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# BioSAXS: the new solution scattering beamline at the Australian Synchrotron

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The BioSAXS beamline is one of the new beamlines to be constructed at the Australian Synchrotron within the BRIGHT program. BioSAXS will be dedicated to perform solution small angle scattering (SAXS) experiments, offering access to a variety of researchers from Australia and New Zealand. Solution SAXS experiments continue to be a growing area of the current Australian Synchrotron SAXS/WAXS operations, particularly in regard to protein and DNA/RNA structure, polymer solutions, nanoparticles and liquid crystal phases. In addition, the structural biology and soft matter work comprise some of the most productive areas of research in the Australian Synchrotron scattering community. The BioSAXS beamline will allow highly radiation sensitive samples to be studied using unprecedented levels of flux, using the CoFlow sample environment, a pioneering development of the Australian Synchrotron. The BioSAXS beamline aims to accommodate most solution SAXS experiments for a wide range of particle sizes by offering a q-range of ~ 0.001 – 3 Å-1, with low instrument background and an optical design optimized for high flux (>1014 ph/s) x-rays and a focused beam size of 0.3 mm (H) x 0.03 mm (V). The implementation of BioSAXS beamline, in conjunction with the existing SAXS/WAXS beamline, will ensure that the SAXS offering at the Australian Synchrotron is at the forefront of world leading SAXS measurements.

## Speakers Gender

Female

## Travel Funding

No

## Level of Expertise

Expert

## Do yo wish to take part in the poster slam

**Primary author(s) :** KAMMA-LORGER, Christina (Lead Scientist BioSAXS)

**Co-author(s) :** Dr RYAN, Tim (Australian Synchrotron, Clayton, Australia); KIRBY, Nigel (Australian Synchrotron); HAWLEY, Adrian (Australian Synchrotron)

**Presenter(s) :** KAMMA-LORGER, Christina (Lead Scientist BioSAXS)

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