

UNIVERSITY OF CONNECTICUT

Department of Marine Sciences
Presents a Seminar by

Veronique Oldham

University of Rhode Island Graduate School of Oceanography

There and back again, A Redox Tale

Trace metals have recently emerged as key (sometimes they key!) reactant in biogeochemical cycles. In particular, the redox state of trace elements plays a critical role in determining the role a metal can play in coupled chemical reactions and in biological uptake. In this seminar, we will discuss the role of trace elements in an ocean world, with a focus on manganese (Mn), the second most abundant redox active element in the Earth's crust. Manganese may not seem like a key player in the ocean: its concentration is relatively high compared to some other trace elements, and it is non-toxic at most environmental concentrations. However, the chemical speciation of Mn is tightly linked to the cycles of nearly all other bioactive elements. In addition, the redox cycle of Mn remains a mystery! The cycling of Mn depends on oxidation by marine bacteria, but no one knows how or why the bacteria do it. In this seminar, we will dive into some possible avenues for unraveling that mystery.

Host: Rob Mason

Time & Date: 11:00 am, Friday, October 16, 2020

Please visit this page to request a link to the seminar:

http://s.uconn.edu/1208uconnmarineseminar

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