The Australian Nuclear Science and Technology Organisation (ANSTO) and the University of Wollongong (UoW) are jointly seeking a candidate for a supervised PhD thesis in the field of materials physics. We will support the candidate for a university scholarship attractively topped up by ANSTO.

Thermo-mechanical processes play a major role in processing modern materials such as metals and intermetallic compounds. The engineering of novel properties demands the understanding of physics and the fundamental processes in these systems. World leading characterization techniques for neutron and synchrotron X-ray diffraction are available in Australia under the leadership of ANSTO and will be combined with unique metallurgical investigations at UoW. High-temperature in-situ studies will be conducted on a series of material systems in order to study phase diagrams and the mechanisms of microstructural changes as a function of temperature, mechanical load or chemical evolution.

Co-supervision by Prof Dippenaar (UoW) and Dr Liss (ANSTO) will enable the successful candidate to be exposed to the challenging research environment in the University, complemented by the sophistication of experimentation in the Bragg Institute, ANSTO. Through the University the student would be exposed to the industrial significance of the investigation while participation in the activities of the Bragg Institute would expose the student to research activities at international level and the use of highly sophisticated experimental neutron and synchrotron facilities in Australia and overseas.

Further information relating to this position can be obtained through Prof Rian Dippenaar and Dr Klaus-Dieter Liss by e-mail, respectively: rian@uow.edu.au and kdl@ansto.gov.au

Applications close: 31.10.2007

ANSTO-employment is subject to a security clearance