



Andreas Zametzer

Work Address: Building 312, Room 304,
Department of Applied Geology, School of
Earth and Planetary Sciences, Curtin
University, Kent St, Bentley, Perth, WA 6102

Email:
andreas.zametzer@postgrad.curtin.edu.au



Brief Summary

I am a German desert rat and a passionate field geologist with a weakness for controlled adventures. I have been studying Geosciences/Geology at German universities in Munich and Jena and was awarded a Master's degree from the Friedrich Schiller University Jena in 2019. The main emphasis of my previous studies was sedimentology and sedimentary basin analysis. My PhD research at Curtin University focuses on reducing exploration risk by enhancing geological knowledge through novel isotopic approaches, using first-cycle detrital minerals. Pb-Pb signatures in K-feldspar and plagioclase as well as U-Pb, Sr and chemical signatures in apatite are utilized to study rock genesis and to track crustal source regions. The case study area are the volcano-sedimentary Black Flag Group (2692 – 2655 Ma) and the unconformably overlying late basins in the Archean Yilgarn Craton in Western Australia. They are part of the poorly exposed granite-greenstone successions of the Eastern Goldfields Superterrane that host several world-class gold deposits. My new isotope toolkit aids to address the limitations of classical U-Pb zircon geochronology and to establish a mineral scale geochemical barcode of the investigated strata. A better understanding of the stratigraphy and direct constraints on the provenance can assist in fingerprinting specific gold mineralization horizons within the Black Flag Group, and thus are of significant economic relevance. The project is pertinent to both the Geological Survey of Western Australia (GSWA) and industry (Northern Star Resources Ltd) and generously funded by an ARC linkage grant between those partner organisations and Curtin University.

Education: BSc Geosciences (LMU and TUM Munich), MSc Geosciences (FSU Jena)

Research interests: Sedimentology, Isotope Geology, Economic Geology & Ore Deposits, Archean Earth

Thesis title: Old but gold: Reducing exploration risk by applying novel isotope tools to the Archean Black Flag Group and the Late Basins, Yilgarn Craton, Western Australia

Supervisors: Prof Chris Kirkland, Dr Milo Barham, Prof Chris Elders

Conferences: Early Career Sedimentologist Meeting (ECSM) 2018, Hannover, Germany

Links: https://www.researchgate.net/profile/Andreas_Zametzer