

**IOP Magnetism Group and IEEE Magnetics Chapter Joint Workshop:
X-rays and Magnetism**

Diamond Light Source, Didcot, Oxon, Thursday 17 November 2011

Organizers: S. S. Dhesi, Diamond Light Source, R. J. Hicken University of Exeter

Synopsis

Synchrotron-based x-ray measurement techniques have become increasingly important in the study of magnetic materials. They pervade all aspects of magnetism research, from the analysis of magnetic structure in bulk crystals to the imaging of high frequency behavior in individual nanomagnets. Knowledge and use of x-ray measurement techniques is now a central component within the training of postgraduate students conducting research in to magnetic materials. The Diamond Light Source is an outstanding resource for UK Magnetism research and it is essential that today's postgraduate students are encouraged to become the synchrotron users of the future. The workshop is intended to inspire current postgraduate students and postdoctoral workers and allow them to benefit from the expertise that is concentrated at Diamond.

Registration

A registration of £30 to members of the IOP and IEEE, and £55 to non-members, will cover the cost of catering and conference materials. Registration is available on-line at <https://www.eventsforce.net/iop/227/home>

On-site overnight accommodation at a rate of £65 per night can be booked at Ridgeway House (tel. 01235 445500) on a first come first served basis. Please quote reference IOP/IEEE when booking accommodation.

Advice on travel to the Diamond Light Source may be found at <http://www.diamond.ac.uk/Home/About/Location.html>. On arrival visitors should report to the main gate.

Programme

- 10.30 Registration and coffee
- 11.00 **The synchrotron and its beamlines**
E. C. Longhi, Diamond Light Source
- 11.30 **Soft x-ray spectroscopy**
G. van der Laan, Diamond Light Source
- 12.00 **Resonant Inelastic X-ray Scattering**
M. Grioni, Ecole Polytechnique Fédérale de Lausanne
- 12.30 **Visit to the synchrotron**
- 13.15 Lunch
- 14.15 **Soft X-ray Scattering from Oxides**
P. D. Hatton, Durham University
- 14.45 **Soft X-Ray scattering from Magnetic Materials**
T. P. A. Hase, University of Warwick
- 15.15 **Time Resolved Measurements**
S. A. Cavill, Diamond Light Source
- 15.45 Coffee
- 16.00 **Magnetic Soft X-Ray Microscopy: A path towards imaging magnetism down to fundamental length and time scales**
P. J. Fischer, IEEE Distinguished Lecturer, Advanced Light Source, Berkeley, California.
- 17.00 Close