

PhD SCHOLARSHIP – COASTAL ENGINEERING

Project Summary:

This project will be based upon the deployment of new instrumentation developed jointly by the University of New South Wales and our University of Plymouth collaborators in the UK, to obtain the first-ever measurements of swash zone sediment erosion and accumulation across the beachface, at the critical time-scale of individual waves. This unique capability will underpin the participation by UNSW researchers in a major international, multi-institution, field research experiment to take place in Bordeaux France in March-April 2008.

The selected PhD student will participate in this international field experiment, which will include researchers from France, UK, The Netherlands, USA, New Zealand and Australia. During the course of their research the student may undertake additional smaller field deployments in Australian and/or the UK. If it is of interest to the student and deemed advantageous to the project, it is envisaged that during their second or third year of study they may have the opportunity to work for a period of 1 – 2 months in the UK, based at the University of Plymouth. The student will be responsible for analysing and interpreting the unique bed-level data set that will provide new information on net cross-shore and alongshore sediment movement at the critical wave-by-wave timescale. The student will undertake their research in parallel with a UK-based PhD student and two Postdocs based in the UK and Australia, who will be analysing and modelling hydrodynamics and sediment transport data obtained concurrent to the bed-level measurements.

The selection criteria for this position include:

- **Australian or New Zealand Citizenship, or Australian Permanent Residency**
- Undergraduate/graduate degree in Engineering, Oceanography, Geosciences, or a related discipline
- 1st Class Honours degree (or equivalent) in one of the above disciplines (upper 2/1 may be considered). Note: students completing their degree in 2007, and prior to submission of their final year project/thesis, are welcome to apply.
- Desire to undertake leading research and publication, of international standing
- Willingness and ability to undertake supervised and unsupervised fieldwork in the coastal environment
- Demonstration of strong computer skills (eg. Matlab programming, analysis of time-series data, image analysis, statistical analysis)

Additional (desirable) criteria include:

- Completion of coursework, experience and/or training in the coastal/surf environment
- Graduate training and/or professional experience relevant to this research project
- Fieldwork experience in the coastal environment
- Current drivers licence

Scholarship:

The PhD Scholarship is available to Australian citizens and to those holding permanent residency (PR) status and available for a period of up to three years. A stipend of approximately \$22,000 per annum (tax free) will be provided with an additional \$8,000 per annum (taxable) tutoring award available for those qualified and interested to undertake undergraduate tutoring duties.

The preferred commencement for this position is Session 2 (July) 2007, however an earlier or later start date may be considered.

More Information:

Further information on the project and scholarship may be obtained from:

Dr Ian Turner
Phone: 02 99494488 (extension 229)
Email: ian.turner@unsw.edu.au

Applications:

Applications for this position (including a cover letter, academic transcript and CV) should be submitted to:

Dr Ian Turner
Deputy Director - Research
Water Research Laboratory
School of Civil and Environmental Engineering
University of New South Wales
King Street, Manly Vale
Sydney, NSW 2093
AUSTRALIA

Applications open 1st December 2006, and will be accepted until a suitable candidate is found.