



Position Description

College/Division:	College of Science
Faculty/School/Centre:	Research School of Earth Sciences
Department/Unit:	Geochemical Instrument Operations Team
Position Title:	Senior Technical Officer
Classification:	ANU Officer 7 (Technical)
Position No:	TBC
Responsible to:	Geochemical Instrument Operations Manager
Number of positions that report to this role:	0
Delegation(s) Assigned:	NA

PURPOSE STATEMENT:

The ANU College of Science (CoS) comprises: the Research School of Astronomy and Astrophysics, the Research School of Biology, the Research School of Chemistry, the Research School of Earth Science, the Fenner School of Environment and Society, the Mathematical Sciences Institute, the Research School of Physics, and the Centre for the Public Awareness of Science. Staff and students within the ANU College of Science conduct research and deliver a research-led education program that encompasses the entire breadth of the sciences, supported by extensive international networks and by world-class facilities. The College has a strong tradition of research excellence that has fostered distinguished Nobel Laureates and Kyoto Prize winners and that trains scientific leaders in disciplines in which the ANU is consistently ranked in the top twenty in the world.

The Research School of Earth Sciences (RSES) is a leading centre of geochemical and geochronological research in Australia. Researchers have a tradition of excellence in addressing the world's most pressing geochemical and geochronological issues, and the RSES Geochemical Instrument Operations Team contributes to these capabilities.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The Senior Technical Officer will join the Geochemical Instrument Operations Team and be responsible for the management and operations of the Sensitive High-Resolution Ion Microprobe (SHRIMP) facility within RSES, and work closely with a team of skilled technical experts supporting research at RSES.

The position will also provide high level support to the Team Manager to manage the School's research equipment, laboratory operations, and technical and research support.

Role Statement:

Under broad supervision of the Geochemical Instrument Operations Team Manager, the Senior Technical Officer will:

- Provide expert technical support focussed on operation and maintenance of equipment in the sensitive high-resolution ion microprobe (SHRIMP) facility and associated laboratory equipment. Provide diagnostic support and solve complex problems associated with the equipment, and develop methods as required.
- Provide expert technical advice to stakeholders on a range of functions including experimental design and implementation, setup & operation of instrumentation, risk assessments and the general operation of relevant Geochemical Instrument Operations Laboratories equipment.
- Prepare sample mounts for SHRIMP analysis, characterise sample mounts by light and electron microscopy, and process and analyse experimental outputs to assist in the preparation of data for research publication
- Lead the general maintenance of relevant Geochemical Instrument Operations Laboratories including but not limited to waste disposal, washing, cleaning, setting up and packing down lab equipment as required.

- Undertake general administration duties associated with relevant Geochemical Instrument Operations Laboratories including the population of laboratory databases for analytical procedures, preparation of reports, ensuring safe working practices, WHS requirements and compliance protocols for regulatory requirements are met.
- Oversee the management of inventories, including the preparation and/or ordering of supplies and collating cost estimates on laboratory purchases.
- Ensure all users have been inducted and provided the required training and support to work in relevant Geochemical Instrument Operations Laboratories and that training materials for the laboratory equipment are readily available and routinely updated.
- Develop and maintain networks amongst other School and College Technical staff on facility capabilities or facilities and/or with facility managers and the building maintenance staff on building and equipment maintenance issues.
- Take a lead role in Work Health and Safety (WHS) and make active contribution towards the practice and compliance process in the WHS space.
- Undertake other duties as required from time to time consistent with the classification level of the position.
- Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity

SELECTION CRITERIA:

- A Degree in Earth Sciences or related STEM disciplines with relevant experience in sensitive high-resolution ion microprobe (SHRIMP) or similar instrumentation (minimum 4 years) and specialist expertise with equivalent combinations of relevant experience and/or education/training.
- Demonstrated attention to procedural details and meticulous work habits used to meet quality standards, and experience providing expert technical services for the operations of complex laboratory equipment, and guiding facility users in the effective implementation of established technical procedures.
- Demonstrated ability to contribute to leadership of a teaching or research laboratory with demonstrated experience assisting honours and postgraduate students with laboratory equipment and instrumentation, and a strong understanding of WHS and regulatory requirements.
- Proven ability to communicate effectively and concisely, both orally and in writing, and to work both independently with limited supervision and harmoniously in a team environment with a diverse range of people.
- Highly developed information technology and organisational skills with demonstrated ability to keep accurate records and prioritise tasks, exercising sound judgement to meet tight timelines.
- A demonstrated general knowledge and understanding of equal opportunity principles as they relate to employment.

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

Supervisor/Delegate Signature:		Date:	February 2023
Printed Name:	Brett Knowles	Uni ID:	

References:

[General Staff Classification Descriptors](#)

[Academic Minimum Standards](#)



Pre-Employment Work Environment Report

Position Details

College/Div/Centre	College of Science	Dept/School/Section	RSES
Position Title	Senior Technical Officer	Classification	ANU 7 (Technical)
Position No.	TBC	Reference No.	

In accordance with the Work Health and Safety Act 2011 (Cth) the University has a primary duty of care, so far as reasonably practicable, to ensure the health and safety of all staff while they are at work in the University.

- This form must be completed by the supervisor of the advertised position and appended to the back of the Position Description.
- This form is used to advise potential applicants of work environment and health and safety hazards prior to application.
- Once an applicant has been selected for the position they must familiarise themselves with the University WHS Management System via Handbook guidance <https://services.anu.edu.au/human-resources/health-safety/whs-management-system-handbook>
- The hazards identified below are of generic nature in relation to the position. It is not correlated directly to training required for the specific staff to be engaged. Identification of individual WHS training needs must be in accordance with WHS Local Training Plan and through the WHS induction programs and Performance Development Review Process.
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria - see 'Employment Medical Procedures' at http://info.anu.edu.au/Policies/_DHR/Procedures/Employment_Medical_Procedures.asp

Potential Hazards

<ul style="list-style-type: none"> • Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a regular or occasional part of the duties. 			
TASK	regular	occasional	
key boarding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
lifting, manual handling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
repetitive manual tasks	<input type="checkbox"/>	<input type="checkbox"/>	
Organizing events	<input type="checkbox"/>	<input type="checkbox"/>	
fieldwork & travel	<input type="checkbox"/>	<input type="checkbox"/>	
driving a vehicle	<input type="checkbox"/>	<input type="checkbox"/>	
NON-IONIZING RADIATION			
solar	<input type="checkbox"/>	<input type="checkbox"/>	
ultraviolet	<input type="checkbox"/>	<input type="checkbox"/>	
infra red	<input type="checkbox"/>	<input type="checkbox"/>	
laser	<input type="checkbox"/>	<input type="checkbox"/>	
radio frequency	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
CHEMICALS			
hazardous substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
allergens	<input type="checkbox"/>	<input type="checkbox"/>	
cytotoxics	<input type="checkbox"/>	<input type="checkbox"/>	
mutagens/teratogens/ carcinogens	<input type="checkbox"/>	<input type="checkbox"/>	
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	
TASK	regular	occasional	
laboratory work	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
work at heights	<input type="checkbox"/>	<input type="checkbox"/>	
work in confined spaces	<input type="checkbox"/>	<input type="checkbox"/>	
noise / vibration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
electricity	<input type="checkbox"/>	<input type="checkbox"/>	
IONIZING RADIATION			
gamma, x-rays	<input type="checkbox"/>	<input type="checkbox"/>	
beta particles	<input type="checkbox"/>	<input type="checkbox"/>	
nuclear particles	<input type="checkbox"/>	<input type="checkbox"/>	
BIOLOGICAL MATERIALS			
microbiological materials	<input type="checkbox"/>	<input type="checkbox"/>	
potential biological allergens	<input type="checkbox"/>	<input type="checkbox"/>	
laboratory animals or insects	<input type="checkbox"/>	<input type="checkbox"/>	
clinical specimens, including blood	<input type="checkbox"/>	<input type="checkbox"/>	
genetically-manipulated specimens	<input type="checkbox"/>	<input type="checkbox"/>	
immunisations	<input type="checkbox"/>	<input type="checkbox"/>	
OTHER POTENTIAL HAZARDS (please specify):			
Supervisor/Delegate Name:	<i>Brett Knowles</i>		Date: <i>February 2023</i>