



## POSITION DESCRIPTION

<b>Position Title:</b>	Radioanalytical Officer
<b>Cluster / Business Unit / Division</b>	Nuclear Safety, Security and Stewardship / Nuclear Stewardship
<b>Section or Unit:</b>	Radioanalytical Chemistry
<b>Classification:</b>	Band 4
<b>Position Description Number:</b>	PD-2433
<b>Work Contract Type:</b>	Technical
<b>STEMM/NON-STEMM:</b>	STEMM

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### POSITION PURPOSE

The primary objective of the role is to support the operation a suite of wet chemistry and instrument laboratories capable of handling low to intermediate levels of radioactivity that supports ANSTO operational, commercial and research objectives. The position enables the safe and secure operation of this facility through maintenance of laboratory facilities, equipment and procedures; undertaking sample preparation; gamma spectrometry operation; maintenance, calibrations, and troubleshooting of instrumentation; planning and scheduling of work; and sample analysis, interpreting data and reporting results.

### 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.

The Nuclear Safety, Security and Stewardship incorporates High Reliability (Safety), Nuclear Security and Safeguards and the Nuclear Stewardship science and technology platform. The Group provides critical enabling functions for ANSTO ensuring operational compliance for a range of regulators as well providing a range of mandated services to federal and state government departments and agencies.

Within NSSS, Nuclear Stewardship is the custodian of ANSTO's mandated and site-essential science capabilities that respond to the needs of the Australian Government, industry and the community relevant to nuclear measurement, nuclear forensics, radionuclide metrology, radioanalytical chemistry and environmental monitoring. These capabilities underpin ANSTO's ability to be responsive to and prepared for a range of nuclear stewardship related functions and responsibilities through the provision of trusted scientific advice and specialised services.

The RAC capability within Nuclear Stewardship develops and maintains specialist radioanalytical and experimental facilities utilising nuclear techniques to support ANSTO's core activities and its stakeholders and to apply these techniques and associated expertise to topics related to releases of radionuclides into the environment, nuclear fuel cycle and other research areas involving quantification of radionuclides at or above typical environmental levels.

### ACCOUNTABILITIES & RESPONSIBILITIES

#### Key Accountabilities

- Ensure operational readiness of instrument laboratories through ongoing maintenance and calibration of laboratory and detection equipment, repairing faulty equipment, sharing of

knowledge and expertise, maintain adequate supply of laboratory equipment, consumables, and chemicals

- Use knowledge and expertise in gamma spectrometry to perform spectral analysis, data analysis and complex data calculations to ensure the accuracy of data reported
- Maintain operational readiness of inactive and active chemical laboratories, through maintenance of laboratory equipment, maintaining adequate levels of consumables, preparation of chemical reagents and appropriate disposal of active and inactive waste
- Prepare samples and conduct analytical and experimental work in accordance with set procedures, and ensure that the data obtained is reproducible, accurate and appropriately recorded and reported
- Maintain compliance with quality, safety, security, environmental, and operational requirements of the laboratories and applicable areas
- Train staff and users in gamma-ray spectrometry techniques and safe and compliant laboratory work practises
- Liaise with clients to provide analytical guidance, updates, and schedules
- Undertake additional duties as required and during period of leave of other staff

### Decision Making

- The ANSTO values, organisational corporate plan, business plan, operational excellence program, NST strategy, Nuclear Stewardship Business Plan and Radioanalytical Chemistry capability Operational Plans and Arrangements provide the context for the position.
- The position holder works within a framework of legislation, policies, professional standards and resource parameter.
- Work priorities are determined within the context of agreed work plans and the position holder will consult with the line manager on complex, sensitive and major issues that have significant impact on business operations.
- 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

- Developing and expanding understanding and knowledge of gamma-ray spectrometry measurement techniques, data analysis and applications
- Managing time effectively to meet the needs of multiple stakeholders
- Managing conflicting priorities, deadlines and unexpected events in order to achieve operational goals
- Prioritise and work within deadlines and time constraints, while handling unexpected constraints such as staff and equipment availability

### KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Manager, RAC Manager	<ul style="list-style-type: none"> <li>• Receive guidance and direction</li> <li>• Recommend and gain endorsement for improvement or development plans and goals and other initiatives</li> <li>• Consult on sensitive or high-risk matters</li> </ul>
Work area team members	<ul style="list-style-type: none"> <li>• Contribute to group decision making processes, planning and goals</li> <li>• Collaborate and share accountability</li> </ul>

	<ul style="list-style-type: none"> <li>• Negotiate and resolve conflicts, including scheduling or lab access conflicts</li> <li>• Provide supervision, instruction, direction, support, training and technical leadership</li> </ul>
Laboratory and Gamma Spectrometry Facility Officer	<ul style="list-style-type: none"> <li>• Receive technical guidance on gamma-ray spectrometry</li> </ul>
ANSTO Users (scientists, researchers, lab users and new starters)	<ul style="list-style-type: none"> <li>• Establish constructive relationships</li> <li>• Provide supervision, instruction, direction, support, and training</li> <li>• Assess competence to undertake activities within laboratories</li> <li>• Provide advice on analytical capabilities</li> <li>• Liaise with for analytical requests and reporting</li> </ul>
<b>External</b>	
Users (e.g. scientists, researchers, post-docs, students)	<ul style="list-style-type: none"> <li>• Establish constructive relationships</li> <li>• Provide supervision, instruction, direction, support, and training</li> <li>• Assess competence to undertake activities within laboratories</li> <li>• Provide advice on analytical capabilities</li> <li>• Liaise with for analytical requests and reporting</li> </ul>
Instrument suppliers and providers of calibration, and maintenance services	<ul style="list-style-type: none"> <li>• Maintain constructive relationships</li> <li>• Purchase laboratory consumables, chemicals and equipment; negotiate prices for equipment and repairs.</li> <li>• Liaise with instrument suppliers to troubleshoot and identify faults and arrange repairs</li> <li>• Clearly communicate needs, deliverables and expected outcomes</li> <li>• Purchase laboratory consumables, chemicals and equipment</li> </ul>
Clients and Users	<ul style="list-style-type: none"> <li>• Provide advice and updates</li> </ul>

## POSITION DIMENSIONS

<b>Staff Data</b>	
Reporting Line	Reports to the RAC Manager
Direct Reports	Nil
Indirect Reports	Nil
<b>Financial Data (2023/2024)</b>	
Revenue / Grants	Nil
Operating Budget	Nil
Staffing Budget	Nil
Capital Budget	Nil
Assets	Nil
<b>Special / Physical Requirements</b>	
Location:	Lucas Heights Working in different areas of designated site/campus as needed
Travel:	Infrequent travel may be required both internationally and nationally. Field work may be needed.
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer)

	<p>Laboratory facility physical requirements (sitting, standing for long periods, frequent manual handling, lifting heavy equipment and items, operating machinery, equipment and in some roles manipulators)</p> <p>Wearing personal protective equipment for the handling of hazardous and/or radioactive materials</p> <p>Frequent movements (climbing, stooping, kneeling, crouching, crawling)</p> <p>Working in a loud environment</p> <p>Public speaking</p> <p>Perform duties with and in an area where hazardous chemicals and materials are handled under tightly controlled safety conditions.</p>
Radiation areas:	<p>Handle and perform duties in an area where radioactive materials are handled under tightly controlled safety and regulatory conditions.</p> <p>Handle and perform duties with and in an area where hazardous chemicals or materials are handled under tightly controlled safety conditions</p> <p>Wear appropriate PPE and operate radiation monitoring equipment</p>
Hours:	<p>Willingness to work extended and varied hours based on operational requirements.</p> <p>After hours work may be required for short and infrequent periods.</p>
Clearance requirements:	<p>Satisfy ANSTO Security and Medical clearance requirements</p> <p>May be required to obtain and maintain appropriate federal government clearance</p>

### Workplace Health & Safety

Specific role/s as specified in <a href="#">AG-2362</a> of the ANSTO WHS Management System	<p>All Workers</p> <p>May be required to undertake one or more specialised roles within the context and course of their duties e.g. Area Supervisor, Building Manager, Building Warden, Contractor Supervisor, Designated First Aid Officer, Health and Safety Representative, Source Officer, and Source Responsible Officer.</p>
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## ORGANISATIONAL CHART



Refer to published Organisational Chart.

## KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree in science, chemistry, or other relevant discipline or a Certificate/Diploma in chemistry or related field with extensive experience working in chemical and instrument laboratories
2. Demonstrated experience in gamma-ray spectroscopy, sample preparation, associated software, data acquisition and data processing techniques
3. Demonstrated experience maintaining chemical/analytical and instrument laboratories, meeting operational, quality, regulatory and safety requirements and planning and coordinating workloads to meet targets and deadlines
4. Demonstrated experience training and supervising users in analytical and nuclear measurement techniques
5. Demonstrated experience establishing effective relationships with team members, users and clients to share knowledge of relevant laboratory and analytical expertise
6. Demonstrated ability to work as part of a team and establish productive relationships

**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.

<b>Line Manager</b>		<b>Delegated Authority</b>	
Name:	Sangeeth Thiruvoth	Name:	Jennifer Harrison
Title:	RAC Manager	Title:	Leader, Nuclear Stewardship
Signature:		Signature:	
Date:	23 JAN 2024	Date:	23 JAN 2024