POSITION DESCRIPTION

THE UNIVERSITY OF MELBOURNE

ARC Training Centre for Advanced Manufacturing of Prefabricated Housing
School of Electrical, Mechanical and Infrastructure Engineering
Melbourne School of Engineering

Research Fellow

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	0043758
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%
WORKING HOURS	Full-time (1.0 FTE) 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.
BASIS OF EMPLOYMENT	Fixed-term position available for up to 12 months 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	Ms Meg Belmonte, Centre Manager Tel +61 3 8344 6790 Email marymeg@unimelb.edu.au

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

Position Summary

The ARC Training Centre for Advanced Manufacturing of Prefabricated Housing (ARC-CAMPH) has been established to create a training pipeline that enables rapid growth of the emerging prefabricated manufacturing industry to deliver affordable and high-quality housing through innovation and streamlining of the supply-chain.

The research program consists of 4 major themes, Sustainable Materials and Manufacturing Techniques for Prefab Housing; Innovative Building Systems and Design for Direct Manufacturing & Assembly; Automated Manufacturing & Construction Processes for Prefab Housing; Optimisation of Supply Chains, Risk, Financial & Procurement Models. With the assistance of ARC-CAMPH's training and research outcomes the industry will be able to transition to the next generation of smart and sustainable building systems, innovative design concepts, automated off-site manufacturing technologies and optimised supply chains.

The appointed Research Fellow will be involved in the centre by co-ordinating research projects and also be involved in carrying out the relevant design, modelling and experimental work. You will conduct independent research, leading to the preparation and publication of research outcomes in conferences and journals. You will have strong structural engineering skills achieved through research and an industry background where you gained experience working with key steel and concrete standards such as AS 4100, AS 4600, AS 3600, AS 1170.0, etc. Experience working with similar international design standards will be deemed favorable for your application as will a track record of advanced modelling such as finite element analysis. Experience in prefabricated construction is highly desirable. You will be regularly communicating your research activities with industry and it is expected that you will have excellent communication skills. The University offers a leading and robust research environment that is internationally engaged and recognised, community focused, and with many outstanding areas of research

You will be located in the ARC Training Centre for Advanced Manufacturing of Prefabricated Housing in the Department of Infrastructure Engineering and will be expected to be an active member of the Centre and 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 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 Civil Engineering, or closely related discipline;
- Experience in construction technologies and experimental techniques;
- Working knowledge of key Australian design standards (e.g. AS 1170.0, AS 3600, AS 4100, AS 4600, etc.)A record of quality research as evidenced by publications in leading journals and at conferences commensurate with opportunity;

- 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;
- Commitment and adherence to the highest standards of scientific and ethical integrity.

1.2 DESIRABLE

- Experience in construction materials technologies;
- Experience in supervision of students and/or research assistants;
- Experience in the completion of ethics applications and submission of grant applications;
- 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 working with the industry partners;
- Develop effective timelines and milestones based on goals of the research programme;
- Perform analysis and modelling, and be responsible for achieving outcomes relevant to the industry partners 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 research projects in order to work as a team and further the centre and the department's research output;
- Contribute to the development of the Centre's, Department's and the School's strong research program in Construction technologies
- Work towards building independent research projects;

- Excellent interpersonal and communication skills, with the ability to work in an inter-disciplinary research team with collegial respect for staff at all levels including graduate students.

2.2 ENGAGEMENT

- Active participation in some 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, national forums;
- Attend and actively participate in centre and departmental seminars, meetings and/or committee memberships.

2.3 SERVICE AND LEADERSHIP

- Active participation 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.

2.4 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.
- Undertake administrative duties and general laboratory duties including maintenance of the laboratory and equipment and ordering supplies.

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

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.

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.

5.2 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/unisec/governance.html.