



GEOC 62: Biogeochemical interfacial reactivity in a changing environment

Donald Lewis Sparks¹

1. Interdisciplinary Sci Engr Lab, Univ of Delaware, Newark, Delaware, United States

Major environmental challenges, due to climate change, are having a profound impact on humankind. Rising seas and temperatures are causing increasing flooding and melting of ice and permafrost soils. The impact of these processes on interfacial processes and reactivity in natural systems such as minerals and soils is not well understood. For example, how do rising seas, that cause inundation of soils with saline water, followed by retrenchment, affect cycling of redox active elements such as arsenic (As) and chromium (Cr)? What will be the effect of redox changes and sorption process on the sequestration of carbon (C) on mineral surfaces of iron (Fe) and manganese (Mn) minerals in soils, a major mechanism for preventing loss of C from soils to the atmosphere. This presentation will explore these questions over a range of spatial and temporal scales. Such multi-scale investigations and study of interfacial reactivity and mechanisms have been greatly advanced over the years in the outstanding research of Jim Davis, whom we are paying tribute to.

Sessions



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Monday, Mar 19 10:00 AM

Room 355, Ernest N. Morial Convention Center

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