

## Job vacancy

The Division Microrobotics and Control Engineering (Prof. Dr.-Ing. habil. S. Fatikow), Department of Computing Science of the University of Oldenburg invites applications for a

### Postdoc Research Associate (m/f/d)

with the focus on “**Manipulation at nanoscale**”

The position is 100% time, pay rate E13 TV-L, for 3 years, with the possibility of extension.

Our Divisions's research activities focus on robotic systems and methods for manipulation and characterization of nanomaterials. The research work covers a broad range of related topics, including nanofabrication and nanocharacterization inside SEM, or vision-guided automation of robotic nanohandling. Several unique robotic setups for automated handling at nanoscale are in operation in the Division.

#### YOUR FOCUS:

Your research work is not bound to a specific project. You may focus on one of the following research directions, and other topics related to nanoscale manipulation and characterization are also conceivable:

- Automated robotic manipulation and characterization of biological materials
- AFM-based manipulation and characterization at nanoscale
- Characterization of 1D and 2D nanomaterials, mechanical / electrical (DC to microwave)
- Automation of robotic handling and FIB-based manufacturing in SEM, with in-situ quality control
- Real-time object detection and tracking in microscopic image sequences (SEM, optical).

#### YOUR PROFILE:

- Academic university degree and a PhD degree in technical or scientific field
- Experience with experimental laboratory work (SEM or AFM)
- Experience with programming languages (C++/C, Python, MATLAB)
- Expertise on automation skills (specifically vision-guided automation)
- Very good command of English language, in speech and writing
- Good command of German language, at least at C1-level
- Engagement in teaching courses of the Department (4 LVS per semester)

#### WHAT WE OFFER:

- Unique laboratory infrastructure for research in automated robotic handling at nanoscale
- An experienced interdisciplinary team, highly visible in related international research communities
- Excellent opportunities for professional development towards cutting edge research
- Gathering hands-on experience with most advanced nanorobotic systems
- Intellectual freedom to explore and implement new research directions
- Involvement in project cooperation with partners from industry and research
- Regular participation in international research conferences is possible and encouraged.

The University of Oldenburg is an equal opportunities employer. According to § 21 para. 3 of the Legislation Governing Higher Education in Lower Saxony (NHG) preference shall be given to female candidates in cases of equal qualification. The same applies to persons with disabilities.

Please send your application (letter of motivation, CV, certified copies of degrees, references, list of publications) by email in a single pdf document with the keyword “**Nano-Manipulation**” to Prof. Dr. habil. S. Fatikow [fatikow@uni-oldenburg.de](mailto:fatikow@uni-oldenburg.de), CC to [anja.hiller@uni-oldenburg.de](mailto:anja.hiller@uni-oldenburg.de). The closing date for applications is **28.08.2022**.