



The Institute for Mechanics and Fluid Dynamics – Chair of Micromechanical Materials Modelling, offers a position as

PhD position / wissenschaftliche/r Mitarbeiter/in

The position is part of the Collaborative Research Center SFB 799 „TRIP-Matrix-Composite“ (<http://tu-freiberg.de/forschung/sfb799>), funded by the Deutsche Forschungsgemeinschaft (DFG).

Vergütung: Entgeltgruppe 13 TV-L
Stellenumfang: 0,75 VZÄ (30 h/Woche)
Befristung: 30.06.2020

The successful candidate will work on the sub project C9 „Microstrukturelle Mechanismen der Stahlmatrix – Interaktion von Dislokationsdynamik, Phasenumwandlung und Zwillingsbildung“. The research topic focuses on modelling and predictive simulations of the aforementioned microstructural phenomena in order to identify important deformation mechanisms. In close cooperation with the experimental groups of the SFB 799 the goal is then to obtain an increased understanding of the structure-property relation of TRIP steels, which ultimately will help to create materials with superior properties. During this project, you will work on multiphysics models that will be based on the coupling of phase field approaches with dislocation plasticity models.

We are offering a challenging and exciting position, which is integrated into an excellent scientific working environment. The ideal candidate holds a M.Sc. degree (or equivalent) in the field of materials science, physics, applied mathematics, mechanics or closely related fields and has a strong inclination towards computational aspects. In particular we expect that a successful candidate has preliminary experience with simulations and/or basic programming skills (e.g. in C/C++, Python or MATLAB).

The successful candidate will be part of the integrated graduate school of the Collaborative Research Center SFB 799 and is supposed to pursue his/her PhD studies within this network. The contract is initially until 30.06.2020 with the option of an extension. For further questions please don't hesitate to contact Prof. Sandfeld (stefan.sandfeld@imfd.tu-freiberg.de).

Please include the reference number **(02/E/2018)** on your application.

Kindly send the usual application documents as hard copies (including certificates, CV, letter of motivation, letter of recommendation) not later than **29.01.2018** to (the postmark of the ZPS of the TU Bergakademie Freiberg is valid):

**TU Bergakademie Freiberg
Dezernat für Personalangelegenheiten
09596 Freiberg**

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