

## New BRIGHT Beamlines for the Australian Synchrotron

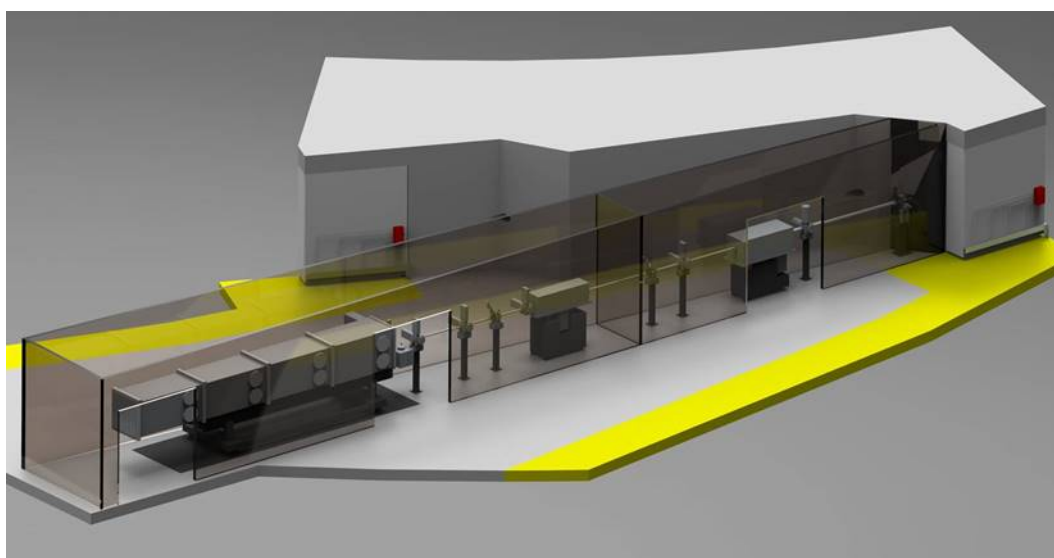
Michael James<sup>\*</sup>, Andrew Stevenson, Chris Glover, Adrian Hawley, Nigel Kirby, Martin de Jonge, Justin Kimpton, and Tom Caradoc-Davies

*Australian Synchrotron, ANSTO, Australia*

*\*[michael.james@synchrotron.org.au](mailto:michael.james@synchrotron.org.au)*

The 3 GeV Australian Synchrotron is one of Australia's premier research facilities and represents one of the biggest single investments in scientific excellence in the nation's history. Following its operation on behalf of the State of Victoria, the Australian Synchrotron is now owned and operated as part of the *Australian Nuclear Science and Technology Organisation (ANSTO)*. The Australian Synchrotron has become an integral part of the Australian and New Zealand research landscape. The facility has now supported over 40,000 user visits to its 10 operational beamlines, resulting in scientific research that has already had a significant and lasting impact. The facility generates more than 500 peer reviewed journal articles annually, with 20% appearing in the world's leading journals.

Moving to Commonwealth operation has allowed provision of funds to significantly refurbish our existing suite of beamlines, machine systems and importantly expand the suite of instrumentation at the facility. The Australian Synchrotron has now commenced the next phase of beamline construction; the so-called "BRIGHT" Program, a 115M program to deliver 8 new beamlines. BRIGHT will deliver a wide range of new capabilities to complement our existing suite of beamlines including Micro-Computed Tomography, Tender-Energy X-ray Absorption Spectroscopy, Biological Small Angle X-ray Scattering, High-Energy Diffraction and Scattering, an X-ray Nanoprobe, Microfocus Macromolecular Crystallography, and a Microdiffraction Beamline.



Schematic layout of the proposed BIOSAXS Beamline.