The University of Newcastle, Australia

PhD Scholarship

Computational modelling of hydraulic fracture

A PhD scholarship post exists for the computational modelling, simulation, and analysis of hydraulic fracturing in Australian coal seam geology. This multiphysics research program will develop a variational approach to fracture mechanics, as well as associated numerical solution algorithms, to simulate three-dimensional hydraulic fracture involving complex systems of cracks in porous geomaterials.

Candidates should have a Civil Engineering background, and have a strong interest in Computational Solid Mechanics. Finite element experience is needed for this position. Applicants with experience in one or more of the fields of fracture mechanics, poroelasticity, numerical analysis, and scientific computing are preferred.

Expressions of interest, along with a CV, should be submitted to Dr. Chet Vignes (email: Chet.Vignes@newcastle.edu.au).

The scholarship is available to commence immediately for a period of three years.

**Salary Scale:** AUD 30,000 – AUD 35,000 p.a.

**Closing date:** 13 March 2015