2022
February 18-19
Webinar

14th International Conference on

Biofuels and Bioenergy

Sorption of Short and Long- chain Per- and Polyfluoroalkyl Substances (PFASs) from Aqueous Phase

Rahim Shahrokhio

Seoul National University, South Korea

Per- and Polyfluoroalkyl Substances (PFASs) are environmentally persistent halogenated hydrocarbon, which have been widely used in many industrial and commercial applications. Recently, contaminating the soil and groundwater due to ubiquity of PFAS in environments has raised great concern. Adsorption technology is one of the most promising method for PFAS removal. This study, has tried to use Activated Carbon and Anion Exchange Resin for removal of two long (PFOA, and PFOS) and two short-chain (PFBA, PFBS) PFAS substances from aqueous phase. Series of batch adsorption tests have been performed to evaluate the adsorption capacity of the used sorbents. Also, sorbents were analyzed by SEM, FT-IR, zeta potential, and XRD tests. The results demonstrated that both sorbents have good potential for adsorbing short and long chain PFAS from the aqueous phase.

Key Words: PFAS, Activated Carbon, Anion Exchange Resin, Adsorption

shahrokhishahraki@snu.ac.kr

Received: January 10, 2022 | **Accepted:** January 20, 2022 | **Published:** February 19, 2022