



Zentrale Universitätsverwaltung Abteilung 3 - Personal

**1434/2016**

Halle (Saale), 02.12.2016

External Job Announcement Reg.-Nr.: 4-11772/16-D

The Center for Innovation Competence (ZIK) SiLi-nano – Silicon and Light: From Macro to Nano – is performing research on nanostructured materials used in solar energy conversion and will be adding two additional groups of young research scientists. SiLi-nano is jointly funded by the Institute of Physics and Chemistry at the Martin Luther University, the Max Planck Institute of Microstructure Physics, the Fraunhofer Institute for Microstructure of Materials and Systems and the Fraunhofer Center for Silicon Photovoltaics. The center is largely autonomous; structurally, it is managed as an interdisciplinary scientific facility as a part of the Martin-Luther-University Halle-Wittenberg.

The group „Light-for-Hydrogen“ invites applications for the position of a

Scientific Researcher

This full-time position (100%) with a planned **starting date of 01.02.2017** is initially *limited to 30.06.2019*. The salary will be determined up to pay grade 13 TV-L depending on the assigned tasks and personal qualifications.

Requirements:

- A completed PhD in Physics with a strong link to nanotechnology.
- A completed Master of Science (MSc.) in Chemistry or Physics.
- A strong interest in photocatalytic and photoelectrochemical applications.
- Hand-on technical experience with nanostructure preparation and characterization, encompassing sol-gel synthesis, hydrothermal synthesis, X-ray diffraction (XRD), Thermogravimetric Analysis (TGA/DSC), N₂-physisorption (BET), UV-vis spectroscopy, and Scanning electron microscopy (SEM).
- Experience with working on the borderline between organic and inorganic chemistry, for which Metal-Organic Frameworks (MOFs) are an excellent example.
- Experience with Molecular Dynamics simulations of nanomaterials.
- Experience in science communication through scientific publications, and via oral and poster presentations at international conferences.
- Capability to work independently, while in the meantime also being a team player that works well in an international team of scientists
- Experience in the supervision of bachelor and/or master students.
- Teaching experience, for instance with laboratory demonstrations and/or seminars for undergraduate students.
- Organizational skills with experience in the organization of e.g. international scientific conferences.
- Excellent communication skills (in writing and oral) in English.
- Excellent computer skills and experience in analysis and graphics software, e.g. OriginLab, ImageJ and ChemDraw.

Responsibilities:

- Design and implementation of experiments involving:
 - Nanostructure synthesis and characterization using several techniques, e.g. (templated) electrodeposition, electrospinning and atomic layer deposition.
 - Combination of multiple photocatalytic materials in a smart design for optimal light-to-hydrogen efficiency.
 - Photocatalytic water splitting investigations using photoelectrochemical measurements and gas chromatography.
- Data analysis and preparation of manuscripts.
- Supervision of bachelor and master students and student assistants, and close collaboration with PhD students.
- Assistance in setting up the labs for the “Light-for-Hydrogen” group.
- Assistance in writing scientific proposals.

Disabled candidates with equal qualifications will be given preference. Women are strongly encouraged to submit an application.

For any queries please contact Jun.-Prof. Dr. Wouter Maijenburg, E-mail: wouter.maijenburg@chemie.uni-halle.de

Please submit your full application **dossier with Reg.-Nr.: 4-11772/16-D** in the subject line **until 16.12.2016** to ZIK SiLi-nano® Martin-Luther-Universität Halle-Wittenberg, c/o Jun.-Prof. Wouter Maijenburg, Karl-Freiherr-von-Fritsch-Str. 3, 06120 Halle (Saale).

Applications should consist of (i) a motivation letter, (ii) a recent curriculum vitae, (iii) a list of publications, (iv) academic degrees and certificates, and (v) contact information of two individuals who could provide an evaluation of the candidate upon request.

The announcement takes place pending any possible budget restrictions. Application expenses cannot be reimbursed by the Martin Luther University. The application dossier will only be send back to the applicant when a sufficiently stamped envelope is provided. Electronic application is preferred and possible to wouter.maijenburg@chemie.uni-halle.de