



POSITION DESCRIPTION

Position Title: Isotope Geochemist

Cluster / Business Unit / Division Nuclear Science and Technology

Environment Research and Technology Group /

Section or Unit:

Classification:

Band 6

Job Family:

Position Description Number:

PD-2571

Work Contract Type:

STEMM/NON-STEMM:

STEMM

STEMM CATEGORY: Technical

POSITION PURPOSE

The Isotope Geochemist applies analytical and research expertise to engage with researchers, collaborators and commercial clients, to support significant research outcomes aligned with ANSTO's strategic imperatives. The role provides scientific and technical advice that supports a program of continuous improvement and assists strategic development of the Environment Research and Technology Group's (ERTG) Geochemistry and Isotope laboratory assets and infrastructure to maintain the groups reputation as a leader in environmental change, contaminant impacts and water research.

ORGANISATIONAL ENVIRONMENT

ANSTO leverages great science to deliver big outcomes. We partner with scientists and engineers and apply new technologies to provide real-world benefits. Our work improves human health, saves lives, builds our industries, and protects the environment. ANSTO is the home of Australia's most significant landmark and national infrastructure for research. Thousands of scientists from industry and academia benefit from gaining access to state-of-the-art instruments every year.

Nuclear Science & Technology (NST) incorporates ANSTO's research, innovation, landmark research infrastructure and associated platforms and capabilities. NST conducts research and development in relation to nuclear science and technology and connects people, transfers knowledge, and provides nuclear-based products and services for the benefit of Australia.

The Environment Research and Technology Group uses its nuclear expertise, capabilities and access to unique research infrastructure to support water resource management decisions, build capacity to understand how our environment is changing and inform the management of human impacts on the geosphere.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

- Apply high level specialist expertise in isotope geochemistry to undertake laboratory experiments and method development in support of instrument optimisation and capability extension.
- Produce research of emerging international standard, publications in peer-reviewed journals, and represent the organisation at national and international forums as an expert in isotope geochemistry.
- Explore opportunities for new research projects including those generating external revenue for the group
- Contribute to day-to-day laboratory operations and provide expert, trusted advice and specialised services which meets stakeholder and customer requirements.

- Provide expert advice to stakeholders on ANSTO Research Portal applications, including technical and capacity review, analysis of results and contributions to manuscripts for journal publications.
- Contribute to KPIs and milestones in the Environment Research & Technology Group Business Plan.
- Contribute to a working environment which promotes teamwork, knowledge sharing, is collaborative
 and achieves quality scientific outcomes and results. Model appropriate and professional behaviour
 in the workplace.
- Support and maintain safe systems of work for laboratories in accordance with documented risk assessments, safety approvals and regulatory frameworks.
- Undertake additional duties as required and during periods of leave of other staff.

Decision Making

- The ANSTO values, organisational corporate plan, business plan, Integrated Business Planning, NST strategy and Environment business plan and objectives provide the context for the position.
- The position works within a framework of legislation, policies, professional standards and resource parameters. Within this framework, the position will be provided with the parameters in which to operate the facilities including project planning and resource allocation in collaboration with the Operations Manager.
- The position has independence for decision making on methods and approaches, project planning and is accountable for delivering outcomes within agreed timeframes and budgets.
- The position is fully accountable for the accuracy, integrity and quality of the content of advice provided to stakeholders and is required to ensure that decisions are based on sound evidence.
- Determine work priorities within the context of agreed work plans and schedules and will consult with their line manager on complex, sensitive and major issues that have a significant impact on the facility operations.
- The position will have authority to make purchases within specified limits.
- The levels of authority delegated to this position are those approved and issued by the Chief Executive Officer. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or replaced).

Key Challenges

- Maintain strong relationships and knowledge exchange between research programs and the various laboratories operating within the Group and across the wider organisation.
- Operation and development of highly specialised analytical instrumentation to achieve continuous improvement and strategic development objectives.
- Maintaining expert isotope geochemistry research and analytical knowledge; and contemporary knowledge of organisational policy, regulatory guidelines and international standards.
- Delivering research program results and outcomes to the required standards and timeframes, given the need to be agile and responsive to opportunities, and adapt in an often changing and unpredictable environment.
- Keeping abreast of recent and emerging developments in the field, ensuring continual improvement and implementation of best practise.
- Networking and staying connected with researchers and technicians from multidisciplinary backgrounds using geochemistry and isotopes in environmental research.

KEY RELATIONSHIPS

Who	Purpose	
Internal		
Operations Manager	Receive direction and guidance	

(Line Manager)	 Provide regular updates on key tasks, issues & priorities Provide expert, authoritative and evidence-based advice Report on progress consistent with agreed plans and objectives Support staff engagement and quality recruitment Recommend and gain endorsement for improvement or development plans and goals and other initiatives 	
Peers (Research Scientists)	 Support leadership team members and work collaboratively with researchers to contribute to achieving research outcomes Contribute to research decision making processes, planning and goals 	
Operations Group	 Provide support, training and technical leadership. Communicate work plans and activities and monitor outputs. Monitor trends, performance and progress against the operational plans and communicate adjustments to work priorities which may be required to ensure delivery against the plan 	
Group staff	 Contribute to group discussions, decision making processes and planning. Participate in meetings, share information and provide input on issues Collaborate and share accountability Negotiate and resolve scheduling or lab access conflicts 	
Other NST staff accessing laboratories & facilities Other ANSTO staff (operations)	 Develop sample processing strategies Develop and maintain effective working relationships and open channels of communication Understand user requirements and desired outcomes Provide expert advice, analysis and training Lead and contribute to the preparation of manuscripts for journal publications 	
External		
Facility users from Universities, Industry, National and International Research organisations.	 Understand collaborators requirements and desired outcomes Provide expert advice, analysis, training, guidance and supervision Ensure compliance with safety and quality systems and applicable legislation and regulations Build and maintain relationships Co-ordinate laboratory availability and usage Develop sample processing strategies to meet project needs Assess competence to undertake activities within laboratory/s Lead and contribute to the preparation of manuscripts for journal publications 	
Suppliers	 Provide input into the purchase of laboratory equipment, negotiating specifications and costs, contracts for service and delivery schedules 	

POSITION DIMENSIONS

Staff Data		
Reporting Line	Reports to the Operations Manager	
Direct Reports	Nil	
Indirect Reports	Nil	

Special / Physical Requireme	
Location:	Lucas Heights
	Working in different areas of designated site/campus as needed
Travel:	May be required to travel to ANSTO sites within Australia occasionally
	Infrequent travel both internationally and nationally
	May be required to undertake field work in remote locations from
	time to time
Physical:	Office based physical requirements (sitting, standing, minimal manual
	handling, movement around office and site, extended hours working at computer)
	Laboratory facility physical requirements (lifting, standing for long
	periods, operating machinery, equipment and in some roles manipulators)
	If required by specific role - wearing personal protective equipment for the handling of hazardous and/or radioactive materials
Radiation areas:	If required by specific role - perform duties in an area where
Radiation areas.	radioactive materials are handled under tightly controlled safety conditions
	Perform duties with and in an area where hazardous chemicals or
	materials are handled under tightly controlled safety conditions
Hours:	Willingness to work extended and varied hours based on operational requirements
	After hours work may be required for short and infrequent periods
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements
	Maybe required to obtain and maintain appropriate federal
	government clearance

Workplace Health & Safety			
Specific role/s as specified in	All Workers		
AG-2362 of the ANSTO WHS	Managers / Leaders / Supervisors		
Management System	May be required to undertake one or more of the specified roles		
	within the context and course of their duties		
	Area Supervisor		
	Building Warden		
	 Contractor Supervisor 		
	Facility Officer		
	Building Manager		

ORGANISATIONAL CHART

On file

KNOWLEDGE, SKILLS AND EXPERIENCE

- 1. PhD in Environmental Chemistry, Geochemistry or related discipline, or equivalent tertiary qualification coupled with extensive isotope geochemistry experience.
- 2. Demonstrated ability to perform independent cutting-edge research, with a publication track record commensurate with experience and opportunities.
- 3. Demonstrated ability to represent the organisation at national and international forums as an expert in a relevant scientific field such as isotope geochemistry.
- 4. Proven extensive experience in managing multiple processes/projects in a research laboratory to achieve scientific excellence, desired organisational outcomes and achieving optimal work performance.

- 5. Strong interpersonal and communication skills with the ability to interact and communicate with a varied and multidiscipline audience and to develop and maintain productive working relationships.
- 6. Proven experience in the development and maintenance of productive research relationships and networks.
- 7. Expertise in relevant topic areas such as interpretation, analysis and modelling of environmental isotope and geochemical data collected for environmental projects.
- 8. Extensive experience operating within laboratory quality, safety and regulatory requirements (e.g. WHS, radiation safety, ARPANSA regulations, quality systems).

VERIFICATION

This section verifies that the line manager and appropriate senior manager/executive confirm that this is a true and accurate reflection of the position.

Line Manager		Delegated	Delegated Authority	
Name:	Michael Corry	Name:	Karina Meredith	
Title:	Operations Manager, Environment Research & Technology Group	Title:	Director, Environment Research and Technology Group	
Signature:		Signature:		
Date:		Date:		