Beth Tennyson

AY 2017-18 All-S.T.A.R. Fellow

A. James Clark School of Engineering Department of Materials Science and Engineering 5th year Graduate Student, RA



As a Graduate Assistant at the Clark School of Engineering I am developing cutting-edge research in photovoltaics, continuously sharing my scientific findings with the scientific community and the broad public, and am deeply involved in UMD service. My Ph.D. focuses on realizing novel microscopic methods to quantify the performance of emerging materials for solar cells with unprecedented spatial resolution. From my forefront contributions I have published four papers and was invited to write Perspective and Review articles. I received 15 awards/honors including: Hulka Energy Research and Graduate

Student Dean's Dissertation Fellowships, IREAP best speaker, ResearchFest overall winner, OSA poster competition–1st place, IEEE Photovoltaic Conference–best poster. Honors/distinctions comprise: ARPA-e student program, OSA Student Leadership Conference, MRS Graduate Student Exchange, NSFGRF honorable mention.

I actively contribute to our campus by engaging in service at multiple levels. By invitation I became the graduate student representative of the University's restricted research sub-committee; our implementation guidelines were recently approved. I led ResearchFest 2014, a poster competition within the Clark School. I often recruit PhD students to MSE by participating in open house events and by representing our department off-campus. I have volunteered for Maryland Day (2014-2016) and the Women in Engineering DREAM conference (2015-2017). Concerning teaching/mentoring, I disseminated key MSE concepts as a TA for Civilization of Materials, and by mentoring four undergraduates and one high-schooler. My GA experiences are preparing me to become a leader in renewable energy, and I am eager to use ALL-S.T.A.R. as a stepping-stone towards my career goal.