



**Technische Universität Berlin**



Technische Universität Berlin offers an open position:

## **Research Assistant - 0.65 working time - salary grade E 13 TV-L Berliner Hochschulen**

under the reserve that funds are granted

### **Faculty II - Institute for Chemistry / Chair of Physical Chemistry - Molecular Material Sciences**

**Reference number:** II-115/25 (starting at the earliest possible / limited until 31/12/2028 / closing date for applications 11/04/25)

#### **Working field:**

Project work in the sub-project A02 "Rheology and mesoscopic structure-dynamics relations of hydrogels" of the DFG-funded CRC 1449 "Dynamic Hydrogels at Biointerfaces".

Within this project hydrogels of increasing structural complexity will become characterised with respect to mesoscopic structure and dynamics and these properties shall be related to their rheological properties on different length scales.

The mesoscopic characterisation will be done comprehensively by means of methods like static and dynamic light scattering (SLS, DLS), small-angle neutron and X-ray scattering (SANS, SAXS), fluorescence correlation spectroscopy (FSC), neutron spin-echo (NSE) spectroscopy, etc.

In addition to the systematic molecular variation of the hydrogels, also the effects of addition of salt and osmolytes, as well as of variation of the pH-value will be investigated. The obtained results will be compared to theoretical models, which will be done in close cooperation with partners from theoretical physics.

PhD thesis preparation is possible.

#### **Requirements:**

- Successfully completed university degree (Master, Diplom or equivalent) in physics, chemistry, biophysics, biochemistry or related subjects.
- Comprehensive expertise in the physico-chemical description of colloidal/polymeric systems as well as their characterisation, including rheological and scattering methods.
- Good command of German and/or English; willingness to acquire the respective missing language skills.

#### **Desirable:**

- Knowledge in synthetic preparation of polymers and polymer networks
- Good knowledge of the physical, theoretical description of polymeric systems, including their modelling
- A strong interest to deepen this knowledge by way of a doctoral thesis

Please send your application **with the reference number** and substantial documents (in a single pdf file, max. 5 MB) **by email to Prof. Dr. Gradzielski (tc7@molmat.tu-berlin.de)**.

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guarantee for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: [https://www.abt2-t.tu-berlin.de/menue/themen\\_a\\_z/datenschutzerklaerung/](https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/).

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

Technische Universität Berlin - Die Präsidentin - Fakultät II, Institut für Chemie, FG Physikalische Chemie - Molekulare Materialwissenschaften, Prof. Dr. Gradzielski, Sekr. TC 7, Straße des 17. Juni 124, 10623 Berlin

The vacancy is also available on the internet at <https://www.personalabteilung.tu-berlin.de/menue/jobs/>

