

Braunschweig, Germany

Marisa Asadian



Program: Chemistry Research in Germany - Summer 2019

Major: Chemistry

Earning the Career Development Badge:



During my research abroad, I learned how to work independently and was approached like a graduate student. I was frequently examined about the concepts behind my research and had to keep up with published articles. The chemistry knowledge that I developed during my academic years were put to the test as I was expected to perform calculations and carry out various procedures. My research data

were evaluated every few weeks by the post-doctoral researcher who supervised my project. I also presented my complete work to the institute's microbial electrochemistry group before returning back to Utah. My research experience prior to TU Braunschweig was never so involved and taken so seriously. I was invited to present at an event that the Ph.D. students in my lab were required to attend. The opportunity to research abroad gave me a sense of how life would be as a graduate student and a future researcher.



Earning the Research Experience Badge:



One of the most important aspects of leading a research project is to raise funding for that research. Going to Germany challenged me to find ways to finance myself, which I was able to accomplish by obtaining a scholarship. I joined the Institute of Environmental and Sustainable Chemistry at TU Braunschweig to design and test a method that utilized the chemical energy found in wastewater to produce electricity. This opportunity allowed me to gain skills in the field of electrochemistry while improving some of the global and environmental issues we face today such as fossil fuel energy dependence and wastewater treatment. Having no prior research experience in electrochemistry

made this project challenging, however, the outcome was rewarding as I was able to accomplish a significant amount of work and knowledge in a short time as well as collaborate with scientists and engineers from different parts of the world.

Transferable Skills:



As an analytical chemistry teaching assistant, my laboratory techniques have improved significantly. I accomplish my work faster while delivering precision and accuracy like never before. This is because of a Ph.D. student in my Germany research lab who was very detailed in her work and she became a good example for me to follow. I also teach these skills to my students. Additionally, I have developed communication and interpersonal skills that I apply on a daily basis. I'm more understanding of international students studying in the U.S while away from home and family. Also, whenever I present, I make sure it is engaging and comprehensible to the audience rather than simply delivering what needs to be said.

"Thus far, my research abroad has been one of the most challenging experiences and yet one of my best accomplishments as an undergraduate chemistry student. I was able to turn my doubts and fears, which were limiting me to achieve something bigger than myself, into a life-changing experience and memories that I will always cherish!"