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Re: 248th ACS National Meeting & Exposition – San Francisco, CA

At the beginning of September every year, my department asks each of its graduate students for a report to check in on their progress toward their degree. One of the items they ask that you address is your goals for the next year. In my report looking ahead at my fourth year in the program, I described attendance at a national conference as a “lofty goal” of mine. However, with hard work and with promising results on this new project, it was not out of reach—and I grasped it.

This meeting was my first national conference and the first time I had the opportunity to present my work outside the city of Pittsburgh. This was also my first trip to The City by the Bay, despite being a West Coast native. Even though some speed bumps arose in the first couple days, everything came together for my poster presentation of *Substituent effects on the properties of short oligothiopenes: A combined physical and theoretical approach* for both the Sci-Mix and PHYS division poster sessions. My work has focused on the absorption and emission properties of bithiophene and several novel derivatives designed to explore the effects of steric hindrance on the torsion between the thiophene rings. The sheer number of posters at Sci-Mix was humbling, having only attended smaller events. In light of the size of the sessions, I had a respectable number of visitors to my poster, both from physical and theoretical chemistry, promoting fruitful discussions and insight into other valuable spectroscopic and computational techniques.

In addition to the knowledge I acquired from the poster sessions, the talks given in both the COMP and PHYS divisions were very helpful. Of particular utility were the talks given in honor of the late Dr. Nicholas C. Handy, a British theoretical chemist who had a major hand in developing density functional theory (DFT). Appropriately, many of these talks were focused on methods for improving both DFT and time-dependent DFT (TD-DFT) and its accuracy in different systems, particularly in their application to spectroscopy, which is very pertinent to my research. Furthermore, I had the opportunity to listen to a talk given by one of the big names in the area of optoelectronics, Dr. Jean-Luc Brédas, as well as chemistry Nobel Prize laureate, Dr. Alan Heeger. Dr. Heeger made a case for thinking outside the box for new ideas with his talk on self-assembly of semi-conducting polymers into unidirectional channels via capillary action, leaving me inspired to expand my own thinking.

While much of my time was spent in the meetings, I did visit the exposition. Between collecting business cards and free pens, my fellow theoretical chemists and I chatted with representatives from several companies, including Gaussian, Semichem, and BASF. Much to our surprise, the representatives from BASF, the largest chemical company in the world, assured that there were positions available for chemists with many different areas of expertise, including theory. I left feeling more confident that, should I choose to do so, I could enter an industry position upon completion of my degree.

After the conference, I was able to take a couple days to explore the beautiful city of San Francisco. I hit Fisherman’s Wharf, Ghirardelli Square, The Castro, Haight-Ashbury, and Chinatown, eating delicious food and seeing some new and interesting sights. I even made sure to visit In-N-Out Burger for the first time, to appease my California friends.

Overall, the experience was highly constructive for me in terms of science, networking, and social adventures. I would like to thank ACS Pittsburgh for the financial support, and my advisors, Dr. Linda Peteanu and Dr. David Yaron, for preparing me well for this experience.