

Analytical Electron Microscopist – Lehigh University/Saint-Gobain Glass

The Nanocharacterization Group at Lehigh University has an immediate opening for a Postdoctoral Research Associate to help develop and advance the techniques of XEDS and EELS spectrum imaging on samples relevant to glass and ceramics science. Two state-of-the-art aberration corrected microscopes, a JEOL 2200FS equipped with a CEOS corrector and a VG HB603 dedicated STEM equipped with a Nion corrector, are available at Lehigh to carry out this research. Atomic resolution imaging and STEM-XEDS/EELS chemical mapping methods will be applied to the study of grain boundary structure problems in Si_3N_4 and Al_2O_3 based ceramics, and to the characterization of metal layers supported on glassy substrates. This Saint-Gobain funded post is available for 1-year initially and the successful candidate will be working under the joint supervision of Prof. C.J. Kiely in the Center for Advanced Materials and Nanotechnology at Lehigh and Dr E. Sondergard (Saint-Gobain, Paris).

Candidates are sought who have substantial prior *hands-on* experience of materials characterization using one or more of the following techniques: transmission electron microscopy, dedicated scanning transmission electron microscopy, electron energy loss spectroscopy, energy dispersive x-ray spectroscopy, high angle annular dark field imaging and FIB sectioning.

Applicants should have already obtained a PhD in Materials Science or a related Physical Science discipline. Candidates should be strongly motivated, possess good communication and computing skills, and show evidence of an ability to work as part of a team. Lehigh University is an equal opportunity employer.

Applicants should send a CV along with the names and contact details of two referees either by e-mail to chk5@lehigh.edu or by regular mail to: *Prof. C.J. Kiely, Center for Advanced Materials and Nanotechnology, Lehigh University, 5 East Packer Avenue, Bethlehem, PA 18015-3195, USA.*

Opening date: August 1st 2007

Closing date: Reviews of applications received will continue until the position is filled.