



## POSITION DESCRIPTION

<b>Position Title:</b>	Senior Nuclear Analyst
<b>Cluster / Business Unit / Division</b>	Nuclear Operations and Nuclear Medicine
<b>Section or Unit:</b>	Nuclear Analysis
<b>Classification:</b>	Band 7
<b>Job Family:</b>	Science and Engineering
<b>Position Description Number:</b>	PD-2548
<b>Work Contract Type:</b>	Professional
<b>STEMM/NON-STEMM:</b>	STEMM
<b>STEMM CATEGORY:</b>	Science

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### POSITION PURPOSE

The primary objective of the Senior Nuclear Analyst is to provide analytic assessments and technical advice through computational and/or experimental means to ANSTO senior management and other stakeholders in support of nuclear reactor safety, utilisation and operations.

### 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

#### Key Accountabilities

- Lead or coordinate one or more major projects or tasks within projects, including management of the project or tasks, conception and development of project ideas and maintaining visibility of the project with internal and external stakeholders.
- For computational work, provide expert computational and analytical services in nuclear applications, nuclear safety and licencing to OPAL and other nuclear facilities and projects at ANSTO.
- For experimental work, manage equipment through an asset management framework and improvement program to ensure reliability of assets, productivity and availability of facility and ensure operational safety, security, sustainability and compliance with applicable standards, legislative and regulatory requirements.
- Disseminate specialist knowledge across the team, monitor and review work, coordinate cross divisional and external collaboration and ensure all milestones are achieved according to time and budget.
- Assess and provide constructive feedback on performance, as well as give advice and guidance on ways of developing the skills, knowledge and capabilities of group and project team members.

- Develop new techniques and methods and seek new solutions that are based on an assessment of broad organisational and/or scientific implications.
- Managing client relationships and negotiating effective outcomes with both internal and external clients through effective communication with a diverse range of stakeholders across various levels of scientific and technical understanding to ensure client needs are met.
- Maintain knowledge of industry best practice and technological developments, through investigating and assessing the relevance of such developments and their benefit to ANSTO.
- Foster and establish professional networks at international and national levels in order to promote ANSTO's research and operational efforts.
- 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 position is fully accountable for the accuracy, integrity and quality of the content of work provided to senior management; 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

- Thinking and acting at a strategic level in order to take part in the formulation of new projects, either by significantly contributing to project proposals and concept development or by taking a lead in the process. This may encompass the development and initiation of policies, strategically aligned initiatives and integration activities.
- Producing research of international standard or through recognition gained by performing work supporting reactor design and safety analysis to develop a significant international reputation for excellence.
- Producing publications in refereed journals and other reputable publications; participation in professional fora, steering committees and other professional networks that add value to ANSTO's strategic priorities.
- Utilising scientific knowledge to solve complex scientific problems by considering and evaluating situations and options and calculating and assessing the risks, costs and benefits of the proposed solutions.

### KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Manager/Executive	<ul style="list-style-type: none"> <li>• Receive guidance and direction</li> <li>• Provide expert, authoritative and evidence-based advice</li> </ul>
Work area team members	<ul style="list-style-type: none"> <li>• Provide expert advice and analysis on a full range of matters</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>

Other departments (Reactor Operations, Nuclear Medicine, Australian Centre for Neutron Scattering, ANSTO Engineering)	<ul style="list-style-type: none"> <li>• Provide expert advice and recommendations</li> <li>• Consult regarding results and stakeholder requirements</li> <li>• Report on technical developments and outcomes</li> </ul>
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## POSITION DIMENSIONS

### Staff Data

Reporting Line	Reports to a Team Leader in NAS
Indirect Reports	Nil

### Special / Physical Requirements

Location:	Lucas Heights Working in different areas of designated site/campus as needed
Travel:	Frequent movement on ANSTO campus Occasional travel both internationally and nationally
Physical:	For computational work, sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer For experimental work, standing for long periods, frequent manual handling, working in a loud environment, operating machinery, equipment Wearing personal protective equipment for the handling of hazardous and/or radioactive materials Working in confined space environment including wearing respiratory equipment Public speaking
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
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements

### Workplace Health & Safety

Specific role/s as specified in <a href="#">AP-2362</a> of the ANSTO WHS Management System	All Workers
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**KNOWLEDGE, SKILLS AND EXPERIENCE**

1. Degree or higher in Engineering or Science.
2. Extensive experience and expertise in the field of computational and/or experimental reactor physics and/or thermohydraulics.
3. Demonstrated ability to develop practical advice and engineering solutions for problems based on computational and/or experimental studies.
4. Project management skills including setting goals and objectives and timely delivery to clients.
5. People management skills and the ability to motivate and enthuse others.
6. Excellent interpersonal, communication, negotiation and conflict resolution skills.
7. Flexible approach to work and the ability to apply judgement to manage conflicting priorities.

**VERIFICATION**

<b>Line Manager</b>		<b>Delegated Authority</b>	
Name:		Name:	
Title:	Team Leader NAS	Title:	Manager NAS
Signature:		Signature:	
Date:		Date:	

## Appendix 1

<b>ANSTO Job Families</b>
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