

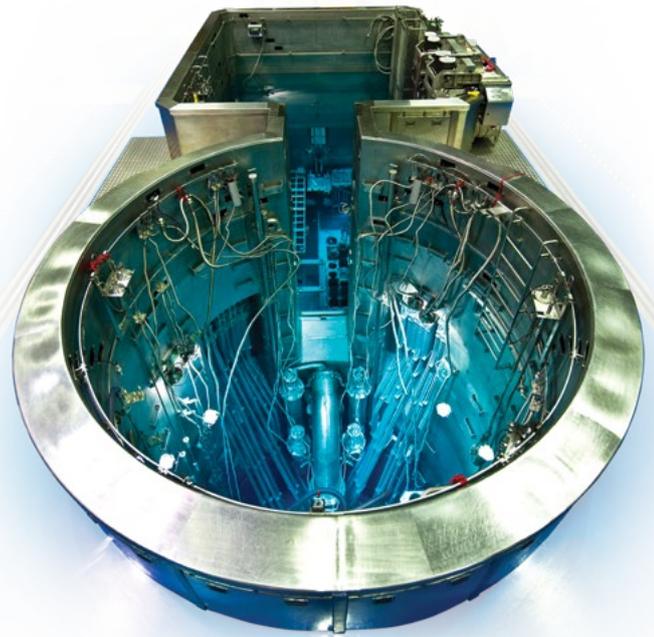
Driving Australia's nuclear science expertise

ANSTO is a leading global nuclear science and technology organisation delivering world-class research and expertise to benefit Australia and support a more sustainable future. Using nuclear science, we improve health, support industries, provide expert advice to government on nuclear technologies and help develop Australia's nuclear workforce.

ANSTO operates much of Australia's landmark scientific infrastructure including our showpiece, the OPAL multi-purpose reactor.

Nuclear science and technology knowledge centre

Thousands of scientists from academia, government organisations and industry benefit from gaining access to our state-of-the-art instruments and scientific facilities, including:



**OPAL
multi-purpose
reactor**



Australian Synchrotron

Making the invisible visible, using powerful synchrotron light for materials research.



Australian Centre for Neutron Scattering

Using neutrons from the OPAL research reactor to study structure and dynamics of materials.



Centre for Accelerator Science

Accelerating ions to explore the past and prepare materials for the future.



National Deuteration Facility

Labelling molecules with deuterium and stable isotopes to probe, characterise and quantify.

Nuclear science and technology to build a better world

Driving nuclear science and technology to benefit Australia



ANSTO safely operates OPAL, Australia's only multi-purpose nuclear research reactor. We use advanced nuclear techniques to provide innovative solutions to some of the most challenging issues facing Australia in human health, the environment, advanced manufacturing, defence and national security.

Producing life-saving nuclear medicine



ANSTO is a leading supplier of nuclear medicines in Australia. ANSTO's OPAL reactor and manufacturing facilities deliver 75-80 per cent of Australia's nuclear medicine for use in the diagnosis and treatment of diseases, including cancer.

Research excellence to support a sustainable future



ANSTO's specialist techniques and expertise are contributing to a net zero future. We are working on critical minerals research, improved water sustainability, cleaner air quality, food origin, and a better understanding of contaminant impact on the environment.

Sharing nuclear know-how and expertise



ANSTO's advanced nuclear techniques are used to support defence and national security priorities in Australia and are sought after globally. Our capabilities in radiation detection and safety training are world class and shared across multiple agencies.

Partnering with industry on real world applications



To enhance advanced manufacturing in Australia, ANSTO characterises new innovative materials for energy storage technologies and engineering solutions. The OPAL reactor irradiates silicon for use in green tech applications, such as high-speed rail, electric vehicles and satellites.

Growing Australia's nuclear workforce of the future



Collaborating with other Commonwealth agencies, ANSTO amplifies opportunities in graduate and STEM programs and other early career initiatives, to build broader workforce capabilities in nuclear technologies.

Connect with us

To learn more, book a tour or access our many educational resources visit: ansto.gov.au

Sydney: +61 2 9717 3111

Melbourne: +61 3 8540 4100

Follow us on:



Australian Government

