MAX-PLANCK-GESELLSCHAFT

MARTIN-LUTHER-UNIVERSITÄT
HALLE-WITTENBERG

Unterstützt von / Supported by
Alexander von Humboldt
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The Martin Luther University Halle-Wittenberg in cooperation with the Max Planck Institute of Microstructure Physics in Halle (Saale), Germany

invites early-career scientists to apply for a position as a **Junior Group Leader** in the International Center for Nano-Systems (ICNS), directed by Prof. Stuart S.P. Parkin. The center is funded by the Alexander von Humboldt Foundation and the Max Planck Institute for Microstructure Physics. The goal of the ICNS is to carry out cutting edge research into artificially engineered materials that form the basis of novel devices and nano-systems. Potential areas of research include:

Functional 3D Devices (ICNS-01-2016)
The proposed function of this group is research on and development of novel means of fabricating 3D nano-structures. This could involve both top-down and bottom-up fabrication techniques, as well as unconventional methods, such as 3D printing techniques. Methods to deposit ultra-thin layers of complex materials on vertical side-walls and in cavities would be strongly desired. An important focus will be the development of complex 3D structures with multiple functionalities and technologically relevant properties. Micro- and nano-fluidics could be an important focus of this group as a control of the properties of 3D devices.

Hybrid Materials for Cognitive Devices (ICNS-02-2016)
The focus of this junior group would be on functional materials, such as organic/inorganic interfaces, and related devices exhibiting cognitive properties, i.e. properties that evolve in response to external stimuli or control parameters. The group could focus on a wide range of materials and control parameters but with the common characteristic that the structure of the materials and related properties could evolve in a non-volatile manner as the materials are subject to a changing environment, both local and non-local.

Spintronics and Oxide Electronics (ICNS-03-2016)
The focus of this junior group would be on the research and development of novel materials and devices based on spintronic and ionitronic phenomena that are technologically relevant in the longer term. The characterization of structures on technologically relevant time-scales in response to external stimuli and control signals would be an essential component of this group.

Your profile and terms of employment
We are looking for an enthusiastic and innovative researcher with a Ph.D. degree in a relevant discipline. The position is a fixed-term appointment till May 31st, 2019 with the possibility of a two-year extension after evaluation. The salary scale is based on personal qualifications and can go up to TV-L 14. The successful candidate will receive a start-up package and have access to laboratory space and state-of-the-art core facilities both at the Max Planck Institute of Microstructure Physics and the Martin Luther University Halle-Wittenberg. The Junior Group Leader will head a small team.

The junior group leader is expected to have an excellent track record of creative and innovative exploratory research in one of the scientific areas above with proven leadership and teaching skills. Furthermore, a strong motivation to work in an interdisciplinary and international environment is required. The candidates are expected to be highly motivated and must be outstanding team-players who can work in a fast-paced and dynamic environment. English is the working language and therefore candidates must have excellent communication skills in English. Experience with supervising students and successful grant proposal preparation will be an asset.

Your application

Both Martin Luther University Halle-Wittenberg and the Max Planck Society are equal opportunity employers. Applications of women are therefore explicitly encouraged. We offer excellent opportunities to combine career and family. Disabled candidates with equal qualifications will be given preference.

Please submit your application in English before **July 15th, 2016** as a single PDF file to icns@mpi-halle.mpg.de. Please indicate the **reference number 5-3276/16-D** as well as the reference number of the preferred research area. Your application should include your CV, academic degrees and certificates, publication record, a summary of scientific achievements (2 pages max.), an outline of the proposed junior group (4 pages max.), and contact information of two academic referees. For informal queries, please contact Prof. Stuart Parkin at the same e-mail address.