



UNIVERSITY OF OXFORD
Department of Engineering Science
DPhil Research Studentship in Nanoscale Stress Analysis

We are seeking outstanding candidates for a doctoral studentship as part of the FP7 EU large-scale integrating collaborative research project entitled “iSTRESS: Pre-standardisation of incremental FIB micro-milling for intrinsic stress evaluation at the sub-micron scale”. The overall project includes wide-ranging round robin and cross-validation exercises and close interaction with industrial partners (Bosch, Global Foundries, Rolls-Royce, EDF, Tescan). For more information on the iSTRESS project see: <http://www.stm.uniroma3.it/iSTRESS/>

The successful candidate will join the research team of Professor Alexander M. Korsunsky, and become part of the Solid Mechanics and Advanced Materials research group in the Department of Engineering Science (central Oxford). The appointee will be required to carry out an active programme of experimental work and data analysis that will include regular travel to meetings and experimental sessions at major facilities.

Within the Oxford team, the successful candidate will perform experimental work and data interpretation, including specifically (i) the optimization of FIB-SEM and synchrotron XRD experimental procedures, (ii) the improvement of flexibility, robustness and accuracy of DIC algorithms, (iii) performing specific series of tests on particular materials and systems, and (iv) preparing technical reports and publications.

You should have a master’s degree or equivalent in Materials Science, Engineering, Physics, Chemistry or related subject from a leading research institution. You should be able to demonstrate skills in modern methods of materials characterization, as well as data interpretation and visualization (Matlab coding ability is preferred). You should combine persistence and patience and the desire to advance research with flexibility and the ability to collaborate within a research group and wider afield.

Informal enquiries may be addressed to Professor Alexander M. Korsunsky (email: alexander.korsunsky@eng.ox.ac.uk). Ability to begin as soon as possible in early 2014 is an advantage. You will be required to make a formal graduate study application through http://www.ox.ac.uk/admissions/postgraduate_courses/ by uploading a covering letter, CV and the details of two referees, as well as a brief statement of research interests.

The Department holds an Athena Swan Bronze award, highlighting its commitment to promoting women in Science, Engineering and Technology.

