



POSITION DESCRIPTION

Position Title: Laboratory Operations Manager
Cluster / Business Unit / Division Nuclear Science and Technology
Section or Unit: National Deuteration Facility (NDF)

Classification: Band 7

Job Family: Research

Position Description Number: PD-2446

Work Contract Type: Professional

STEMM/NON-STEMM: STEMM

STEMM CATEGORY: Research & Sciences

POSITION PURPOSE

The NDF Laboratory Operations Manager manages the safety and quality operations of the NDF laboratories and coordinates the technical operations of the labs by managing support staff and liaising with the NDF team members, users, instrument custodians and safety and quality auditors and professionals. The position manages the production and the staff responsible for production of routine deuterated precursors and molecules in the NDF produced through chemical and biological synthesis techniques. The position also contributes to managing the workflow system updates and metrics collection of the NDF.

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 National Deuteration Facility (NDF) is Australia's national facility for isotopic labelling of molecules with the stable, non-radioactive isotope deuterium using chemical or biological processes in order to enhance contrast, and reduce background when conducting structural studies using neutron scattering instrument operated by the Australian Centre for Neutron Scattering (ACNS) at the OPAL Reactor, or using spectroscopic techniques such as Nuclear Magnetic Resonance (NMR), Infra-Red (IR) or Mass Spectrometry (MS).

The NDF is a world leader in chemical deuteration and equal to the benchmark for Biodeuteration. It is the only facility of its kind in southern hemisphere and has an oversubscribed user program with greater than 100 users from 25 institutions per year benefitting from the NDF's capabilities. The NDF has significant international engagement with institutions in Europe, Asia and North America.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

The key accountabilities for this position include:

- Manage NDF laboratory operations and day-to-day lab activities, ensuring world-class user support
 is delivered to academic, industrial and commercial clients and the NDF team. This includes
 coordinating safety and quality reviews and implementing improvements to laboratory and facility
 processes and operations.
- Ensuring operational safety, security, sustainability and compliance with applicable standards, legislative and regulatory requirements.
- Coordinate and manage the routine production of deuterated or other stable isotope labelled
 precursors and molecules and ensure reliability, productivity and availability of the Parr and Bioreactors.

- Manage staff responsible for laboratory support and production of routine precursors molecules (~ 2-3 staff members).
- Independently manage and undertake projects that produce deuterated molecules using the Parr and Bio-reactors.
- Generate and increase demand for use of the NDF's capabilities through contribution to
 establishing and building strong networks and peer-to-peer partnerships with external researchers
 undertaking investigations that benefit from the use of deuterated molecules.
- Initiate, undertake and contribute to internal and external collaborative research investigations and projects.
- Prepare and publish journal papers describing application of deuterated molecules to structure/function investigations and deuteration method development.
- Represent the NDF at national and international conferences and workshops and other scientific fora.
- Supervise research students and provide expertise in the use of Parr and Bio-reactors to users and students for all NDF labs.
- Support the NDF User Program Manager in managing workflow system updates, metrics collection, and reporting.
- 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 individual objectives, including people management of lab support staff, lab consumable budget, methods and approaches, operations of programs in the role portfolio and project planning.
- The ANSTO values, organisational corporate plan, business plan, operational excellence program, the NST strategy and Research Infrastructure & NDF objectives provide the context for the position.
- 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 maybe 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 will consult with the
 platform leader or other manager on issues that have an impact on the NDF operations in terms of
 safety, quality and the routine production of deuterated precursors.
- 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

- Effective multitasking to achieve management of the labs and the operation of the Parr and Bioreactors without jeopardising quality or timeliness on deliverables
- Conversion of technical success in deuteration and stable isotope labelling into high value outcomes including journal publications of high quality – frequently requiring motivating staff and clients to take projects through to completion.
- Appropriately balancing responsibilities as the NDF Lab Operations Manager and the NDF safety and quality delegate.
- Ensuring the successful operation of the NDF labs and reporting systems of the NDF whilst managing conflicting priorities and deadlines with stakeholders
- Manage the efforts for the development of new deuterated methods using the Parr and Bioreactors.

• Integration into a multi-disciplinary team and positive management of the dynamic of team interaction with operation of the Parr and Bio-reactors.

KEY RELATIONSHIPS

Who	Purpose
Internal	
NDF Leader	 Receive guidance and direction Recommend and gain endorsement for plans and goals and other initiatives. Negotiate and report on the Lab activities and resources consistent with operational plans and goals. Report on progress of NDF deuteration proposals Provide expert, authoritative and evidence based information and advice on safety and quality aspects of the NDF's operations.
Deuteration 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 Engage to monitor progress of lab operations and monitor trends and evaluate further support which may be required to ensure delivery against the plan Negotiate and resolve conflicts
Direct Reports	
	 Provide leadership, guidance and support Set performance requirements and manage performance and development
ANSTO Scientists & facility users	 Provide advice and analysis Collaborate and contribute to research projects Understand user requirements and desired outcomes Provide training, guidance & supervision while utilising facilities, ensure compliance with safety, quality and applicable legislation and regulation
External	
Facility users and collaborators from University, public and commercial R&D sectors	 Build & maintain relationships and stimulate interest in deuteration and in the research community Provide advice and analysis Collaborate and contribute to research projects Understand user requirements and desired outcomes Provide training, guidance & supervision while utilising facilities, ensure compliance with safety, quality and applicable legislation and regulations Collaborate to deliver client focused results and provide scientific expertise

POSITION DIMENSIONS

Staff Data		
Reporting Line	Reports to the NDF - Leader or delegate	
Direct Reports	1 x Lab technician2 x Deuteration Facility Chemist / Biochemist	
Indirect Reports	Nil	

Financial Data (2023/2024)

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:	
	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)
	Labour intensive physical requirements (sitting, standing, frequent manual handling)
	Standing for long periods
	Frequent movements (climbing, stooping, kneeling, crouching, crawling)
	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
	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 with and in an area where hazardous chemicals or
	materials are handled under tightly controlled safety conditions
Hours:	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 Al	P- All Workers
2362 of the ANSTO WHS	Officer (definitions found in appendix A of AP-2362)
Management System	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
	Area Supervisor
	First Aid Officer
	Building Manager

ORGANISATIONAL CHART

On file

KNOWLEDGE, SKILLS AND EXPERIENCE

- 1. Postgraduate degree in Chemistry, biochemistry, or other related discipline encompassing organic synthesis.
- 2. Extensive practical experience in the production, purification and characterisation of deuterated molecules using H/D exchange reactors.
- 3. Proven experience in managing research projects and publishing research results in refereed journals.
- 4. Proven experience in managing lab quality systems effectively, within scope, within budget and on time.
- 5. Demonstrated ability to create networks and establish collaborations with researchers from other organisations.
- 6. Demonstrated strong customer focus and meticulous approach to execution of research lab production and operations in the laboratory.
- 7. Demonstrated experience in managing effective relationships with key stakeholders and ability and willingness to work in a team environment.
- 8. Flexible approach to work, deadline driven, reliable in following through with actions and pro-active when attending to customer and business unit interest.

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:	Tamim Darwish	Name:
Title:	Leader, National Deuteration Facility	Title:
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