

SUGGESTED RESEARCH PROPOSAL TOPICS

Organic ligand-metal biogeochemistry

Carbon sequestration/iron fertilization and old DOC in the deep ocean.

Dissolved organic nutrients and climate change.

Carbon preservation in marine sediments.

Early diagenesis and light isotope (CHN) fractionation on paleoenvironmental studies using biomarkers

The deep biosphere: molecular evidence and consequences for interpretation of the sedimentary record

Anaerobic methane oxidation and the formation of gas hydrates, carbon cycling and burial on continental margins, and climate: molecular evidence

Molecular evidence for dramatic variations in sea surface temperature, $p\text{CO}_2$ and photic zone anoxia during Cretaceous oceanic anoxic events (OAEs).

The biogeochemical role and molecular manifestation of viruses in the ocean.

Anammox processes in the water column and sediments

Compound-specific hydrogen isotopes as a new tool for biogeochemistry and paleoclimatology

The interface between molecular biology and molecular biogeochemistry