Zerina Mehmedović – Curriculum Vitae University of California, Los Angeles Los Angeles, CA 90095

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### Education

## University of California, Los Angeles, Los Angeles, CA

Doctor of Philosophy in Physical Chemistry, July 2018 - current

# San Francisco State University, San Francisco, CA

Bachelor of Science in Chemistry, August 2014 - December 2017

#### Research

# San Francisco State University, San Francisco, CA

- Undergraduate Student Researcher with Professor Nicole Adelstein June 2016 July 2018
  - First-principles density functional theory (DFT) simulations of ionic diffusion in solid materials to increase the capacity and safety of high-energy density storage through improved inorganic solid-state batteries.
- Undergraduate Research Paid Internship with Dr. Adelstein

Summer 2017

# **Teaching Experience**

# San Francisco State University, San Francisco, CA

• General Chemistry II Demonstrator

Aug. 2016 – Current

- Demonstrate chemistry experiments for students in a classroom setting to provide a deeper knowledge and understanding of the topics covered in the course
- Inorganic Chemistry Grader

Fall 2017

- o Graded homework for Inorganic Chemistry course
- General Chemistry II Learning Assistant

Fall 2017

 Helped answer students' questions during lecture. Assisted students individually with homework problems or material they found difficult to understand

### Celsius and Beyond, San Francisco, CA

• Periodic Table of Elements Instructor

Summer 2017

 Created the curriculum for a middle school summer camp that would teach kids basic beginner chemistry knowledge while engaging students in exciting experiments.

#### Awards and Honors

- Competitive Edge Fellowship, University of California, Los Angeles, 2018
- San Francisco State University Summer Research Fellowship 2017
- 2014 2017 Dean's List, San Francisco State University

• 2014 – 2017 Middle Class Scholarship, San Francisco State University

### **Publications**

- **Zerina Mehmedović**, Andrew Grieder, and Nicole Adelstein. "Computational experiments on drivers of Li<sup>+</sup> Diffusion Using Lithium-Oxyhalide Anti-Perovskites." The American Chemical Society, 2017. San Francisco, CA (Poster).
- Vanessa Wei, Zerina Mehmedović, Andrew Grieder, and Nicole Adelstein. "Computational Experiments on Drivers of Li<sup>+</sup> diffusion in Lithium-Oxyhalide Anti-Perovskites." Gordon Conference, 2018. Ventura, CA (Poster)
- Zerina Mehmedović, Vanessa Wei, Andrew Grieder, and Nicole Adelstein. "Computational experiments on drivers of Li<sup>+</sup> Diffusion Using Lithium-Oxyhalide Anti-Perovskites." The Electrochemical Society, 2018. Seattle, WA (Poster)
- Zevgolis, A., Wood, B.C., Mehmedović, Z., Hall, A. T., Alves, T. C., & Adelstein, N. (2018). Alloying effects on superionic conductivity in lithium indium halides for all-solid-state batteries. *APL Materials*, 6(4), 047903. doi:10.1063/1.5011378

### **Technical Skills**

- Working knowledge of Density Functional Theory codes: VASP and Quantum Espresso
- Proficient in Python
- Experience in setting up 1D and 2D NMR experiments

### Upper Division Undergraduate Courses at San Francisco State University

- Organic Chemistry II
- Organic Chemistry II Lab
- Biochemistry I
- Quantitative Analysis
- Quantitative Analysis Lab
- Inorganic Chemistry
- Advanced Inorganic Chemistry Lab
- Physical Chemistry I Thermodynamic and Kinetics
- Physical Chemistry II Quantum Mechanics
- Experimental Physical Chemistry Lab
- Chemical Oceanography
- Contemporary Chemistry and Biochemistry Research

# Graduate Courses at San Francisco State University

- Computational Materials Chemistry (Audit)
- Organic Spectroscopic Methods