



## POSITION DESCRIPTION

<b>Position Title:</b>	Radionuclide Metrology Industry Scientist Nuclear Safety, Security and Stewardship (NSSS)/ Nuclear Stewardship (NS)
<b>Cluster / Business Unit / Division</b>	Nuclear Stewardship - Radionuclide Metrology
<b>Section or Unit:</b>	Nuclear Stewardship - Radionuclide Metrology
<b>Classification:</b>	Band 5
<b>Position Description Number:</b>	PD-1948
<b>Work Contract Type:</b>	Professional
<b>STEMM/NON-STEMM:</b>	STEMM

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### POSITION PURPOSE

The primary objective of the Radionuclide Metrology Industry Scientist is to facilitate access for Australian users to the national radioactivity standards we maintain through the management and delivery of national access programs and client specific services. Additionally, the position contributes to laboratory operations in the development and maintenance of national radioactivity standards and the development of new Certified Reference Materials.

### 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.

Under authorisation from the Chief Metrologist of the National Measurement Institute (NMI), constituted by the National Measurement Act 1960, ANSTO holds responsibility for the development, maintenance and dissemination of the Australian primary and secondary standard of activity of radionuclides. This function is performed by the Radionuclide Metrology capability area within the Nuclear Stewardship division.

Radionuclide Metrology develops specialised methods for performing precise measurements of the activity of various radionuclides as part of its national standard setting role for the Becquerel, the unit of measure of radioactivity. Through membership and participation on behalf of Australia in international and regional metrology organisations, Radionuclide Metrology also contributes to the international equivalence of radioactivity measurements and facilitates Australia's capacity to trade radioisotope products. Radionuclide Metrology also provides specialised advice and services to internal and external clients, such as the nuclear medicine community, to ensure legal traceability for the measurement of radionuclides to the national standards and contributing to the correct administration of nuclear medicine to patients across Australia.

### ACCOUNTABILITIES & RESPONSIBILITIES

## Key Accountabilities

- Responsible for developing new industry and community based services and programs to disseminate and national radioactivity standards and lead the promotion and awareness campaigns of Radionuclide Metrology's value adding capabilities amongst our user community.
- Responsible for operating and managing all aspects of the Australian Nuclear Medicine Traceability Program (ANMTP) as well as the Australian Industry Becquerel Traceability Program (AIBTP). This includes management aspects such as developing plans, identifying and allocating resources, developing budgets, controlling and managing financial performance, and obtaining and interpreting customer satisfaction and feedback. In addition, the role includes all technical aspects such as performing radionuclide source measurements (at ANSTO Radionuclide Metrology and on location at client laboratories), data analysis and reporting.
- Utilise specialised knowledge and expertise in chemistry and/or physics to measure precise quantities of radionuclides and apply radioanalytical techniques, such as gamma-ray spectrometry, in the analysis and interpretation of radiation metrology measurements as required and on behalf of client initiated requests.
- Contribute to the development of new measurement techniques for standardising radionuclides with complex decay paths and prepare radioactive sources for laboratory measurement or distribution to clients.
- Prepare radioactive sources for laboratory measurement or distribution to clients.
- Contribute to the maintenance of laboratory based scientific instrumentation fit for purpose and assist in the development and application of quality systems as applied to Radionuclide Metrology services and functions.
- Assist in the development and application of Quality systems as applied to Radionuclide Metrology services and functions.
- Undertake additional duties as required and during period of leave of other staff.

## Decision Making

- The position works within the framework of the National Measurement Act (1960) and Regulations to ensure ANSTO's radionuclide metrology services offered to Australian users meet and adhere to the requirements of legal metrology.
- The position has a high degree of independence in determining the form and scope of national dissemination programs in support of best meeting our clients' and users' needs.
- The ANSTO values, organisational corporate plan, business plan, operational excellence program, the Nuclear Stewardship Business Plan provide the context for the position.
- The position is fully accountable for the accuracy, integrity and quality of the content of advice and specialised services provided to our users, and is required to ensure that decisions are based on sound evidence, but at times may be required to make effective judgements under pressure or in the absence of complete information or expert advice.
- 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

- Ensuring continued growth of our national dissemination programs across Australia and expansion into new markets internationally under a commercial basis
- Influencing changes to the nuclear medicine regulatory environment through contributions to government policy reviews
- Keeping abreast of ongoing developments in nuclear medicine and maintaining open communication networks with our varied stakeholders to ensure current and future industry needs are met

## KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Line Manager	<ul style="list-style-type: none"> <li>• Receive guidance and direction</li> <li>• Provide expert, authoritative and evidence based advice</li> <li>• Staff engagement and quality recruitment</li> <li>• Negotiate and report on budgets and resources consistent with strategic plans and goals</li> <li>• Recommend and gain endorsement for plans and goals and other initiatives</li> </ul>
Work area team members	<ul style="list-style-type: none"> <li>• Coordinate and direct team member participation on national Becquerel dissemination programs</li> <li>• Contribute to group decision making processes, planning and goals</li> <li>• Collaborate and share accountability</li> <li>• Negotiate and resolve conflicts</li> </ul>
ANSTO Nuclear Medicine and Business Development	<ul style="list-style-type: none"> <li>• Work collaboratively to continuously improve customer networks and market awareness of our radionuclide metrology services and programs</li> </ul>
<b>External</b>	
Australian and New Zealand Society of Nuclear Medicine (ANZSNM)	<ul style="list-style-type: none"> <li>• Maintain close engagement with ANZSNM to determine future needs of the nuclear medicine community</li> <li>• Deliver reports on ANMTP results and new standards/capabilities</li> <li>• Attend ANZSNM events to promote our metrology services and programs</li> </ul>
National Measurement Institute (NMI)	<ul style="list-style-type: none"> <li>• Receive guidance, direction and legal advice on metrology matters and compliance with the National Measurement Act 1960 and National Measurement Regulations 1999</li> </ul>

## POSITION DIMENSIONS

<b>Staff Data</b>	
Reporting Line	Reports to the Manager, Radionuclide Metrology
Direct Reports	Nil
Indirect Reports	Nil

<b>Financial Data (2015/2016)</b>	
Revenue / Grants	N/A
Operating Budget	N/A
Staffing Budget	N/A
Capital Budget	N/A
Assets	N/A

<b>Special / Physical Requirements</b>	
Location:	Lucas Heights Working in different areas of designated site/campus as needed
Travel:	Frequent travel both internationally and nationally Field work in remote locations across Australia
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer) Public speaking

	Wearing personal protective equipment for the handling of hazardous and/or radioactive materials
Radiation areas:	May be required to work in radiation areas under tightly regulated conditions Perform duties in an area where 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 Transport radioactive material in compliance with all relevant legislation
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

### Workplace Health & Safety

Specific role/s as specified in <u>AG-2362</u> of the ANSTO WHS Management System	All Workers Officer (definitions found in appendix 1 of AG-2362) Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties
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## ORGANISATIONAL CHART

Refer to published Organisational Chart

## KNOWLEDGE, SKILLS AND EXPERIENCE

1. Bachelor of science majoring in physics, chemistry or other related discipline;
2. Solid knowledge and experience in radioanalytical measurements specific to radionuclide metrology;
3. Demonstrated ability to assess and express experimental uncertainties in measurement according to international standards;
4. Demonstrated ability to document and record scientific processes with a high degree of precision and reliability and prepare analytical reports for distribution to clients;
5. Ability to plan, coordinate and deliver nationally based radionuclide metrology services and programs;
6. Demonstrated ability to develop and document client services according to quality guidelines, e.g., ISO 17025 or ISO 9001;
7. Demonstrated experience in resource utilisation, task and priority management and organisational skills;
8. Demonstrated experience in managing and building effective relationships with internal and external stakeholders;
9. Meticulous approach to customer service and the ability to interpret and predict customer needs as well achieve market growth for our services;
10. Developed computer skills associated with data and customer management.

## 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 Authority	
Name:	Freda van Wyngaardt	Name:	Jennifer Harris
Title:	Manager, Radionuclide Metrology	Title:	Leader, Nuclear Stewardship
Signature:		Signature:	

Date: 12/02/2024

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