The Biotechnology Centre (BIOTEC), an Institute of the Center for Molecular and Cellular Bioengineering (CMCB), is offering a position within a project as

**Research Associate as Microstructure Core Facility Leader**

(Subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting as soon as possible to lead the Microstructure Core Facility within the CMCB Technology Platform. The position is limited until 30.06.2021. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

The CMCB is a central academic unit of the TU Dresden and the administrative roof for three individual research institutes, BIOTEC, B CUBE and CRTD. The BIOTE C is an interdisciplinary research centre that develops innovative technologies driving the progress of modern life sciences in the areas of molecular cell and developmental biology, physical biology, and computational biology. This synergy between technology development and basic research drives the sustained success of basic, applied, and translational research at the institute. The offered position within the Microstructure Core Facility is part of the EFRE funded project “Molekulares Bioengineering von Proteinen, Zellen und Geweben” to support the development of the CMCB Technology Platform, which makes state-of-the-art technologies available to the CMCB, the TU Dresden campus and DRESDEN-concept partners.

**Tasks:** The candidate will independently lead and support the project, which has the aim to improve and develop the Microstructure Core Facility to expand concepts of scientific services offered by the facility. Ideally, the candidate will conduct and guide experiments and set-ups in the research areas of material science, microfabrication and microfluidics. The fabrication of microstructured surfaces on silicon, photoresist and polymer using photolithography, soft-lithography, UV-NIL or thermal evaporation and the characterization of surface topography by profilometer and interferometer have to be covered. Tasks also include the control of surface chemistry, topography and stiffness by using microfabrication technology on different polymeric materials, mostly hydrogels and elastomers. The candidate is responsible for the design, fabrication and optimization of microfluidic devices for biological and biophysical applications as well as the control of liquid flow in a network of microchannels by using external valves, flow sensors and syringes or pressurized pumps. Eventually the developed methods and set-ups should be made accessible to a wide group of users and applications. Running of the Core Facility, management of technical assistance and guidance for users is an essential part of the job.

**Requirements:** We are seeking a highly motivated candidate with a university degree and a Ph.D. in Physics, Biophysics, Engineering or Material Sciences or related subjects. A strong background in material science, microfabrication and/or microfluidics is required. Experience in clean room processes, microfabrication technologies on organic and inorganic materials as well as characterization of surface topography by profilometer and interferometer are highly desirable. Previous experience working within a Core Facility environment is desirable but not essential. Ability to work in a multidisciplinary environment and motivation to explore and develop new techniques and concepts are essential. The candidate should work independently, show self-initiative and manage a facility in terms of instruments maintenance, scientific collaborations, and advertisement. Excellent communicational skills and fluency in English are necessary for this position.
The Microstructure Core Facility is part of the CMCB Technology Platform. More information can be found here: http://biotp.tu-dresden.de/biotechnology-platform/.

Applications from women are particularly welcome. The same applies to people with disabilities. Please submit your comprehensive application including the usual documents preferably via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf-document to janett.schuster@tu-dresden.de by 18.02.2019 (stamped arrival date applies) or by mail to: TU Dresden, BIOTEC, Frau Janett Schuster, Tatzberg 47/49, 01307 Dresden. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis