

2 PhD positions at University of Adelaide, South Australia

We are seeking highly motivated PhD candidates for a research project supported by Australian Research Council (ARC) with an Industry partner, OZ Minerals, based in South Australia.

The aim of the project is to develop a new damage model for rock burst in deep mines under high stress and high temperature within the context of micromechanics principles. This will facilitate modelling damage processes in deep mines leading to identification of rock burst prone areas to avoid catastrophic failures. Development of the micromechanics based model will be carried out in parallel with extensive rock mechanics experiments. The developed model will then be implemented in ABAQUS to simulate an actual deep mining operation.

Candidates must have an MSc or equivalent degree in relevant engineering disciplines (Civil/Geotechnical Engineering or Mining Engineering) with strong knowledge or experience in computational geomechanics or in experimental rock mechanics. Strong maths and physics knowledge is also desirable. Experience in programming (Fortran and/or C++) and ABAQUS are preferred.

As English is the language of instruction at the University of Adelaide, proficiency in speaking, listening, reading and writing in English is essential. Therefore, candidates must meet the minimum language requirements which were set out in the following link.

http://www.adelaide.edu.au/graduatecentre/handbook/03-considerations-in-applying/02-entry-requirements/03-english-language/

All successful applicants will receive an Australian Postgraduate Award (APA) which provides an annual living allowance of \$25,849 in 2015 for the normal duration of the program.

The full-time post will be available in February 2016 for duration of three years.

The application should contain a cover letter, CV and two referees. Please send your application only via email before 10th of October.

Further inquiries and applications can be directed to Dr. Murat Karakus, murat.karakus@adelaide.edu.au

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