



POSITION DESCRIPTION

Position Title: Manager Nuclear Analysis Section

Cluster / Business Unit / Division Nuclear Operations and Nuclear Medicine (NONM)

Section or Unit: Nuclear Analysis

Classification: Band 8

Job Family: Science and Engineering

Position Description Number: PD-2498
Work Contract Type: Manager
STEMM/NON-STEMM: STEMM
STEMM CATEGORY: Science

POSITION PURPOSE

The primary objective of the Manager Nuclear Analysis Section (NAS) is to be responsible for the leadership, management, coordination, budgeting, and strategic planning activities of a multi-disciplinary team. The Nuclear Analysis Section provides high-level analytic assessments and technical advice to ANSTO senior management and other stakeholders in support of nuclear reactor safety, nuclear reactor operations and optimisation, nuclear safety and operations in other nuclear facilities and specialised nuclear research. The Manager Nuclear Analysis Section (NAS) uses their extensive knowledge and experience to ensure a high level of quality, assurance and practicality in the delivery of support to the nuclear facilities.

ORGANISATIONAL ENVIRONMENT

ANSTO is the national organisation for nuclear science and technology and is the home of Australia's most significant landmark and national infrastructure for research. 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. Nuclear Operations and Nuclear Medicine (NONM) brings together the key areas of Reactor Operations, Waste Management, ANSTO Health and the ANSTO Nuclear Medicine facility, which together form Nuclear Medicine.

The Nuclear Analysis Section (NAS) comprises a team of scientists and engineers who are responsible for conducting numerical modelling, experiments and analysis in support of a broad range of ANSTO nuclear projects. These projects include the safe operation of OPAL, analysis and review of reactor design and safety features, irradiation of new types of targets in the reactor, design and operations of nuclear facilities and equipment, and modifications of nuclear facilities and equipment.

ACCOUNTABILITIES & RESPONSIBILITIES

The key accountabilities for this position include:

- Develop and provide leadership, develop and implement performance objectives, plans, strategies, targets and activities to deliver NAS outcomes to achieve NONM business plans, aligned to the organisations strategic objectives.
- Manage the financial budget of the Nuclear Analysis Section including preparation of forecasts and recruiting requirements.
- Manage, lead and develop the team to ensure the delivery of excellence within the Nuclear Analysis Section team by fostering a culture of high-performance that encourages innovation, improves productivity and promotes teamwork and collaboration.
- Manage multiple projects within area to ensure that they meet high quality and technical standards. Provide oversight and direction with the ongoing monitoring, reviewing and timely completion of projects, consistent with agreed project deliverables.

- Provide specialist knowledge and expertise to Reactor Assessment Committee (RAC) for multiple projects. This includes the ability to identify, assess and communicate important nuclear safety issues and the functional requirements of possible solutions to project problems.
- Provide strategic, technical and analytic advice and assessments in support of safety submissions
 for OPAL and other ANSTO projects. This includes the development or assistance with
 development of submissions requiring ARPANSA approval and analysis and review of reactor design
 and safety to ensure the optimum operation of OPAL
- Manage a multi-disciplinary team who contribute to a broad range of ANSTO projects and to
 provide high quality, peer reviewed advice to internal and external stakeholders on relevant
 computational and experimental analysis techniques.
- Strategise and establish in collaboration with NONM leaders a vision for the future of OPAL reactor and beyond, by maintaining up to date knowledge on international best practice and cutting edge advancements in the NAS areas of expertise and implement improvements as identified.
- Develop and maintain a range of collaborative and professional networks across ANSTO and externally at international and national levels to share knowledge and acquire best practice.
- Initiate, coordinate and supervise projects for university students, graduates and collaborators from academia and research reactor industry.
- Manage direct reports from consultants/contractors and specialist roles including the criticality officer and CNS advisor.
- Fulfil WHS responsibilities as specified in AG 2362 of the ANSTO WHS system.
- Undertake additional duties as required and during period of leave of other staff.

Decision Making

- 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 objectives of the unit, including deciding on methods and approaches, operations, project planning and allocation of resources.
- The ANSTO values, Strategy, Corporate plan and operational excellence program and the Nuclear Operations, Nuclear Medicine and Waste Management Services business plans provide the context for the position.
- The position is fully accountable for the accuracy, integrity and quality of the content of the work 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.
- Determines key work priorities within the context of agreed work plans and will consult with the Group Executive, NONM on complex, sensitive and major issues that have a significant impact.
- 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

The major challenges for this position include:

- Pursue the application of solutions to complex conceptual problems across multi-disciplinary boundaries.
- Establish and develop nuclear analysis techniques that are relevant to the safety and operation of OPAL, and other nuclear facilities as required.
- Manage heavy workload through prioritising work to meet project schedules, whilst ensuring compliance with regulatory and safety requirements.
- Identifying development opportunities for the group, and acting on those opportunities to increase the groups profile for ANSTO.
- Balancing operational and strategic demands in a complex and dynamic environment to ensure successful delivery of agreed objectives.

KEY RELATIONSHIPS

Who	Purpose
Internal	
Manager/Executive	 Receive guidance and direction Provide expert, authoritative and evidence based advice Staff engagement and quality recruitment Negotiate and report on budgets and resources consistent with strategic plans and goals Recommend and gain endorsement for plans and goals and other initiatives
Work area team members	 Provide expert advice and analysis on a full range of matters Contribute to group decision making processes, planning and goals Collaborate and share accountability Negotiate and resolve conflicts
Direct Reports	 Provide leadership, guidance and support Set performance requirements and manage performance and development Engage to monitor trends, performance and progress against the strategic plan and evaluate further support which may be required to ensure delivery against the plan Coach/train and mentor staff
Other departments	 Reactor Operations Australian Centre for Neutron Scattering, Nuclear Medicine, ANSTO Maintenance and Engineering other areas within ANSTO as required.
External	
National and international bodies, forums and taskforces	 Actively contribute and represent ANSTO and the Australian Government position
Universities, Business, Industry, Scientific Institutions	 Develop and maintain collaborative relationships Provide expert, authoritative and evidence based advice Share knowledge and deliver outcomes from partnered research
Visitors / VIPs	 Provide information to the public in support of safe and effective nuclear operations.

POSITION DIMENSIONS

Staff Data	
Reporting Line	 Reports to the Group Executive, Nuclear Operations and Nuclear Medicines
Direct Reports	2
Indirect Reports	10-15

Financial Data (2024/2025)

Revenue / Grants	NA	
Operating Budget	Part of NONM Business Support	
Staffing Budget	Part of NONM Business Support	
Capital Budget	NA	
Assets	Part of NONM Business Support	

Location:	Lucas Heights / Clayton
	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
	Field work in remote locations
Physical:	Office based physical requirements (sitting, standing, minimal manual
	handling, movement around office and site, extended hours working at computer)
	Occasional Public speaking
	Wearing personal protective equipment for the handling of hazardous
	and/or radioactive materials
	Occasional Working in confined space environment including wearing respiratory equipment
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
Hours:	Willingness to work extended and varied hours based on operational requirements
	After hours work may be required for short and infrequent periods
	Required to participate on an on-call roster
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements
	Obtain and maintain appropriate federal government clearance

Workplace Health & Safety	
Specific role/s as specified in AP2362 of the ANSTO WHS	Managers / Leaders / Supervisors
Management System	

ORGANISATIONAL CHART

Refer to published Organisational Chart.

KNOWLEDGE, SKILLS AND EXPERIENCE

- 1. Degree in Engineering, Physics or Mathematics, and a PHD in a relevant discipline or relevant experience.
- 2. Extensive experience in the principles and application of nuclear reactor physics and/or engineering.
- 3. Significant experience in leadership and management of multi-disciplinary teams to achieve planned project goals, desired organisational outcomes and achieving optimal work performance, including good coaching and mentoring skills.
- 4. Demonstrated strategic planning skills and capacity to develop innovative solutions to complex, multi-faceted issues and problems.
- 5. Extensive knowledge and experience in numerical modelling and computational modelling and analysis techniques.

- 6. Highly developed analytical/problem solving skills with a demonstrated ability to analyse data to develop practical advice and engineering solutions for problems and to provide expert advice to stakeholders.
- 7. Highly developed influencing and negotiation skills combined with excellent written and verbal communication skills.
- 8. Demonstrated significant experience promoting continuous improvement and ability to implement change.
- 9. Proven ability to show initiative in working independently be deadline driven, assertive and reliable in following through with actions.

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: Pamela Naidoo-Ameglio	Name: Pamela Naidoo-Ameglio
Title: Group Executive, NONM	Title: Group Executive, NONM
Signature:	Signature:
Date:	Date: