Ocean and Earth Science, National Oceanography Centre Southampton

Postgraduate Research supervision

All of the staff listed below are happy to consider applications to pursue research under their supervision in their research areas. Students wishing to develop a research programme with a potential supervisor should contact the individual directly to discuss the kind of projects supported and the possibilities for funding.

You can find further details on the Ocean and Earth Science website, http://www.soton.ac.uk/soes/ or in some cases the NOCS website http://www.noc.soton.ac.uk/. The list is correct at May 2011 but is liable to change. If you are looking for joint supervision from another academic area, you can explore this from http://www.southampton.ac.uk/about/faculties/index.html.

For general queries about postgraduate research in Ocean and Earth Sciences, you should contact the Postgraduate Office +44 (0)23 8059 4785 or +44 (0)23 8059 6043 or phdenq@noc.soton.ac.uk .

Dr Eric Achterberg - Interaction between marine ecosystems and carbon, nutrients and trace metals.

Dr John Allen -NSRD/OBE

Prof Carl L Amos - Quaternary stratigraphy, marine technology, placer genesis and sedimentology.

Dr Jim R Andrews - Brecciation, fluid flow and mineralisation in faults, veins and shear zones.

Dr Angus I Best - Marine geophysics; acoustics in sediments.

Dr Tom Bibby- Marine Phytoplankton Ecology and Molecular Biology

Dr David Billett - Long-term change in the deep-sea. The role of surface productivity in regulating the distribution of species on the abyssal seafloor. Episodic change in the deep-sea environment. Exploitation of deep-sea resources and environmental management. Spatial and temporal management of the deep ocean. The biology deep-sea echinoderms. Canyon ecosystems on the European margin.

Dr Simon Boxall - SOES/COASTAL

Prof Harry L Bryden - Ocean climate change; maintaining the global climate system; western boundary currents.

Dr Jonathan M Bull - Marine geophysics, high resolution geophysics, reflection seismology and tectonics.

Dr Peter Challenor - Satellite remote sensing, uncertainties in models and observations, statistics of oceanography/climate.

Dr Paolo Cipollini - Radar Altimetry; Satellite Oceanography

Dr Ken Collins – SOES/OBE

Prof Michael B Collins - Regional sediment (suspended and bed load) transport; laboratory simulations; coastal management.

Dr Douglas Connelly- trace metal biogeochemistry, hydrothermal research and aquatic sensor development

Dr Jon Copley - marine ecology, including deep-sea and chemosynthetic environments

Dr David Cromwell - NSRD/OOC

Dr Ian W Croudace - Environmental geochemistry and radioactivity. (Co-director of Geosciences Advisory Unit).

Dr Stuart A Cunningham - Ocean circulation; Monitoring the Atlantic meridional overturning circulation (RAPID-MOC)

Dr Justin K Dix - High-resolution geophysics; modelling of submerged archaeological artefacts and landscapes.

Dr Rosemary Edwards – Marine Geophysics; long-offset seismics; rifted and sheared continental margins; UNCLOS.

Dr Gavin L Foster – isotope geochemistry, proxy reconstructions of the carbon cycle and pCO_2, paleoceanography

Dr Christine Gommenginger – ocean remote sensing, wind and waves, sea level, sea surface salinity from space, altimetry, new satellite sensors.

Prof Andy J Gooday - Benthic biology and palaeoceanography; ecology, taxonomy and biodiversity of deep-sea benthic foraminifera.

Dr Ian C Harding - High-resolution morphological/taxonomic, biostratigraphic and palaeoenvironmental studies of palynomorphs and palynofacies.

Dr Nicholas Harmon - SOES/GG

Dr Chris Hauton - Marine invertebrate ecophysiology and immunology.

Dr Lawrence E Hawkins - Ecophysiology and immunology of marine and estuarine invertebrates and fish.

Dr Stephanie Henson - bio-physical interactions in the upper ocean; ocean remote sensing

Dr Timothy J Henstock - Geophysics, reflection and refraction seismology and continental evolution.

Dr N Penny Holliday - ocean climate change, western boundary currents, polar outflows

Dr Tammy Horton – Taxonomy, biodiversity and ecology of deep-sea peracarid Crustacea.

Dr David Hydes - NSRD/OBE

Dr Debora Iglesias-Rodriguez - Oceanographic genomics, genetic diversity of coccolithophorids, marine calcification, harmful algal bloom dynamics

Dr Vladimir Ivchenko- Physical Oceanography

Dr Rachel James - Marine geochemistry; development of biogeochemical proxies of past climate change; gas hydrates; hydrothermal systems.

Dr Antony C Jensen - Artificial reefs; inshore fisheries; lobster behaviour and ecology.

Dr Simon Josey - Ocean-Atmosphere Interaction, Impacts of Extreme Ocean Heat Loss, Linking Surface Forcing to Ocean Circulation Variability

Dr Boris Kelly-Gerreyn - Sediment biogeochemistry and benthic modelling, ships of opportunity research, water quality, phytoplankton-nutrient dynamics

Prof Alan ES Kemp - High-resolution palaeoclimatology and palaeoceanography, especially from laminated sediments.

Dr Elizabeth C Kent - Air-sea interaction, marine meteorology, marine climatology

Dr Brian A King - Basin-scale ocean changes from interannual to decadal timescales; Argo; Novel observational techniques for physical oceanography.

Dr Richard S Lampitt - Open ocean biogeochemistry; particle flux, marine snow and mesozooplankton.

Dr Mei-Man Lee - Ocean eddies in the climate system.

Dr Cathy H Lucas – Zooplankton dynamics, in particular jellyfish population ecology, life histories and role in biogeochemical cycling.

Dr Michael I Lucas - Biological Oceanography.

Dr Robert Marsh - Physical Oceanography; Ocean, Climate and Earth System Modelling

Prof John E A Marshall - Palynostratigraphy, climatic stratigraphy and sea-level change in ancient sediments and hydrocarbon source rocks.

Dr Adrian Martin - Biology-physics interactions, biogeochemistry,

Prof Doug Masson - Sedimentary processes on continental slopes and characterisation of modern marine sedimentary environments; landslides.

Dr Elaine McDonagh - NSRD/OOC

Dr Lisa C McNeill - Evolution, tectonics, and seismic potential of convergent margins and continental rifts.

Dr Rachel A Mills - Marine geochemistry and hydrothermal systems; metal-microbe interactions and biomineralisation in marine systems.

Prof Tim Minshull - Lithospheric extension, continental breakup and basin evolution; formation and evolution of volcanic islands; methane hydrates and fluid flow beneath continental margins

Dr Mark Moore – Phytoplankton ecophysiology and ocean biogeochemistry

Dr Matt Mowlem - Sensor technology development, in situ chemical and biological sensors, miniaturisation and micro sensors, autonomous vehicles, technology for extreme environments.

Dr Bramley J Murton - Geochemical characteristics of ridge segmentation. Volcanotectonics of non-transform discontinuities.

Dr Naveira-Garabato - Physical Oceanography

Dr Adrian New - ocean and climate modelling, and physical oceanography - in particular areas such as circulation, water masses, mixing and internal waves.

Dr George Nurser – NSRD/OMF

Dr Stuart Painter - NSRD/OBE

Dr Heiko Pälike - Palaeoceanography of the Paleogene; Astronomical calibration of geological time scales (Milankovitch cycles)

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scales (Milankovitch cycles)

Prof Martin R Palmer - Trace element and isotope geochemistry.

Dr Lindsay M Parson - Sidescan sonar interpretation, mid ocean ridge segmentation.

Dr Katya Popova - Global 3D coupled physical and biological modelling. Modelling of the past present and future of the Arctic ecosystems.

Dr Alex Poulton - The role of coccolithophores and diatoms in the biological carbon pump: interactions between diversity-physiology-ecology and marine biogeochemistry.

Dr Duncan A Purdie - The role of phytoplankton and bacteria in carbon and nutrient cycling in estuaries, coastal seas and oceans.

Dr Graham Quartly - satellite-based remote-sensing; circulation in the SW Indian Ocean; effect of ocean physics on biology; global rainfall -- measuring its variability and modelling its impact; algorithm development and validation; Tropical Instability Waves

Prof Andrew P Roberts - Palaeomagnetism, environmental magnetism and rock magnetism applied to palaeoceanography, palaeoclimate, geomagnetic field behaviour and tectonics.

Dr Stephen Roberts - Origin of mineral deposits; construction and mineralisation of the oceanic lithosphere.

Prof Ian S Robinson - Upper ocean processes and remote sensing.

Prof Eelco J Rohling - Quaternary palaeoceanographic process-studies; marginal seas as amplifiers of climatic change signals.

Dr Henry A Ruhl - Connections between climate, the upper ocean and deep-sea ecology

Dr Richard I C Sanders - Nutrient biogeochemistry of the open ocean.

Dr Robert B. Scott - Physical oceanography, interested in all aspects of ocean circulation. Recent work includes geostrophic turbulence of mesoscale eddies, internal wave generation, predictability of Lagrangian trajectories, vertical structure of currents, inter-model comparison and validation with observational data.

Dr Martin Sheader - Benthic ecology and animal-sediment interactions.

Dr Bablu Sinha - Physical Oceanography and Climate, Physics and Ecosystem model interaction

Prof Martin Sinha - Marine geophysics; electromagnetic investigations of magma and fluids in the ocean crust.

Dr David Smeed -NSRD/OMF

Dr Denise Smythe-Wright - Chemical oceanography; role of phytoplankton in the production of biogenic gases in the ocean.

Dr Meric A Srokosz - Remote sensing of ocean physics and biology; bio-physical interactions in the upper ocean.

Dr Kate Stansfield - Flow-topography interactions and finescale and microstructure measurements of oceanic mixing

Dr Peter J Statham - Marine biogeochemistry of trace metals, carbon, and nutrients; studies of processes influencing cycling and fate of trace metals.

Prof Dorrik A Stow - Sedimentology; deep-water environments, fine-grained sediments, submarine fans, volcaniclastics, black shales and contourites.

Dr Rex N Taylor - Geochemistry of volcanic systems; radiogenic and stable isotope measurement systematics.

Dr Damon A Teagle - Mid-ocean ridge hydrothermal systems - processes and fluid/chemical fluxes; formation of ore-deposits.

Dr Sven Thatje - Marine Ecology & Ecosystem Evolution

Dr Charlie E L Thompson - Coastal research; sediment dynamics; laboratory simulations of solid- and fluid-transmitted stresses.

Dr Jess Trofimovs - Physical volcanology and marine sedimentology

Dr Clive Trueman – Biominerals and geochemical ecology – especially related to marine fisheries

Prof Paul A Tyler - Life history biology of marine invertebrates, particularly gametogenic and larval biology of deep-sea organisms; hydrothermal vents and cold seeps.

Dr Toby Tyrrell - Ecology of phytoplankton; modelling ocean biogeochemistry.

Prof Philip PE Weaver - Sedimentation stratigraphy and palaeoceanography, modern deep-sea sedimentary processes.

Dr David J Webb - Physical Oceanography, especially Ocean Tides.

Dr Neil Wells - Air-sea interaction, large-scale ocean circulation and climate change. Decadal changes in the tropical oceans and El Nino.

Dr Joerg Wiedenmann - Coral reef biology, stress physiology, fluorescent pigments, biotechnology, marine molecular biology

Dr John A Williams - Pelagic community structure and ecophysiology.

Prof Paul A Wilson - Palaeoceanography of past greenhouse climates; reefs and carbonate sediments (modern and ancient) as indicators of climate change

Dr Russell Wynn - NSRD/GG

Dr Margaret J Yelland - Measurement and parameterisation of the air-sea turbulent fluxes of momentum, heat and CO_2 in terms of wind speed and sea state parameters (directional wave spectra, wave breaking and whitecap fraction).

Prof Mike Zubkov – Microbial biogeochemistry of the open ocean; investigating ecological interactions between dominant planktonic prokaryotes and protists