

Deanna Caroline Myers

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University of California, Irvine

Irvine, CA 92617

Education

University of California, Irvine

June 2017 – present

M.S., Chemistry, *Conferred 12/8/2020*

Ph.D. Candidate, Chemistry

Advisor: Prof. James N. Smith

Western Washington University

September 2012 – June 2016

Bachelor of Science in Chemistry, University Honors Program

Advisor: Prof. Steven Emory

Experience

Graduate Student Researcher

2018 – present

University of California, Irvine; Prof. James N. Smith

Research focus: characterization of water uptake kinetics by ultrafine aerosol particles.

- Development of a variable residence hygroscopicity tandem differential mobility analyzer (VRHTDMA) for analysis of ultrafine particle uptake of water.
- Analysis of ultrafine particle hygroscopicity during the OASIS field campaign and indirect chemical composition analysis (Utqiagvik, AK 2009).

Trace Organics Extraction Technician

June 2016 – April 2017

AmTest, Inc.; Kathy Fugiel

Performed organic extractions from wastewater, ground water and soil samples to test for pesticides, herbicides, diesel, and semi-volatile and volatile compounds.

Research Assistant

January 2015 – June 2016

Western Washington University; Prof. Steven Emory

Designed and synthesized an optical fiber-based pH probe for hydrogen detection by surface-enhanced Raman spectroscopy.

Professional Development and Certification

California Community College Internship Program

August 2020 – June 2021

Santa Ana College; Mentor: Prof. Stacey Littlejohn

Through guidance of mentor, develop teaching and professional development activities for community college; meet weekly with mentor for course planning and tailored career development.

- Teaching activities: guest lecture weekly in introductory chemistry; develop problem sets; hold weekly office hours; create and grade quizzes; develop and lead exam review sessions.
 - Planned future activities: teach entire unit including lecture, quizzes, and exam.

- Professional development activities: attend faculty FLEX meetings; attend chemistry department and division meetings; attend Academic Senate meetings.
- Enrichment activities (planned): present Ph.D. research to introductory chemistry students; host virtual lab tour for introductory chemistry students.

Pedagogical Fellow

January 2021 - present

Department of Teaching Excellence and Innovation, UCI; Mentor: Dr. Daniel Mann

- Development and refinement of advanced pedagogical skills for use in higher education.
- Personal and professional development for success in instruction at higher education institutions.
- Creation and implementation of chemistry-specific TA Professional Development Program (TAPDP) for new graduate student TAs.

Developing California Community College Leaders

October – December 2020

Rancho Santiago Community College District; Mentor: Prof. Stacey Littlejohn

- Under guidance of Rancho Santiago Community College District Office of Diversity, Equity, and Inclusion, complete a series of community college-specific trainings; shadow mentor; under guidance of mentor receive career development advice.

Teaching Certifications

University of California, Irvine

Winter 2020: Center for Integration of Research, Teaching and Learning Associate Level

- Participation in 40 hours of pedagogical training, including over 12 hours of pedagogical training, participation in one quarter of University Studies 390X, 3 hours of training in learning through diversity, and 3 hours of teaching as research.

Winter 2020: Division of Teaching Excellence and Innovation Course Design Certification

- Planned undergraduate introductory chemistry course, including course outline and syllabus.

Winter 2020: Division of Teaching Excellence and Innovation Certificate in Teaching Excellence

- Designed lessons using research-based pedagogical principles, analyzed and assessed various teaching practices, and facilitated effective student learning.

Teaching Experience

Instructional Intern

Santa Ana College

Fall 2020: Introductory Chemistry, 209

- Deliver weekly lecture; host weekly office hour; develop and review problem sets; develop quizzes

Teaching Assistant

University of California, Irvine

Spring 2020: Majors Quantitative Analytical Chemistry, M3C

- Facilitated three discussion sections per week; designed new midterm projects and developed corresponding rubrics to replace traditional exams; developed half of the final

exam; graded quizzes and exams. (*All tasks performed remotely due to COVID-19 restrictions*)

Spring 2018: Organic Chemistry Lab, 51LD

- Led two laboratory sections; graded lab reports, exams, and weekly experiment presentations; held weekly office hours.

Winter 2018: Organic Chemistry Lab, 51LC

- Led two laboratory sections; graded lab reports and exams.

Fall 2017: Organic Chemistry 51A

- Facilitated five discussion sections per week; held weekly office hours; drafted exam practice material; graded exams.

Teaching Assistant

Western Washington University

2015 – 2016: Analytical Chemistry (Chem 333) Lab

- Assisted two laboratory sessions per week, served as additional aid for student questions on lab reports, data analysis, homework, and exams.

2015: General Chemistry 1 & 2 (Chem 121 & 122) Labs

- Led two laboratory sessions per week, graded lab reports.

2014 – 2016: General Chemistry 4 (Chem 123) Labs

- Assisted two laboratory sections per week, served as additional aid for student questions on lab reports, graded lab notebooks.

Talks

- **D.C. Myers**, “OASIS Campaign & Aerosol Particle Hygroscopicity,” AirUCI Retreat, Lake Arrowhead, CA, September 24-46, 2018.
- **D.C. Myers**, “It’s the water: how humidity can change atmospheric particles,” Brews and Brains, University of California, Irvine, October 1, 2019.

Poster Presentations (*bold entry indicates presenter*)

- **D.C. Myers**, J. Abbatt, J. Smith “A Variable Residence Hygroscopicity Tandem Differential Mobility Analyzer (VRHTDMA),” 37th American Association for Aerosol Research (AAAR) Annual Conference, Portland, OR, October 14-18, 2019.
- **D.C. Myers**, **L. DeGraaff**, S. Emory “Surface-enhanced Raman Scattering Optical Fibers as Chemical Sensors,” Undergraduate Scholars Showcase, Western Washington University, May 19, 2016.
- **D.C. Myers**, **L. DeGraaff**, S. Emory “Surface-enhanced Raman scattering based optical fiber sensors,” National Meeting of the American Chemical Society, San Diego, CA, March 13-17, 2016.
- **D.C. Myers**, **L. DeGraaff**, S. Emory “Surface-enhanced Raman Scattering Optical Fibers as Chemical Sensors,” Undergraduate Scholars Showcase, Western Washington University, May 22, 2015.

Awards

Advancing Chemistry Through Service

June 2016

Department of Chemistry, Western Washington University

Awarded for strong commitment to advancing and promoting chemical sciences through involvement in the Chemistry Department and community as a teaching and research assistant, and ACS Chapter Chemistry Club involvement.

Outreach

Chapter President

March 2020 – present

American Association for Aerosol Research (AAAR) Student Chapter at UCI

Organize and lead remote events for graduate students in atmospheric science, including literature review sessions, speaker series, and social events. Report to AAAR National Organization about the annual chapter activities. Research and apply for additional funds for chapter events.

Events Coordinator

January 2019 – present

American Association for Aerosol Research (AAAR) Student Chapter at UCI

Organize professional development workshops and events for new graduate students. Organize outreach for underserved communities in atmospheric sciences.

Chapter President

September 2014 – June 2016

American Chemical Society Chemistry Club, Western Washington University

Organized club and department events, demo shows, outreach events, and weekly chapter meetings.