



PhD position in Geochemistry and Igneous Petrology

The [Earth Dynamics Research Group](http://scieng.curtin.edu.au/wa-school-of-mines/applied-geology/) at Curtin University has an open PhD position for research into the petro-genesis of Proterozoic igneous rocks in northern Queensland. The candidate will join a diverse team of ~15 researchers working on the IGCP 648 project of Supercontinent Cycles and Global Geodynamics, led by ARC Australian Laureate Fellow Prof. Z.X. Li, within the Department of Applied Geology (<http://scieng.curtin.edu.au/wa-school-of-mines/applied-geology/>). The available position is three years full-time with the successful applicant being offered a competitive scholarship stipend.

This project aims to study the petrogenesis and chemistry of Palaeo- to Mesoproterozoic igneous rocks of northern Queensland along an east–west corridor across possible terrane boundaries. The study aims to decipher the petrogenesis and tectonic environments under which the various magmatic series were generated. The candidate will carry out petrography, major and trace element analysis, isotope geochemistry (especially ϵNd and ϵHf), and geochronology (especially SHRIMP zircon U–Pb). The regional tectono-magmatic history reconstructed in this study will be compared with that of other continents (e.g. NW Laurentia and W Siberia) that were possibly connected to NE Australia in the supercontinent Nuna.

This study is part of a field-based programme of multi-disciplinary projects (sedimentology, structural geology, metamorphic and igneous petrology, and geochronology) that aim to identify and characterize terranes that accreted to the eastern margin of the North Australian Craton between 2.0 and 1.5 Ga, and possibly other tectonic events thereafter.

Requirements:

Applicants must have either 1st class Honours (or equivalent qualification with research experience) or a MSc in the Earth sciences or other relevant fields. Experience working in the field will be beneficial.

How to express your interest:

Please contact **Dr Josh Beardmore** (josh.beardmore@curtin.edu.au) if you are interested in developing an application. Please include the following:

- A curriculum vitae and a list of publications (if applicable).
- Details of BSc (Hons.) and MSc including: copies of transcripts showing lists of courses with grades and the abstract of your thesis (if applicable).
- A brief statement about your research interests, motivation and skills.
- Names, addresses and emails of two references that may be contacted for a recommendation letter.