

# Australian Synchrotron

ANSTO's Australian Synchrotron produces powerful beams of light one million times brighter than the sun.



These beams of light are used at individual experimental facilities, known as beamlines, to examine the atomic and molecular detail of a wide range of materials from health and medical, food, environment, biotechnology, nanotechnology, energy, mining, agriculture, advanced materials and archaeological research.

The results are superior in terms of accuracy, quality, robustness and the level of detail that can be seen and collected much faster than with traditional laboratory tools.

## Applications

additive and chemical manufacturing  
biofortification and solid state analysis  
commercial process validation  
composite materials  
drug discovery  
energy extraction and conversion  
energy storage and transportation  
environmental monitoring  
health product and medical device development  
mineral processing  
resource exploration  
waste management and remediation

## Beamlines

Imaging and Medical Beamline (IMBL)  
X-ray Fluorescence Microscopy (XFM)  
Macromolecular and Micro Crystallography (MX1 and MX2)  
Terahertz/Far-Infrared (THz/Far-IR)  
Infra-red Microscopy (IRM)  
Soft X-ray Spectroscopy (SXR)  
Small and Wide Angle X-ray Scattering (SAXS/WAXS)  
X-ray Absorption Spectroscopy (XAS)  
Powder Diffraction (PD)

## Access

Access by researchers to the Australian Synchrotron, under an expectation to publish results, is merit-based through a proposal program.

Paid access allowing for confidentiality and support to industry can be arranged through the Industry Engagement team.

Visit [www.ansto.gov.au/useraccess](http://www.ansto.gov.au/useraccess) for more information.

## LOCATIONS

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## SOCIAL



## WEBSITE

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