

**Graduate School, National Oceanography Centre Southampton**

## PhD opportunities in Palaeoceanography and Palaeoclimate

### Entry 2017

Understanding past changes in the Earth System provides the essential context for future climate prediction. Southampton's Palaeoceanography and Palaeoclimate research group is big and active with critical mass of over 55 academics, post-doctoral researchers and PhD students and a suite of state-of-the-art geochemical, micropalaeontological, core processing and numerical modelling facilities. Our research is global in scope. We work in all ocean basins on key problems in Earth history spanning the Anthropocene to the Palaeozoic.

**African rainfall variability: Palaeo insights into the climate history of our hominid ancestors and the monsoon response to a warmer future**  
Paul A. Wilson, Chuang Xuan, Anya Crocker (UoS)

**Aridity and floods in Asia: Understanding teleconnections high-resolution palaeo records from Plio-Pleistocene marine sequences**  
Paul A. Wilson, Chuang Xuan, Suzanne MacLachlan

**Dynamics, causes and consequences of Quaternary geomagnetic change: continuous records from East China Sea and Japan Sea sediments**  
Chuang Xuan, Alan Kemp, Ryuji Tada (University of Tokyo)

**Abrupt climate change during the last deglaciation: linking records from Greenland to central Europe**  
Alan Kemp, Pete Langdon (Geography & the Environment, UoS)

**Antarctic / Atlantic Ocean connections during rapid climate change**  
Kevin Oliver, Louise Sime (British Antarctic Survey)

**Inferring early warning signals of ecosystem collapse at the end of the Eocene greenhouse**  
Steve Bohaty, Thomas Ezard (OES, UoS), Sandra Nogue (Geography & the Environment, UoS), Kirsty Edgar (Geography, Earth and Environmental Sciences, University of Birmingham)

**Did shifts in Westerly Winds over the Southern Ocean cause glacial-interglacial CO<sub>2</sub> change?**  
Kevin Oliver, Louise Sime, Dominic Hodgson (BAS)

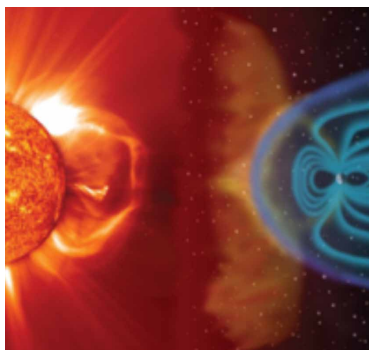
**Drivers of marine ecosystem change during the end-Triassic mass extinction and recovery**  
Jessica Whiteside, Richard J. Twitchett (Natural History Museum)

**Characterising continental weathering in past greenhouse worlds**  
Christopher Pearce, Mike Clare, Steve Bohaty, Gavin Foster

**Measuring the microenvironment around calcifying foraminifera to give clues into the past record of ocean carbonate chemistry**  
Gavin Foster, Glen Wheeler (Marine Biological Association, Plymouth), Colin Brownlee (Marine Biological Association, Plymouth)


**Reconstructions of Antarctic sea-ice at the peak of the last interglacial (marine isotope stage 5e)**  
Kevin Oliver, Claire Allen (BAS), Louise Sime (BAS)

**The temperature control on the biological carbon pump - insights from boron isotopes and palaeo-water column pH profiles**  
Gavin Foster, Mathis Hain, Jessica Whiteside, Tom Chalk (UoS)



#### Contact us

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[www.noc.ac.uk/gsnocs/how-apply](http://www.noc.ac.uk/gsnocs/how-apply)

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