



## POSITION DESCRIPTION

<b>Position Title:</b>	Radiochemist
<b>Cluster / Business Unit / Division</b>	NSSS – Nuclear Stewardship
<b>Section or Unit:</b>	Radioanalytical Chemistry
<b>Classification:</b>	Band 5
<b>Job Family:</b>	Science
<b>Position Description Number:</b>	PD-1790
<b>Work Contract Type:</b>	Science
<b>STEMM/Non-STEMM:</b>	STEMM

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### POSITION PURPOSE

The primary objective of the Radiochemist is to provide expertise in environmental radiochemistry, focused on alpha spectrometry and liquid scintillation analysis, to a combination of internal ANSTO clients and external clients. This includes fostering and maintaining client relationships, operating and maintaining specialised instrumentation, developing new and improving existing radioanalytical techniques, applying a high degree of radiochemical expertise in the interpretation of analytical results on behalf of clients, and the training and mentoring of staff.

### ORGANISATIONAL ENVIRONMENT

ANSTO is the national organisation for nuclear science and technology. We focus on undertaking leading edge research, delivering innovative scientific services and providing specialised advice to government, industry, academia and other research organisations.

Nuclear Stewardship maintains national capabilities that support industry, government and scientific users. Capabilities include radionuclide metrology, ionising radiation detection and measurement, radioanalytical chemistry, nuclear forensics and environmental monitoring.

The Radioanalytical Chemistry Capability (RACC) Group within Nuclear Stewardship aims to develop and maintain specialist radioanalytical and experimental facilities utilising nuclear techniques to support ANSTO's core activities and its stakeholders and to apply these techniques and associated expertise to topics related to releases of radionuclides into the environment, nuclear fuel cycle and other research areas involving quantification of radionuclides at or above typical environmental levels.

### ACCOUNTABILITIES & RESPONSIBILITIES

#### Key Accountabilities

The key accountabilities for this position include:

- Research, develop and implement new and/or refined radiochemical and counting techniques as required by internal and external clients;
- Operate, maintain and provide expert advice on specialised radiochemical techniques and nuclear counting instrumentation;
- Independently plan and undertake experiments, provide experimental results, assess and make preliminary interpretations of the data;
- Maintain knowledge of industry best practice and technological developments to ensure ANSTO's facilities are improved and upgraded in order to remain internationally competitive;
- Build and maintain relationships with stakeholders/clients/users to enable effective communication around deliverables that meet expectations;

- Provide technical supervision and mentor staff to develop their skills in the areas of radiochemistry and nuclear counting techniques;
- Independently plan work-load to meet group outcomes and deliver on time to meet changing requirements;
- Contribute to research, commercial and internal publications; give presentations at scientific conferences, meetings and seminars; and develop and maintain research networks to share outcomes of work with research, industry and community groups;
- Contribute to laboratory management, maintenance and cleaning and ensure laboratories are functioning effectively;
- Maintain quality and safety by adhering to good working practices in the laboratory, updating SDSs and participation in quality, safety and housekeeping audits as required; and
- Contribute to a work environment which promotes teamwork and continual improvement;
- 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, Nuclear Stewardship Business Plan and Radioanalytical Chemistry Capability Area Operational Plans and Arrangements provide the context for the position.
- The position holder works within a framework of legislation, policies, professional standards and resource parameters. Within this framework the position will be provided with the parameters in which to operate the laboratories and facilities. The position holder has some independence in determining the tasks and activities required to achieve day-to-day activities.
- The position is fully accountable for the accuracy, integrity and quality of the content of advice provided to users and staff, and is required to ensure that decisions are based on sound evidence.
- Daily work priorities are determined within the context of agreed work plans and the position holder will consult with the line manager on complex, sensitive and major issues that have a significant impact on the (section/unit).
- 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**

The major challenges for this position include:

- Developing and implementing new or improved radioanalytical techniques for a wide range of radionuclides in a required timeframe;
- Promoting current and high quality radiochemistry within ANSTO;
- Mentoring and retaining staff in the area of radiochemistry and nuclear counting techniques;
- Performing a range of tasks with a flexible approach to work and the ability to apply judgement in managing conflicting priorities in a non-routine working environment;
- Application of specialised radiochemical analysis instrumentation and associated radiochemical separation techniques on behalf of clients;
- Provide expertise and oversight to other analytical team members carrying out analyses of a significant number of critical samples under time pressure;
- Implement data and information gathering, storage, retrieval and dissemination; and
- Develop improved ways of working and more productive methods to achieve project outcomes and prioritising work to complete assigned tasks.

## KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Line Manager	<ul style="list-style-type: none"> <li>• Receive guidance and direction</li> <li>• Provide expert, authoritative and evidence based advice</li> <li>• Negotiate and report on resources consistent with strategic plans and goals</li> <li>• Recommend and gain endorsement for plans and other initiatives</li> </ul>
Work area team members	<ul style="list-style-type: none"> <li>• Provide and receive supervision, instruction, direction, support, training and technical leadership</li> <li>• Provide expert advice and analysis on a range of radioanalytical, instrument and laboratory matters</li> <li>• Contribute to group decision making processes, planning and goals</li> <li>• Collaborate and share accountability</li> <li>• Negotiate and resolve scheduling conflicts</li> </ul>
ANSTO Users (scientists, researchers, technical staff)	<ul style="list-style-type: none"> <li>• Establish constructive relationships</li> <li>• Provide advice on analytical capabilities and scheduling</li> <li>• Liaise with on analytical requests and reporting</li> <li>• Collaborate with on new research ventures</li> </ul>
<b>External</b>	
Scientists, Researchers and technical staff	<ul style="list-style-type: none"> <li>• Establish constructive relationships</li> <li>• Provide advice on analytical capabilities and scheduling</li> <li>• Liaise with for analytical requests and reporting</li> <li>• Collaborate with on new research ventures</li> </ul>
Commercial clients	<ul style="list-style-type: none"> <li>• Establish constructive relationships</li> <li>• Provide advice on analytical capabilities and scheduling</li> <li>• Liaise with on commercial projects, analytical requests and reporting</li> </ul>
Instrument suppliers and providers of calibration, and maintenance services	<ul style="list-style-type: none"> <li>• Establish constructive relationships</li> <li>• Clearly communicate needs, deliverables and expected outcomes</li> </ul>

## POSITION DIMENSIONS

<b>Staff Data</b>	
Reporting Line	Reports to the Manager, Radioanalytical Chemistry
Direct Reports	Nil
Indirect Reports	Nil
<b>Financial Data (2021/2022)</b>	
Revenue / Grants	N/A
Operating Budget	N/A
Staffing Budget	N/A
Capital Budget	N/A
Assets	N/A
<b>Special / Physical Requirements</b>	
Location:	Lucas Heights Working in different areas or work group of platform as needed Willingness to undertake field work sometimes in remote and challenging environments

Travel:	May be required to travel nationally and internationally for conference, workshop or meeting attendance May be required to travel nationally for field work
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 up to 20kg) Standing for long periods in a laboratory Public speaking (at conferences and in-house meetings/events) 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 A willingness to work with radioactive materials, contaminated sites, and/or in radiation areas under strictly regulated and controlled conditions
Hours:	Able to work variable hours according to operational requirements.
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements

### Workplace Health & Safety

Specific role/s as specified in <a href="#">AG-2362</a> of the ANSTO WHS Management System	All Workers Managers / Leaders / Supervisors Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties <ul style="list-style-type: none"> <li>- Area Supervisor</li> <li>- Building Manager</li> <li>- Building Warden</li> <li>- Contractor Supervisor</li> <li>- Designated First Aid Officer</li> <li>- Health and Safety Representative</li> </ul>
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### ORGANISATIONAL CHART

Refer to the published organisation chart.

### KNOWLEDGE, SKILLS AND EXPERIENCE

1. Degree in relevant field of science (Chemistry, Radiochemistry, Environmental), or related discipline.
2. Demonstrated relevant experience in a scientific field.
3. Demonstrated experience operating within and supervising others to adhere to applicable standards, regulations and legislation (radiation safety, ARPANSA regulations, quality systems etc.).
4. Demonstrated experience in supervising, providing safety and operational training and instruction to laboratory/facility users of varying skills and abilities.
5. Ability to work under limited supervision, prioritise work and respond to changing priorities and deadlines.
6. Experience and proactive approach to following policy, procedures and guidelines.
7. Provision of expert oversight to the work of other radioanalytical scientists.

8. Technical writing skills.
9. Willingness to learn, adapt and develop improved processes and procedures.
10. Interpersonal and communication skills with the ability to interact, negotiate and communicate with a varied and multidiscipline audience including clients.
11. Demonstrates personal qualities that will add value to the work group.

**VERIFICATION**

<b>Line Manager</b>		<b>Delegated Authority</b>	
Name:	Jennifer Harrison	Name:	Mark Reinhard
Title:	Manager, Radioanalytical Chemistry	Title:	Leader, Nuclear Stewardship
Signature:	As per original on file	Signature:	As per original on file
Date:	07/09/2017	Date:	07/09/2017