



Resources Technology and Critical Minerals Trailblazer

Transforming how industry, universities and research work together

Supporting optimization of resource operations by developing new technologies

Equipping innovators with the skills and knowledge to transform the sector

Project

Fast, Automated Acquisition of Mineral Chemistry for Mineral Exploration



 Curtin University

IN COLLABORATION WITH

Fast, Automated Acquisition of Mineral Chemistry for Mineral Exploration

Project Description

Problem

Mineral explorers are increasingly applying advanced techniques to increase potential exploration space and reduce risk.

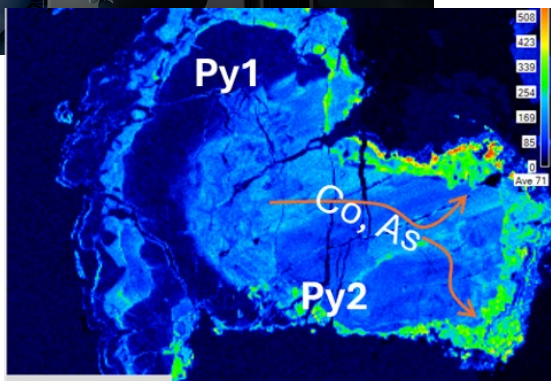
Mineral chemistry and age dating services are in demand, but current procedures are labour intensive and costly with high turnaround times.

Aims

Develop new techniques to support mineral industry applications.

Automate analytical procedures and protocols to reduce time and cost.

Develop a commercially viable model to deliver services to industry.



Partnerships

Collaborators

James Cook University – Physical Science, Geoscience

Industry – Anglo American, South32, Glencore (Mount Isa Mines)

Government – Queensland Geological Survey

Project Lead

Assoc. Prof. Yang Liu, JCU

Contributions

Industry ~ \$1.1m

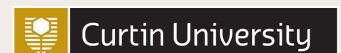
Trailblazer ~ \$0.2m

Government ~ \$0.4m

Total Project Value ~ \$1.7m

April 2026

For further information on JCU Trailblazer projects please send enquiries to: EGRU@jcu.edu.au



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