



## ANSTO Synchrotron ADS Beamline Extension

arete Australia delivered the ADS Beamline Extension project, a significant addition to the Advanced Diffraction and Scattering (ADS) facilities at the Australian Synchrotron. The ADS-1 and ADS-2 beamlines provide high-energy X-ray diffraction and imaging capabilities, serving a wide range of applications in materials science, engineering, and mineralogy.

Awarded in August 2021, construction began the following month and progressed in two distinct phases. Phase 1 focused on preparatory works, including extensive excavation and the relocation of critical services such as fire, stormwater, sewer, domestic water, high-pressure gas, and power. This phase also involved the construction of concrete retaining walls, the pouring of two connecting slabs, one of which was a 1,500mm-thick technical slab designed to house the beamlines, and the partial enclosure of the new structure. Phase 1 concluded at the end of 2021, paving the way for the ADS-1 and ADS-2 installation, completed in October 2022.

Phase 2 commenced thereafter, involving the closure of the external façade and installation of flashings, construction of entry ramps, and connection into the main facility. The team refurbished the adjacent G16 laboratory and carried out internal fitouts, including partitions, doors, ceilings, epoxy and vinyl flooring, and comprehensive services installation and commissioning. An external perforated metal façade was also installed, adding a distinctive architectural element to the facility.

With Practical Completion reached in February 2023, arete Australia proudly delivered a state-of-the-art extension that supports world-class research and innovation.

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### Client

Australia's Nuclear Science and Technology Organisation (ANSTO)

### Consultants

DesignInc  
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### Value

\$2.5M

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