Max-Planck-Institut für Mikrostrukturphysik Halle

Postdoctoral position:
TEM and HRTEM of multiferroic superlattices

A full postdoctoral position on TEM and HRTEM of multiferroic superlattices is available at Max Planck Institute of Microstructure Physics, Halle, Germany, in the *Group on Nano-engineering of Functional Oxides,* jointly with the recently founded group of *Multiferroic Nanostructures* (Group leader Dr. Ionela Vrejoiu) (www.mpi-halle.de/~functio), within the *Experimental Department II* (www.mpi-halle.de/department2).

Filling of the position is subject to the condition that the prospective EU project "Interfacial oxides" will indeed be granted in spring or early summer, 2010, as planned.

The position should be filled between May 1 and July 1, 2010, and is for one year, but principally extendable for a second year depending on progress and funding. A research program on preparation of ultrathin films and superlattices by pulsed laser depostion, their microstructure and ferroelectric and magnetic properties is being pursued. Materials of interest are various functional perovskites. The postdoc will be responsible for the characterization of the grown films and superlattices by TEM including HRTEM, SAED, EDX, EELS, and EFTEM.

Apart from state-of-the-art SEMs, AFMs, XRD, and ion-beam thinning equipment, TEMs of types Jeol 4010, Philips CM20T, Philips CM20FEG,and FEI TITAN 80-300 are available, in part equipped with EDX, EELS and EFTEM facilities.

We expect a postdoc (him or her) with a Ph.D. in Physics, Chemistry, Crystallography, Mineralogy, or Materials Science, who has profound experience with TEM including sample preparation. We offer the creative, open-minded, international atmosphere of a Max Planck Institute. If interested, please send your papers (C.V. and list of publications) to

Prof. Dr. Dietrich Hesse
Max-Planck-Institut für Mikrostrukturphysik
Weinberg 2,
D-06120 Halle (Saale), Germany

hesse@mpi-halle.de