

Biography

My research project focuses on contamination in the Sabatier Reactor in the Environmental Control and Life Support System (ECLSS). The recycled water stream used in the Sabatier Reactor has been intermittently contaminated with dimethylsilanediol (DMSD) and dimethyl sulfone (DMSO₂). These contaminants are not removed in the multi filtration beds in the Water Processing Assembly (WPA). The focus of my research project is to provide a replacement for the media inside the multi filtration beds in the WPA by using biobased ionic liquid coated biochar, a sustainable yet effective adsorbent.

My academic and career goals are to work in climate science and help change the world for the better. I plan on spending my career researching ways to slow the effects of climate change, address the causes of climate change, and hopefully, reverse the effects. To do this, I will finish my Bachelor's degree in Geology, and then I plan to go to graduate school to get my Ph.D. in Earth Sciences and Environmental Sustainability. Then, I want to conduct research on the ecological, hydrological, and geological impacts of climate change. Ultimately, I want the research I conduct and the work I do, to have a positive impact on the world, the environment, and the living things surrounding me. I believe that the most important thing someone can do in their lifetime is make a positive impact. By following my career goals, I will achieve my life goal of helping people and being a positive influence on the people around me, the environment I live in, and the world.