

**Postdoctoral Research Associate Required: University of Leeds, UK**  
**Flow dynamics and sedimentation of active submarine channels**

Post-doctoral Fellowship studying the flow dynamics and sedimentation of active submarine channels Job reference: 315191; Salary: Grade 7 (£29,853 - £35,646 p.a)  
Faculty of Environment  
School of Earth and Environment, Earth Surface Science Institute  
(Full time, fixed term for 24 months to commence 1 May 2010)

We are seeking a post-doctoral researcher to join a team of researchers from the University of Leeds (Dr Jeff Peakall, Dr Dan Parsons), University of Southampton (Prof Steve Darby) and the National Oceanography Centre (Dr Russ Wynn). We are starting work on a major NERC funded project concerned with quantifying flow dynamics and sedimentation processes in submarine channels formed by gravity currents. Submarine channels are spectacular features that can extend for thousands of kilometres across the seafloor, and are the major transport pathways for sediments and nutrients to the deep sea. However, it has not previously been possible to study process-product relations in modern examples as flows within these environments are typically infrequent and highly destructive. Consequently, existing knowledge comes mainly from laboratory experiments, and understanding of their deposits from studies of ancient examples now exposed on land.

This project will address this key limitation through examining the interactions between flow, morphology and deposits within an active submarine channel. This will be achieved by deploying aDcp and MBES equipment from Autosub3, NERC's state-of-the-art autonomous underwater vehicle. You will join the Earth Surface Science Institute in Leeds' School of Earth and Environment, which has a strong international research profile in sedimentology, flow dynamics and deep-marine clastic systems. You will join an enthusiastic and motivated School, which aims to achieve the highest standards in its research and teaching.

You will have a PhD and a strong record of research in some aspect of flow dynamics, sedimentology, geomorphology, geophysics, or engineering. You will have experience with the analysis of large datasets, good communication skills, and the ability to work as part of a team. Previous field experience, experience in interpreting seismic or GPR data, and knowledge of MATLAB (or similar programming code/tools) would be an advantage. You will be expected to contribute to ongoing research on submarine channel dynamics in the School, to publish research papers, and to present your research at national and international meetings.

Full details of how to apply, along with links to further details about the post (including person specification), are available on the University of Leeds website at:

<http://hr.leeds.ac.uk/jobs/ViewJob.aspx?CId=2&JId=920>

Informal enquiries (to Dr Jeff Peakall at

[j.peakall@see.leeds.ac.uk](mailto:j.peakall@see.leeds.ac.uk)<<mailto:j.peakall@see.leeds.ac.uk>>) are also very welcome.

Note that a second PDRA post, focused on developing and validating numerical models of flow and sedimentation dynamics within submarine channels, will be available at the University of Southampton to start in November 2010. It is expected that this second

post will be formally advertised in May/June this year, but informal enquiries to Steve Darby ([S.E.Darby@soton.ac.uk](mailto:S.E.Darby@soton.ac.uk)<<mailto:S.E.Darby@soton.ac.uk>>) are welcomed.