

At the Faculty of Chemistry and Physics, Institute of Physical Chemistry, TU Bergakademie Freiberg, a

Cotutelle PhD Position (m/f/d) – position number 193-E/2023

is expected to be filled on a temporary basis as of 01.11.2023.

Pay grade: Pay group 13 TV-L
Hours: 0,67 FTE (26,5 hours/week)
Contract type: 3 years (with option for extension)

As part of the collaborative project "Single-Chain Nanoparticle Complexation at Interfaces", funded by the German Research Foundation (DFG) between the research groups of Prof. Plamper (Freiberg), Prof. Schacher (Jena) and Prof. Barner-Kowollik (Brisbane), colloidal polymer networks will be prepared and their interfacial behaviour explored. The successful candidate will be employed at the Technical University of Freiberg, Germany, and the project includes short-term exchanges with the University of Jena, Germany. The project is conducted under a cotutelle PhD agreement with the QUT in Brisbane, Australia, and the successful candidate is expected to work at QUT for a minimum of 1 year and up to 1.5 years during their PhD time.

These are your tasks:

- Synthesis of photoactive monomers and crosslinkers
- preparation of photoactive polymers
- molecular characterization (NMR, IR...)
- photocrosslinking of polymers in solution and at interfaces
- structural investigations in solution by scattering methods (DLS, SLS, SAXS...)
- studies of interfacial behavior (Langmuir trough, interfacial rheology, SAXS, reflectometry)
- Participation in teaching (exercises, practical courses) and Supervision of student theses
- Preparation of publications, preparation of research reports

The position is suitable for doctoral studies.

What you can expect from us:

- working at a family-friendly university with flexible working hours
- remuneration according to the provisions of the collective agreement for the public service of the federal states in accordance with the personal requirements; attractive fringe benefits, e.g. B. Asset-based benefits (VL), company pension schemes (VBL), health management, assistance (training) by experienced colleagues
- guidance by experienced colleagues and the possibilities of further education
- a unique opportunity to conduct a transcontinental cotutelle PhD project

What we expect from you:

- a university diploma or master degree in chemistry, applied science, nanotechnology or in a field related to these areas
- Experience in organic chemistry, photochemistry, polymer chemistry, interfacial and/or colloid chemistry and related characterization techniques
- excellent English (and German) language skills, both written and spoken
- independent goal-oriented and interdisciplinary working style
- willingness to work in a transcontinental setting

For further information please contact Prof. Dr. Plamper, Tel. 0049-(0)3731 39-2139, e-Mail:
plamper@chemie.tu-freiberg.de.

The applicant must meet the hiring requirements for fixed-term employment contracts according to the WissZeitVG. Applicants with disabilities will receive preferential consideration, provided they possess equal qualifications. For consideration, we ask you to submit proof of your disabled status together with your application documents. TU Bergakademie is committed to increasing the number of women in teaching and research positions, hence qualified female candidates are especially encouraged to apply. Written applications, including a CV, motivation letter and copies of all relevant qualifications documents (certificates, diplomas), should be submitted before **19.10.2023** stating **reference number (193-E/2023)** to the following address:

mail: bewerbungen@tu-freiberg.de

Your application materials will not be returned; please submit copies only. Interview costs will not be covered. The TU Bergakademie Freiberg is also looking for scientific personnel from different disciplines. Information under: <http://tu-freiberg.de>