**Shane Devlin**

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**EDUCATION**

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| **University of California, Berkeley** | Berkeley, CA  College of Chemistry  Candidate for PhD in Chemistry (expected May 2023)  **Boston University** | Boston, MA | August 2018 - Present  May 2018 |
| College of Arts and Sciences | |
| Bachelor of Arts in Chemistry with Honors, Cum Laude |  |

**RESEARCH EXPERIENCE**

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| **Experimental Physical Chemistry,** Department of Chemistry at UC Berkeley  Advisor: Richard J. Saykally | Octo 2018 – Present |
| * Operated ultrafast laser systems for non-linear spectroscopy studies of ion adsorption to aqueous interfaces (broadband deep UV sum frequency generation and second harmonic generation) * Implemented planar liquid sheet technology into non-linear optics experiment, in collaboration with Jake Koralek (sample delivery department at LCLS) * Conducted research at synchrotron sources and Xray Free Electron Laser facilities, including Xray Reflectivity studies of laser melted carbon (FERMI, Trieste), Mega-Electron Volt Ultrafast Electron Diffraction (MeV-UED, LCLS) of laser melted diamond, and Soft Xray Second Harmonic Generation on thin water sheets (ChemRIX, LCLS) * Performed frequent data analysis with programs such as Python, Jupyter Notebook, and Igor | |
| **Experimental Physical Chemistry,** Dept. of Chemistry at Boston University  Advisors: Shamsunder Erramilli and Lawrence Ziegler   * Trained in nonlinear optics experiments, including vibrational sum-frequency generation spectroscopy and two-dimensional IR spectroscopy | Nov 2015 – May 2018 |

**PUBLICATIONS**:

* Devlin, S.W.; Jamnuch, S.; Pascal, T.; Saykally, R.J. “Transient Agglomeration Drives Reversed Fractionation of The Aqueous Carbonate System at the Air-water Interface” manuscript in progress.
* Devlin, S. W.; Benjamin, I.; Saykally, R. J. “On The Mechanism of Ion Adsorption To Aqueous Interfaces: Air-water vs. Oil-Water” *PNAS,* **2022,** In Press.
* Devlin, S. W.; McCaffrey, D.; Saykally, R. J. “Characterizing Anion Adsorption to Aqueous Interfaces: Air-water vs Toluene-water” *J. Phys. Chem. Lett.* ***2022,*** *13,* 222-228*.*
* Du, C.; Andino, R. S.; Rotondaro, M. C.; Devlin, S. W.; Erramilli, S.; Ziegler, L. D.; Thuo, M. M. “Substrate Roughness and Tilt Angle Dependence of Sum-Frequency Generation Odd--Even Effects in Self-Assembled Monolayers.” *J. Phys. Chem. C* **2022**, *126* (16), 7294–7306.
* Raj, S. L.; Devlin, S. W.; et al. “Free Electron Laser Measurements of Liquid Carbon Reflectivity in the Extreme Ultraviolet” *Photonics,* **2020,** 7(2), 35.
* Andino RS, Liu J, Miller CM, Chen X, Devlin S.W, Hong MK, Rajagopal R, Erramilli S, Ziegler LD. “Anomalous pH-Dependent Enhancement of *p*-Methyl Benzoic Acid Sum-Frequency Intensities: Cooperative Surface Adsorption Effects.” *J Phys Chem A*. **2020,** 124(16), 3064-3076.

**CONFERENCES AND PRESENTATIONS**

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| **Ultrafast Xray Summer School, LCLS, Stanford, CA**   * Workshop on Xray Free Electron Laser technology + LCLS endstations | June 2022 |
| **American Chemical Society Conference, San Diego CA**   * Poster presentation | March 2022 |
| **Graduate Research Conference, Berkeley CA**   * Presentation to the Department of Chemistry faculty and graduate students | October 2019 |

**AWARDS**

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| **Department of Chemistry Instructional Achievement Award**   * Awarded to graduate student instructors who have had significant impact on student learning | April 2022 |
| **Outstanding Graduate Student Instructor Award**   * Awarded to graduate student instructors who excel in teaching | April 2022 |
| **Undergraduate ACS Physical Chemistry Award**   * Awarded to a senior who excelled in physical chemistry research + coursework | May 2018 |

**TEACHING EXPERIENCE**

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| **Head Graduate Student Instructor,** Intensive Gen. Chem. (majors) at UC Berkeley   * Worked closely with Professors John Arnold and Rich Saykally to develop assignments, exams, and lead review sessions. Gave multiple lectures to class of over 200 students | Spring 2020, 2021 |
| **Graduate Student Instructor,** General chemistry (non majors) at UC Berkeley   * Led weekly laboratory sessions and discussion sections * Developed worksheets and laboratory reports for students | Fall 2018 |
| **Teaching Assistant,** General Chemistry (non-majors) at Boston University   * Led a weekly laboratory session and graded reports + exams | Spring 2017 |