



INSTITUTE OF
EARTH SCIENCE AND ENGINEERING



THE UNIVERSITY OF AUCKLAND
NEW ZEALAND

PhD Opportunities: Deep Geothermal Resources, Taupo Volcanic Zone, New Zealand.

Auckland, New Zealand.

The Institute of Earth Science and Engineering is engaged in a multi-year collaborative project to investigate the potential utilisation of deep geothermal resources in New Zealand. Applicants are invited for three PhD positions, each of which focuses on unravelling the deep structure of the Taupo-Reporoa Basin, Taupo Volcanic Zone, New Zealand. This region lies within one of the world's premier silicic volcanic provinces and hosts >10 high temperature (>250°C) geothermal fields.

Stipend for minimum 3 years at NZ\$25k per annum (tax free) plus fees.

Project 1: Deciphering the 4D geological framework of the Taupo-Reporoa Basin: implications for deep hydrothermal flow. This project has a strong field geology focus and requires a high level of competence in volcanic stratigraphy and structural geology. In addition, the successful candidate will work with experts in applied geophysics to synthesise geological field observations with various geophysical data sets. This project will be supervised by Dr Julie Rowland and Assoc. Prof. Paul Hoskin, IESE, University of Auckland, with an advisory panel comprising Dr Greg Bignall, GNS Science, and Professor Colin Wilson, Victoria University, Wellington.

Contact: j.rowland@auckland.ac.nz for further information.

Project 2: Geophysical characterisation of mid-crustal structure within the Taupo-Reporoa Basin: Identifying deep geothermal flow paths. This project requires a high level of numeracy and excellent analytical skills. Experience in electrical methods and proficiency in MATLAB or UNIX would be an advantage. This project will be supervised by Dr Stephen Onacha, Dr Eylon Shalev and Dr Julie Rowland, IESE, University of Auckland.

Contact: s.onacha@auckland.ac.nz for further information.

Project 3: Joint interpretation of microearthquake and electromagnetic signals from down-hole sensors in geothermal fields. This project requires a high level of numeracy and excellent analytical skills. Experience in electrical methods and / or seismology, and proficiency in MATLAB or UNIX, would be an advantage. This project will be supervised by Dr Stephen Onacha, Dr Eylon Shalev and Prof. Peter Malin, IESE, University of Auckland.

Contact: s.onacha@auckland.ac.nz for further information.

Applicants should provide a full CV (including academic grades and courses completed), statement of motivation, evidence of proficiency in English (for those applicants whose first language is not English), and contact details of 3 referees.

Review of applications will begin **20 July 2009**, and continue until position is filled. Please send electronic applications to Dr Julie Rowland (j.rowland@auckland.ac.nz).

The University of Auckland has an equal opportunities policy and welcomes applications from all qualified persons. Please see the following web-link for general information and entry criteria:

<http://www.auckland.ac.nz/uoahome/for/international-students>