



Holly Meadows

Work Address: Room 168, Building 314,
Department of Applied Geology

Email: h.meadows@postgrad.curtin.edu.au



Brief Summary

No major ore deposits have been discovered in the Capricorn Orogen, WA, for some time due to complex reworking in the ancient orogen, and hidden deposits undercover. Improving the prospectivity of the Capricorn Orogen requires the integration of structural, geochemical and geochronological analysis to decipher the complex mineral systems and identify geochemical 'footprints' of mineralisation. This project involves field work, structural observations and measurements, and petrological description to characterise deformed and mineralised rocks in the Capricorn Orogen. Targeted geochemical analysis, including stable isotopes, trace element geochemistry and U-Pb petrochronology is employed to decipher fluid sources, metasomatic and metamorphic processes, and physico-chemical conditions of ore precipitation. The integration of these analyses is used to constrain the multi-stage fluid evolution and deformation in complex systems.

Education: MEng University of Liverpool, UK

Research interests: Ore deposit geochemistry, structural geology

Thesis title: Mineral Geochemistry, Deformation and Ore Fluid Evolution in the Capricorn Orogen, WA

Supervisors: Prof. Steve Reddy, A/Prof. Chris Clark

Links: <https://www.linkedin.com/in/holly-meadows-39461246/>