

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

Postdoctoral Researcher OR Doctoral Candidate, Robotic handling at micro/nano scale

The position (approval of the project funds assumed) is full time (100%), pay rate E13 TV-L, 3 years.

Our Divisions's research activities are on robotic handling and automation at micro/nano scale. The research work covers a broad range of related topics, including a.o. microscopy (SPM, SEM, and optical), robotic automation and control engineering, handling strategies for nanomaterials, and robot-based nanofabrication. Several unique microrobotic setups for automated handling at micro/nano scale have been developed in the Division for different applications.

YOUR FOCUS:

Main topics of your research work are robotic manipulation, characterization and assembly of micro- and nanoscale objects such as 2D materials or tiny building blocks. Your engagement with vision-based automation of handling sequences is of additional interest and would allow you to develop a research direction towards application-oriented technologies, for example the assembly of 2D heterostructures or similar nanomanipulation technologies.

YOUR PROFILE:

- For a Postdoctoral Researcher:
academic university degree in engineering or natural sciences at master level, and a PhD degree in engineering or natural sciences, preferably in robotics, control engineering or applied physics
- For a Doctoral Candidate:
above-average academic university degree in engineering or natural sciences, preferably in robotics, control engineering or applied physics at master level
- Well-developed communication skills, and willingness to work both independently and within our interdisciplinary research team
- Strong experience with experimental laboratory setups, hardware-software interfacing and implementations in lab control software is expected
- Experience with image processing, robotics, and automation is expected
- Experience with SPM, SEM, and MEMS technologies is desirable
- Excellent command of English (spoken and written) is expected, excellent German language skills are desirable for a Postdoctoral Researcher and expected for a Doctoral Candidate

WHAT WE OFFER:

- Unique laboratory infrastructure for research in robotic handling at micro/nano scale. In particular a dedicated robotic setup with 16 DOF for manipulation, characterization and assembly of micro/nano scale materials
- Excellent opportunities to continue your personal and professional development
- Strong involvement in project cooperation with international and national partners, both from industry and research
- An experienced interdisciplinary team (12-15 professionals) that works on adjacent topics and is highly visible in related international research communities

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, to Prof. Dr.-Ing. habil. S. Fatikow, fatikow@uol.de. The closing date for applications is **30.04.2020**.