

Positions for Postdoctoral Researchers

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 research into atomically engineered materials and devices in the research areas of spintronics, oxide electronics, cognitive devices and novel superconductors. The Department is offering Positions for Postdoctoral Researchers. 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.

YOUR PROFILE

Candidates should have

- completed their PhD degree in physics, materials science, chemistry, or related fields
- a strong research and journal publication record as well as an excellent academic record
- excellent English language skills
- research experience in atomically engineered thin film materials, spintronic materials and devices, nano-structuring in 2 and 3 dimensions, micro-/nano-fluidics, magnetic and transport characterization, device modeling and simulation, oxide and nitride interfaces and heterostructures, is preferred
- a strong drive to excel in an interdisciplinary and international environment
- highly creative and innovative competencies and must be outstanding team players who can work in a fast-paced and highly dynamic environment

Candidates with exceptional research and communication skills in all fields related to or adjacent to spintronic, oxide and cognitive materials and devices will be considered.

TERMS OF EMPLOYMENT

- positions are with an initial appointment for one year with possibility of extension
- 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_PD_004**. 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 (PhD thesis, research projects) and the contact details of two academic referees
- contains a first outline for your potential project at our institute (max. 1 page)

Only online applications will be considered. For more detailed information about our research focus see <http://www.mpi-halle.mpg.de/NISE>.

