



## POSITION DESCRIPTION

<b>Position Title:</b>	OPAL Instrumentation & Control Technician
<b>Cluster / Business Unit / Division</b>	Nuclear Operations
<b>Section or Unit:</b>	OPAL – Maintenance
<b>Classification:</b>	Band 4/5 (Linked Role)
<b>Position Description Number:</b>	PD-2290
<b>Work Contract Type:</b>	Technical
<b>STEMM/NON-STEMM:</b>	STEMM

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### POSITION PURPOSE

The primary objective of the OPAL Instrumentation & Control Technician is to undertake maintenance, calibration and testing activities on OPAL instrumentation and control systems to support the safe achievement of reliability and availability targets for the reactor, and ongoing compliance with safety and regulatory requirements.

### 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 Precinct brings together Reactor Operations, the operations teams of ANM and Health Products, Waste Operations, Minerals and Radiation Services.

Nuclear Operations operates the OPAL reactor and provides nuclear services to the rest of site to support the strategic objectives of ANSTO. This includes the provision of neutron beams for research institutes and irradiation services to ANSTO Health for the purpose of radiopharmaceutical production.

The function of the OPAL Maintenance section is to plan and conduct plant maintenance, implement plant modification projects, provide support to OPAL engineering and assist with the creation and improvement of documentation for the OPAL Reactor Facility. These functions help to support the achievement of reliability and availability targets for the reactor and its associated systems, ensure ongoing compliance with safety, regulatory and statutory requirements.

### ACCOUNTABILITIES & RESPONSIBILITIES

#### Key Accountabilities- Band 4

- Utilise knowledge and experience to continuously improve and add value to the organisation.
- Independently perform calibration, testing, fault-finding and/or repair tasks on basic process and safety instrumentation systems once assessed as competent to work independently on these systems.
- Develop a working knowledge of the principles, theory and practice of advanced reactor instrumentation systems including Nucleonics & Radiation Protection Systems; Reactor Protection Systems; Reactor Control Systems; Cold Neutron Source; and other advanced instrumentation systems through training and practical working experience.
- Utilise and follow OPAL maintenance-related management systems, including safe work processes, work order management procedures, CMMS, BMS and document management systems.
- Research, prepare and review work processes, procedures, instructions and technical reports relating to instrumentation maintenance, calibration and testing.

- Mentor and train less experienced maintenance staff on practices, processes and procedures for instrumentation systems, including safe work practices.
- Solve complex technical problems through use of judgement, analysis of information and use of available resources and expertise.
- Undertake additional duties as required and during period of leave of other staff.
- Fulfil OHSE responsibilities as specified in AG-2362 of the ANSTO OHSE system.

### **Key Accountabilities- Band 5**

- Perform key accountabilities for the Band 4 Instrumentation Technician above.
- Independently undertake calibration, configuration, testing, fault-finding and/or repair tasks on advanced reactor instrumentation systems including Nucleonics & Radiation Protection Systems; Reactor Protection Systems; Reactor Control Systems; Cold Neutron Source; and/or other advanced instrumentation systems once assessed as competent to work independently on these systems.
- Lead small groups of technicians to complete specific tasks or solve problems.
- Maintain a high level of knowledge and understanding of practical and theoretical principles advanced reactor instrumentation systems.
- Provide and be recognised by others as a source of high-level technical advice in relation to advanced reactor instrumentation systems.
- Apply theoretical knowledge in practice to solve complex problems associated with advanced reactor instrumentation systems, including new situations and problems which may be outside direct scope of experience.
- Guide, train, mentor, assess and authorise less experienced instrumentation technicians to develop and build capability and competence within the OPAL instrumentation team.
- Communicate effectively and contribute with technicians, operators, engineers and managers on technical issues, and prepare complex technical reports, manuals, work instructions and training materials.
- Contribute to long term work planning and the optimisation of maintenance strategies, work processes and procedures.
- Demonstrate a high level of integrity and credibility in all working relationships.

### **Decision Making**

- The position works within a framework of regulation, standards and procedures. Within this framework the position has some independence in determining how to safely and effectively manage workload, including deciding on methods and approaches on a job-by-job basis.
- The position is fully accountable for the accuracy, integrity and quality of the content of data and advice provided to managers and engineers, 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.
- Determines key work priorities within the context of agreed work plans and consults with the supervisor on complex, sensitive and major issues that have a significant impact on reactor systems.
- 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**

- Contributing to the development of innovative and creative solutions to complex instrumentation issues where there may be few precedents;
- Developing and maintaining knowledge of OPAL's I&C systems given the complexity, diversity and uniqueness of the systems which are in the only facility of its type in Australia;

- Maintaining the plant given the requirement to comply at all times with OL&Cs, regulatory requirements, codes and standards.

## KEY RELATIONSHIPS

Who	Purpose
<b>Internal</b>	
Manager	<ul style="list-style-type: none"> <li>• Receive guidance and direction</li> <li>• Provide advice</li> <li>• Recommend and gain endorsement for plans</li> </ul>
Work area team members (other Radioactive Waste Supervisors)	<ul style="list-style-type: none"> <li>• Contribute to group decision making processes, planning and goals</li> <li>• Work collaboratively and share accountability</li> </ul>
Customers	<ul style="list-style-type: none"> <li>• Provide support to operations and engineering staff</li> </ul>

## POSITION DIMENSIONS

<b>Staff Data</b>	
Reporting Line	Reports to the OPAL Instrumentation Supervisor
Direct Reports	Nil
Indirect Reports	Nil

<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
Physical:	Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer) Industrial facility physical requirements (lifting, standing for long periods, operating machinery, equipment and manipulators) Wearing personal protective equipment for the handling of hazardous and radioactive materials Working in confined space environment including wearing respiratory equipment
Radiation areas:	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
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements 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 Management System	All Workers Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties

## ORGANISATIONAL CHART

Refer to published Organisational Chart.

## KNOWLEDGE, SKILLS AND EXPERIENCE

	Band 4	Band 5
1. Tertiary qualification in Instrumentation & Control (or other relevant discipline such as industrial electrical trades), or demonstrated equivalent relevant industrial experience.	E	E
2. Basic knowledge understanding of the principles, theory and practice of operation of industrial instrumentation systems and process plants.	E	E
3. Extensive experience in maintenance, calibration and testing of basic industrial process and safety instrumentation systems (a minimum of 3 years of relevant industry experience)	D	E
4. Experience in maintenance and testing of advanced instrumentation control systems including DCS and safety PLC's	D	E
5. Knowledge of Safety and Environmental Management Systems, safe work practices and OHSE legislation	E	E
6. Knowledge of quality assurance systems, business management systems and continuous improvement processes	D	E
7. Awareness of maintenance management processes and CMMS, preferably SAP PM	D	E
8. Ability to organise, prioritise and complete work to deadlines	E	E
9. Good teamwork, interpersonal and communication skills, both verbal and written	E	E
10. Computer literate and proficient in Microsoft Office, particularly Outlook, Word and Excel	E	E
11. Ability to prepare and review technical documents including reports, manuals, work instructions	D	E
12. Problem solving skills and the ability to assess and resolve technical issues	D	E
13. Independently undertake calibration, configuration, testing, fault-finding and/or repair tasks on advanced reactor instrumentation systems including: <ul style="list-style-type: none"> <li>- Nucleonics &amp; Radiation Protection Systems;</li> <li>- Reactor Protection Systems;</li> <li>- Reactor Control Systems;</li> <li>- Cold Neutron Source;</li> <li>- and/or other advanced instrumentation systems.</li> </ul>	N/A	E

\* E = Essential; D = Desirable

## LINKED ROLE TRANSITION REQUIREMENTS

- Minimum 2 years working as OPAL Instrumentation Technician or equivalent experience
- Assessed as competent for carrying out all basic Reactor Instrumentation and Control specific competencies independently.
- Assessed as competent for carrying out multiple advanced Reactor Instrumentation and Control specific competencies independently:
  - Competent to work on advanced Reactor systems independently.
  - Solid technical knowledge and basic experience to troubleshoot, investigate and resolve complex systems and problems (relevant to discipline) with limited supervision or guidance.
  - Willingness to grow the depth of knowledge and experience in advanced Reactor Instrumentation systems.

Transition from Band 4 to Band 5 will occur following a recommendation from the relevant line manager, assessment by management and approval from GM

Transition within the linked role is not automatic and ability to perform Band 5 accountabilities will need to be demonstrated and assessed. This is to be done by completing the attached form and completing a full written submission demonstrating and justifying how the employee meets the transition requirements noted above.

## 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:	Darren Elliott	Name:	David Vittorio
Title:	OPAL Maintenance Manager	Title:	General Manager OPAL Reactor
Signature:		Signature:	
Date:		Date:	



**OPAL Instrumentation & Control Technician (PD-2290)  
Band 4 to Band 5 Transition Checklist**

Name:	
Commencement Date:	
Assessment Date:	

**Written submission demonstrating and justifying how the employee meets requirements must also be attached.**

Requirements for transition	Met Criteria
a) Minimum 2 years working as OPAL Instrumentation & Control Technician (Band 4) OR b) Minimum 2 years equivalent experience (Nuclear Reactor Technician)	<input type="checkbox"/> Yes <input type="checkbox"/> No OR <input type="checkbox"/> Yes <input type="checkbox"/> No
Assessed via 'linked role transition submission' as competent for carrying out all basic Reactor Instrumentation and Control specific competencies independently.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Assessed via 'linked role transition submission' as competent for carrying out multiple advanced Reactor Instrumentation and Control specific competencies independently.	<input type="checkbox"/> Yes <input type="checkbox"/> No

Demonstrated ability to independently and responsibly perform Band 4 accountabilities and apply required knowledge, skills and experience for the Band 5 position including:	
Undertake Band 5 accountabilities independently with no direct supervision	<input type="checkbox"/> Yes <input type="checkbox"/> No
Communicate effectively with technicians, operators, engineers and managers on technical issues, and prepare complex technical reports, manuals, work instructions and training materials.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Guide, train, mentor, assess and authorise less experienced instrumentation technicians to develop and build capability and competence within the OPAL instrumentation team.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Demonstrate a high level of integrity and credibility in all working relationships.	<input type="checkbox"/> Yes <input type="checkbox"/> No
Provide and be recognised by others as a source of high-level technical advice in relation to advanced reactor instrumentation systems.	<input type="checkbox"/> Yes <input type="checkbox"/> No

**Attach written submission demonstrating and justifying how the employee meets each of the requirements.**

**Manager Recommendation**

I have reviewed the employee's competence in accordance with Linked Role PD-2290 and certify that the employee meets all requirements for transition and recommend transition from Band 4 to Band 5 be endorsed as demonstrated in the attached written submission detailing how the employee meets each of the requirements.

Name & Title:			
Signature:		Date:	

**Senior manager**

I have assessed the submission and confirm that the employee meets all requirements for transition from Band 5 to Band 6.

Name & Title:			
Signature:		Date:	

**GM**

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

Name & Title:			
Signature:		Date:	
Effective date of transition:			