



## POSITION DESCRIPTION

<b>Position Title:</b>	Development Technologist
<b>Cluster / Business Unit / Division</b>	Commercial Products and Services
<b>Section or Unit:</b>	Minerals
<b>Classification:</b>	Band 5
<b>Job Family:</b>	Research
<b>Position Description Number:</b>	PD-1304
<b>Work Contract Type:</b>	Technical
<b>STEMM/NON-STEMM:</b>	STEMM

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### POSITION PURPOSE

The primary objective of the Development Technologist is to provide technical expertise and experimental support for research and development projects in Minerals especially those relating to separation technology based on solvent extraction and ion exchange

### 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 Minerals business is a part of ANSTO's Commercial Products and Services cluster. We are a team of more than 60 consultants and technicians with expertise that covers metallurgy, chemistry, chemical engineering, mineralogy, analytical and radiation safety. ANSTO's Minerals business provides practical solutions and innovative technology to deliver financial and environmental benefits to the mining and metallurgy industries.

The Minerals Group undertakes commercial and research work that seeks to identify, investigate and develop technologies that will:

- increase the competitiveness and environmental sustainability of operations in the critical minerals (including rare earths and lithium), uranium and other metallurgical industries, including those affected by NORM (naturally occurring radioactive materials);
- underpin our commercial consulting services; and
- foster collaborative relationships with industry.

### ACCOUNTABILITIES & RESPONSIBILITIES

#### Key Accountabilities

- Undertake experimental work programs including test work, preliminary analysis of experimental data and development of Excel spreadsheets for presentation of experimental data and contributions to the preparation of technical reports.
- Utilise expertise when assessing the viability of proposed approaches and exercising sound technical judgement in order provide advice to the Project Leader on the most effective experimental techniques.
- Take responsibility as an area supervisor to maintain a functioning laboratory for purpose to carry out hydrometallurgical test work with emphases in solvent extraction and ion exchange techniques

- Lead tasks within projects. This involves setting goals and objectives for work completion and ensuring milestones are achieved, within time, scope and budget.
- Take an active role in establishing sampling and analytical protocols to support pilot plant operations
- Maintains, operates and calibrates laboratory equipment and custom designed experimental systems.
- Provide coaching to students and other junior technicians or visitors in laboratory procedures sharing knowledge of the relevant laboratory and/or technical expertise.
- Work in a highly collaborative way, building and maintaining productive working relationships within ANSTO and with external suppliers
- Participate in committees such as WHS, Quality and others, which support the general operations of ANSTO and Minerals
- Provide guidance to technical and professional staff regarding appropriate chemical labelling codes
- Provide guidance to project leaders as to technical effort required to be used in commercial proposal development

### Decision Making

- The position is fully accountable for the accuracy, integrity and quality of the experimental data produced and to alert professional staff when there are inconsistencies in the data
- Test new methods and develop procedures that are appropriate for Minerals
- Source scientific equipment fit for purpose that involves minor capital expenditure
- 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

Minerals works in a matrix system where the position reports to a direct supervisor for administrative purposes but to a project leader for technical input.

- Time management skills are key in order to respond to the diverse requirements of various projects;
- Will need to juggle more than one project at a time and report to a number of different project leaders
- Keep abreast of all requirements for effective and safe operation of a hydrometallurgical laboratory
- Manage the laboratory with respect to sample storage and proper and timely disposal of samples

### KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Supervisor	<ul style="list-style-type: none"> <li>• The supervisor is responsible to provide guidance for career development</li> </ul>
Project Leader (s)	<ul style="list-style-type: none"> <li>• Receive guidance as to technical project requirements from different project leaders</li> <li>• Provide advice to project leader as to technical effort required for specific individual project;</li> <li>• Provide advice to project leader (s) as to the appropriate laboratory space allocation for project work</li> </ul>

Work area team members	<ul style="list-style-type: none"> <li>From time to time, as required by the project, there is a requirement to participate in pilot plant shift work as part of a pilot plant technical team</li> </ul>
Direct Reports	<ul style="list-style-type: none"> <li>From time to time, as required by the project, technical staff will need to be supervised to carry out project work</li> <li>Technical staff undertaking work in the work area will need to be guided as to correct use of equipment</li> <li>Undertake inductions into work area</li> <li>Provide guidance for proper storage and disposal of samples</li> <li>Allocate appropriate work space in the laboratory</li> </ul>
WHS	<ul style="list-style-type: none"> <li>Expected to participate, if, elected, in the WHS committee as staff representative</li> <li>Keep abreast of potential improvement to safe work practices in the laboratory</li> </ul>
<b>External</b>	
Equipment Vendors	<ul style="list-style-type: none"> <li>Liaise with external equipment suppliers to explore relevant new methods and technologies with the aim of improving processes or facilities;</li> </ul>

## POSITION DIMENSIONS

<b>Staff Data</b>	
Reporting Line	Reports to the Senior Hydrometallurgist
Direct Reports	Nil
Indirect Reports	Nil
<b>Financial Data (2021/2022)</b>	
Revenue / Grants	
Operating Budget	Responsible for managing credit card according to ANSTO guidelines
Staffing Budget	
Capital Budget	
Assets	
<b>Special / Physical Requirements</b>	
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 may be required from time to time
Physical:	Office based physical requirements (moderate requirement for working at the computer) Labour intensive physical requirements (sitting, standing, frequent manual handling in the laboratory) 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 Willingness to participate in shift work from time to time based on operational requirements
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements

### Workplace Health & Safety

Specific role/s as specified in <u>AP- All Workers 2362</u> of the ANSTO WHS Management System	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

On file

### KNOWLEDGE, SKILLS AND EXPERIENCE

1. Suitable technical qualification in relevant discipline (Certificate in Chemistry or higher)
2. Extensive technical expertise and demonstrated experience in laboratory techniques associated with hydrometallurgical testwork with solvent extraction and/or ion exchange testwork experience highly regarded.
3. Basic computer skills
4. Ability to be pro-active in encouraging the sharing of knowledge and experiences within the team.
5. Problem solving and the ability to think laterally, modify designs and apply new techniques are important.
6. Deadline driven, reliable in following through with actions, and pro-active when attending to ANSTO and customer interests.
7. Demonstrates high level interpersonal and communication skills when dealing with people at various levels within and external to the organisation.

### 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:	Mark Maley	Name:	Karin Soldenhoff
Title:	Senior Hydrometallurgist	Title:	Prociple Comsultant
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