



Zentrale Universitätsverwaltung Abteilung 3 - Personal



474/2018

Halle (Saale), 18.04.2018

External Job Announcement Reg.-Nr. 4-4191/18-D

The Group "Silicon to Light" at the Centre of Innovation Competence (ZIK) SiLi-nano investigates nanostructured materials for active integrated photonics based on silicon. Recently we focus on hybrid solutions, which e.g. comprise the combination of a nonlinear optical material with silicon. For a specific project ferroelectric thin films should be deposited by molecular beam epitaxy (MBE) and pulsed laser deposition (PLD) on SOI-substrates. Of special interest are the nonlinear optical properties of resulting hybrid waveguide structures.

The group "Silicon to Light" therefore **immediately** invites applications for the position of a

Scientific Researcher (f/m)

The period of this part-time position (initially 50%) is initially *limited to 29.2.2020*. A later increase of the occupation level to 67% or potentially 75% and extension of the term is presumably possible.

The salary will be commensurate with the qualifications of the successful candidate within the salary scale 13 TV-L.

Requirements:

- Master degree in Physics, in Materials Science or a related discipline
- Solid knowledge in the area of solid state physics and/or surface science and experience or knowledge of thin film deposition are desirable but not mandatory
- Experience with ferroelectric materials and/or in optics/photonics is advantageous
- Enthusiasm and Motivation to work on an application related topic at the interface of materials science and optics
- Ability to communicate in English (written and oral)

Responsibilities:

- Growth of ferroelectric layers on SOI using MBE, PLD and sputter deposition
- Structural Analysis using X-ray diffraction techniques and scanning electron microscopy
- Nanostructuring applying Reactive Ion Etching (RIE)
- Nonlinear optical measurements (SHG, difference frequency) on waveguides
- The possibility to obtain further qualifications (e.g. PhD-degree) is provided

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

For any queries please contact Prof. Jörg Schilling, E-mail: joerg.schilling@physik.uni-halle.de, Tel.: 0345 55-28653

Please submit your full application dossier with **Reg.-Nr. 4-4191/18-D** in the subject line until **15th May 2018** to ZIK SiLi-nano® Martin-Luther-Universität Halle-Wittenberg, c/o Prof. Jörg Schilling, Karl-Freiherr-von-Fritsch-Str. 3, 06120 Halle (Saale).

Electronic application is possible at Joerg.schilling@physik.uni-halle.de.

Applications should consist of (i) a motivation letter, (ii) a recent curriculum vitae, (iii) a list of publications (if any), (iv) academic degrees and certificates, and (v) contact information of two individuals (e.g. professors, former supervisors) 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.