

### **Position Description**

Position Title: Research Fellow

Position Classification: Level B

Position Number: NEW

Faculty/Office: Faculty of Science

School/Division: School of Earth Sciences

Centre/Section: Centre for Exploration Targeting

Supervisor Title: Professor

**Supervisor Position Number:** 312326

#### Your work area

The School of Earth Sciences at The University of Western Australia undertakes diverse fundamental and applied research with recognised strengths in mineral geoscience, petroleum geoscience, geochemistry, hydrogeology and marine geoscience. The School has an international reputation in research and teaching with strong support from the mineral exploration, petroleum and groundwater industries, and well established collaborations with industry and state and federal government agencies.

The School has been recognised internationally, with Earth and Marine Science ranked 44th in the 2017 QS World University subject rankings and Excellence in Research for Australia (ERA) ratings above to well above world standard across the Earth Sciences sub disciplines. Undergraduate and postgraduate teaching programs are underpinned by research activity and expertise, and the School attracts high calibre higher degree by research students into PhD and MPhil programs.

# Reporting structure

Reports to: Professor

#### Your role

As the appointee, you will provide leadership within the team and initiate and maintain productive relationships with members of the Loop Consortium under the direction of Professor Mark Jessell and Dr Mark Lindsay (CET). The appointee will undertake the development of algorithms and procedures to allow automated construction of 3D geological models for Project 6 within the MinEx CRC and will be involved in the supervision of postgraduate students.

Develop and apply algorithms for extracting, processing and input of geological drilling and other data

Extend previously developed techniques to better characterise, understand and reduce model uncertainties

Work with CRC participants to guide development of new data sets for optimal model construction

Prepare scientific reporting and presentations for the project

Produce publications for peer-reviewed journals and attend scientific conferences to disseminate results

Communicate and collaborate with the different stakeholders and participants of the CRC and Consortium when required

Develop new collaborations

Contribute to the supervision and training of postgraduate students

Other duties as directed

### Your specific work capabilities (selection criteria)

PhD qualification

Experience in geoscience research

Proven track record in one or more of 3D modelling, uncertainty and/or sensitivity analysis and integrated geophysical interpretation

Demonstrate achievement with a record of publications commensurate with the years in the academic environment

Experience with successful collaboration with government and industry partners

Experience and willingness to supervise students and staff

Scientific computing capabilities essential

Well-developed organisational skills and ability to set priorities and to meet deadlines

Ability to work independently, show initiative and work productively as part of a team

Well-developed written and verbal communication skills

# Special requirements

There are no special requirements

## Compliance

## Workplace Health & Safety

All supervising staff are required to undertake effective measures to ensure compliance with the Occupational Safety and Health Act 1984 and related University requirements (including Safety, Health and Wellbeing Objectives and Targets).

All staff must comply with requirements of the Occupational Safety and Health Act and all reasonable directives given in relation to health and safety at work, to ensure compliance with University and Legislative health and safety requirements. Details of the safety obligations can be accessed at <a href="http://www.safety.uwa.edu.au">http://www.safety.uwa.edu.au</a>

#### **Inclusion & Diversity**

All staff members are required to comply with the University's Code of Ethics, Code of Conduct and Inclusion and Diversity principles. Details of the University policies on these can be accessed at <a href="http://www.hr.uwa.edu.au/policies/policies/conduct/code">http://www.hr.uwa.edu.au/policies/policies/conduct/code</a>, <a href="http://www.web.uwa.edu.au/inclusion-diversity">http://www.web.uwa.edu.au/inclusion-diversity</a>.