



4th International Symposium on
Energy **C**hallenges & **M**echanics
- working on small scales

11-13 August 2015
Aberdeen, Scotland, UK

Oliver Kirstein

SESSION 11 - NANOMECHANICS



Oliver Kirstein received his PhD from the Christian Albrechts University (Kiel, Germany) under a scholarship from the Ministry of Education and Cultural Affairs of Schleswig-Holstein in August 1997. He spent one year working in industry before becoming a Postdoc at the Research Centre in Jülich for four years. He joined the Bragg Institute at the Australian Nuclear Science and Technology Organisation (ANSTO) in August 2002, and took on the responsibility of designing and building the engineering diffractometer Kowari at the OPAL research reactor, which is available to the user community since 2008. In 2011 Oliver took on the role as the Head of the Instrument Technologies

Division at the European Spallation Source (ESS). The ESS is a next generation neutron source and is currently being built in Lund, Sweden. The research he is involved with uses predominantly neutron scattering techniques, either inelastic or elastic, to characterise materials though he also has an interest in neutron instrumentation.

In his talk he will discuss how elastic constants of polycrystalline MAX phases such as Ti_3SiC_2 or Ti_3AlC_2 were determined by combining *ab-initio* calculations, *in-situ* neutron diffraction and inelastic neutron scattering.

