



## POSITION DESCRIPTION

<b>Position Title:</b>	Technical Manager
<b>Cluster / Business Unit / Division</b>	NST - CAS
<b>Section or Unit:</b>	Accelerator Systems and Development
<b>Classification:</b>	Band 7
<b>Job Family:</b>	Science, Research
<b>Position Description Number:</b>	PD-0515
<b>Work Contract Type:</b>	Manager, Professional
<b>STEMM/NON-STEMM:</b>	STEMM
<b>STEMM CATEGORY:</b>	Technical

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### POSITION PURPOSE

The primary objective of the Technical Manager is to lead, mentor and drive all technical aspects of the Accelerator Systems and Development (ASD) group, providing the technical expertise and resources to operate, maintain and develop research instruments and facilities and associated beam lines within the Centre for Accelerator Science.

### 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, 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.

Nuclear Science and Technology (NST) incorporate 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.

The Centre for Accelerator Science (CAS) is a multi-disciplinary team of scientists, technicians and engineers supporting academic and industry users across Australia and the world with a suite of accelerator instrumentation for ultra-sensitive measurement, analysis and irradiation applications. As a user facility open to all, supported by the National Collaborative Research Infrastructure Strategy, CAS informs policy, provides critical services for IAEA, and enables discovery and innovation in areas such as environment, climate and health sciences, space technologies, advanced materials for energy and quantum, and cultural heritage.

CAS operates four tandem particle accelerators and a wide range of advanced (and often bespoke, inhouse designed) engineering systems, scientific instrumentation, equipment, and technologies across twelve beamlines for accelerator science applications and twelve chemistry laboratories for specialised sample processing. CAS offers accelerator mass spectrometry, sample preparation, ion beam analysis, ion beam implantation, and ion beam irradiation - together in one centre - backed by decades of accumulated experience in accelerator science and operations.

### ACCOUNTABILITIES & RESPONSIBILITIES

#### Key Accountabilities

- Provide specialised technical and engineering support for the safe, efficient, and effective operation of the accelerator facilities, maximising through well managed maintenance and

development programs, the availability of these accelerator facilities in a ready to use state to provide world class analyses

- Responsible for the management of CAS capital equipment and an annual operating budget for ASD, ensuring the equipment is maintained at world class standard and in a ready to use state
- Apply specialist accelerator knowledge and experience to evaluate problems with the accelerators and associated beam lines, providing timely, specialised, innovative and cost effective solutions to complex accelerator problems
- Investigate, plan and implement tactical and innovative developments and improvements to plant and equipment ensuring the facilities are placed to cope with changes in project directions and technological change (including electronic and mechanical instrumentation, and computer control and monitoring systems) to enhance and improve the efficiency and effectiveness of these facilities in order to yield leading edge, high quality research, products and services
- Liaise with accelerator scientists to develop their conceptual ideas and meet their daily demands, interfacing with engineering, administrative and IT staff to maintain the crucial infrastructure not supported from within the ASD. Liaise and develop networks with external suppliers to ensure CAS is provided with up-to-date and 'state of the art' technology
- Manage, plan and implement work schedules, priorities and allocate resources to ensure maintenance and development work is carried out on the accelerators delivering 90% availability of services
- Develop and implement pre-emptive/ proactive preventative maintenance systems to ensure minimal downtime of the accelerators due to breakdown maintenance
- Continual development and improvement of operational protocols to enhance the effective operation of the accelerator facilities. Prepare major submissions to gain necessary approvals, managing the technical effort for licensing and QA Safety
- Management and coordination of field work locally, nationally and internationally
- Generate progress, budgetary, quality, safety, board, annual and expert reports for management and ARPANSA
- Develop national and international networks that produce knowledge and skills sharing in accelerator technologies. Maintain core accelerator expertise at ANSTO by providing learning opportunities for technical staff to develop new skills through facilitating forums, workshops, lab visits and personal coaching
- Ensure personnel participate in training and maintain the necessary accreditations and licences to operate facilities and complete their work
- Develop international presence by contributing to the international pool of expertise on accelerator technology through the Accelerator Technical Forums and Symposium of North Eastern Accelerator Personnel (SNEAP) networks
- Act as the Licensing Officer and Area Supervisor for the accelerators to manage their safe operation ensuring all personnel comply with safety regulations and standards applied by ANSTO, ARPANSA, Comcare and WorkCover
- Liaise on matters pertinent to the safe operation of the accelerators, taking responsibility as the CAS representative for accelerator related safety and quality management audits.
- Fulfilling WHS responsibilities as specified.
- Undertake additional duties as required and during period of leave of other staff.

### **Decision Making**

- 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**

- Carrying out work in a heavily regulated environment and adherence to all regulations, operational requirements and to tight deadlines

- Maintaining knowledge and expertise with a system that is custom built.
- Troubleshooting complex systems developing innovative enhancements and improvements in a highly specialised field with no reference for advice or guidance
- Ensuring that all tasks are carried out safely and that all safety precautions are taken
- Coordination of people and resources in remote locations

## KEY RELATIONSHIPS

### KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Manager, CAS Director	<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>
CAS Management Team	<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>
Direct Reports, ASD	<ul style="list-style-type: none"> <li>• Provide leadership, guidance and support</li> <li>• Set performance requirements and manage performance and development</li> <li>• 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</li> </ul>
CAS and ANSTO process owners	<ul style="list-style-type: none"> <li>• Develop effective working relationships.</li> <li>• Liaise and consult in relation to impact of relevant ANSTO systems and process on CAS and vice versa.</li> </ul>
<b>External</b>	
Collaborators, users, visitors, students, regulators, suppliers	<ul style="list-style-type: none"> <li>• Develop and maintain effective working relationships.</li> </ul>
National & international bodies, forums and taskforces	Develop and maintain effective working relationships.

## POSITION DIMENSIONS

<b>Staff Data</b>	
Reporting Line	Reports to the CAS Director
Direct Reports	5 x engineers, specialists 7 x technicians, officers
Indirect Reports	Nil
<b>Financial Data (2024/2025)</b>	
Revenue / Grants	
Operating Budget	
Staffing Budget	

Capital Budget
Assets

### 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
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer) Public speaking May be working in confined space environment including wearing respiratory equipment
Radiation areas:	May be required to work in radiation areas under tightly regulated 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 AP- All Workers  
2362 of the ANSTO WHS Management System  
 Managers / Leaders / Supervisors

### KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree in Mechanical or Electrical Engineering or equivalent experience
2. Strong people management skills
3. Previous experience working within a highly regulated environment. Previous experience liaising with ARPANSA is desirable
4. Work in a safe manner and apply strong knowledge of QA systems
5. Proven experience and ability to diagnose and rectify instrumentation/systems faults using scenario building techniques
6. Thorough understanding and demonstrated knowledge in radiation safety and quality systems
7. Proven logical, systematic and methodical approach to problem solving, with the ability to use an innovative approach to resolve issues
8. Experience with high voltage and vacuum systems/ apparatus
9. Demonstrated ability to effectively communicate information
10. Demonstrated ability to establish productive relationships
11. Use communication and interpersonal skills to work in a team

### 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:	Ceri Brenner	Name:	Andrew Peele
Title:	Director, Centre for Accelerator Science	Title:	GE, Nuclear Science and Technology
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