

Andrew Wildman

RESEARCHER · DEVELOPER

Seattle, WA

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Education

University of Washington

PH.D. IN CHEMISTRY

ADVISOR: PROF. XIAOSONG LI

GPA: 3.88

Seattle, WA

Sept. 2016-Current

Whitman College

B.A. IN CHEMISTRY WITH HONORS, MINOR IN MATHEMATICS

ADVISOR: PROF. NATHAN E. BOLAND

GPA: 3.59

Walla Walla, WA

Aug. 2012 - May 2016

Honors & Awards

- 2019 **Gudiksen, Paul H. and Karen S. Merit Fellowship**, University of Washington, Chemistry Dept.
- 2019 **Best Poster Award**, Northwest Theoretical and Computational Chemistry Conference
- 2018 **Honorable Mention**, NSF GRFP
- 2017-2018 **CEI Graduate Fellowship**, University of Washington, Clean Energy Institute
- 2017-2018 **DIRECT NSF NRT Traineeship**, University of Washington, Clean Energy Institute
- 2017 **Graduate Fellowship**, Pacific Northwest National Lab
- 2016 **Exceptional Achievement in Chemistry**, Whitman College, Chemistry Dept.
- 2014-2015 **Perry Research Grant**, Whitman College

Publications

- Williams-Young, D. B.; Petrone, A.; Sun, S.; Stetina, T. F.; Lestrangle, P.; Hoyer, C. E.; Nascimento, D. R.; Koulias, L.; **Wildman, A.**; Kasper, J. M.; Goings, J. J.; Ding, F.; DePrince III, A. E.; Valeev, E. F.; Li, X. The Chronus Quantum (ChronusQ) Software Package. *WIREs Comput. Mol. Sci.*, 2019, Just Accepted.
 - Clark, A. E.; Servis, M. J.; Liu, Z.; Martinez-Baez, E.; Su, J.; Batista, E. R.; Yang, P.; **Wildman, A.**; Stetina, T.; Li, X.; Newcomb, K.; Maginn, E. J.; Autschbach, J.; Dixon, D. A. Solvent Extraction through the Lens of Advanced Modeling and Simulation. *Ion Exchange and Solvent Extraction*, 2019, 23, Chapter 5. DOI: 10.1201/9781315114378
 - Liu, H.; Jenkins, A. J.; **Wildman, A.**; Frisch, M. J.; Lipparini, F.; Mennucci, B.; Li, X. Time-Dependent Complete Active Space Embedded in a Polarizable Force Field. *J. Chem. Theory Comput.*, 2019, 15. DOI: 10.1021/acs.jctc.8b01152
 - Wildman, A.**; Donati, G.; Lipparini, F.; Mennucci, B.; Li, X. Nonequilibrium Environment Dynamics in a Frequency-Dependent Polarizable Embedding Model, *J. Chem. Theory Comput.* 2018, 15. DOI: 10.1021/acs.jctc.8b00836
 - Wildman, A.**; Martinez-Baez, E.; Clark, A.; Li, X. Anticorrelated contributions to pre-edge features of aluminate near-edge X-ray absorption spectroscopy in concentrated electrolytes, *J. Phys. Chem. Lett.*, 2018, 9. DOI: 10.1021/acs.jpcllett.8b00642
 - Donati, G.*; **Wildman, A.***; Caprasecca, S.; Lingerfelt, D. B.; Lipparini, F.; Mennucci, B.; Li, X., Coupling Real-Time Time Dependent Density Functional Theory with Polarizable Force Field, *J. Phys. Chem. Lett.*, 2017, 8. DOI: 10.1021/acs.jpcllett.7b02320.
- *Co-First Authors

Presentations

- Jul. 2019 **Wildman, A.**; Dembowski, M.; Graham, T. R.; Martinez Baez, E.; Gorniak, R. M.; Pouvreau, M. J.; Prange, M.; Krzysko, A. J.; Zhang, X.; Semrouni, D.; Wang, H-W.; Li, X.; Schenter, G. K.; Rosso, K. M.; Pearce, C. I.; Clark, A. E.; Clark, S. B. Relating Structure to Spectroscopic Signatures. 2019 Energy Frontier Research Centers Principal Investigators' Meeting Washington, D.C.

- Jun. 2019 **Wildman, A.**; Paesani, F.; Li, X. Origins of Hydrogen-Bonding Driven X-Ray Emission Splitting in Liquid Water. Northwest Theoretical and Computational Chemistry Conference. *Pullman, WA*
- Mar. 2016 **Wildman, A.**; Boland, N.E. Oxalic Acid Influences Kinetics of Strong Chelate Exchange Reactions. 251st American Chemical Society National Meeting and Exposition. *San Diego, CA*
- Nov. 2015 **Wildman, A.**; Boland, N.E. Influence of Oxalic Acid on Rates of Ligand Exchange between Strong Chelating Agents. 24th Annual Murdock College Science Research Conference. *Vancouver, WA*
- Mar. 2015 Boland, N.E.; Stone A.T.; Nelson, T.; Harned, M.V.; **Wildman, A.** Adjunctive, Disjunctive and "Interjunctive"? Influence of ligand structure on kinetic pathways of ligand exchange. Abstracts of Papers, 249th American Chemical Society National Meeting. *Denver, CO*

Outreach Activities

Research Computing Club

University of Washington

- RCC President (2019-Present)
- RCC Vice President (2018-2019)
- RCC mentorship program [Mentor] (2017-Present)

Clean Energy Institute Ambassadors

University of Washington

- Solar car derby at Thorton Creek Elementary, Martin Sortun Elementary, and Eastgate Elementary
- Solar car derby at Engineering Discovery Days
- Dye-sensitized solar cells at Ingraham High School

WC Science Outreach

Whitman College

- Science night at Green Park Elementary
- Teaching the senses at Sharpstein Elementary

Teaching Experience

University of Washington

Seattle, WA

TEACHING ASSISTANT (GENERAL CHEMISTRY)

Sept. 2016 - Mar. 2017

Whitman College

Walla Walla, WA

TEACHING ASSISTANT (QUANTITATIVE ANALYSIS)

Sept. 2014 - Dec. 2015