



POSITION DESCRIPTION

Position Title:	Waste Characterisation Lead
Cluster / Business Unit / Division	Nuclear Science and Technology
Section or Unit:	ANSTO Synroc
Classification:	Band 7
Job Family:	Project and Program
Position Description Number:	PD-2464
Work Contract Type:	Professional
STEMM/NON-STEMM:	STEMM
STEMM CATEGORY:	Research and Sciences

POSITION PURPOSE

The primary purpose of the Active Waste Characterization Lead is to manage waste characterisation programs for ANSTO Synroc and to coordinate with other ANSTO departments to administer these programs. This role has an overall responsibility for the Synroc's characterisation programs and facilities for radioactive waste, and leads analytical method development, maintenance, and training programs.

ORGANISATIONAL ENVIRONMENT

ANSTO is the national organisation for nuclear science and technology. We focus on undertaking leading edge research, delivering innovative scientific services and providing specialised advice to government, industry, academia and other research organisations.

Nuclear Science & Technology (NST) integrates 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.

NST's Research Portfolio undertakes world class applied and translational research utilising nuclear techniques to foster innovation in research and development programs to enhance ANSTO's contribution to supporting a sustainable and healthier future for our planet and people everywhere. The Research Portfolio consists of research themes that define the broad subject areas of research with underlying research programs that are focussed activity groupings that contribute to the overall objectives of the research theme and also conducting research sub-programs within platforms. The Research Themes are Environment, Human Health, Nuclear Fuel Cycle and Synroc.

Synroc has been given the challenge of developing markets for ANSTO's wasteform science and processing technology and develop tailored solutions for nuclear waste stream including advancement of engineering designs and solutions for waste processing plants and equipment within ANSTO and for international clients

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

- Management of ANSTO Synroc waste characterisation programs and facilities, including R&D, maintenance, and operation.
- Ensure compliance with good laboratory practices and maintain the quality management system for analytical methods used in waste characterization.
- Responsible for developing and implementing new methodologies and technology for the characterisation of complex chemical and radiological compositions.
- Develop the strategy, expansion plans, and collaborations (national and international) for waste characterization facilities.

- Provision of input information to support the Synroc Waste Treatment Facility quality assurance requirements to allow wasteform disposal.
- Establish and maintain training programs for operators using waste characterization methods and personnel involved in radioactive waste safety assessment.
- Provide expertise and support for waste management programs at other ANSTO departments and internationally.
- Supervise Synroc and NST research projects focused on improving the understanding of nuclear waste chemistries and mitigating radiological hazards for streamlined sampling and characterization.
- Represent ANSTO as a subject matter expert at local, state, national, and international forums, ensuring adherence to best practices in waste characterization programs.
- Represent ANSTO as an expert in the field of waste characterisation at IAEA technical meetings.
- Provide expertise and leadership to the international community in radioactive material characterisation.
- Support external collaborations in waste management and waste form development.
- Undertake additional duties as required and during periods of staff leave.

Decision Making

- The ANSTO values, organisational corporate plan, business plan, operational excellence program, the NST strategy and Synroc Technologies defined strategy and plans 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 has some independence in determining how to achieve assigned objectives however will be constrained by the project deliverables and timeframes.
- Use expertise to provide solutions and methodologies for complex chemical and radiological characterisations and evidence based decision making.
- The position is fully accountable for the accuracy, integrity and quality of the content of advice provided 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.
- Determine key work priorities within the context of agreed work plans and project plans and consult with the line manager on complex, sensitive and major issues that have a significant impact on the project.
- The levels of authority delegated to this position are those approved in accordance with the project management structure 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

- Carry out work in accordance with project delivery schedule while working across numerous projects with varying deadlines.
- Undertaking activities in a heavily regulated environment and comply at all times with regulatory & safety requirements, codes, standards and specifications.
- Communicating and negotiation with key senior staff and representatives or other government agencies and professional organisations, to achieve desired outcomes for ANSTO.
- Providing leadership in the integration of new characterisation methodologies and technology and coordinating various stakeholders for successful implementation.
- Integrate continuous improvement methodologies by considering alternative design concepts, constructability and operability factors and the application of lessons learnt and strive to deliver improvements.
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- Ensuring that QA systems are maintained that are compatible with clients' systems such as ISO9001 and ISO14001;
- Working within short timeframes for delivery of working systems
- Managing conflicting priorities between projects.

KEY RELATIONSHIPS

Who	Purpose
Internal	
Manager/Executive	<ul style="list-style-type: none"> • Receive guidance and direction • Provide expert, authoritative and evidence-based advice and recommendations. • Provide regular updates on key tasks, issues & priorities • Negotiate and report on progress of project outcomes consistent with project plans and goals. • Recommend and gain endorsement for project activities and other initiatives. • Escalate issues and propose solutions
Project team members	<ul style="list-style-type: none"> • Lead the delivery of specific work package as defined by the project. • Provide expert advice and analysis on a full range of matters • Lead the group decision making processes, planning and goals • Collaborate and take responsibility • Identify, negotiate and resolve technical conflicts
Waste management services	<ul style="list-style-type: none"> • Manage delivery and implementation of characterisation programs • Facilitate operationalisation of characterisation of the future waste streams. • Provide relevant training packages
ANSTO Nuclear Medicine Waste management services	<ul style="list-style-type: none"> • Supervise the sampling programs in accordance with ANSTO Synroc requirements. • Support operations by providing expertise in waste and process chemistry.
Radiation Protection Services Work Health & Safety Systems safety and reliability	<ul style="list-style-type: none"> • Contribute to optimisation of the safety regulatory practices at ANSTO. • Feedback the subject matter advice on the nuclear waste operations • Supervise communication with the NST departments to streamline safety assessments of work packages

POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the Manager, Wasteforms Engineering
Direct Reports	TBA2 x Indirect Reports
Indirect Reports	Nil

Financial Data (2023/2024)	NOTE: For which the role is responsible for
Revenue / Grants	N/A
Operating Budget	N/A
Staffing Budget	N/A
Capital Budget	N/A
Assets	N/A

Special / Physical Requirements	
Location:	Lucas Heights Working in different areas of designated site/campus as needed
Travel:	May be required travel to ANSTO sites from time to time Occasional travel both internationally and nationally
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer). Public speaking Industrial facility physical requirements (lifting, standing for long periods, operating machinery, equipment and manipulators). Wearing personal protective equipment for the handling of hazardous and/or radioactive materials.
Radiation areas:	Will 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 radioactive materials are handled under tightly controlled safety conditions.
Hours:	Willingness to work extended and varied hours based on operational requirements.
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements

Workplace Health & Safety	
Specific role/s as specified in AG-2362 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

ORGANISATIONAL CHART

Refer to published Organisational Chart.

KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree or higher in Industrial Chemistry, Analytical Chemistry, Chemical Engineering or equivalent discipline.
2. Extensive knowledge of analytical techniques for chemical characterisation
3. Extensive knowledge of analytical techniques for radiological characterisation
4. Demonstrated ability to identify and coordinate teams with the requisite skills and experience to create an effective operational environment.
5. Demonstrated extensive experience (> 10 years) in analytical characterisation facilities and/or laboratories.
6. Demonstrated extensive experience in development and validation of analytical techniques for the characterisation of materials in a highly regulated environment.
7. Demonstrated extensive experience in design of experiments and statistical analysis

8. Demonstrated ability to produce detailed engineering and technical documents including data reports, calculation reports and descriptive reports.
9. Demonstrated ability to supervise the strategic development of regulated analytical facilities
10. Demonstrated ability to independently prioritise and manage projects and tasks and deliver to agreed timelines.
11. Ability to build networks and to develop linkages with the nuclear industry
12. Personal qualities that add value to a team operating in a high-level client delivery, safety & quality environment.
13. Ability to educate and train stakeholders in the application of developed analytical methods
14. Excellent interpersonal and communication skills, both written and verbal

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:	Daniel Gregg	Name:	Gerry Triani	
Title:	Manager, Wasteforms Engineering	Title:	Technical Director,	Synroc Technologies
Signature:		Signature:		
Date:		Date:		

Appendix 1

ANSTO Job Families
Accounting & Finance
Administration
Communications & Marketing
Compliance & Regulation
Engineering and Technical
Human Resources
ICT & Digital Solutions
Information & Knowledge Management
Legal
Manufacturing
Monitoring & Audit
Operations
Organisational Leadership
Project & Program
Research
Science
Security & Intelligence
Senior Executive
Service Delivery
Strategic Policy
Trades & Labour