

Helmholtz-Zentrum Dresden-Rossendorf e.V.



With cutting-edge research in the fields of ENERGY, HEALTH and MATTER, around 1,500 employees from more than 70 nations at Helmholtz-Zentrum Dresden-Rossendorf (HZDR) are committed to mastering the great challenges facing society today. The Institute for Ion Beam Physics and Materials Research is dedicated to the study of materials and their nanostructures that can be considered for future applications in information technology and are based on electrical, magnetic or optical functionalities. The Department of Intelligent Materials and Systems is looking for a Postdoc (f/m/d) curvilinear soft materials and structures.

Postdoc (f/m/d) curvilinear soft materials and structures

City: Dresden; Starting date (earliest): 01/02/26; Remuneration: TVöD-Bund; Reference number: 2025/138; Closing date: 07/11/25

Working field

- Fabricate actuators based on liquid crystal elastomers
- Characterize their structural and mechanical properties
- Characterize change of inner structure upon mechanical deformations including geometric curvature
- Interact with theory teams to describe impact of geometric curvature and strain on responses of liquid crystal elastomers

- Integrate sensors on mechanical actuators to monitor their motion

Requirements

- Completed university studies (PhD) in the field of Material Science, Physics, Mechanical Engineering or comparable natural sciences
- Relevant professional experience in two photon polymerization, 3D printing, processing and characterization of liquid crystal elastomers
- Knowledge in soft matter, polymers, elastomers, actuation of soft robotics

What we offer

- A vibrant research community in an open, diverse and international work environment
- Scientific excellence and extensive professional networking opportunities
- Salary and social benefits in accordance with the collective agreement for the public sector (TVöD-Bund) including 30 days of paid holiday leave, company pension scheme (VBL)
- We support a good work-life balance with the possibility of part-time employment, mobile working and flexible working hours
- Numerous company health management offerings
- Employee discounts with well-known providers via the platform Corporate Benefits
- An employer subsidy for the "Deutschland-Ticket Jobticket"

Application

We look forward to receiving your application documents (including cover letter, CV, diplomas/transcripts, etc.), which you can submit via our online-application-system: <https://www.hzdr.de/db/Cms?pNid=490&pOid=75837&pContLang=en>

More information at <https://stellenticket.de/198988/TUBS/>
Offer visible until 07/11/25

