



Max Planck Institute of Microstructure Physics in Halle (Saale), Germany

- Solid State Research & Materials Sciences
- Chemistry and Physics

The **Department of Nano-Systems from Ions, Spins and Electrons (NISE)** headed by Prof. Stuart Parkin, seeks regularly to appoint highly motivated young scientists to carry out PhD projects on atomically engineered materials and devices, in the research areas of spintronics, oxide electronics, cognitive devices and novel superconductors. The Department is offering

PhD Positions in Solid State Physics

in conjunction with the Martin Luther University Halle-Wittenberg
(Reference: **MPI_Halle_PhD_001**)

Projects comprise thin film deposition, using magnetron and ion beam sputtering, pulsed laser deposition, molecular beam epitaxy, and atomic layer deposition; structural, magnetic, transport and optical characterization; nano-device fabrication; modeling and simulation. The control of electronic properties on varying time scales from milli-second to nano-second and beyond is a critical goal for the exploration of novel phenomena useful for the development of devices that could enable advanced sensor, memory and computational technologies. An important focus area is the development of ultra-low energy devices based on the directed motion of ions. The candidates will help to set up new laboratories and equipment at the Max Planck Institute of Microstructure Physics and the Martin Luther University Halle-Wittenberg.

Requirements for PhD students

- we are looking for enthusiastic and talented students with a Master's degree in physics, materials science, chemistry, or related fields
- candidates should have a strong drive to excel in an interdisciplinary and international environment
- candidates are expected to be highly creative and innovative and must be outstanding team players who can work in a fast-paced and highly dynamic environment
- English is working language at the Institute

Terms of employment

- positions are on fixed-term contracts for three years
- positions are available immediately
- we welcome applications from disabled persons with equal qualifications
- furthermore, the Max Planck Society aims to employ more women in this area and therefore particularly encourages applications from women

Your application

- can be uploaded as a single pdf file at our [application website](#) with reference to **MPI_Halle_PhD_001**. Please supply the name and email of at least two references
- should include a complete CV, certificates and transcripts, a statement of past research accomplishments (MSc thesis, research projects) and the contact details of two academic referees
- Research aims for your potential PhD project (1 page)

Only online applications will be considered.

For more detailed information about our research focus see <http://www.mpi-halle.mpg.de/NISE>.

Contact for questions:

Recruiting Team office.parkin@mpi-halle.mpg.de

phone +49 (0) 345 5582-654