



POSITION DESCRIPTION

Position Title:	Minerals Processing Laboratory Technician
Cluster / Business Unit / Division	Commercial Products and Services
Section or Unit:	Minerals
Classification:	Band 3 / 4 Linked Role
Job Family:	Research
Position Description Number:	PD-1178
Work Contract Type:	Technical
STEMM/NON-STEMM:	STEMM
STEMM CATEGORY:	Science

POSITION PURPOSE

The primary objective of the Minerals Processing Laboratory Technician is to provide detailed technical support to a number of managers and project leaders undertaking commercial and research work for industry clients on the development of processes for the treatment of ores containing inter alia uranium and critical minerals. The minerals processing laboratory work involves the development and optimisation of minerals processing unit operations such as crushing, milling and screening along with sample preparation and equipment set up and maintenance in support of a wide range of laboratory and pilot scale experimental programs.

ORGANISATIONAL ENVIRONMENT

ANSTO is a leading global nuclear science and technology organisation delivering world class research and expertise to benefit Australia and support a more sustainable future. Using nuclear science, we improve health, support industries, provide expert advice to government on nuclear technologies and help develop Australia's nuclear workforce.

The Minerals business unit is a team of more than 60 consultants and technicians with expertise that covers chemical engineering, metallurgy, mineralogy, chemistry, geology, and radiation safety. ANSTO Minerals provides practical solutions and innovative technology in ways that deliver financial and environmental benefits to the mining and minerals processing industries.

Minerals incorporates Process Development groups that undertake commercial and research work that seeks to identify, investigate and develop technologies that will increase the competitiveness and environmental sustainability of operations in critical minerals (including rare earths and lithium), uranium and other metallurgical industries, including those affected by NORM (naturally occurring radioactive materials).

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities Band 3

- Conduct minerals processing experimental work and ensure that the data obtained is reproducible, accurate, appropriately recorded and reported in a report-ready format.
- Independently prioritise, plan, schedule, and carry out routine and non-routine minerals processing tests across multiple projects to meet deadlines including the identification of appropriate sample processing methods and using meticulous housekeeping to eliminate cross contamination.
- Contribute to research and commercial output by working as part of project research teams to complete project experiments and pilot plants within time and scope;
- Apply practical experience to analyse and develop responses to unforeseen technical problems.

- Ensure work undertaken follows set procedures, so that data collected for research can be validated.
- Ensure the minerals processing laboratory meets quality assurance, considering relevant Australian standards and continual review practices for improvement.
- Manage and maintain minerals processing laboratory in good working order.
- Work collaboratively to ensure minerals processing laboratory is functioning effectively through sharing of knowledge and expertise.
- Assist with Dangerous Goods management and freight and handling of shipments of samples.
- Fulfilling WHS responsibilities as specified in AS 2362 of the ANSTO WHS system.

In addition to performing all Band 3 Key Accountabilities, the **Key Accountabilities for the Band 4** role include:

- Contribute to, and develop, experimental programs and designs to satisfy the task/project objectives.
- Modify and design the set-up of minerals processing equipment for experiments in order to meet project requirements.
- Develop standard operating procedures, considering relevant Australian standards, for equipment usage and experimental practice.
- Supervise the day-to-day operations of other staff within the minerals processing area and ensure the delivery of timely information.
- Plan and schedule the daily workload to meet project outcomes and deliver on time to meet constantly changing client requirements.
- Oversee shipments from the sample preparation facility including approval as the Authorised Officer for Dangerous Goods shipments.

Decision Making

- The position works within a framework of project requirements, legislation, policies, professional standards and resource parameters. Within this framework the position has some independence in determining how to achieve assigned objectives however will be constrained by the project requirements, deliverables and timeframes.
- The ANSTO values, organisational corporate plan, business plan, operational excellence program, the Minerals business strategy and commercial and development project plans provide the context for the position.
- The position is fully accountable for the accuracy, integrity and quality of the content of work undertaken and advice provided 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.
- Determine key work priorities within the context of agreed work plans and project plans and will consult with the line manager on complex, sensitive and major issues that have a significant impact on the project or team members.
- 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 multiple tasks, working on multiple projects to tight deadlines.
- Adjusting plans to suit changing priorities.
- Meeting needs of different managers and clients.
- Using initiative to troubleshoot complex systems and problems.

KEY RELATIONSHIPS

Who	Purpose
Internal	
Manager	<ul style="list-style-type: none">• Receive guidance and direction• Recommend and gain endorsement for plans and goals and other initiatives
Work area team members	<ul style="list-style-type: none">• Contribute to group decision making processes, planning and goals• Work within groups to achieve target project outcomes• Guide and informally supervise students and other more junior technical staff• Work within groups to ensure WHS and Quality requirements are met
Other departments	<ul style="list-style-type: none">• There are no formal arrangements with other departments in ANSTO, however it may be necessary to work collaboratively with them from time to time, depending on project and operation requirements.
External	
Commercial Clients	<ul style="list-style-type: none">• From time to time may need to liaise with suppliers of chemicals or equipment.• May be required to outline and discuss operation of experimental setups with clients when they are visiting site.

POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the Senior Process Engineer
Direct Reports	Nil
Indirect Reports	Nil

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 Field work in remote locations Work on mine sites. Work on mine sites involves travel and a current driver's licence is required to allow mobility across mine sites.
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 Industrial facility and laboratory 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

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 Shift work 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>AP-2362</u> of the ANSTO WHS Management System	All Workers Officer (definitions found in appendix A of AP-2362) Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties
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KNOWLEDGE, SKILLS AND EXPERIENCE

Band 3 level

1. Demonstrated experience working in a minerals processing laboratory including equipment operation and maintenance
2. Work safely with chemicals and radioactive materials
3. Work co-operatively with others as part of a team with a customer service focus
4. Conduct routine experiments under minimal supervision
5. Ability to plan and set up experiments, collect and present data based on required outcomes
6. Intermediate computer skills in Microsoft programs (Word, Excel and Outlook).
7. Ability to interpret and apply policies and procedures and regulations
8. Sample and warehouse management - forklift ticket, dogman's licence, understanding of Dangerous Goods packaging and shipment
9. Demonstrate personal qualities that will add value to the work group.
10. Pro-active, deadline driven, and reliable in following through with actions

In addition to the required knowledge skills and experience above the Band 4 level will require:

1. Certificate diploma in minerals processing or equivalent experience (Relevant tertiary studies are desirable)
2. Ability to conduct routine and non-routine experiments under minimal supervision
3. Training and experience as Authorised Officer for Dangerous Goods shipments.
4. Ability to promote, establish and maintain effective workplace relationships with clients and staff
5. Proven ability to coordinate and lead a small team,
6. Ability to train others in sample preparation methodologies
7. Demonstrated capability to carry out tasks/ projects with little supervision
8. Strong written and verbal communication skills and the ability to interact with people of various backgrounds.

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:	James Lowe	Name:	Adrian Manis
Title:	Senior Process Engineer	Title:	Manager, Pilot Plant Operations
Signature:		Signature:	
Date:		Date:	

Minerals Processing Laboratory Technician Linked Role (PD-1178)

Band 3 to Band 4 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 Criteria
Performing Band 3 accountabilities, as described in this PD.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Performing Band 4 accountabilities, with >90% metric, as described in this PD.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Demonstrated behaviours and ability to independently and responsibly perform all Band 3 and Band 4 accountabilities - through exercising sound individual judgement that will not challenge the safety and reliability of the facilities and meet all regulatory requirements.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Demonstrated experience or competency in: <ul style="list-style-type: none"> • Tertiary qualifications (commonly a Diploma) in relevant engineering or science discipline qualifications or equivalent minerals processing experience. • Ability to conduct routine and non-routine sample preparation tasks with minimal supervision • Maintenance of Dangerous Goods accreditation through regular refresher training. • Ability to promote, establish and maintain effective workplace relationships with clients and staff. • Proven ability to coordinate and lead a small team. • Pro-active, deadline driven, and reliable in following through with actions. • Demonstrated capability to carry out tasks/ projects with little supervision. • Strong written and verbal communication skills and the ability to interact with people of various backgrounds. 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
Sustained commitment to demonstrating a proactive attitude and practical application of ANSTO values.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Demonstration of ability to build and maintain strong stakeholder relationships to ensure customer requirements are met	<input type="checkbox"/> Yes <input type="checkbox"/> No
Consistent achievement of >90% training completion metrics.	<input type="checkbox"/> Yes <input type="checkbox"/> No

Manager Recommendation:

I have reviewed the employee's competence in accordance with Linked Role PD-1178 and certify that the employee meets all requirements for transition and recommend transition from Band 3 to Band 4 be endorsed.

Manager Name:	
Signature:	
Date:	

General Manager Assessment

I have assessed the submission and confirm that the employee meets all requirements for transition from Band 3 to Band 4

General Manager Name:	
Signature:	
Date:	