



Postdoctoral Research Associate in Advanced Electron Microscopy

Department of Engineering Materials
The University of Sheffield

This is an excellent opportunity to work on a novel form of secondary electron spectroscopy in scanning electron microscopy (SEM) for purposes of quantitative two- and three- dimensional dopant mapping in semiconductor devices. The technique offers a potential solution for the requirements of dopant mapping in view of progressing miniaturisation. It relies on site specific sample preparation by Focused Ion beam methods using low ion energies and a secondary electron spectrometer integrated in a low voltage field emission gun (FEG) SEM.

This EPSRC funded project is a collaboration between the Universities of Sheffield and Cambridge and is also supported by FEI. The successful candidate will be based in Sheffield but is expected to spend extended periods (up to one month at a time) in Cambridge at the Department of Materials Science and Metallurgy.

Applicants must have extensive experience in scanning electron microscopy and/or Focused Ion Beam semiconductor specimen preparation. Experience of Monte Carlo modelling of secondary electrons is desirable. We are particularly interested in candidates who have a track record of designing and implementing unusual experiments. The post is tenable from 1 April 2007 for three years.

For further details from C.Rodenburg@shef.ac.uk , phone 0114 2225921 or go to <http://www.jobs.ac.uk/jobfiles/DC175.html>

Closing Date: 16/03/07
Salary: £24,402 per annum