POSITION DESCRIPTION



Department of Chemical Engineering Melbourne School of Engineering

Lecturer or Senior Lecturer

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	0044313
CLASSIFICATION	Lecturer (Level B) or Senior Lecturer (Level C)
SALARY	\$98,775 - \$117,290 p.a.(Level B) \$120,993 - \$139,510 p.a. (Level C)
SUPERANNUATION	Employer contribution of 17%
EMPLOYMENT TYPE	Full-time (continuing) position available
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT	New
CURRENT OCCUPANT	New 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.
	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

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

Position Summary

Located in the Department of Chemical Engineering, this newly-created position offers aspiring academics the opportunity to join a highly successful department within our consistently-ranked world-class Melbourne School of Engineering. The Department of Chemical Engineering has a strong track record of mentoring and developing academic leaders, and our staffs have won many international awards recognising excellence and innovation in research and education.

You will deliver high quality teaching in graduate and undergraduate programs and be expected to build a world-class, independent and well-funded research program in a field that is consistent with the research interests of the Department. These research areas can be summarised as:

Materials Development – including nanotechnology, polymer science and ceramics processing to develop new materials. Applications range from drug delivery to high temperature rockets.

Separations Technology – encompassing solvent extraction, membrane processing, solidliquid separations, adsorption and filtration. Applications are focussed on sustainable energy, carbon dioxide capture, mining and water resources.

Surface Chemistry and Rheology – encompassing colloid science, interfaces, atomic force microscopy, suspensions and non-Newtonian rheology. Applications are in minerals processing, consumer products, food processing and wastewater treatment.

Bioprocessing – the use of biology within engineering processes. Applications include food, biofuels, pharmaceuticals, bio-inspired polymers and tissue engineering.

These four domains are underpinned by cross-domain strengths in applied process engineering and in mathematical modelling.

The Department would also keen to see applications from candidates whose research aligns with: **Energy storage technologies** – encompassing fuel cells, battery technology and catalysis

You will actively collaborate with other research groups in the Department and the Melbourne School of Engineering and interact with industry and/or government agencies. We particularly seek a candidate with strong connections to industry or the ability to build partnerships with key industrial collaborators.

You report to the Head of Department and you will be expected to take an active role in the leadership and administration of the Department.

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

- 1.1.1 A degree in chemical engineering or a related discipline;
- 1.1.2 A PhD in engineering, applied science or a cognate discipline;
- 1.1.3 A track record of quality research as evidenced by research publications in leading journals and conferences;
- 1.1.4 Potential to achieve the highest levels of scholarship in engineering research;
- 1.1.5 Capacity to teach effectively across a broad range of subjects, including the capacity to develop and deliver high quality seminars and lectures and contribute to other teaching activities;
- 1.1.6 Excellent oral and written communication skills;
- 1.1.7 Demonstrated ability to work as part of a team.

In addition to the above for appointment at Level C:

- 1.2.1 A strong publication record and demonstrated independence of scholarship;
- 1.2.2 The development of educational programs and methods;
- 1.2.3 A successful record of attracting competitive research funding;
- 1.2.4 A successful record of engaging industry, government and/or the community in teaching and research;
- 1.2.5 Experience in supervision of research higher degree students.

1.2 DESIRABLE

1.2.1 A track record of engagement with industry and/or government

2. Special Requirements

Not applicable

3. Key Responsibilities

3.1 TEACHING AND LEARNING

- 3.1 Teach subjects in the Master of Engineering, Specialised Masters or in engineering and breadth subjects taught in the University's New Generation Undergraduate degrees, as directed by the Head of Department or Deputy Head;
- 3.2 Providing adequate access for consultation with and mentoring of students;
- 3.3 Initiation and development of high quality subject material;
- 3.4 Supervision of the program of study of undergraduate, graduate or postgraduate students engaged in coursework or smaller research projects;

3.2 RESEARCH

- 3.5 The conduct of research including the publication of high quality scientific research outcomes and the dissemination of research results at leading international conferences;
- 3.6 The preparation of grant applications to external funding agencies;
- 3.7 Presentation of research workshops and seminars within the department;

3.3 ENGAGEMENT

- 3.8 Initiate and foster industry engagement, including the development of collaborative research opportunities;
- 3.9 Active participation in professional activity including consulting, workshops and short courses for external participants and participation in meetings of professional societies; and
- 3.10 Engage in knowledge transfer and community activities beyond the university;

3.4 SERVICE AND LEADERSHIP

- 3.11 Participation in industry and community liaison activities as arranged by the department;
- 3.12 Participation in department activities such as student events and school visits; Contribution to the administrative functions of the Department as required;
- 3.13 Perform other tasks as requested by the supervisor or the Head of the Department;
- 3.14 Undertake Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 5.

In addition to the above, responsibilities for Senior Lecturer will include:

- 3.15 Supervision of major undergraduate, graduate or postgraduate research projects;
- 3.16 Significant role in research projects including, where appropriate, leadership of a research team;
- 3.17 Significant role in knowledge transfer and community engagement;
- 3.18 A major role in planning or committee work.

4. Other Information

4.1 DEPARTMENT OF CHEMICAL ENGINEERING

http://www.chemeng.unimelb.edu.au

The Department of Chemical Engineering is a large Department with approximately 20 teaching and research staff, 30 full time research staff and around 90 PhD students. We host several important Research Centres including the Peter Cook Centre for Carbon Capture and Research, the ARC Dairy Innovation Research Hub, the Particulate Fluids Processing Centre and the ARC Centre of Excellence in Convergent Bio-Nano Science and Technology. Our laboratories are housed across four locations including a substantially renovated main building, a second building devoted exclusively to research, two floors within the nearby Chemistry building and a presence within the Bio21 Institute. Academic staff have been elected as Fellows of the Royal Society, the world's oldest scientific society, the Australian Academy of Science, and the Australian Academy of Technological Sciences and Engineering.

Strong collaborations with industry, government and community partners inform teaching and research programs with real-world requirements. Industry Engagement is a key focus area for the Department. We carry out research projects based on deep collaborations with government and business and we also work with organisations that provide internship project opportunities for students.

We offer four Masters of Engineering degrees (Chemical, Chemical with Business, Biochemical, and Materials) with over 250 students, as well as undergraduate majors within the Bachelor of Science and Bachelor of Commerce.

4.2 MELBOURNE SCHOOL OF ENGINEERING

http://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.

4.3 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

4.4 EQUITY AND DIVERSITY

Another key priority for the University is access and equity. The University of Melbourne is strongly committed to an admissions policy that takes the best students, regardless of financial and other disadvantage. An Access, Equity and Diversity Policy Statement, included in the University Plan, reflect this priority.

The University is committed to equal opportunity in education, employment and welfare for staff and students. Students are selected on merit and staff are selected and promoted on merit.

4.5 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.

5. 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.