

# ISIS Crystallography User Group Meeting

## PCG/SCMP Winter Meeting 2012

### “The Crystallography of Functional Materials”

The ISIS crystallography user group meeting is held at Cosener's House, Abingdon in conjunction with the winter meeting of the Physical Crystallography Group of the British Crystallographical Association and the Structural Condensed Matter Physics Group of the Institute of Physics.

#### Thursday 8<sup>th</sup> November 2012

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| 12:15 – 13:00 | <i>Buffet Lunch</i>  |
| 13:00         | ISIS Crystallography User Group Chair's Welcome<br><i>Anthony Powell (Heriot-Watt)</i>   |
| 13:10 – 13:40 | ISIS Facility Update<br><i>Robert McGreevy (ISIS)</i>  |
| 13:40 – 14:00 | ISIS Crystallography Update<br><i>Steve Hull (ISIS)</i>  |
| 14:00 – 14:15 | Neutron Imaging and Materials Science on IMAT<br><i>Winfried Kockelmann (ISIS)</i>   |
| 14:15 – 14:30 | Recent highlights from SXD<br><i>Matthias Guttman (ISIS)</i>   |
| 14:30 – 14:50 | Discussion   |
| 14:50 – 15:30 | Structural studies of new ionic conducting electrolyte materials<br><i>Peter Slater (Birmingham)</i>                                 |
| 15:30 – 16:00 | <i>Tea (PCG-SCMP EGM)</i>  |
| 16:00 – 16:40 | Mind the Gaps - a Total Scattering Approach to Understanding Vacancy Ordering in Solid Electrolytes<br><i>Isaac Abrahamas (QMUL)</i> |
| 16:40 – 17:20 | TBA<br><i>Paolo Radaelli (Oxford)</i>  |
| 18:00 – 19:30 | <i>Posters followed by Dinner</i>  |

## Friday 9<sup>th</sup> November 2012

- 9:10 – 9:45      Multiphase behaviour and kinetic constraints in half-Heusler thermoelectrics  
*Jan-Willem Bos (Heriot-Watt)*
- 9:45 – 10:00      Crystallographic and Magnetic structure of  $6H\text{-BaFeO}_2\text{F}$   
*Oliver Clemens (Birmingham)*
- 10:00 – 10:15      Structural characterisation and physical properties of a new transition metal oxyselenide  
*Andrew Tuxworth (Durham)*
- 10:15 – 10:30      Anomalous Physical Properties of Flexible Network Structures  
*Leila Rimmer (Cambridge)*
- 10:30 – 10:45      Large negative linear compressibility in cyanide framework materials  
*Andrew Cairns (Oxford)*
- 10:45 – 11:15      *Coffee*
- 11:15 – 11:50      A new theoretical mechanism to lift orbital degeneracy probed by resonant X-ray scattering  
*Lucian Pascut (PANalytical Thesis prize winner)*
- 11:50 – 12:25      Powder neutron diffraction studies of  $\text{BiFeO}_3$  and Dy doped  $\text{BiFeO}_3$  ceramics  
*Donna Arnold (Kent)*
- 12:25 – 13:00      The Devil is in the Detail: Examples from Materials for Solid Oxide Fuel Cells  
*John Claridge (Liverpool)*
- 13:00              *Close and Buffet Lunch*