Analytical Facility Capability

ANSTO Minerals’ Analytical Facility is a modern, well-equipped facility housing a range of analytical instruments, including ICP-OES, ICP-MS, Particle Sizing, Carbon and Sulfur analyser, XRD and XRF analysers used to analyse a wide variety of sample types. Our expert team can analyse everything from simple samples to complex matrices that are not typically dealt with by standard commercial laboratories.

The Analytical Facility provides a variety of services to ANSTO Minerals’ projects and is responsible for the analysis of solids and liquors derived mainly from mining and hydrometallurgical projects.

All analyses required to support ANSTO Minerals’ commercial projects are undertaken in-house and not contracted out to third party service providers.

Liquor samples are routinely analysed by ICP-OES, ICP-MS and ISE after appropriate dilution. Solids are routinely analysed by XRF either as fused beads or pressed powders. All required sample preparation of solids is undertaken by our team.

ICP techniques may also be used to analyse solutions derived from solid samples after fusion and/or appropriate digestion with acids. The analysis undertaken provides major element and trace element data.

The Analytical Facility provides around-the-clock support to ANSTO Minerals’ continuous piloting programs with turnaround times varying from 4–24 h as required for plant control.

About ANSTO Minerals

ANSTO Minerals has a 40-year track record of providing practical solutions and innovative technology to the mining and minerals processing industries. We are a team of 60+ professional scientists and technicians with expertise covering chemical engineering, metallurgy, mineralogy, chemistry, geology and radiation safety.

We provide review and consulting services, process development services as well as collaborative and contract research on uranium, rare earth and specialty metals processing, radioactivity control and management, novel flowsheet design and modelling, and scoping level engineering / cost estimates.