



Postdoc, Engineer and Ph.D. student positions at the German-Ukrainian Core of Excellence “Plasma-Spin-Energy” located at the Max Planck Institute of Microstructure Physics, Halle (Saale), Germany

The **Max Planck Institute of Microstructure Physics**, Halle, Germany, Department *Nanosystems from Ions, Spins, and Electrons (NISE)*, Director Prof. Stuart S. P. Parkin, is currently recruiting **1 Postdoc, 2 Ph.D. students and 1 Engineer** for a newly established German-Ukrainian Core of Excellence (CoE) “Plasma-Spin-Energy”. The CoE will be focused on experimental and theoretical research in the field of advanced plasma technologies and spintronic materials and technologies, administered by the Max Planck Institute of Microstructure Physics (MPI-MSP) in cooperation with the V.N. Karazin Kharkiv National University (Kharkiv, Ukraine). The CoE will be located initially at the MPI-MSP with the expectation of a later relocation to Karazin University in Kharkiv after normalization of the current situation in Ukraine.

YOUR TASKS

The tasks, depending on your experience, include experimental work on the formation of atomic layers of spintronic materials using novel plasma deposition technologies, and the fabrication of nanoscale spintronic devices using advanced plasma etching technologies. Further studies of their properties for applications in energy-efficient memory and computing, as well as theoretical studies of the dynamics of non-collinear, chiral magnetic textures (e.g. chiral domain walls, skyrmions) are anticipated.

YOUR PROFILE

- For Ph.D. students, a Master's or equivalent academic degree in Physics, Materials Science, Engineering or related fields;
- For postdoc candidates a Ph.D. in Physics, Materials Science, Engineering or related fields is required;
- Knowledge and previous experience in plasma physics, spintronics, thin-film deposition and etching is desirable;
- Good command of written and spoken English, the working language of the MPI-MSP; Ukrainian and German languages skills are an asset.

WE OFFER

- An exciting and challenging position in an international and attractive working environment and the opportunity to interact with a wide network of international collaborators;
- Access to state-of-the-art equipment for the fabrication and analysis of spintronic materials and devices; the development of novel plasma deposition and etching technologies as well as substantial resources for computational studies;
- Flexible working hours and substantial remuneration amounting to 65% (Ph.D.) / 100% (postdoc) EG13 TVoED-Bund;
- An initial contract duration of 36 months for PhD students and 12 months for the postdoc and engineering positions with a possible extension of up to 3 years;
- The starting date is negotiable.

YOUR APPLICATION

- For applications and any other questions, please email plasmaspin-jobs@mpi-halle.mpg.de with reference to job code **CoE Plasma-Spin-Energy** including CV, motivation letter and two reference letter.



- The Max Planck Institute of Microstructure Physics gives priority to applications from severely disabled candidates with equivalent qualifications. Furthermore, we strive to increase diversity, and specifically encourage women to apply.
- For more information please visit www.mpi-halle.mpg.de/plasma-spin-energy