

Wombat – the high intensity diffractometer at OPAL

Thursday, 12 November 2020 17:03 (1)

Wombat is a high intensity neutron diffractometer located in the OPAL Neutron Guide Hall. It is primarily used as a high-speed powder diffractometer, but has also expanded into texture characterisation and single-crystal measurement. The high performance comes from the combination of a high speed area detector with a large beam guide and correspondingly large crystal monochromator. Wombat can also operate with polarization/analysis.

Wombat has been used to explore a broad range of materials, including: novel hydrogen-storage materials, negative-thermal-expansion materials, methane-ice clathrates, piezoelectrics, high performance battery anodes and cathodes, high strength alloys, multiferroics, superconductors and novel magnetic materials. Our poster will highlight both the capacity of the instrument, and some recent results.

Speakers Gender

Male

Level of Expertise

Expert

Do you wish to take part in the poster slam

No

Primary author(s) : STUDER, Andrew (ACNS ANSTO); PETERSON, Vanessa (ANSTO); MAYNARD-CASELY, Helen (Australian Nuclear Science and Technology Organisation); HESTER, James (ANSTO); WANG, Chin-Wei (NSRRC)

Presenter(s) : STUDER, Andrew (ACNS ANSTO)

Session Classification : Poster Session

Track Classification : Neutron Instruments & Techniques