**POSITION DESCRIPTION**

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| **Position Title:** | Senior Scientist, Nuclear Forensics and Microanalysis |
| **Cluster / Business Unit / Division** | Nuclear Safety, Security and Stewardship (NSSS) |
| **Section or Unit:** | Nuclear Stewardship – Nuclear Forensics |
| **Classification:** | Band 6 |
| **Position Description Number:** | PD-1540 |
| **Work Contract Type:** | Scientist |

**POSITION PURPOSE**

The primary objective of the Senior Scientist, Nuclear Forensics and Microanalysis is to provide project management and subject matter expertise to deliver scientific and technical advice and specialised services of the Nuclear Forensics capability area. The position takes a proactive role in developing team members to support the provision of a range of services in nuclear forensics and is a technical point of contact for capability development and application of microanalysis techniques in nuclear forensics.

**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.

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 Nuclear Forensics capability area operates Australia’s designated nuclear forensics laboratory and works in close cooperation and collaboration with internal and external stakeholders domestically and internationally. Nuclear Forensics has a high profile in international engagement and outreach to strengthen global nuclear security and provides trusted advice and specialised services in support of needs of the Australian Government.

**ACCOUNTABILITIES & RESPONSIBILITIES**

**Key Accountabilities**

* Manage engagement and communication for assigned projects with key stakeholders in the national security function of the Nuclear Forensics capability area.
* For assigned requests, plan and manage the provision of specialised services to the Australian Government; coordinate the response and delivery on requests from Government stakeholders for projects and training.
* Develop team members’ technical skillsets and security culture to support the provision of specialised services through transfer of knowledge and experience in planning, analysis, interpretation and reporting of results in the context of client specified requirements.
* Develop project management skillsets to implement a new analytical capability, within recognised agreements and within resource and financial appropriations.
* Contribute to the business elements of the capability area by recommending key performance indicators and raising awareness of financial considerations of assigned projects to the line manager.
* Represent ANSTO in a range of domestic and international fora including meetings, technical working groups and conferences.
* Contribute to a working environment and culture which promotes teamwork and knowledge sharing, is collaborative and user focussed and achieves quality scientific outcomes and results.
* Undertake additional duties as required and during periods of leave of other staff.

**Decision Making**

* The ANSTO values, organisational corporate plan, business plan, operational excellence program, NSSS strategy, Nuclear Stewardship Business Plan and Nuclear Forensics 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. The position holder has 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 the line manager for assigned projects, 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 line management on complex, sensitive and major issues that have a significant impact on the Nuclear Forensic capability area.
* 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**

* Implementing a new analytical capability with responsibilities in project management, operational readiness and quality scientific outcomes.
* Managing security risks and supporting a positive security culture to comply with protective security and physical protection requirements as described in the ANSTO Security Manual AG-1028.
* Communicating project requirements and motivating people to deliver on milestones within agreed timeframes.
* Ensure continual improvements and implementation of best practice in the delivery of products and services.
* Managing time and resources effectively and being adaptable to satisfy needs of multiple internal and external customers.

**KEY RELATIONSHIPS**

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| **Who** | **Purpose** |
| **Internal** |  |
| Line Manager | * Receive direction and guidance * Provide expert, authoritative and evidence based advice * Recommend and gain endorsement for improvement or development plans and goals and other initiatives |
| Work area team members | * Provide and receive supervision, instruction, direction, support, training and technical leadership * Contribute to group decision making processes, planning and goals * Collaborate and share accountability * Teamwork and knowledge sharing * Engagement and learning |
| ANSTO staff  Government and International Affairs | * Build constructive and productive relationships within ANSTO in support of the delivery of client services * Work cooperatively with Government partners in conjunction with Government and International Affairs |
| **External** |  |
| Users (customers, scientists, researchers, post-docs, students, and visitors) | * Establish constructive relationships * Consult to identify users requirements and desired outcomes * Provide advice on analytical capabilities, analysis and training |
| National and international stakeholders | * Establish constructive relationships * Develop fit-for-purpose nuclear forensics products to meet stakeholder needs * Communicate scientific outcomes and identify opportunities for continuous improvement |

**POSITION DIMENSIONS**

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| **Staff Data** | |
| Reporting Line | Reports to the Science Program Manager, Microanalysis |
| Direct Reports | Nil |
| Indirect Reports | Nil |

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| **Financial Data** | |
| Revenue / Grants |  |
| Operating Budget |  |
| Staffing Budget |  |
| Capital Budget |  |
| Assets |  |

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| **Special / Physical Requirements** | |
| Location: | Lucas Heights  Working in different areas of designated site/campus as needed. |
| Travel: | May be required to travel to ANSTO sites within Australia occasionally  Frequent travel both internationally and nationally.  May be required to undertake field work in remote locations from time to time. |
| Physical: | Office based physical requirements (sitting, standing, minimal manual handling, movement around office and site, extended hours working at computer).  Laboratory physical requirements (sitting, lifting, standing for long periods, operating equipment, frequent manual handling up to 20 kg).  Wearing personal protective equipment for the handling of hazardous and/or radioactive materials and maintaining clean room environment.  Public speaking (at conference and in-house meetings/events). |
| Radiation areas: | Perform duties with and 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.  After hours work may be required for short and infrequent periods. |
| Clearance requirements: | Satisfy ANSTO Security and Medical clearance requirements.  Ability to hold and maintain a national security clearance up to Top Secret Positively Vetted (TSPV). |

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| **Workplace Health & Safety** | |
| Specific role/s as specified in [AG-2362](http://cdn.ansto.gov.au/acs/ACS060446/LatestReleased/Web) of the ANSTO WHS Management System | All Workers |
| May be required to undertake one or more of the specified roles within the context and course of their duties:   * Building Manager * Facility Officer * Area Supervisor * Building Warden * Contractor Supervisor * Designated First Aid Officer * Health and Safety Committee Member |

**KNOWLEDGE, SKILLS AND EXPERIENCE**

1. Degree in relevant field of science (e.g. radiochemistry, analytical chemistry, applied chemistry, chemistry, forensic science) or significant equivalent experience.
2. Substantial knowledge of a range of analytical techniques for characterisation of materials.
3. Well-developed knowledge of the nuclear fuel cycle.
4. Demonstrated experience leading nuclear forensic examinations, preparing analytical plans for the characterisation of complex samples, interpreting results from a range of analytical technqiues and reporting conclusions.
5. Experience working within a protective security and physical security framework; with the ability to apply discretion and judgement to different situation contexts.
6. Ability to develop and maintain productive working relationships internal and external to ANSTO.
7. Experience in client relationships, meeting client expectations and operating within deadlines.
8. Excellent verbal communication skills with emphasis on the ability to communicate clearly with people at a varierty of organisational levels and varied technical understanding.
9. Experience working safely with chemicals and radioactive materials.
10. Demonstrated personal qualities that add value to the work group.

**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.

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| **Line Manager** | | **Delegated Authority** | |
| Name: | Tegan Bull | Name: | Jennifer Harrison |
| Title: | Senior Manager, Radiological and Nuclear Security Science | Title: | Leader, Nuclear Stewardship |
| Signature: |  | Signature: |  |
| Date: |  | Date: |  |