

<b>Position Title</b>	Research Fellow
<b>Classification</b>	Level B
<b>School/Division</b>	School of Earth Sciences
<b>Centre/Section</b>	Australian Centre for Excellence in Antarctic Science
<b>Supervisor Title</b>	Senior Lecturer
<b>Supervisor Position Number</b>	307518
<b>Position Number</b>	NEW

## **Your work area**

---

The School of Earth Sciences at The University of Western Australia undertakes a diverse range of fundamental strategic and applied research across the geosciences. The School has an established international reputation in research and teaching with strong support from industry, and well established collaborations with state and federal government agencies. The School has been recognised internationally, with Earth and Marine Science ranked 30th in the 2022 QS World University subject rankings.

## **Reporting structure**

---

Reports to: Senior Lecturer

## **Your role**

---

This position is part of the ARC Australian Centre for Excellence in Antarctic Science (ACEAS), a national-scale, University-led, international centre focused on helping the world community prepare for climate risks emerging from East Antarctica and the Southern Ocean by integrating knowledge of the ocean, atmosphere, cryosphere and ecosystems, and their interplay. ACEAS will grow to support the activities of around 150 researchers, administrative staff, and students, with exciting opportunities to collaborate across disciplinary and institutional boundaries. Further information on ACEAS is available at <https://antarctic.org.au/>

As the appointee, your work will focus on making new interpretations of subglacial geology to characterise the ice sheet bed and constrain bed-conditions for a better knowledge of glacial processes. You will engage broadly with the UWA research community and with the Antarctic research community within ACEAS and through national and international research networks. You will contribute to co-supervision of postgraduate students within ACEAS.

## **Your key responsibilities**

---

Analyse geophysical data including gravity, magnetic and radar data to generate data products relevant to improving knowledge of subglacial processes

Develop innovative approaches to define the characteristics of the ice-sheet bed and the bedrock beneath

Collaborate with ACEAS researchers to link bed-characteristics with ice sheet and ocean science outcomes

Prepare high-quality research outputs for presentation at internal meetings and national/international conferences and write publications in peer-reviewed journals

Communicate and collaborate broadly with the ACEAS research team and with international research organisations (e.g. SCAR INSTANT)

Take on leadership opportunities that arise and contribute to the collegiate life of ACEAS and the School of Earth Sciences such as contributing to PhD supervision, committee membership, leading workshops, etc

Subject to need, expertise and ability, contribute to data collection initiatives in Antarctica and/or Southern Ocean

Other duties as directed

## **Your specific work capabilities (selection criteria)**

---

PhD in Geophysics, Geology or Physical Geography

Ability, commensurate with experience, to deliver high-quality research outputs including peer-reviewed publications and conference presentations

Experience working with gravity, magnetic and topographic datasets. Experience obtained in a subglacial geology context is strongly preferred

Demonstrated skill in numerical data analysis, potentially including geophysical inversion, machine learning or data science methods

Highly developed organisational skills with the ability to show initiative, problem solve, self-manage priorities and to meet deadlines

Demonstrated ability to work collaboratively in a research team covering multiple disciplines and achieve collective as well as individual outcomes

## **Special requirements (selection criteria)**

---

Frequent interstate travel and occasional overseas travel may be required

Remote fieldwork of durations up to 2 months may be required, if able

## **Compliance**

---

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:

The University's Code of Conduct [hr.uwa.edu.au/policies/policies/conduct/code/conduct](http://hr.uwa.edu.au/policies/policies/conduct/code/conduct)

Inclusion and Diversity [web.uwa.edu.au/inclusion-diversity](http://web.uwa.edu.au/inclusion-diversity)

Safety, health and wellbeing [safety.uwa.edu.au/](http://safety.uwa.edu.au/)