous undergraduate students, the long-term precipitation study at Mt. Rainier National Park culminated in its publication in Atmospheric Environment, Sept. 2019: “Precipitation chemistry and deposition at a high-elevation site in the Pacific Northwest United States (1989-2015).” Results reveal that common pollutants have decreased in the last 15 years, confirming other scientists’ findings that emissions regulations are effective. First initiated by Clint Duncan, this collaborative arrangement between Mt. Rainier National Park and CWU is ongoing in Anne Johansen’s laboratory and recently received support from NPS for another five years (2019-2024). Two additional peer-reviewed publications in 2019 focused on widely different topics: (i) Shirley Orellana’s thesis (Best CWU MS Thesis Award, 2018) on chemically fingerprinting WA state wines (Food Chemistry, May 2019), and (ii) results from an international collaboration on the state-of-science of iron biogeochemistry over the oceans (Marine Chemistry, October 2019). Further manuscripts are in the works that build on the meticulous labor that Johansen’s students perform in CWU labs and at the Environmental Molecular Sciences Laboratory (EMSL) and University of Washington’s Molecular Analytical Facility (MAF). These studies pertain to identifying mechanisms that contribute to the effect of particles emitted from combustion of fossil and biomass fuels on environmental and human health.

Students in Johansen’s lab disseminate their works at large national conferences, such as the American Chemical Society (ACS) or American Geophysical Union (AGU), including DC in December 2018 and the upcoming AGU conference in San Francisco December 2019. These efforts and travels would not be possible without CWU’s sustained support for undergraduate and graduate student research and travels, and with externally funded science and education research grants from federal (NSF, NIH, NPS, Dept. of Ed.) and state agencies (Dept. of Ecology), as well as private foundations (Murdock and Keck). On a local level, Johansen’s education and outreach efforts partnering with the Public Health Department, hospital, and high school students, have increased awareness of air pollution and accessibility of data. CWU now hosts particle and ozone monitors that provide real-time local air quality data at www.geology.cwu.edu/airquality/.

This fall, Anne Johansen accepted an exciting opportunity as rotating program officer in Atmospheric Chemistry at NSF. During this two-year assignment she remains a CWU employee and active in research, while spending 80% of her time in Alexandria, VA. She encourages people to visit when in the area. Johansen would like to thank the amazing team of students, the department and chair, and everyone in the Dean’s and Sponsored Research Offices who have supported this exciting endeavor.
Marissa Barrientos joined the department in fall 2019 as a full-time lecturer to fill a vacant position.

She earned her doctorate in inorganic chemistry in 2019 from the University of California at Riverside, and was a chemistry lecturer at the University of La Verne before coming to CWU. Her PhD work focused on the synthesis of bimetallic silylene and germylene complexes for small molecule activation. When she’s not teaching, she can be found drinking coffee, taking photos, or hosting the podcast Healthy Talk Show.

We are proud to announce that graduate student Antonio Moreno’s thesis was chosen for the 2019 Dale and Mary Jo Comstock Distinguished Thesis Award! Each year the Office of Graduate Studies solicits nominations from across campus for this award; each department offering graduate programs with a thesis option may nominate one thesis for consideration. A thesis is then selected by Dale Comstock, a retired CWU faculty member and benefactor of this award, and Kevin Archer, Dean of the Graduate School.

As recipient of this award, Antonio was honored at CWU’s separate Masters Commencement and Hooding ceremony in June with a certificate and check (pictured with Dean Archer). Antonio’s graduate thesis research, “Modular Synthesis and Hydroalkylation of Vicinally Functionalized Ketopiperaazines: A Solution to the Piperazine Problem”, was conducted with Timothy Beng. Antonio graduated in June 2019.

The department hosted a Career Talks event on February 22, 2019, inviting three alumni back to campus to share with current students how they came to CWU and, once they got here, how they came to graduate with a chemistry degree, and how that led them to their current positions. Speakers included Lyn Dehen (class of 2001), Senior Food Scientist at Lamb Weston, Craig Gyselinck (class of 2008) Environmental Assistant Manager at Quincy-Columbia Basin Irrigation District, and Josh Kirk (class of 2008), General Dentist and owner of Mountain View Dental Center. We always appreciate having alumni back on campus, and are excited this has become an annual event. We look forward to hearing from the next round of speakers in February!
UPCOMING EVENTS

Concert for a Cure: February 22
Career Talks: February 24
SOURCE: May 13-14
Chemistry Student Appreciation Picnic: May 18

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