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## POSITION DESCRIPTION Academic Positions (In addition to the Position Classification Standards)

Position Title:	Associate Research Fellow	Level:
Faculty/Division:	Engineering and Information Sciences	
Department/Location:	Location: School of Civil, Mining and Environmental Engineering	

#### Primary Purpose of the Position:

Conduct research for a CRC RM project involving Laboratory, Field and Theoretical Investigation of track stability and dynamic resiliency using the USP and UBM inclusions.

#### Position Environment:

The Faculty of Engineering & Information Sciences is research intensive and has approximately 5,000 undergraduate and postgraduate students onshore and offshore, approximately 260 academic staff and approximately 50 technical and 40 administration staff. The School of Civil, Mining and Environmental has approximately ten laboratories and conducts large, industrial scale research projects in structural, geotechnical and mining engineering.

### Major Accountabilities/Responsibilities:

Responsibilities		Outcome	
1.	Work towards research objectives, ensuring close liaison with chief investigators.	Maintain correct project direction and incorporate all research ideas and feedback from the research team	
2.	Critical review of the available literature.	Understanding the current State-of-the-Art	
3.	Planning and execution of experimental work and data analyses.	Obtain good quality laboratory test result	
4.	Execution of appropriate computational techniques and model development.	Predictive tool	
5.	Contribute to high quality technical publications including peer reviewed journal papers.	Dissemination of research outcomes to national and international community	
6.	Prepare technical reports, including the Annual ARC reports.	Fulfilment of ARC requirements	
7.	Involvement in related geotechnical studies and assistance to chief investigators in drafting future research proposals for grant agencies.	Secure related research grants for future extensions of this research	
8.	Communicate and consult with staff on workplace and staffing matters.	To foster direct relationships with staff and enhance engagement with the organisation.	
9.	Observe principles and practices of Equal Employment Opportunity.	To ensure fair treatment in the workplace	
10.	Have WH&S responsibilities, accountabilities and authorities as outlined in the <u>http://staff.uow.edu.au/ohs/commitment/responsibilities/</u> document	To ensure a safe working environment for self & others.	

### Inherent Requirements:

This position description outlines the major accountabilities/responsibilities and the selection criteria against which you will be assessed as suitable for the position. As such there will be specific job requirements that we refer to as Inherent Requirements.

Inherent Requirements refer to your ability to:

- Perform the essential duties and functional requirements of the job;
- Meet the productivity and quality requirements of the position;
- Work effectively in the team or other type of work organisation concerned; and
- Do the job without undue risk to your own or others health, safety and welfare at work.

If you have any injuries, illness, disorder, impairment, condition or incapacity that may affect your ability to perform the inherent requirements of the position, we encourage you to discuss this with the University to assist in the process of identifying reasonable adjustments to enable you to perform the duties of the position. The University wants to place you in the best situation to use your skills effectively in the position you are applying for at the University.

#### Reporting Relationships:

Position Reports to:	Prof Buddhima Indraratna, Research Director, Centre for Geomechanics and Railway Engineering
The position supervises the following positions:	N/A

#### Key Relationships:

#### Contact/Organisation:

CME Laboratory Manager

Purpose & Frequency of contact As required.

## Key Challenges:

- 1. Research Innovation.
- 2. Contribute to high-calibre publications.
- 3. Experimental skill.
- 4. Knowledge of constitutive modelling.

#### SELECTION CRITERIA - Knowledge & Skills:

#### Essential:

- Experience in fundamental geotechnical testing.
- Experience in computational and numerical modelling.

## **SELECTION CRITERIA - Education & Experience:**

Essential:

- Bachelor of Civil Engineering or related field and recent PhD in Civil (Geotechnical) Engineering or related discipline.
- Experience in geotechnical testing.
- Experience in computer and numerical modelling including discrete element modelling.

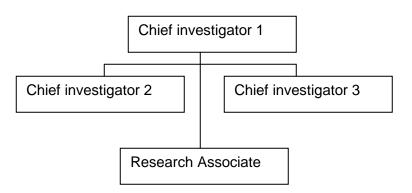
# Personal Attributes:

Energetic, independent, adaptable and innovative

# Special Job Requirements:

Occasional field trip may be necessary.

# Organisational Chart:



# Approval:

Approved by Head of Unit:	B. Indraratie		
Date:	18/07/2014		
Approved by Human Resources:			
Date:			

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## POSITION CLASSIFICATION STANDARD - Research Only

Level: A

Title: Associate Fellow

#### Description

A position classification standard describes the broad categories of responsibility attached to research-only academic staff at different levels. The standards are not exhaustive of all tasks in research-only academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. The standards provide an adequate basis to differentiate between the various levels of employment and define the broad relationships between classifications.

Progression through an academic career will normally be based on research, teaching, administrative functions and contribution to the profession. The balance of functions will vary according to level and position over time. It is only in exceptional circumstances that promotion would be solely on the research only position classification standards.

- General Standard
- Specific Duties
- Skill Base

## General Standard

A Level A research-only academic is expected to contribute towards the research effort of the institution, and to develop her/his research expertise through the pursuit of defined properties relevant to the particular field of research.

## Specific Duties

Specific duties required of a Level A research-only academic may include

- The conduct of research under limited supervision either as a member of a team or, where appropriate, independently, and the production or contribution to the production of conference and seminar papers and publications from that research.
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- Limited administrative functions primarily connected with the area of research of the academic.
- Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff.
- Occasional contributions to teaching in relation to his/her research project(s).
- Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures.
- Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental and/pr faculty meetings and/or membership of a limited number of committees.
- Advice within the field of the staff member's research to postgraduate students.
- A Level A research-only academic shall work with support, guidance and/or direction from staff classified at Level B and above and with an increasing degree of autonomy as the research academic gains in skill and experience.

#### Skill Base

A Level A research-only academic will normally have completed four years of tertiary study in the relevant discipline or have equivalent qualifications or research experience. In many cases a position at this level will require an honours degree or higher qualifications or equivalent research experience. Research experience may have contributed to or resulted in publications, conference papers, reports or professional or technical contributions which give evidence of research potential.

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