

## POSITION DESCRIPTION

<b>Position Title:</b>	Science Operations Manager
<b>Cluster / Business Unit / Division</b>	NSTLI, Australian Synchrotron
<b>Section or Unit:</b>	Science
<b>Classification:</b>	Band 7
<b>Position Description Number:</b>	PD-1989
<b>Work Contract Type:</b>	Leadership, Professional

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### POSITION PURPOSE

The Science Operations Manager is pivotal to the operational management of the beamlines and Science functions at the Australian Synchrotron (AS). The role is responsible for managing facilitating and leading the application and improvement of beamline operational activities, processes and interactions across the facility. The Science Operations Manager is a member of the Synchrotron Management Team and the Project Governance Group, working closely with the Senior Principal Scientist and the Beamline Group Managers on all science operational matters. The role has input into scientific development at the AS through strategic planning and science operations management of existing and future beamlines.

### 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 Australian Synchrotron provides world-leading technical capability, and the nucleus around which new science and industry networks form as researchers interact. The synchrotron delivers experimental techniques that not only enhance current fundamental and applied research, but also open up new avenues of investigation to Australian science. The facility promotes international collaboration to enable leading-edge research and development, and is a hub for research that greatly benefits Australia and its regional neighbours.

The Science team provides a world-class user experience to university researchers, commercial and industry clients. This includes ensuring delivery of support to users through a range of services and access to the operational beamlines within the facility. Members of the Science team collaborate with other ANSTO teams to maintain world-class beamlines and to develop new capabilities and systems (including new beamlines for the facility). They achieve high impact research outcomes in line with ANSTO's research mission and through collaborations with the Australian Synchrotron User Community. Science team members also deliver highly effective outreach and training outcomes to promote the capabilities and achievements of the facility.

### ACCOUNTABILITIES & RESPONSIBILITIES

#### Key Accountabilities

- As part of the Synchrotron Management Team contribute to NSTLI's strategic plans and operational business plans through provision of operational leadership, advice, recommendations and influencing improved functionality, efficiency and relationships across the Science team and the facility as a whole. Develop and deliver Science-based reports to underpin and deliver these strategic plans.

- Liaise with science leadership and key operational managers within NSTLI on matters relating to operations & development of ANSTO's research infrastructure to ensure effective scientific outcomes and delivery.
- Lead and manage the development and continuous improvement of science operational functions and processes, in partnership with the Accelerator, Engineering, Controls, Scientific Computing, and IT Teams, and in accordance with safety, regulatory and compliance obligations. Initiate, develop and implement standard Science operating systems and processes across all beamlines in collaboration with other teams across the facility.
- Advise and support the AS Senior Principal Scientist and Beamline Group Managers on operational processes, activities and initiatives across the Science team.
- Provide oversight and balance of Science operational workloads, beamline shutdown planning and related works, development planning for existing beamlines, and integration of new beamlines into the AS User Program.
- Lead regular Beamline Failure Mode Analysis Reviews and provide oversight of Science team quality and risk management processes. Contribute to the development of and provide oversight for Asset Management Plans and the spares portfolio within the Science team.
- Lead the Capital development processes for operational beamlines and the Science Team. Provide oversight of Beamlines and other facility developments through the AS Project Governance Group.
- Develop and implement superior safe work practices in accordance with ANSTO policy and process in collaboration with the Australian Synchrotron's Work Health, Safety and Environment team and other Science Team staff.
- Engage in effective liaison with science operations at international light source facilities to develop improved systems, practices and capabilities at the Australian Synchrotron.
- Manage Science operating budgets relating to activities to support maintenance, developments and common beamline operational needs. Management of the AS Laboratory operational budgets and resourcing.
- Manage the day-to-day interactions with the User Office on matters relating to Science team requirements for maintenance, use of and improvements to User Portal Functions. Develop and manage a formal process for approval of expert user proposals and commissioning time requests.
- Engage and support members of the Science team to deliver superior capabilities and service to the NSTLI Industry and Stakeholder Engagement team and its clients, promote scientific outcomes and beamline development activities to internal and external stakeholders and identify, attract and engage new users.
- Undertake additional duties as required and during period of leave of Science Management.

## Decision Making

The position makes decisions in relation to,

- Objectives and plans for Science Operations function within the context of the facility's objectives and consult with the Senior Principal Scientist on complex, sensitive and major issues that have a significant impact on the Science function.
- Approval of Expert User proposals and commissioning time requests.
- Capital planning and associated priorities and resourcing associated with Beamline-based CAPEX Projects.
- The position works within a framework of legislation, policies, professional standards and resource parameters. Within this framework the position has independence in determining how to achieve objectives of the operations function, including deciding on methods and approaches, operations, project planning and allocation of resources.

- The ANSTO values, corporate plan, business plan, and operational excellence program provide the context for this position.
- The position is fully accountable for the accuracy, integrity and quality of the content of operational advice provided to users and staff, and is required to ensure that decisions are based on sound evidence.
- The position will be provided a budget within which constraints the position is expected to operate. The position will have authority to make purchases within specified limits and approve work hours and staff leave requests.
- 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 timely completion of facility wide projects, given limited resources and tight deadlines for completion
- Managing multi-disciplinary units and teams, which may have conflicting priorities while trying to improve operational effectiveness, service, response times and delivery efficiencies.
- Competing for key resources within the organisation given the need to deliver specific outcomes for projects to a disparate range of internal and external stakeholders
- Leading through influence and having overarching control of the deployment of engineering and technical resources when and where required. Keeping abreast of recent developments in field, ensuring continual improvement and implementation of best practise.

### KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Manager Senior Principal Scientist	<ul style="list-style-type: none"> <li>• Discuss and gain endorsement on operational for plans and goals and other initiatives</li> <li>• Consult on complex, sensitive and major issues that have a significant impact on operations</li> <li>• Provide expert, strategic and evidence based advice</li> <li>• Staff engagement and quality recruitment</li> <li>• Negotiate and report on budgets and resources consistent with operational business plans and goals</li> <li>• Recommend and discuss matters relating to operational plans and activities</li> </ul>
Science Leadership Team: Beamline Group Managers and Principal Beamline Scientists	<ul style="list-style-type: none"> <li>• Collaborate with to develop operational plans and improvements</li> <li>• Collaborate with to deliver of Science Team Goals</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>
Direct Reports	<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>
Senior Manager, Operations	<ul style="list-style-type: none"> <li>• Provide inputs required for AS facility-wide operations planning and budgets</li> </ul>

	<ul style="list-style-type: none"> <li>Collaborate with to deliver operational and development activities and projects, as well as other related processes for the AS.</li> </ul>
Senior Manager, Engineering; Senior Manager, Controls & Computing; Senior Manager, Capital Portfolio	<ul style="list-style-type: none"> <li>Collaborate with to deliver operational and development activities and projects, as well as other related processes for the AS.</li> <li>Develop a better working interaction between the Engineering, Controls, Project Management and Science teams.</li> </ul>
Beamline Group Managers; Principal Scientists; Science team members. Engineering Group Leaders; Engineering team members. Senior Manager, Accelerator Science and Operations; Accelerator Science team members.	<ul style="list-style-type: none"> <li>To enable effective operation and development of AS beamline capabilities and effective management of development projects and activities</li> </ul>
Facility operations teams such as Safety, Quality and Risk, Facilities, Mechanical Engineering, Controls and Computing as well as the Accelerator and Operations team, User Office team, Communications, Industry and Stakeholder Engagement teams and the Computing Infrastructure and IT team.	<ul style="list-style-type: none"> <li>Collaborate with to deliver operational and development activities and projects, as well as other related processes for the AS.</li> <li>Develop a better working interaction between these groups and the Science teams.</li> <li>To enable effective operation and development of AS beamline capabilities and effective management of development projects and activities</li> </ul>
<b>External</b>	
Universities, Business, Industry, Scientific Institutions	<ul style="list-style-type: none"> <li>Develop and maintain collaborative user relationships</li> <li>Provide expert, authoritative and evidence based advice</li> </ul>
International synchrotrons and research organisations and committees	<ul style="list-style-type: none"> <li>Develop and maintain international linkages around synchrotron scientific operations and practices</li> </ul>
Suppliers and contractors	<ul style="list-style-type: none"> <li>To ensure effective beamline development; project management and procurement requirements</li> <li>Contractor supervision</li> </ul>

## POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the Senior Principal Scientist – Australian Synchrotron
Direct Reports	2
Indirect Reports	40+
Financial Data (2018/2019)	
Revenue / Grants	
Operating Budget	\$0.5M+
Staffing Budget	\$150k
Capital Budget	

Assets
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### Special / Physical Requirements

Location:	Clayton Working in different areas of designated site/campus as needed
Travel:	May be required travel to ANSTO sites from time to time Frequent travel to ANSTO sites within Australia Frequent 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 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
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 Obtain and maintain appropriate federal government clearance

### 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) Group Executive / General Manager Managers / Leaders / Supervisors 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

Ref published Org chart

## KNOWLEDGE, SKILLS AND EXPERIENCE

- A PhD in a relevant field of Science or Engineering with a strong technical and operational understanding of synchrotron beamlines and functions.
- Demonstrated ability to manage staff with strong team leadership capabilities, particularly where the team is multi-disciplinary.
- Experience in guiding, developing and mentoring staff to deliver optimal operational outcomes.
- Experience or demonstrated knowledge of scientific computing, data analysis and data management functions.
- High level networking competency at science and technology interface with demonstrated experience in science operations and project management.
- Demonstrated ability to strategically plan innovate, contribute to and drive continuous improvement efforts
- Strong capacity for influencing, managing and motivating others.

- Demonstrated capacity to work independently and as part of a team requiring sound professional judgement, decision-making and problem-solving skills.
- Ability to manage a range of competing priorities.
- Personal commitment to safety practices for all staff, contractors and visitors to the Australian Synchrotron

## 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:	Michael James	Name:	Andrew Peele
Title:	Senior Principal Scientist - Australian Synchrotron	Title:	Director, Australian Synchrotron
Signature:		Signature:	
Date:		Date:	