



## Faculty of Engineering and Built Environment

### Postdoctoral Researchers in Geomechanics (Level B) – 2 positions

#### School of Engineering

#### Position No. 917

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### General Information

The successful candidates will join the Priority Research Centre for Geotechnical and Materials Modelling, working under the direction of Professor Scott Sloan (see <http://livesite.newcastle.edu.au/cgmm> for a description of the Centre's activities). The appointees will focus on the stability of underground openings in 2D and 3D using finite elements and computational limit analysis. Themes to be investigated will include the stability of tunnels, disused mine workings, storage facilities and sinkholes in soil and rock. Knowledge of plasticity theory, constitutive modelling, finite elements, and limit analysis would be an advantage.

Support to attend national and international conferences is available.

The positions are available for a fixed term of three years.

### Position Description

#### Selection Criteria

- A PhD in computational mechanics or computational geomechanics
- A strong background in plasticity theory, solid mechanics and finite elements
- A broad understanding of computational methods.
- Effective communication skills

The Level B Research Academic Classification Standard should be viewed before applying. It can be found at the end of this document.

### Conditions and Benefits

Academic Level B - \$67,689 per annum to \$80,382 per annum. Salary level within this range will be dependent on the qualifications and experience of the successful applicant.

The basic contribution for superannuation will be made by the University into Unisuper Accumulation 1. Contributory superannuation is not available with this appointment.

The successful applicant will be offered employment on an Australian Workplace Agreement (AWA). You may choose to have your conditions of employment covered by an AWA or a Certified Agreement.

Further information on benefits and conditions of employment is available at the following link:  
<http://www.newcastle.edu.au/service/employment/conditions.html>

### Further Information

For additional information on the position contact Professor Scott Sloan, ARC Federation Fellow, Priority Research Centre for Geotechnical and Materials Modelling, Discipline of Civil, Surveying and Environmental Engineering on +61 2 4921 16059 or email [Scott.Sloan@newcastle.edu.au](mailto:Scott.Sloan@newcastle.edu.au)  
You can also visit the Centre website at <http://livesite.newcastle.edu.au/cgmm>



## Related Links

- [School of Engineering](#)
- [University of Newcastle Annual Report](#)

## Closing Date

Applications close on Monday 21 April 2008.

**Note:** All applications must include a statement addressing each selection criteria.

All applications must include the Application for Employment Cover Sheet ([PDF](#) or [MS Word](#)) including an email and/or fax address for each nominated referee.

Please read the important information contained via the [How to apply](#) link before submitting your application.

## How to Submit Your Application

DO NOT send your application to the Faculty or Division in which the position is located.

### For Internal applicants

**Current University of Newcastle staff members MUST use [HRonline](#) to lodge their application.**

- Log into [HRonline](#)
- Click on University Job Vacancies
- Click Apply for a Vacancy and select the position you wish to apply for

### For External applicants

Please forward your application **by email** to: [employment@newcastle.edu.au](mailto:employment@newcastle.edu.au) and ensure you quote the position number and title in the subject line of your email.

Attachments must be in either Word Version 6.0 (.doc) or later, or Rich Text Format.

Applicants who do not have access to email can still provide a paper application, in one of the following ways:

You should staple your application in the top left corner with the Application For Employment Cover Sheet ([PDF](#) or [MS Word](#)) on top. Please do not submit your application(s) in binders, folders or plastic sleeves as often the applications are required to be photocopied by Human Resource Services staff.

1. By hand, ensuring that you include one (1) copy of your complete application to:

Human Resource Services  
1st Floor, Eastern Wing  
The Chancellery  
Ring Road  
Callaghan Campus  
The University of Newcastle

2. By mail, ensuring that you include one (1) copy of your complete application to:

Client Service Teams  
Human Resource Services



University of Newcastle  
CALLAGHAN NSW 2308  
Australia

Envelopes containing your application should be clearly marked "Confidential", and indicate the Position Number for which you are applying.

3. By fax, sending one (1) copy of your application to:  
a confidential fax on (+61 2) 4921 5285.

*The University values [equity and diversity](#).*



# LEVEL B *Research-only Academic*

## **General Standard**

A Level B research-only academic is expected to carry out independent and/or team research within the field in which he/she is appointed and to carry out activities to develop his/her research expertise relevant to the particular field of research.

## **Specific Duties**

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

- \* The conduct of research either as a member of a team or independently, and the production of conference and seminar papers and publications from that research.
- \* Supervision of research-support staff involved in the staff member's research.
- \* Guidance in the research effort of junior members of research-only academic staff in his/her research area.
- \* Contribution to the preparation, or where appropriate individual preparation, of research proposal submissions to external funding bodies.
- \* Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- \* Administrative functions primarily connected with his/her area of research.
- \* Occasional contributions in the teaching program within the field of the staff member's research.
- \* Co-supervision, or where appropriate supervision, of major honours or postgraduate research projects within the field of the staff member's area of research.
- \* Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or departmental and/or faculty meetings and/or membership of a limited number of committees.

## **Skill Base**

A Level B research-only academic will normally have completed a relevant doctoral qualification or have equivalent qualifications or research experience. In addition he/she may be expected to have had post-doctoral research experience which has resulted in publications, conference papers, reports or provisional or technical contributions which give evidence of research ability.