UMD Department of Chemistry & Biochemistry

Fall 2021 Seminar Series

Friday, October 1, 2021

Chem 200 ~ 3:00 p.m.

Dr. Bridget Ulrich

Aqueous Geochemist, Environmental Chemistry Program Leader, NRRI

Host ~ Dr. Kathryn Schreiner

From Pesticides to PFASs: Effects of Black Carbon on the Fate and Transport of Dissolved Organic Contaminants

Semi-polar dissolved organic contaminants such as pesticides and perfluoroalkyl substances (PFASs) are often both biologically active and highly mobile in aquatic systems, causing health concerns for humans and aquatic ecosystems. Black carbon materials such as biochar and activated carbon can adsorb dissolved organic contaminants, reducing contaminant mobility and potentially providing conditions favorable for degradation. This seminar will focus on fundamental and applied studies assessing the effects of black carbons on the fate and transport of (i) pesticides in stormwater treatment systems, and (ii) PFASs in activated carbon adsorption systems.