

Leibniz-Institut für Polymerforschung Dresden e. V. HR Department

Job advertisement No. 005 / 2018

At the Institute of Physical Chemistry and Polymer Physics (Division Nanostructured Materials), research group Polymer Micro(bio)reactors / ThieleLab - subject to the financial allocation -

PhD position (m/f):

Multi-material design for micro-stereolithography for cell biology and cell-free biotechnology

We are part of the **DFG Graduate School 1865**, an interdisciplinary network of research groups from TU Dresden and Leibniz IPF Dresden developing novel hydrogel-based microsystems. Here, the ThieleLab (https://thielelab.com) focuses on the design of multifunctional polymer materials as experimental platform for processes and functions in biotechnology and cell biology.

Work task:

The PhD position is devoted to develop switchable 4D materials by additive manufacturing. In a holistic approach, the candidate will synthesize tailored resins, process these by novel 3D-printing tools to yield complex polymer structures ("From resins to components"). Yearly summer schools organized by the GRK will deepen the candidate's expertise in bioand material sciences as well as engineering.

Suitable candidates with a master degree in chemistry, engineering (or similar) are skilled in:

- (Photo-)polymer synthesis
- Additive manufacturing based on stereolithography (e.g. Envisiontec P4 Mini, Cerafab 7500, Asiga Pico2)

Experience in AutoCAD and LabVIEW as well as COMSOL Multiphysics is a plus. It is expected that the applicant shows excellent communication skills in English - German is an asset.

Starting date: 01.04.2018 **Duration**: 31.03.2021

Salary: According to German pay grade TV-L EG 13 (65 %)

Professional questions about this position can be addressed to: Mr. Dr. Julian Thiele thiele@ipfdd.de

Please send your CV, a copy of degrees and scores, recommendation letters and a brief statement why you would like to apply to this particular job offer to the Department of Human Resources (with the Number 005-2018):

Leibniz-Institut für Polymerforschung Dresden e.V. Mrs. Susanne Otto Head of Human Resources Hohe Straße 6 / 01069 Dresden Germany otto-susanne@ipfdd.de