Employment opportunity for doctoral and postdoctoral students

The Research Training Group (RTG) on Tip- and laser-based 3D-Nanofabrication in extended macroscopic working areas (NanoFab) at the Technische Universität Ilmenau offers the following open positions:

13 full-time research positions for doctoral students

The RTG NanoFab is government-funded via the Deutsche Forschungsgemeinschaft DFG. Start of employment will be on 1st April 2017. In exceptional cases the candidate can be appointed slightly earlier or later. The research positions will have a period of three years. Payment will be according to the TVL E13 scale of the German public sector (over 40,000 EUR gross income per year).

The objective of NanoFab is the establishment of new, multiscale nanofabrication techniques for extended macroscopic areas, based on the synergistical combination of latest nanofabrication techniques with the outstanding precision of Nanopositioning- and Nanomeasuring machines (NPM machines). It is to be examined to what extent smallest features can be produced efficiently in large areas by combining the latest AFM tip-based nanofabrication techniques with the NPM technique. Likewise laser-based subwavelength processing methods in conjunction with the NPM-technology shall open up the possibility to enable truly 3D nanofabrication with highest precision especially on optical and curved precision surfaces. Within the RTG, the basic physics of these technologies shall be explored to perform new approaches for advanced nanofabrication technologies in extended areas.

The RTG will provide a creative and inspiring environment and excellent laboratory facilities. Several NPM-machines are available for experimental work as well as the state-of-the-art technology and knowledge base of the Centre of Micro- and Nanotechnologies. The RTG strongly supports students wishing to complete their PhD studies within a three-year period. Further details can be found at www.tu-ilmenau.de/NanoFab.

Candidates for the research positions should have:

- an excellent Diploma or Master’s degree, preferably in mechanical engineering, electrical engineering, mechatronics or physics,
- excellent knowledge of the English language,
- a high motivation for interdisciplinary work in an international scientific team, and the commitment to complete the doctoral programme within three years.

Experience in either precision measurement, precision engineering, tip-based nanofabrication, optical and laser technologies or automatic control is helpful, but not required.

The Technische Universität Ilmenau aims to establish gender equality and highly encourages women to apply.

Handicapped applicants with identical qualification will be considered with priority. Special services are available concerning all social matters.

We invite all applicants to e-mail the complete set of documents in PDF format should be sent by 15 January 2017 via E-Mail under reference number 100/2016 to:

bewerbung@tu-ilmenau.de

Preliminary information can be obtained from the Head of the RTG, Professor Eberhard Manske (eberhard.manske@tu-ilmenau.de) or the Scientific Coordinator of the RTG, Prof. Roland Füßl (roland.fuessl@tu-ilmenau.de).