POSITION DESCRIPTION

THE UNIVERSITY OF MELBOURNE

Department of Infrastructure Engineering
School of Electrical, Mechanical and Infrastructure Engineering
Melbourne School of Engineering

Research Fellow in Ocean Remote Sensing

In line with the special measure H103/2014 provided for under section 12 of the Equal Opportunity Act 2010 (VIC), the Melbourne School of Engineering strongly encourages applications from suitably qualified female candidates.

POSITION NO	0043863
CLASSIFICATION	Research Fellow (Level A)
SALARY	$69,148 - $93,830 p.a. (PhD starting salary A.6 $87,415 p.a.)
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full-time (1.0 FTE)
BASIS OF EMPLOYMENT	Fixed-term position available for 2 years Fixed term contract type: Externally Funded
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT	New
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Prof Ian Young Email ian.young@unimelb.edu.au *Please do not send your application to this contact*

For information about working for the University of Melbourne, visit our websites:
about.unimelb.edu.au/careers

Position Summary

You will be part of a team developing a global database of ocean wind speed and wave height from radiometer and altimeter instruments. As part of the project, you will develop a publicly accessible archive of this data. In addition, you will work with the project director, Professor Ian Young in developing new techniques for the retrieval of wind speed and wave height from altimeter records in coastal regions. Altimeter data is often corrupted by the presence of land and this project will involve the use of high frequency data which has a relatively small footprint and hence is less susceptible to land influence. The project will involve collaboration with other members of the team at the University of Melbourne and with colleagues at CSIRO in Hobart. The Ocean Engineering group at the University of Melbourne has developed a world leading reputation for the analysis and application of such remote sensing data.

You will be required to conduct independent research, leading to the preparation and publication of research outcomes in conferences and journals. You will be located in the Department of Infrastructure Engineering in the Melbourne School of Engineering and will be expected to be an active member of the Department, collaborating with other researchers. You may undertake small amounts of teaching and research supervision directly related to your area of research, as required.

The Melbourne School of Engineering is strongly committed to supporting diversity and flexibility in the workplace. Applications for part-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position.

The University plan seeks to increase the diversity of the workforce and the representation of women in areas they have been traditionally under-represented. Consistent with this the School is seeking to increase the representation of women in the academic workforce across engineering disciplines. Under a Special Measure, under Section 12 (1) of the Equal Opportunity Act 2010 (Vic) the School is seeking to lift the representation of women from 20% in 2014 to at least 25% over the next 5 years, and strongly encourages applications from suitably qualified female candidates.

1. Selection Criteria

1.1 ESSENTIAL

- A PhD in engineering, science or computer science, or closely related discipline;
- A record of quality research as evidenced by publications in leading journals and at conferences commensurate with opportunity;
- Experience in the use and archiving of large datasets;
- Ability to perform independent research and a commitment to interdisciplinary research;
- Capacity to communicate research concepts to technical and non-technical audiences;
- Excellent ability in analysing data, problem solving and maintaining accurate research records;
- Capability for innovative research, as evidenced by scholarly publication;
- Experience in using initiative, working with minimal supervision and ability to prioritise tasks to achieve project objectives within timelines;
- Excellent written and verbal communication skills, demonstrated by presentation of research results at conferences, internal forums and through manuscript submissions;

- Excellent interpersonal skills, including an ability to interact with internal and external stakeholders (academic, administrative and support staff) in a courteous and effective manner.

1.2 DESIRABLE

- Experience in Ocean Engineering, Physical Oceanography or Remote Sensing;
- Ability to structure, engage and present information clearly to various audiences;

2. Key Responsibilities

2.1 RESEARCH – ADVANCEMENT OF DISCIPLINE

- Independently plan and carry out research on the nominated research project and work towards completion of the aims of the project;
- Develop effective timelines and milestones based on goals of the research programme;
- Perform data and microstructure analysis, and be responsible for qualitative and statistical analysis of research data and to communicate this information to the Chief Investigators and collaborators;
- Regularly write technical reports on the outputs of the experiments conducted, and maintain accurate and detailed records of all experiments conducted;
- Participate in preparation of manuscripts for publication in peer-reviewed journals;
- Liaise effectively with collaborators with a variety of internal and external stakeholders;
- Assist other researchers in carrying out experiments in order to work as a team and further the department's research output;
- Contribute to the development of the Department's and the School's strong research program in Ocean Engineering and Remote Sensing;
- Work towards building an independent research project.

2.2 TEACHING AND LEARNING

- Contribute to teaching, training, scientific mentoring and supervision of students;
- Supervise junior research staff in the Ocean Engineering group.

2.3 ENGAGEMENT

- Actively participate in outreach activities relating to research and scholarship;
- Effective liaison with external networks to foster collaborative partnerships;
- Involvement in professional activities, including consultations and referrals;
- Present results at local and national forums;
- Attend and actively participate in departmental seminars, meetings and/or committee memberships.

2.4 SERVICE AND LEADERSHIP

- Actively participate in the communication and dissemination of research;

- Identify sources of funding to support individual or collaborative projects, relating to teaching, research and engagement practice in the discipline;
- Effective supervision of research support staff.

2.5 OTHER

- Perform other tasks as requested by the supervisor or the Head of the Department;
- Undertake Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 4.

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised.

4. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

http://safety.unimelb.edu.au/topics/responsibilities/

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

5. Other Information

5.1 SCHOOL OF ELECTRICAL, MECHANICAL AND INFRASTRUCTURE ENGINEERING

DEPARTMENT OF INFRASTRUCTURE ENGINEERING

www.ie.unimelb.edu.au

The Department of Infrastructure Engineering combines Civil Engineering, Environmental Engineering and Geomatics in one department which creates a broad scope for research and

engineering education. The focus of the department is to solve infrastructure problems in a sustainable way.

The Department offers both PhD and Masters level research degrees: www.ie.unimelb.edu.au/research/projects.html

OCEAN ENGINEERING GROUP

The Ocean Engineering Group is located within the Department of Infrastructure Engineering and has developed a world-class reputation for its work on ocean waves. Specific research is conducted on wave modelling, remote sensing, sea level rise, coastal engineering and global climate.

5.2 MELBOURNE SCHOOL OF ENGINEERING

www.eng.unimelb.edu.au

The Melbourne School of Engineering is one of Australia's leading Engineering Schools and aims to be the school of choice for the highest performing students and research staff in Australia and within the Time Higher Education Supplement top twenty Schools of Engineering internationally by 2020.

5.3 THE UNIVERSITY OF MELBOURNE

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The University offers staff many benefits and prospective staff are encouraged to view the following web links:

www.unimelb.edu.au

www.growingesteem.unimelb.edu.au

www.unimelb.edu.au/careers

5.4 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at www.unimelb.edu.au/governance.