



## POSITION DESCRIPTION

|                                     |   |
|-------------------------------------|---|
| <b>Position Title:</b>              | Manager, XYZ Instrument Group   |
| <b>Cluster / Business Unit</b>      | Nuclear Science & Technology and Landmark Infrastructure –<br>Research Infrastructure |
| <b>Division / Section:</b>          | Australian Centre for Neutron Scattering - Neutron Scattering<br>Science              |
| <b>Classification:</b>              | Band 8  |
| <b>Position Description Number:</b> | PD-1910   |
| <b>Work Contract Type:</b>          | Manager / Science Professional  |

### POSITION PURPOSE

The *Manager, XYZ Instrument Group*, is a manager/science leader of a collective group of instruments within the Australian Centre for Neutron Scattering (ACNS), Neutron Scattering Science. The role has oversight for the staffing, operation and development for neutron-beam instruments and ancillary capabilities within their assigned instrument group, as well as research, industry engagement, and outreach activities. The role is central to ensuring effective interactions and resourcing across the specific instrument group, as well as excellent engagement with other members of Neutron Scattering Science and other operational teams across the facility. The role will be required to understand the requirements, abilities and capabilities of the staff, techniques and instruments within the specific instrument group and apply expert knowledge to enable the best possible scientific outcomes. The role has significant input into scientific development at ACNS through strategic planning and coordinating the planning for new instruments.

### 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 Science & Technology and Landmark Infrastructure (NSTLI) incorporates ANSTO's research, innovation, landmark research infrastructure, and associated platforms and capabilities. NSTLI 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.

ACNS provides world-leading technical capability, and the nucleus around which new science and industry networks form as researchers interact. ACNS delivers better and faster experimental techniques that not only enhance current fundamental and applied research, but also open up new avenues of investigation to Australian science. The facility promotes international collaboration to enable leading-edge research and development, and is a hub for research that greatly benefits Australia and its regional neighbours.

Neutron Scattering Science provides world-class user service and neutron- and X-ray-scattering expertise to Users of ACNS, including academic-based researchers, commercial and industry clients. This includes ensuring delivery of support to users through a range of services and support for access to the instruments and capabilities within the facility. Members of Neutron Scattering Science collaborate with other ANSTO teams to maintain world-class instruments and to develop new capabilities and systems (including new instruments for the facility). They achieve high-impact research outcomes in line with ANSTO's research mission and through collaborations with the ACNS user community. Neutron Scattering Science members also deliver highly effective outreach and training outcomes to promote the capabilities and achievements of the facility.

### ACCOUNTABILITIES & RESPONSIBILITIES

#### Key Accountabilities

- Lead and manage an instrument group within Neutron Scattering Science to deliver high-quality, cost-effective user-service, research and industry outcomes.
- Monitor and report on the science, research and operations activities of the instrument group according to overall research strategies and relevant performance metrics including material for the annual *Neutron Scattering Advisory Committee* review. Contribute to ACNS, NSTLI, and other ANSTO-focused operational reports as required.

- Foster a culture of high performance that encourages innovation, improves productivity, and promotes teamwork and collaboration. Model appropriate and professional behaviour in the workplace and manage people matters proactively.
- Lead and manage safe working practices, policies and processes across the instrument group, across the whole facility, and within ANSTO to ensure that users, staff, and visitors are working in a safe environment. Lead improvements to ANSTO's safety culture.
- As an instrument scientist, contribute scientific knowledge and expertise to instrument-development projects as a project team member (ACNS).
- Undertake additional duties as required.

#### *People Management*

- Manage, coach and mentor the instrument group staff (including students and postdoctoral fellows) to achieve personal career, and other organisational objectives, and foster a culture of high performance that encourages innovation, improves productivity and promotes teamwork and collaboration.
- Manage staff processes including recruitment, training, mentoring, performance management and review, workforce and succession planning, recognition and talent management.

#### *Budget Management*

- Undertake budget planning and reporting process.
- Manage the instrument group expenditure in support of operations, maintenance and developments, research and professional activities to ensure correct allocation of funds in support of world-class operational and research outcomes, in-line with ANSTO's policies and procedures.

#### *Instrument Operation & Maintenance*

- Manage and coordinate the deployment of staffing, operational funds and resources in support of world-class user operations and scientific research.
- Manage day to day operation of group instruments, ensuring instruments operate and are maintained to appropriate standards and plans. Provide expert and detailed instrument knowledge to facilitate the Asset Management Plan, which includes maintenance, calibration, and documentation.

#### *Instrument Development*

- Maintain and apply knowledge of industry best practice and technological developments to ensure instrument capabilities are improved and upgraded and kept at state of the art to remain internationally competitive.
- Coordinate instrument-development activities and projects to improve and expand capabilities for research and industrial applications including alternative sources of funding for development activities.
- Contribute to the development of plans and processes for the installation of new instruments, facilities and capabilities.

#### *User Programme/Support*

- Ensure that world-class user support is delivered to academic, industrial, and commercial clients.
- Ensure that technical feasibility and safety reviews of proposals are completed, and ensure that administrative tasks related to the user programme are satisfactorily completed.
- Work with members of the instrument group to provide expert knowledge to support the development of the user community through the beam-time proposal process, instrument experiments, data-analysis processes, and instrument-based user training.

#### *Research*

- Initiate and conduct leading-edge research of international standard which increases instrument demand and standing.
- Use networks to collaborate with national and international scientists/engineers to produce world-class research outcomes captured in leading international journals. Participate in grant applications with collaborators and partners.
- Coordinate research activities that lead to scientific capability development.
- Apply expert knowledge in order to facilitate contributions from across the instrument group to ANSTO / NSTLI-led mission-based research programmes.

#### *Industry*

- Coordinate industry engagement activities across the instrument group to enable the delivery of optimal outcomes to industry and commercial clients to meet revenue targets whilst enhancing the platform's reputation.

- Support the instrument group to promote techniques, capabilities and applications to industry and commercial clients to identify industry leads and convert them to opportunities and contracts.

#### Outreach

- Promote, develop and manage outreach activities across the instrument group, and on behalf of ACNS and ANSTO. Participate in professional forums, steering committees, and other professional associations. Highlight the impact and benefits of the facility to the scientific community, external stakeholders, and general audiences at the local and international level. Identify, attract, engage and develop new users of the facility.

#### Decision Making

- The ANSTO values, corporate plan, business plan, and operational-excellence programme 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 will be provided with the parameters in which to manage and operate the group of instruments and facilities including project planning and resource allocation and resolution of issues. The position has independence in determining the tasks and activities required to achieve day-to-day operational outcomes.
- 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.
- Determines daily work priorities within the context of agreed work plans and schedules and will consult with their line manager on complex, sensitive and major issues that have a significant impact on the facility or instrument operations.
- 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

- Balancing resources to ensure world-class user service, and instrument maintenance and development activities
- Maintaining an active involvement as a researcher with instrumental-development and research project/s.
- Appropriately balancing responsibilities as a manager of the assigned instrument group Manager and contributing as an instrument and research scientist.
- Ensuring timely completion of facility-wide projects, given limited resources and tight deadlines for completion.
- Competing for key resources within the organisation given the need to deliver specific outcomes for projects and operational activities to tight deadlines for a disparate range of internal and external stakeholders
- Through effective management and negotiation, facilitate the deployment of engineering, controls and computing, and technical resources when and where required.

#### KEY RELATIONSHIPS

| Who  | Purpose  |
|--|--|
| <b>Internal</b>                                  |  |
| Senior Principal Scientist – ACNS (line manager) | <ul style="list-style-type: none"> <li>• Receive guidance and direction</li> <li>• Provide expert, strategic and evidence-based advice</li> <li>• Staff engagement and quality recruitment</li> <li>• Negotiate, manage and report on budgets and resources consistent with strategic and operational plans and goals</li> <li>• Recommend and gain endorsement for plans and goals and other initiatives</li> </ul> |
| Work area peers                                  | <ul style="list-style-type: none"> <li>• Provide expert advice and analysis on a full range of matters</li> <li>• Lead group decision-making processes, planning and goals</li> <li>• Coordinate, collaborate and share accountability</li> <li>• Negotiate and resolve conflicts</li> </ul>   |
| Direct Reports                                   | <ul style="list-style-type: none"> <li>• Provide leadership, guidance and support for members of the instrument</li> </ul>   |

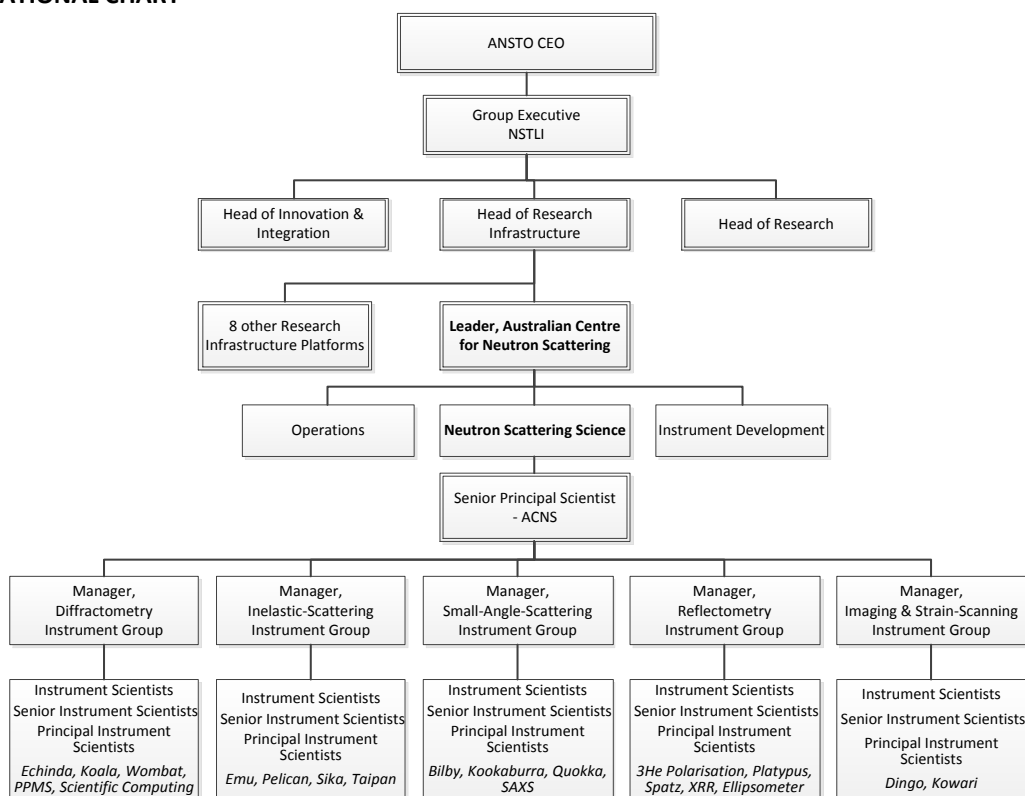
|   |  |
|---|--|
|   | <ul style="list-style-type: none"> <li>group</li> <li>Set performance requirements and manage performance and development</li> <li>Engage to monitor trends, performance and progress against the business/operational plans and evaluate further support which may be required to ensure delivery against the plan</li> </ul> |
| ACNS Management Team  | <ul style="list-style-type: none"> <li>Communicate, and collaborate to strengthen working interactions between the Scientific Operations, Computing and Electronics, Electrical Engineering, Sample Environments, and Neutron Scattering Science teams.</li> </ul>   |
| Managers of the other instrument groups ; Neutron Scattering Science members; ACNS Operations staff | <ul style="list-style-type: none"> <li>Communicate and collaborate to enable effective operation of ACNS instruments and capabilities and effective management of development projects and activities .</li> </ul>   |
| Other ANSTO enabling functions  | <ul style="list-style-type: none"> <li>Engage and coordinate with Safety, Finance, Human Resources, IT, Industry Engagement, and the ANSTO User Office to manage effectively the activities of the instrument group in support of world-class research outcomes.</li> </ul>  |
| <b>External</b>   |  |
| Universities, Business, Industry, Scientific Institutions   | <ul style="list-style-type: none"> <li>Develop and maintain collaborative user relationships</li> <li>Provide expert, authoritative and evidence based advice</li> </ul>   |
| International synchrotrons and research organisations   | <ul style="list-style-type: none"> <li>Develop and maintain international linkages around scientific operations and research</li> </ul>  |
| Suppliers and contractors   | <ul style="list-style-type: none"> <li>To ensure effective instrument development; project management and procurement requirements</li> <li>Contractor supervision</li> </ul>  |

## POSITION DIMENSIONS

| <b>Staff Data</b> |  |
|-------------------|--|
| Reporting Line    | Reports to the Senior Principal Scientist – ACNS   |
| Direct Reports    | 5-14 Instrument Scientists, Senior Instrument Scientists, Principal Instrument Scientists. |
| Indirect Reports  | 2-5 Post-Doctoral Fellows and students   |

| <b>Special / Physical Requirements</b> |  |
|--|--|
| Location:                              | Lucas Heights<br>Working in different areas of designated site/campus as needed  |
| Travel:                                | Moderate amount of travel to ANSTO sites within Australia<br>Moderate amount of travel both nationally and internationally   |
| Physical:                              | Office-based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer)<br>Public speaking<br>Wearing personal protective equipment for the handling of hazardous and/or radioactive materials  |
| Radiation areas:                       | Required to work in radiation areas under tightly regulated conditions<br>Perform duties in an area where radioactive materials are handled under tightly controlled safety conditions<br>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<br>After-hours work may be required for short and infrequent periods   |
| Clearance requirements:                | Satisfy ANSTO Security and Medical clearance requirements<br>Obtain and maintain appropriate federal-government clearance  |

| <b>Workplace Health &amp; Safety</b>                                     |   |
|--|---|
| Specific role/s as specified in <a href="#">AG-2362</a> of the ANSTO WHS | All Workers<br>Managers / Leaders / Supervisors |

**ORGANISATIONAL CHART****KNOWLEDGE, SKILLS AND EXPERIENCE**

1. PhD in Science or Engineering discipline.
2. Expert technical understanding and significant experience in execution and research applications of neutron beam instruments.
3. Previous experience operating as an instrument scientist undertaking experiments, supporting users and providing data analysis in neutron and/or x-ray scattering.
4. Relevant experience to demonstrate ability to lead and manage staff.
5. The ability to choose appropriate management techniques and communication styles to maintain high levels of motivation and productivity, giving feedback for development purposes and providing support for improvement.
6. The demonstrated ability to work effectively as an integral team member and leader of a multi-disciplinary team, and foster an environment in which there is a high level of co-operation within and between teams.
7. Demonstrated experience leading or delivering science operations, development or research projects; including strategic planning, decision-making, managing budgets/expenditure, delivery timeframes, competing priorities, quality outcomes and resources
8. Demonstrated commitment and engagement with user community, providing expert knowledge, support and advice to deliver world-class scientific outcomes.
9. Demonstrated experience and successful outcomes promoting scientific techniques and capabilities to engage with industry and commercial clients.
10. Demonstrated competency to effectively network, develop a portfolio of internal and external relationships and influence stakeholders leading to collaborative outcomes and results in science and technology.
11. Personal commitment to safety practices for all staff, contractors and visitors.
12. A history of professional and respectful behaviours and attitudes in a collaborative environment.

**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.

| <b>Line Manager</b> |                                   | <b>Delegated Authority</b> |                         |
|---------------------|-----------------------------------|----------------------------|-------------------------|
| Name:               | Garry McIntyre                    | Name:                      | Jamie Schulz            |
| Title:              | Senior Principal Scientist - ACNS | Title:                     | Leader, ACNS            |
| Signature:          | As per email approval             | Signature:                 | As per original on file |
| Date:               | 21/05/2018                        | Date:                      | 22/05/2018              |