



POSITION DESCRIPTION

Position Title:	ACNS Laboratory Technical Officer/Senior Technical Officer
Cluster / Business Unit / Division	Nuclear Science & Technology
	Australian Centre for Neutron Scattering – Operations –
Section or Unit:	Laboratories and Compliance
Classification:	Band 4/5 Linked Role
Job Family:	Science
Position Description Number:	PD-2504
Work Contract Type:	Technical
STEMM/NON-STEMM:	STEMM
STEMM CATEGORY:	Research and Science

POSITION PURPOSE

The ACNS Laboratory Technical Officer/Senior Technical Officer undertakes laboratory, technical, analytical and scientific activities in support of scientific experiments at the Australian Centre for Neutron Scattering (ACNS). The primary objective of the Laboratory Technical Officer/Senior Technical Officer is to support and facilitate the research outcomes of ACNS and its customers by maintaining the laboratory facilities and equipment, ensuring effective operations by planning user activities and completing analytical and scientific tasks as requested by the Laboratories and Compliance Group Leader.

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.

Nuclear Science & Technology (NST) incorporates 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 Research Infrastructure portfolio consists of scientific infrastructure and capabilities, with a number of them categorised as landmark infrastructure. This includes a range of scientific assets, infrastructure, capability development & delivery for multi-decadal, multi-disciplinary, multi-user platforms for the user community and for internal research and development endeavours.

The Australian Centre for Neutron Scattering (ACNS) operates neutron and X-ray scattering instruments with specialised sample environment equipment utilising ANSTO's modern high flux OPAL reactor and its cold neutron source. ACNS conducts structural and functional scientific investigations for industry, health, environment, biotechnology, nanotechnology, energy, advanced materials, engineering, food, cultural heritage and archaeology sectors. ACNS is one of the top neutron facilities worldwide and unique within the Southern Hemisphere with an internationally competitive instrument suite complemented by an extensive suite of sample environments. There is an extensive user program of >500 users (1400 visits) per year from Australian universities and institutes, international institutions and internal ANSTO researchers. ACNS also services industry needs in engineering, infrastructure, food, automotive and other sectors. The user laboratories are a critical support for the research undertaken by the user program.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities Band 4

- Support neutron scattering experiments by efficiently preparing laboratory work areas, equipment and chemicals to meet the requirements of external and internal users, providing technical advice to staff and visiting scientists on the purpose and safe use of laboratory equipment, chemicals and consumables, and conducting ACNS and laboratory inductions as requested.
- Practice exceptional laboratory housekeeping to enable operational readiness of the laboratories, including protective clothing and equipment. Manage stock control ensuring adequate stock of chemicals and consumables is maintained for users.
- Accurate and timely record keeping of chemicals, samples and waste for traceability, safety and regulatory purposes.
- Independently assess and undertake equipment maintenance and calibration to ensure safety, reliability and availability of equipment, including radiological equipment. This also includes contributing to the continuous improvement of laboratory equipment. Report repairs as required to the Laboratories and Compliance Group Leader.
- Ensure hazards and risks are identified and controlled for all laboratory activities and assess if escalation to the appropriate officer is required. Complete safety assessments as directed by the Laboratories and Compliance Group Leader.
- Prepare clear and concise user instructions for laboratory equipment, allowing for safe and efficient usage.
- Complete analytical tasks, assess results and prepare reports as required by the Laboratories and Compliance Group Leader.
- Complete ACNS compliance, regulatory, and BMS tasks as required by the Laboratories and Compliance Group Leader.
- Additional responsibilities include Safeguards Officer, area supervisor and contractor supervisor.
- Undertake additional duties as required and during period of leave of other staff.

Key Accountabilities Band 5

- Undertake all Band 4 accountabilities at an expert level without supervision or guidance.
- Manage the safe and compliant day-to-day laboratory operations, including scheduling of the laboratory workspace and equipment to meet user program requirements, independently risk assessing all laboratory activities.
- Use specialised expertise to procure, install, commission and maintain new laboratory equipment to ensure delivery of a wide range of experimental techniques. Undertake method development of new techniques, processes and equipment implementation and assessing the effectiveness of improvements.
- Independently prepare and update laboratory protocols, risk assessments and procedures. Apply laboratory standards and international best practice. Assess if escalation is required for delegate officer approvals.
- Conduct safety and radiological risk assessments on proposed experiments, samples and equipment for the user program and provide expert advice.
- Responsible for the compliant management of regulated, controlled and nuclear materials at ACNS.
- Train, supervise and provide expert advice to staff, users (scientists, researchers, post-docs, students), visitors and contractors to ensure effective and safe work within the facility. Provide technical leadership and demonstrate best practice for other workers within the facility. Actively contribute to a working environment which promotes teamwork, knowledge sharing, collaboration and achieves quality scientific outcomes for the facility and its users.
- Manage laboratories projects within budget and provide advice on costs, including Capital and Labour, as required by the Laboratories and Compliance Group Leader.
- Collaborate and exchange information with other user support laboratories and groups at international neutron beam facilities.

- Ensuring relevant qualification of dangerous goods shipping is maintained to align with relevant regulations. The role is accountable for the responsibilities and advice provided associated with this function.
- Undertake additional duties as required and during period of leave of other staff.

Decision Making

- The ANSTO values, organisational corporate plan, business plan, operational excellence program, the NST strategy and ACNS Business Plan provide the context for the position.
- 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 laboratory work area.
- The position is fully accountable for the accuracy, integrity and quality of the content of advice and services provided to users and instrument scientists, and is required to ensure that activities and equipment and their interaction with ACNS are compliant with regulatory and safety requirements at all times.

Band 4 role

• Work plans and work priorities are provided and this position is required to consult with the Laboratories and Compliance Group Leader on changes to work plans and priorities.

Band 5 role

- Determines key work priorities autonomously within work plans and is required to consult with the Laboratories and Compliance Group Leader on complex and sensitive issues that may have a significant impact on the safety, compliance, schedule and outcome of the neutron beam instrument experiments.
- When managing the laboratory operations, this role approves or restricts access to the laboratories and laboratory equipment to users and staff by making a justified assessment of risks according to their proficiency, abilities and work requirements.
- 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

- Developing and maintaining the skills required for ensuring the safe operation of chemical laboratories in a nuclear environment.
- Working effectively on multiple tasks to completion by agreed deadlines.
- Resolving scheduling conflicts and other operational issues as they arise without major inputs by the Group Leader.
- Ensuring that laboratories are prepared for experiments and a high standard of housekeeping is maintained.
- Meeting needs of multiple stakeholders and adjusting work plans and processes to meet user and operational requirements.
- Carrying out work in a heavily regulated environment and adherence to all regulations is mandatory.
- Ensuring safety precautions are taken by staff and visitors when using the neutron beam facility laboratories.

KEY RELATIONSHIPS

Who	Purpose
Internal	
Laboratories and Compliance Group Leader (supervisor)	 Receive guidance and direction. Provide advice and recommendations on laboratory operations and issues.

Work area team members	 Report on work plan achievements and resolution of issues or laboratory usage conflicts. Recommend and gain endorsement for operational plans and goals and other initiatives. Contribute to group decision making processes, planning and goals. Collaborate and share accountability. Negotiate and resolve conflicts.
ACNS Instrument Scientists, ACNS Operations Staff	 Liaise regarding laboratory needs for experiments. Collaborate in relation to ensure high availability of laboratory and user support. Establish and maintain ongoing open communication to ensure laboratory supplies and equipment meets needs and user requirements. Provide advice and support for tasks related to laboratories and chemicals.
Radiation/environmental protection & safety staff	Seek advice when required.Provide advice on irradiated samples nature and potential activities.
ANSTO facility users and students	 Provide advice and training on use of laboratory equipment, chemicals and consumables. Communicate and collaborate to ensure laboratory support matches user needs.
External	
Facility users (national & international scientists, students, contractors and collaborators)	 Provide advice and training on use of laboratory equipment, chemicals and consumables. Communicate and collaborate to ensure laboratory support matches user needs.

POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the Laboratories and Compliance Group Leader
Direct Reports	Nil
Indirect Reports	Provide technical assistance to contractors, laboratory students and facility users.

3)	
N/A	
	N/A N/A N/A

Special / Physical Requirements

Location:	Lucas Heights	
	Working in different areas of designated site/campus as needed	
Travel:	May be required travel to ANSTO sites	
	Infrequent travel both internationally and nationally	

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
Wearing personal protective equipment for the handling of hazardous and/or radioactive materials
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
Willingness to work extended and varied hours based on operational
requirements
After hours work may be required for short and infrequent periods
Satisfy ANSTO Security and Medical clearance requirements
Obtain and maintain appropriate federal government clearance
The Transition from Band 4 to Band 5 is not automatic and requires a
full written submission, in addition to the attached checklist, to
demonstrate how the employee meets the requirements. Transition
will only occur following approvals from the Line manager, Operations
Manager and ACNS Director.

Workplace Health & SafetySpecific role/s as specified in AP-2362 of the ANSTO All WorkersWHS Management SystemOther specialised roles identified within the
guideline a position holder may be allocated to in
the course of their duties

ORGANISATIONAL CHART

On file

KNOWLEDGE, SKILLS AND EXPERIENCE

Band 4 level

- 1. Degree in Chemistry, Applied Science or similar, or Diploma in Chemistry with relevant laboratory experience.
- 2. Demonstrated practical experience and technical skills working within a chemical or analytical laboratory environment. Previous experience in a multi-user facility is highly desirable.
- 3. Strong interpersonal and communication skills with the ability to interact and communicate with a diverse and multidisciplinary audience.
- 4. Demonstrated ability to work as part of a team and seek advice from supervisor and fellow colleagues.
- 5. Demonstrated ability to practice WHS requirements in a laboratory.
- 6. Experience in the preparation of and demonstrated ability to follow policy, procedures & guidelines.
- 7. Experience in Microsoft Office software suite and chemical management software.

- 8. Experience working in and maintaining a highly regulated environment.
- 9. Ability to work under time constraints with limited supervision, prioritise work and respond to changing conditions and deadlines.

In addition to the required knowledge skills and experience above the Band 5 level will require:

- 1. Degree in Chemistry, Applied Science or similar, coupled with equivalent extensive experience working within a chemical or analytical multi-user laboratory and nuclear facility environment.
- 2. Demonstrated ability to independently and expertly undertake duties as a Band 4 Laboratory Technical Officer
- 3. Extensive experience in managing, working in and maintaining laboratories.
- 4. Significant experience troubleshooting various laboratory equipment and proven ability to investigate and resolve problems within and outside main field of qualification.
- 5. Experience in providing training on laboratory safety, procedures and policies.
- 6. Extensive experience providing support to other scientists/researchers while meeting, and at times exceeding, user requirements and services.
- 7. Demonstrated knowledge and experience working with radiation and providing radiological assessment.
- 8. Ability to lead and co-ordinate work activities to achieve user and facility outcomes.
- 9. Demonstrated experience providing technical advice, coaching and mentoring to other laboratory technical officers).
- 10. Demonstrated Project management experience within a scientific context.

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 Manag	ger	Delegated A	Authority
Name:	Deborah Wakeham	Name:	Jamie Schulz
Title:	Laboratories and Compliance Group Leader, Australian Centre for Neutron Scattering	Title:	Director, Australian Centre for Neutron Scattering
Signature:	As per email on file	Signature:	As per email on file
Date:		Date:	

ACNS Laboratory Technical Officer/Senior Technical Officer Linked Role (PD-2504) Band 4 to Band 5 Transition Checklist

Name:	
Commencement Date:	
Assessment Date:	

Note: Full written submission demonstrating and justifying how the employee meets the requirements must also be attached.

Requirements for transition	Met Crit	eria
a) Minimum 5 years working as Laboratory Technical Officer (Band 4)	🗌 Yes	🗌 No
OR	OR	
b) Minimum 5 years of equivalent experience	🗌 Yes	🗌 No
Qualification for Band 5 or equivalent (include details)	Yes	🗌 No
Extensive experience and demonstrate meeting all below requirements	🗌 Yes	🗌 No
Demonstrated ability to independently and responsibly perform band 4 accountable	pilities and	apply
required knowledge, skills and experience for the band 5 position including:		
Undertake band 4 accountabilities at expert level and independently without	🗌 Yes	🗌 No
supervision or guidance.		
Demonstrated ability to undertake the daily management and operations of the	🗌 Yes	□ No
ACNS laboratories including scheduling workspaces and equipment.		
Demonstrated ability to independently prioritise and allocate tasks to ensure	🗌 Yes	□ No
efficient and effective laboratory services are provided for the user program.		
Demonstrated ability to recognise issues with equipment and undertake necessary	🗌 Yes	□ No
troubleshooting including organising repairs at an intermediate to advanced level		
to ensure minimal down time.		
Demonstrated ability to conduct safety and radiological risk assessments on proposed experiments, samples and equipment for the user program and	🗌 Yes	🗌 No
laboratory work.		
Training, supervision and provision of expert advice to staff and users (scientists,	🗌 Yes	□ No
researchers, post-docs, students) to ensure effective and safe work within ACNS		
and to ensure safety, regulatory and legislative compliance.		
Professional and specialist expertise developed sufficiently to independently	🗌 Yes	🗌 No
prepare, revise and update instructions, processes and safety documents.		
Demonstration of teamwork, knowledge sharing, collaborative and user focussed working environment.	🗌 Yes	🗌 No
Demonstrated Project Management Experience in a scientific context		
	🗌 Yes	🗌 No

Manager Recommendation:

I have reviewed the employee's competence in accordance with Linked Role PD-2504 and certify that the employee meets all requirements for transition and recommend transition from Band 4 to Band 5 be endorsed.

Line Manager Name:	
Signature:	
Date:	

Operations Manager Assessment

I have assessed the submission and confirm that the employee meets all requirements for transition from Band 4 to Band 5

Operations Manager Name:	
Signature:	
Date:	

Director, Australian Centre for Neutron Scattering

I have reviewed all information and approve transition from Band 4 to Band 5

Director Name:	
Signature:	
Date:	