INM

Post-Doc (M/F/D) Nanomechanics Of Light-Activated Molecular Motors

(starting date: asap, ideally before May 2021, salary level 13 TV-L, 39,5h/week).

We are looking for a postdoc to study light-activated molecular motors using Atomic Force Microscopy (AFM) and Flow Force Microscopy based on tethered particle motion. Our research group at INM studies mechanics at the molecular scale and reveals fundamental mechanisms of adhesion, friction, and lubrication through cutting-edge experiments. In an international collaboration with three partners, we explore the forces and power delivered by light-activated molecular motors, which are built into synthetic biointerfaces that can activate cellular processes. Our project focuses on the quantification of forces and the optimization of motor performance, while the collaboration partners implement novel synthetic routes to molecular motors and develop and verify dynamic biomaterials.

Your profile:

- background in experimental physics, biophysics, or soft matter physics
- ideally experience in single-molecule force spectroscopy, AFM, or microfluidics

Candidates should be self-motivated, have good interpersonal, communication and writing skills, and a demonstrated ability to interact effectively with staff at all levels. The ability to work as a member of an international, multi-disciplinary team is a critical asset, and proficiency in English is mandatory.

Please direct your questions regarding the position to Roland Bennewitz (roland.bennewitz@leibniz-inm.de). Interested candidates should submit their complete application via email (a single pdf file < 5 MB) to Gabriele Koster at gabriele.koster@leibniz-inm.de including the following:

- motivation letter of max. 1 page (included in the text of the email)
- CV (max. 2 pages)
- publication list

The deadline for submission is **1st March 2021.** We expect to fill the position as soon as possible, ideally before May 2021. The INM is an equal opportunity employer with a certified family-friendly policy. We promote professional opportunities for women and strongly encourage them to apply. Full-time jobs can generally be divided.

The INM – Leibniz Institute for New Materials in Saarbrücken, Germany, is an internationally leading center for materials research, a scientific partner to national and international research institutions, and a provider of research and development for companies throughout the world. The INM is an institute of the Leibniz Association and has about 250 employees.





CONTACT

INM – Leibniz Institute for New Materials Campus D2 2 66123 Saarbrücken/Germany www.leibniz-inm.de

Prof. Dr. Roland Bennewitz Nanotribology roland.bennewitz@leibnizinm.de Phone: +49681-9300-213