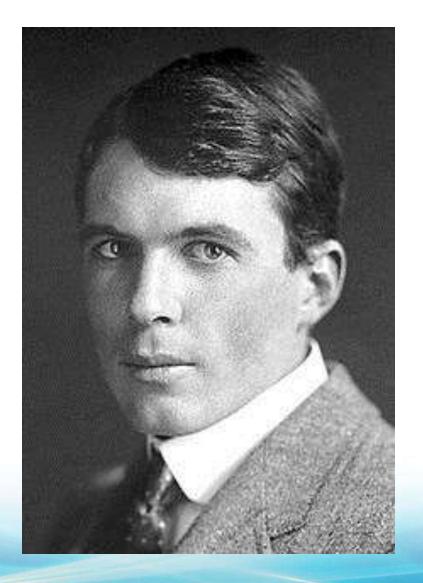
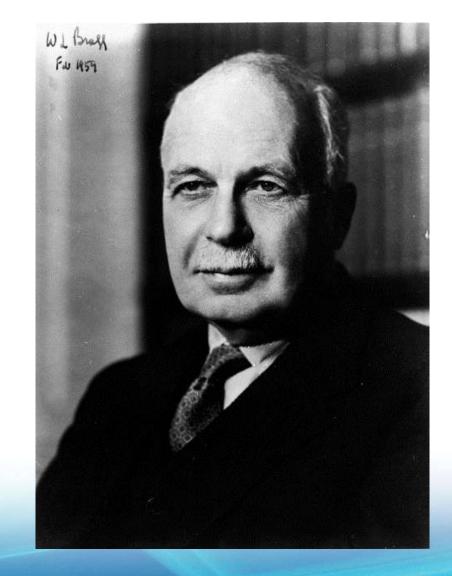
ANSTO – A Bright Future Going Forward with Crystallography

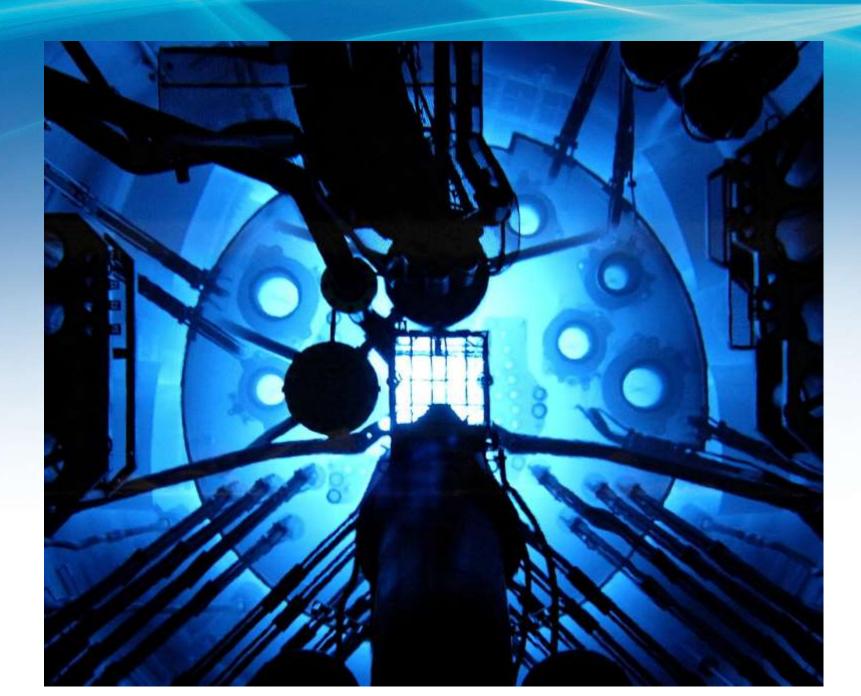


www.ansto.gov.au/ansto/bragg

Named to honour Lawrence Bragg







The OPAL reactor at the Australian Nuclear Science and Technology Organization has 3 major functions:

- Production of neutron rich isotopes predominantly but not exclusively for medical application
- Irradiation of silicon ingots for production of high quality semiconductors
- Provision of neutron beams for the neutron beam instruments
- ANSTO also operates the Australian Synchrotron and a suite of accelerators

Australian Nuclear Science and Technology Organisation - Sydney





Platypus (Reflectometer)



Kowari (Residual Stress)



Our Initial Neutron Zoo



Wombat (Hi-Intensity Powder)



Koala (Single Crystal)



Sika (Cold TAS)

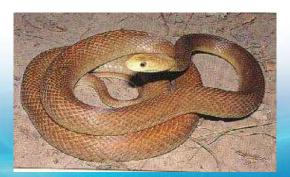
Echidna (Hi-Resolution Powder) Taipan (Thermal TAS)



Quokka (SANS)



Pelican (Polarization Spectrometer)



Instruments in Commissioning

- EMU a backscattering spectrometer
- KOOKABURRA a USANS instrument
- DINGO neutron imaging (including tomography)
- BILBY a second SANS instrument
- JOEY a Laue alignment camera
- Additional sample environment equipment

Future Instruments - Opportunities

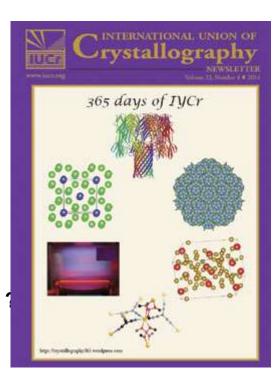
- We have not yet filled the available beam capability for the first Guide Hall
- We are looking at relocating instruments from institutions which are shutting reactors (ahead of initial expectations)
- Proposals to build instruments at ANSTO are welcome and provide an opportunity for smaller countries to have active neutron scattering research facilities without the capital costs of a reactor
- Development of the second Guide Hall is anticipated to include more internationally built and operated instruments
- Our future will continue to be internationally collaborative

Crystallography 365

Daily blog - aimed at the 'Informed public' and those wanting to seek more detail about crystallography

Took advantage of the common CIF format for crystal structure descriptions

Every blog asked three questions, What does it look like? What is it? And where did the structure come from



http://crystallography365.wordpress.com/

Crystals in the City

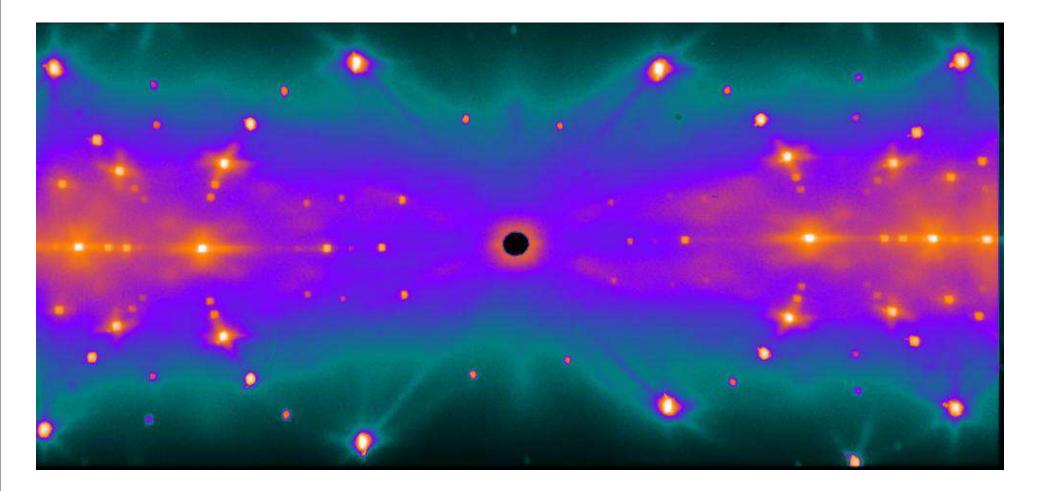




A travelling exhibition of GIANT crystal structure models.

High profile locations, e.g. Botanic gardens, Sydney and the Shine Dome Canberra.

Includes a knitted neuraminidase and 3D printed glucose!



Thank you for your attention