



# Earth Perspectives Lectures

Monday 23<sup>rd</sup> November 2009, 4 pm.  
Flett Lecture Theatre, NHM.

## Our Changing Oceans

Two seminars that showcase the geological and palaeontological work that is going on to understand the link between ocean and biogeochemical cycles and how climate change has affected marine life.

### **The origin of the Pleistocene carbonate cycle**

Professor Harry Elderfield, Cambridge University

### **Mediterranean anoxic events: processes and ecological impacts**

Professor Eelco J. Rohling, School of Ocean and Earth Science, Southampton University

### About our speakers:

**Professor Harry Elderfield FRS** is a geochemist at the University of Cambridge specializing in development of climate records and ocean chemistry. His research uses mass spectrometry and elemental isotopic geochemistry to generate records of climate change on time-scales from hundreds of years to 100 million years. Dissolution in the oceans provides a large sink for anthropogenic CO<sub>2</sub> and the cycling of carbon from the atmosphere into the deep ocean is of particular interest at present, as a way of dealing with the excess carbon dioxide in the atmosphere.

**Professor Eelco Rohling** is a marine micropalaeontologist at the National Oceanographic Centre, Southampton working on ocean and climate change. He uses the fossil record from deep-sea cores to carry out high-resolution investigations of ocean/climate changes during the Neogene to determine the nature, timing and magnitude of natural climate variability. He has worked extensively in the Mediterranean studying changes in deep-sea ventilation states and nutrient distribution mechanisms, the interactions with the organic and inorganic carbon cycle, and the impact of ecological responses on proxy records.