



Contribution ID: 283

Type: Oral Presentations

SYNCHROTRON RADIATION STUDIES of STRUCTURE and REACTIVITY in CATALYTIC and ENERGY MATERIALS

Thursday, 31 January 2019 12:15 (15 minutes)

We will describe how the concerted use of synchrotron radiation methods with modelling techniques can yield unique information on structures, dynamics and mechanism in a range of catalytic and energy materials. Our discussion will concentrate on the the structures and reactivities of oxide supported nano-particulate catalysts, including insights in the re-structuring of nano-particles during catalytic reactions.

We will also consider areas of industrial catalytic science where the synergistic use of modelling with X-ray techniques could be fruitfully applied.

Summary

The talk will summarise some of the work of the UK catalysis Hub exploiting the facilities at the Diamond Light Source for elucidating molecular level structures and properties of key catalytic systems including those of industrial importance.

Primary author: Prof. RICHARD, Catlow (Richard Catlow; Department of Chemistry, University College London; School of Chemistry, Cardiff University; UK Catalysis Hub, Research Complex at Harwell, UK)

Presenter: Prof. RICHARD, Catlow (Richard Catlow; Department of Chemistry, University College London; School of Chemistry, Cardiff University; UK Catalysis Hub, Research Complex at Harwell, UK)

Session Classification: AfLS2

Track Classification: AfLS2 track