

Nuclear Stewardship



The Nuclear Stewardship team and facilities at ANSTO maintain national capabilities that support industry, government and scientific users.

ANSTO's Nuclear Stewardship capabilities include radionuclide metrology, ionising radiation detection and measurement, radioanalytical chemistry, nuclear forensics and environmental monitoring.

The radionuclide metrology capabilities maintain Australia's national standard of measurement for radioactivity (the national Becquerel standard) ensuring that users of this standard, such as nuclear medicine departments, have access to precise standards for the measurement of patient administered radiopharmaceuticals.

The ionising radiation detection and measurement capabilities provide expertise to clients in the development of new technologies associated with ionising radiation.

The environmental monitoring and radioanalytical chemistry capabilities measure natural and anthropogenic radionuclides to support site essential operations, research applications and industry. Environmental monitoring also characterise airborne discharges from

ANSTO facilities and maintain meteorology and plume transport modelling systems in support of ANSTO's emergency arrangements.

Nuclear Stewardship also operates Australia's nuclear forensics facility which supports Australia's domestic nuclear security requirements and multi-lateral partnerships.

Applications

- · Measurement traceability for quantities of nuclear medicines administered to patients
- The development of novel radiation detection technology supporting industry
- · Analysis of natural and anthropogenic radioactivity in complex matrices
- Nuclear forensics in support of our State and Federal police.

Capabilities

· Precise measurement of quantities of radioactivity

- · Radiation detection and bespoke measurement instrumentation
- Radioanalytical chemistry techniques including high purity gamma-ray spectrometry, alpha spectrometry and liquid scintillation analysis
- · Nuclear forensics analysis
- Monitoring radioactive airborne emissions and the associated environmental footprint.

Facilities

- · Radioactivity Standards Laboratory
- · Detector Laboratory
- Radioanalytical Chemistry Laboratories
- · Nuclear Forensics Facility
- · Environmental Monitoring Facility.

Access

Access to Nuclear Stewardship facilities is available via the ANSTO User Portal at www.ansto.gov.au/user-access.

LOCATIONS

Lucas Heights | NSW Clayton | VIC

Camperdown | NSW

PHONE

+61 2 9717 3111

enquiries@ansto.gov.au







www.ansto.gov.au



