

DEPARTMENT OF MATERIALS, UNIVERSITY OF OXFORD

Postdoctoral Research Assistant in scanning confocal electron microscopy Grade 7 / Salary in the range: £27,466 to £30,013 pa / Job Ref No: DJ08/013

An exciting new post-doctoral research position is available for two years, with the possibility of a further year, to work on the development of scanning confocal electron microscopy (SCEM). The position is funded by a grant awarded to Dr Peter Nellist and Professor Angus Kirkland by the Leverhulme Trust. You will develop methods to implement scanning confocal electron microscopy in a transmission electron microscope fitted with two aberration correctors. In particular, you will develop methods for the automatic alignment of the instrument in this novel confocal configuration and for the data acquisition process. Following this, you will perform experiments applying SCEM to a range of materials science problems making use of both elastically and inelastically scattered electrons.

You will be responsible for disseminating the results of this research through the writing of high quality research papers and the presentation of results at national and international conferences. You will also be expected to assist in writing grant applications for further development of the technique, and to assist with the identification and protection of intellectual property rights associated with this research. You will liaise with other members of the research group and attend progress and review meetings locally.

You should have (by the start date) a doctorate in Materials, Physics, Engineering or a related field. Experience with high performance imaging systems is essential, with specific experience with high resolution transmission electron microscopy or scanning transmission electron microscopy an advantage. Experience with computer programming is essential, preferably related to the automated control of scientific instruments and/or image processing. Experience with aberration-corrected transmission electron microscopy is desirable.

Further particulars, including instructions on applying for this post, are available from the web-site: <http://www.materials.ox.ac.uk> or from Mrs K Fewings, Department of Materials, University of Oxford, Parks Road, Oxford OX1 3PH (email: posts@materials.ox.ac.uk), or telephone 01865 273680 (post reference **DJ08/013**). The closing date for applications is **13 June 2008** with interviews currently planned for 14 July 2008.