JOI/USSAC Distinguished Lecturer Series 1991

MODES AND RHYTHMS IN GLOBAL CLIMATE CHANGE: THE EVIDENCE FROM OCEAN DRILLING

Dr. Margaret Leinen, University of Rhode Island

Dr. Leinen's research interests include the application of geochemistry and mineralogical analysis of deep-sea sediments to the study of paleoclimatology and the productivity, chemistry and circulation of the oceans in the past. She will speak on the challenges facing geologists to place the climatic changes of the last few hundred years, as well as climate changes predicted for the future, into a geological perspective. Recent ODP results provide significant new insights into the short-term variability (on scales of 10⁵ yrs.) of Earth's climate before and after the onset of glacial ages. ODP drilling also provides new insights into the sensitivity of Earth's climate to catastrophic events-such as the meteorite impact at the Cretaceous/Tertiary boundary-as well as its sensitivity to more gradual changes in oceanic and atmospheric circulation.