



THE UNIVERSITY OF
WESTERN AUSTRALIA
Achieve International Excellence

Engineering, Computing and Mathematics

Associate Professor (Mining)

Information for Candidates
October 2011



Contents

Appointment of Associate Professor (Mining)

Contents

The University of Western Australia	3
Role, Key Responsibilities, Selection Criteria and Conditions of Employment	4
The Faculty of Engineering, Computing and Mathematics	5
Western Australia and Perth	6
Applications	7

The University of Western Australia

The University of Western Australia – a member of Australia’s Group of Eight – combines the traditions of the world’s old and great universities with the vitality and excitement of innovative study and research in the twenty-first century. It is recognised internationally as an excellent teaching and research university, and a leading intellectual and creative resource to the community it serves.

The University of Western Australia is a high-quality research-intensive university with a broad and balanced coverage of disciplines in the arts, science and major professions. It is Western Australia’s oldest university, established in 1911, and currently has a student population of approximately 22,000.

The University has acquired an international reputation for excellence and enterprise and is regarded as one of Australia’s best research institutions. Its strong research culture sees it attract high levels of competitive research funding. At the same time the University places great emphasis on high quality in teaching and learning, and is committed to the development of innovative and responsive programmes. It has focused on the teaching-research nexus, so that teaching and learning take place in an atmosphere of research scholarship.

The University’s high quality teaching and research ensure it remains the university of preference for Western Australia’s highest achieving school leavers, as well as attracting high-calibre undergraduate and postgraduate students from around the nation and overseas. The quality of the student population is extremely high by national and international standards.

The University is recognised nationally and internationally for the quality of its academic staff and has strong strategic partnerships with industry, the professions and government. It operates in collaboration with other research intensive universities in Australia and around the world. The University of Western Australia graduates are highly competitive internationally, achieving success in higher study and in wide-ranging fields of employment. Many graduates have risen to prominence in leadership roles in industry, government, education and the professions, in Australia and internationally.



Role, Key Responsibilities, Selection Criteria and Conditions of Employment

Role

The Associate Professor (Mining) will provide academic leadership, coordinate undergraduate and postgraduate teaching and develop research in the field of mining engineering.

In the resource rich sector of Western Australia the opportunities for partnership and collaborative research are extensive.

Key Responsibilities

- Provide academic leadership in teaching and research to maintain the quality of teaching/training and research.
- Coordinate and contribute to teaching and training activities related to undergraduate/postgraduate students.
- Conduct independent and collaborative research in mining engineering.
- Coordinate or contribute to competitive funding applications, including applications for fellowship and research grants.
- Prepare research reports and papers for publication as author/co-author, and present research findings at seminars and conferences.
- Other duties as directed.



Selection Criteria

- PhD in a relevant discipline to mining engineering.
- Relevant research experience at an appropriate level in one or more of the fields of (but not limited to) mining geomechanics, mine backfill, mine closure, geostatistics, resource modelling and simulation, ore reserve estimation, rock mechanics, optimisation, system analysis and simulation, and automation.
- Track record of refereed research publications, relative to the opportunity to do so.
- Track record of successful supervision of postgraduate research students, relative to the opportunity to do so.
- Teaching experience at the tertiary level is an advantage.
- Highly developed written and verbal communication skills.
- Highly developed organisational skills and demonstrated ability to set priorities and to meet deadlines.
- Ability to work independently, show initiative and work productively as part of a team.

Conditions of Employment

This is an ongoing appointment. An attractive and flexibly constructed remuneration package will be negotiated and will include:

- Employer contribution to superannuation of 17% (employees are required to contribute 7% also);
- Recreation leave of 20 working days per annum;
- Long Service Leave after ten years;
- Eligibility for sabbatical leave of one year after six years continuous service.

In addition, reasonable assistance will be provided for relocation expenses including airfares for the appointee and dependants.

Empowering People to Change the World

The Faculty of Engineering, Computing and Mathematics (ECM) has a long track record of distinction in research and teaching, and in serving the needs of the local and international community. Focusing on the challenges of the 21st century the Faculty provides a dynamic, exciting and engaging environment that breeds excellence and fosters ingenuity, creating graduates and research that change the world.

In 2012 the Faculty is embarking on an exciting range of new courses across Engineering, Computing and Mathematics. Through a combination of hands-on courses, industry projects and theoretical learning students will graduate as broadminded problem-solvers with a strong practical and technical knowledge base.

The Faculty will offer majors in Engineering Science, Computer Science, Applied Computing, Mathematics and Statistics and Quantitative Methods. Graduates of the Engineering Science and Computer Science majors will have the opportunity to follow their undergraduate degree with the Master of Professional Engineering, a professionally accredited postgraduate qualification.

The Faculty conducts world class research and is home to two Federation Fellows and the 2007 Prime Minister's Young Scientist of the Year for Physical Sciences. In a response to environmental pressures and industry demand the Faculties current research focus is on six key themes of Bioengineering, Energy and Minerals, Engineering Education, Environment and Infrastructure, Mathematics and Computation for Complex Systems and Sensors and Sensing Systems.

Corporate partnerships between the Faculty and industry promote the development of research and technology to discover innovative solutions for the problems of tomorrow. Partnership projects include the Monadelphous Integrated Learning Centre, sponsorship of research infrastructure, industry named chairs and consultancy services. The wide range of state-of-the-art research facilities, combined with strong links and partnerships with industry, ensure the development of new technologies and strategies which benefit the global community.

School of Civil and Resource Engineering

The School of Civil and Resource Engineering offers a range of engineering programs which equip graduates with the practical and theoretical skills necessary to become innovative problem-solvers. Our Engineers are concerned with the design, construction and maintenance of the physical environment. They are involved with the provision of minerals, energy, water and infrastructure and will play a vital role in finding innovative, responsible solutions to combat the challenges society will face in the future.

The School offers a Mining Engineering program that delivers high quality graduates to the local, national and international mining industries. From 2013 students completing the new Master of Professional Engineering will have the option to complete a Mining Engineering program. This degree has been developed in consultation with industry to equip graduates with the advanced technical expertise, critical thinking and professional skill they need to excel in the 21st Century.

The School conducts a wide range of research in all areas of Civil and Resource Engineering. In the resource-rich state of Western Australia mining is one of the School's key research fields. Current areas of research within the mining field include optimisation and simulation of mining systems, underground backfill, covers for tailings storage facilities, contaminant treatment with electrokinetics, open pit slope stability, hydraulic fracturing, and blast fragmentation and vibration modelling.

Western Australia and Perth

The resource-rich State of Western Australia is the economic powerhouse of Australia. Western Australia is the principal Australian supplier of natural resources and energy to international partners, including China, India, Japan, South Korea and much of South-East Asia. Western Australia's diverse inventory of minerals and energy, as well as its agricultural and fisheries resources, account for 25 per cent of the nation's exports and place the State at the heart of Australian economic growth and transformation.

Western Australia and its capital Perth occupy the same time zone as 60 per cent of the world's population and the nations that promise the greatest economic growth of the 21st century. In recognition of the State's unique position, The University of Western Australia has initiated a series of strategic discussions under the banner 'In The Zone' – www.zone.uwa.edu.au. There was a major international conference at the end of 2009 and the discussions will continue in 2011.

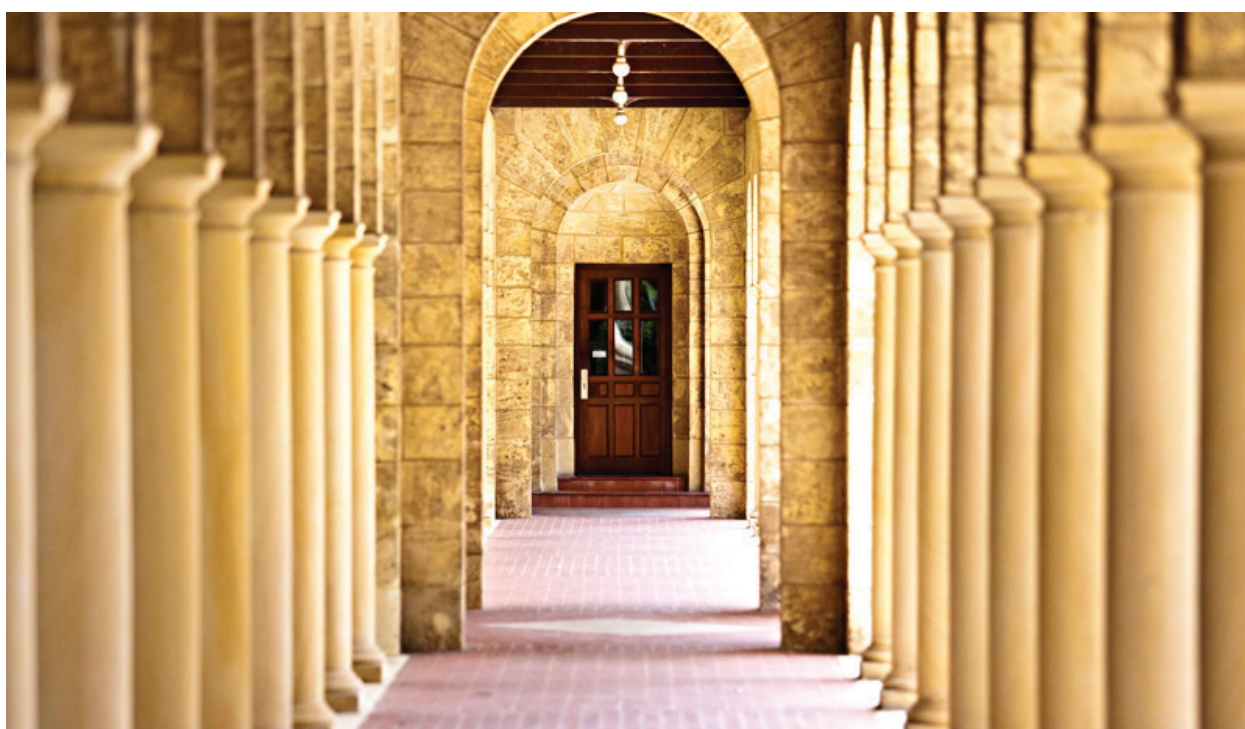
Western Australia is also Australia's largest state, covering some 250 million hectares and 12,500 kilometres of coastline, including some of the most ancient landscapes in the world. The State's population is matching the rapid growth of the economy and is nearing two million.

Perth is a cosmopolitan city, with wide ethnic and cultural diversity. The city centre is on the Swan River 12 kilometres from the Indian Ocean port of Fremantle.

The city enjoys a Mediterranean climate, with more hours of sunshine than any other capital city in Australia. Summers are hot and dry and the winters mild and wet. Perth's world-famous beaches and rivers, extensive parklands and variety of restaurants and cafes provide a superb living environment. For more information see: www.westernaustralia.com.

Perth is well served with art galleries, theatres and cinemas and is home to the WA Symphony Orchestra, the WA Ballet and the WA Opera. The cultural highlight of the year is the Perth International Arts Festival, founded and owned by The University of Western Australia – www.uwa.edu.au/piaf

Western Australia's five universities and wide variety of public and private schools, vocational institutions and English language colleges provide quality assured education with flexible study pathways and state-of-the-art facilities. Perth continues to build its reputation as a destination for international students seeking a quality education - www.pertheducationcity.com.au



Applications

Thank you for your interest. If you wish to proceed, the following information will assist you with your application. Refer also to the selection criteria on page 4.

Written applications should be sent to Director, Human Resources, The University of Western Australia, M350, 35 Stirling Highway, Crawley WA 6009 or emailed to jobs@uwa.edu.au by the closing date. Written applications should quote the reference number and include:

- Sufficient information to demonstrate that your capabilities fulfil the requirements of the position. You do not need to provide a specific statement addressing each selection criterion, however, you may do so. You will be required to demonstrate that you meet all the relevant selection criteria to be considered for an interview;
- A curriculum vitae that provides your personal details, qualifications and work history;
- A list of any publications;
- The names, email, mailing addresses and the telephone contact details of three referees who can be contacted for a confidential report. Please note that your permission will be sought before referees are contacted.

Please also note: If you are the successful candidate for this position and you are not an Australian or New Zealand citizen, or a permanent resident of Australia, you will be required to obtain an entry visa to work here. The University of Western Australia will sponsor you for employment in Australia under the Employer Nomination Scheme.

Closing Date

The closing date for applications is 25 November 2011.

Enquiries and Further Information

If you wish to discuss the position in confidence, please contact:

Winthrop Professor Liang Cheng
Head of School; School of Civil and Resource Engineering
head@civil.uwa.edu.au
08 6488 3076

