

Opportunities for structural research at the OPAL reactor's Neutron Beam Facility

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Australia's new research reactor, OPAL, is designed for high quality neutron beam science and radioisotope production. It has the capacity for eighteen neutron beam instruments to be located at the reactor face and in a neutron guide hall. The reactor features a high quality cold neutron source and supermirror neutron reflecting guides for delivery of intense cold and thermal neutron beams to the neutron beam facility. Nine high-performance neutron beam instruments are currently under development, of which seven are being commissioned and will be available for experiments in 2007.

The presentation will outline our aspirations for neutron science over the 40 year life of the OPAL reactor, and describe the neutron beam facility. The status of the development and a forecast of the program to completion, including commissioning and commencement of routine operation will be discussed. The presentation will also include some examples of the scientific opportunities that OPAL will provide.