

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 Research Associate (m/f/d)

with the focus on “**AFM-characterization for nanoplastics research**”

The position is full time (100%), pay rate E13 TV-L (funded by the German Research Foundation - DFG), for a period of 3 years, with the possibility of extension.

Our Divisions's research activities focus on robotic automation for manipulation and characterization of nanomaterials. The research work covers a broad range of related topics, including a.o. AFM-based characterization, automation at nanoscale, nanofabrication inside SEM, and robot-based nanomanipulation. Several unique robotic setups for automated handling at nanoscale are in operation in the Division for different applications.

YOUR FOCUS:

The purpose of the advertised position is to validate the scientific potential of atomic force microscope (AFM) measurements as an analytical tool for nanoplastics research. Here, the goal is a quantitative and automated investigation of the properties of various polymeric nanoparticles (e.g. topography, roughness, or adhesion). These properties will be characterized under different aging conditions.

YOUR PROFILE:

- Above-average academic university degree and a PhD degree, preferably in the field of experimental surface physics, AFM-based characterization, or nanotechnologies
- Profound experience with experimental AFM-based characterization
- Knowledge and experience in automation (specifically vision-guided automation)
- Very good command of English language, in speech and writing
- Experience with programming languages (C++, Python, MATLAB) (desirable)
- Good command of German language (desirable)

WHAT WE OFFER:

- Unique laboratory infrastructure for research in automated robotic handling at nanoscale
- An experienced interdisciplinary team that works on adjacent topics and is highly visible in related international research communities
- Excellent opportunities for professional development towards cutting edge research
- Gaining hands-on experience with the world's most advanced nanorobotic systems
- Intellectual freedom to explore and implement new approaches
- Strong involvement in project cooperation with international and national partners, both from industry and research
- Regular participation in international research conferences is possible and desired.

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 “**AFM-NanoPlast**” to Prof. Dr. habil. S. Fatikow fatikow@uni-oldenburg.de, CC to anja.hiller@uni-oldenburg.de. The closing date for applications is **13.10.2022**.