



Advanced service powder diffraction

ANSTO's Australian Synchrotron has a dedicated high resolution powder diffraction beamline to study the structure of materials, and identify and quantify components in a mixture



- ⊘ Very small sample sizes
- ⊘ Radioactive samples can be measured
- Ø World class resolution
- ⊘ Extreme sensitivity to minor phases

Standard measurement service offering

Ambient temperature

Capillary measurement

Choice of wavelength: 7keV (1.77Å) - 22 keV (0.56Å)

Calibration of a diffraction standard reference material included

Maximum 10 minute measurement time

Fully processed data delivered ready for direct import into standard analysis software

Standard measurement service offering

IP Protection

Confidentiality

Fast and guaranteed access

Calibration benchmarking with ISO 9001:2015 (Quality Management System) certification

Extras

Discounts for bulk samples - pricing available

Qualitative phase identification

Capillaries can be supplied

Sample preparation kit for easy sample loading

Sample preparation and capillary packing services also available

Technical capabilites

Able to detect crystalline phases to a minimum of 0.5wt%

Data acquisition in minutes rather than hours in a laboratory setting

Tiny quantities of samples needed: minimum ~3mg

State of the art high resolution diffraction detector

Selectable wavelength to suit all samples

Large, accessible dynamic d-space range

Highly customisable sample environments for in situ measurements

High throughput for batch quality assurance

Robot automation for fast, reliable data collection

Access to world class databases for analysis

ANSTO LOCATIONS Lucas Heights | NSW Clayton | VIC

Camperdown | NSW

PHONE +61 3 8540 4101 **EMAIL** nise@ansto.gov.au as-pd@ansto.gov.au

SOCIAL f in WEBSITE www.ansto.gov.au



