

Theoretical and experimental PhD positions in Surface and Materials Science University of Munich



Applications are invited for PhD positions in computational materials science and experimental surface science. Both positions are part of an international multidisciplinary project within the European Science Foundation network (ESF). This project brings together scientists from solid state physics, materials science, mineralogy and geophysics. The aim is to gain microscopic understanding in the origin of magnetism at transition metal oxide interfaces and relate it to macroscopic phenomena. The topics are of importance both for geophysical and technological applications. The positions are expected to start in the beginning of 2006.

PhD position in computational materials science

The successful candidate will investigate magnetic, electronic and structural properties of oxide interfaces using large scale electronic structure calculations. The candidate is expected to have a background in condensed matter theory, materials science and preferably experience in density-functional theory calculations and/or strongly correlated materials.

PhD position in surface science (experiment)

The focus of the work will be on the epitaxial growth and characterization of metal oxide heterostructures. Magnetic measurements will be performed on natural and synthetic samples. Background in solid state physics, materials science as well as experience in surface science techniques in UHV (LEED, XRD, TEM, STM, XMCD) will be favourable.

A further **PhD position in computational materials science** with equivalent requirements is available to investigate the adsorption of water on metal oxide surfaces. This position is available immediately.

To apply, please send your curriculum vitae, list of publications together with a short description of research experience and interests and two references via email (or normal mail) to:

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