

# 2<sup>nd</sup> World Congress on Petrochemistry and Chemical Engineering

October 27-29, 2014 Embassy Suites Las Vegas, USA

## E- Neutron scattering studies of catalyst systems at the ISIS neutron spallation source

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The ISIS neutron spallation facility is a world-leading centre for neutron scattering. The technique is applicable to a great diversity of subjects spanning condensed matter physics, engineering, materials science, chemistry and soft matter. ISIS has a formidable selection of elastic and inelastic neutron scattering instruments to study the physical properties solids and liquids by a number of techniques that include diffraction, total scattering and molecular spectroscopy. In addition, complex sample environment apparatus may be utilised with these instruments that allows materials to be studied under controlled gas environments as a function of temperature, pressure and gas flow. Here we discuss the application of these instruments and various sample environments to materials challenges within the field of catalysis, describe some of the more recent catalysis and catalysis-related experiments and highlight the capabilities of the ISIS facility in tackling catalytic challenges.

### Biography

Martin Jones completed his PhD at Nottingham University in 1993 and undertook postdoctoral studies at the University of Birmingham (UK), CRISMAT CNRS research facility (France) and Oxford University (UK). He is currently Energy Materials Coordinator of the ISIS neutron Spallation Facility, a world leading centre for neutron scattering and has published more than 60 peer-review papers in reputed journals.

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