Research Fellow in Ocean Engineering

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 0045078

CLASSIFICATION Research Fellow (Level A)

SALARY $69,149 - $93,830 p.a. (PhD starting salary A.6 $87,415 p.a.)

SUPERANNUATION Employer contribution of 9.5%

EMPLOYMENT TYPE Full-time (fixed term) position available for 18 months

Fixed term contract type: Externally Funded

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.

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, under ‘Job Search and Job Alerts’, select the relevant option (‘Current Staff’ or ‘Prospective Staff’), then find the position by title or number.

CONTACT FOR ENQUIRIES ONLY Professor Alexander Babanin

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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

The projects are aimed at experimental and modelling Metocean research in the Arctic/Antarctic Marginal Ice Zones (MIZ) and in the Extreme Tropical/Extra-Tropical Cyclones. This is a challenging and synergetic mix at the cutting edge of Metocean discipline, a unique opportunity for postdoctoral researchers. Candidates should have a PhD in physical oceanography, ocean/coastal engineering or applied mathematics, and track record in research of ocean waves. For candidates with experimental background, experience in MIZ or hurricane observations is an advantage. Modellers are expected to know FORTRAN, experience with ROMS or MOM circulation models is preferable.

The appointees are expected to undertake original research and participate actively in the research activities of the Melbourne School of Engineering. They are expected to report on the outcomes of their work in a timely fashion through both oral presentation and written material. It is expected that the written material will be suitable for publication in scholarly journals.

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
- PhD in Engineering or a relevant discipline;
- A track record of quality research as evidenced by research publications in leading conferences and journals commensurate with opportunity;
- Excellent ability in analysing data, problem solving, maintaining accurate research records, and other experimental skills as described in Position Summary;
- High level computer skills, including Matlab, FORTRAN other modelling and computational skills as described in Position Summary;
- Demonstrated 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.

1.2 DESIRABLE
- Experience in a range of instrumentations and techniques used in Metocean research;
- Experience in Metocean data analysis;
- Experience in Metocean modelling;
- Ability to structure, engage and present information clearly to various audiences;
- Experience in postgraduate student supervision;
- Experience in a leadership role within a research team.
2. Key Responsibilities

2.1 RESEARCH – ADVANCEMENT OF THE 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;
- 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 and students 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;
- Work towards building an independent research project;
- Perform other duties as requested by the appointee’s immediate supervisors.

2.2 TEACHING AND LEARNING

- Contribute to teaching, training, scientific mentoring and supervision of students;
- Supervise junior research staff in the appointee’s area of expertise;
- Conduct lectures, tutorials, mark and undertake laboratory duties as required by the Department.

2.3 ENGAGEMENT

- Attend and contribute actively to lab meetings;
- Present experimental results at local, national and international forums;
- Attend and actively participate in departmental seminars, meetings and/or committee memberships.

2.4 SERVICE AND LEADERSHIP

- Assist with administrative duties and general laboratory duties including maintenance of the laboratory and equipment and ordering of supplies;
- Assist in the preparation and submission of competitive grant applications relating to the appointee’s research program;
- 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 5.

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 as vital in our continuous desire to strive for excellence and reach the targets of Growing Esteem.

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/people/community/responsibilities-of-personnel

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

The School of Electrical, Mechanical and Infrastructure Engineering undertakes teaching and research across a range of disciplines that are internationally recognised for their contribution to fundamental research. It has a number of well-established industry linkages and international partnerships. It is building a vibrant profile of interdisciplinary research, working with industry with an aim to contribute to society. It offers a comprehensive range of accredited Masters of Engineering and Master of Information Technology programs taught through the Electrical, Mechanical and Infrastructure departments as well as professional Masters programs. It has a substantial cohort of research higher degree students.

The School’s aim is to attract and retain outstanding staff. The School is highly supportive of increasing the number of female staff.

5.2 DEPARTMENT OF INFRASTRUCTURE ENGINEERING

www.ie.unimelb.edu.au

Combining civil engineering, environmental engineering and geomatics in one department creates a broad scope for our research and engineering education. Our focus is to solve infrastructure problems in a sustainable way.
The Departmental philosophy is to attract and retain the highest quality staff available in order to maintain a vigorous research effort. Our strategic plan is to address the most urgent contemporary problems of our rapidly developing industrial society, with investigations into the engineered and natural environment.

5.3 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.

5.4 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

5.5 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/unisec/governance.html.