Leibniz-Institut für Polymerforschung Dresden

Job vacancy No. 009-2023

The Leibniz Institute of Polymer Research Dresden is a non-university research institute and a member of the Leibniz Association. It has gained world-wide reputation for its application-oriented basic research on new polymer materials for future technologies, e.g. in the fields of energy, mobility, health, sustainability, and communication, and it supports the transfer of research results into application. The research work is carried out on the basis of state-of-the-art technical equipment in interdisciplinary cooperations between the five institutes of the IPF and embedded in numerous national and international cooperations. The IPF promotes young scientists and is certified as a family-friendly employer according to the Audit berufundfamilie®. The institute currently employs around 500 persons. Further information at www.ipfdd.de.

The IPF-Institute of Biofunctional Polymer Materials is looking for a

PhD student (m/f/d)

to work on the project 'Conductive polymer hydrogels combining tunable electrical conductivity and biomolecular affinity for multimodal tissue interfacing'

Description:
In biological systems, electrical and biomolecular signals are often interconnected. The technical implementation of this principle using a biomaterial has not been achieved so far, but could allow to transmit signals from both modalities into living tissue with unprecedented control. We are seeking an applicant who is enthusiastic about the development and application of novel material systems that have the potential to revolutionize bioelectronic devices of the future.
The aim of this DFG-funded project is to synthesize, characterize and apply a biomimetic conductive hydrogel system that is able to multimodally stimulate living matter. The candidate will work on the synthesis and characterization of conductive polymer hydrogels combining various sulfated/sulfonated polymer hydrogels with different conductive polymers. In addition, the ability of these materials for electrical stimulation and their potential to release and sequester biomolecules in an electrically controlled way will be investigated. The research involves conductive hydrogel synthesis, comprehensive material characterization (electrical, structural, mechanical), and molecule release and sequestration studies. The candidate will be part of an interdisciplinary and international research team.

Your profile:
We are looking forward to receiving applications from highly motivated candidates with a master's degree in material sciences, chemistry, biochemistry, physics or related fields. Applicants should have proven expertise in the synthesis and characterization of biomaterials, preferably bioelectronic materials, and have the right to work in the EU. The candidate is expected to work independently but in close collaboration with other team members and research groups. Well-developed planning and organizational skills, with the ability to prioritize multiple tasks, setting and meeting deadlines are essential. Excellent communication skills for scientific writing and discussions and proficiency in English are mandatory.

Salary: According to German pay grade TV-L EG 13
Terms: 65% of the full-time weekly hours
Starting date: April 2023
Duration: 3 years

We offer:
A position in a leading research institute, combined with a highly specialized working environment in the junior research group 'Bioelectronic Materials and Systems' where you can implement your own ideas and work with a diverse and inclusive team; flexible working hours.

The IPF Dresden strives for gender equality and diversity in all fields. Applications by people with severe disabilities will be given preference if they are equally qualified. Moreover, as the IPF would like to raise the proportion of women in fields where they are underrepresented, women in particular are invited to apply.

The personal data collected by the IPF relating to your application, as well as the evaluation thereof shall be processed exclusively for purposes of the application process on the basis of contractual measures under Art. 6 (1b) GDPR. These data shall not be transferred to third parties. Recipients shall comprise the employees responsible, the Works Council as well as, where applicable, the representative body for disabled employees and the equal opportunities officers of the IPF. Your application details provided to us shall be deleted by us 6 months after the end of the application process, i.e. either after the job advertised has been filled, or after we have decided not to fill the vacancy after all. For questions under data protection law and for exercising your rights, please contact: d atenschutz@ipfdd.de (data protection officer). You have the right to complain to the supervisory authority. Expenses for the interview participation will not be refundes.

Full applications should include a 2-page curriculum vitae, a 1-page letter of motivation, certificates, 2-3 references and expected availability date and should be emailed as a single PDF to the Human Resources Department. **Please also indicate the number of the Job vacancy.**

Leibniz-Institut für Polymerforschung Dresden e. V.
Frau Susanne Otto
Human Resources Department
Hohe Straße 6 01069 Dresden
otto-susanne@ipfdd.de