



POSITION DESCRIPTION

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

Research Fellow in Fluid Mechanics

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	0045236
CLASSIFICATION	Research Fellow (Level A)
SALARY	\$69,148* - \$93,830 p.a. (*PhD entry Level A.6 \$87,415 p.a.)
SUPERANNUATION	Employer contribution of 9.5%
EMPLOYMENT TYPE	<p>Full-time (1.0 FTE) position available for 12 months Fixed term contract type: Externally Funded</p> <p>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.</p>
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT	New
HOW TO APPLY	<p>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.</p>
CONTACT FOR ENQUIRIES ONLY	<p>Dr Simon Illingworth Tel +61 3 8344 7957 Email sillingworth@unimelb.edu.au</p> <p><i>Please do not send your application to this contact</i></p>

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

Position Summary

Located in the Department of Mechanical Engineering, this position offers the opportunity to join the highly successful fluid mechanics group within the Melbourne School of Engineering. The appointee will carry out theoretical research in fluid mechanics and will report to Dr Simon Illingworth and Professor Ivan Marusic. The appointee is also expected to work in close collaboration with other staff in the fluid mechanics group.

The appointee will be expected to carry out other duties commensurate with a postdoctoral position in the Department of Mechanical Engineering, including writing high-quality journal publications, mentoring graduate students and submitting abstracts and full-length papers to national and international conferences.

1. Selection Criteria

1.1 ESSENTIAL

- ▶ A PhD in mechanical engineering, aerospace engineering, or a related discipline;
- ▶ A track record of quality research as evidenced by research publications in leading conferences and journals commensurate with opportunity;
- ▶ Well-developed and demonstrable programming skills (e.g. in Matlab, Python, Fortran or C);
- ▶ Demonstrated project management skills, including high-level organisational and time management skills, ability to manage competing priorities and excellent record-keeping skills;
- ▶ Demonstrated ability to perform independent research and a commitment to interdisciplinary research;
- ▶ Excellent written and verbal communication skills, demonstrated by presentation of research results at conferences, internal forums and through manuscript submissions.
- ▶ Excellent ability to work co-operatively in a multi-disciplinary team environment and liaise with associates from both industry and academia;
- ▶ Excellent ability in analysing data, problem solving and maintaining accurate research records;
- ▶ Demonstrated experience in using initiative, working with minimal supervision and ability to prioritise tasks to achieve project objectives within timelines.

1.2 DESIRABLE

- ▶ Experience in the successful completion of ethics applications and submission of grant applications;
- ▶ Experience in supervision of graduate students and/or research assistants;
- ▶ 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;
- ▶ Produce journal publications and conference papers;
- ▶ Supervision or co-supervision of major honours or postgraduate research projects within research area;
- ▶ Work towards building an independent research project;
- ▶ Liaise effectively with collaborators with a variety of internal and external stakeholders;
- ▶ Assist other researchers in carrying out experiments to further the department's research output;
- ▶ Contribute to the development of the Department's and the School's strong research program in fluid mechanics; and
- ▶ Perform other duties as requested by the appointee's immediate supervisors.

2.2 TEACHING AND LEARNING

- ▶ Occasional contributions to teaching within the staff member's area of expertise;
- ▶ Contribute to teaching, training, scientific mentoring and supervision of research students.

2.3 ENGAGEMENT

- ▶ Attend and actively participate in lab meetings;
- ▶ Attend and actively participate in departmental seminars and meetings;
- ▶ Attend conferences, workshops and seminars in the field of expertise;
- ▶ Liaise effectively with external networks to foster collaborative partnerships.

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;
- ▶ Identification of sources of funding to support individual or collaborative projects, relating to teaching, research and engagement practice in the discipline;
- ▶ Undertake Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in [Section 5](#).

3. Other Information

3.1 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.

3.2 DEPARTMENT OF MECHANICAL ENGINEERING

www.mech.unimelb.edu.au

The Department of Mechanical Engineering is one of the largest in Australia. It provides teaching into subjects in the three-year undergraduate degrees of Science and Commerce, which can be followed by a two-year professional Master of Engineering.

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 biomechanical engineering, fluid mechanics and thermal sciences.

3.3 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.

3.4 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

3.5 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 <http://www.unimelb.edu.au/unisec/governance.html>.