

HOLLEE WINDERS, Dept of Biology, Shepherd University, Shepherdstown, WV, 25443, and DR. JORDAN MADER, Dept of Chemistry, Shepherd University, Shepherdstown, WV 25443. Preparation of functionalized polystyrene foams for arsenic removal.

Clean water is a luxury that is not readily available everywhere, like it is here in the United States. Arsenic contamination in water is a problem for many across the world. Long-term exposure of arsenic can lead to serious health issues, including cancer and even death. High Internal Phase Emulsion (HIPE) functionalized polystyrene foam is a possible solution to this problem. This research focused on optimizing the thioacetate substitution step of synthetic processes to form a foam for effectively and efficiently removing arsenic from water.