



At the Faculty of Mechanical, Process and Energy Engineering, Institute of Thermal Process Engineering, Environmental and Natural Material Processing (TU Bergakademie Freiberg/Germany) the following temporary position is available after April 1<sup>st</sup>, 2018:

## PhD Candidate / Doctoral Researcher / Post-Doc

The occupation will be within an ERC Starting Grant project until April 30<sup>th</sup>, 2020. A continuation of the occupation afterwards is pursued. The topic covers

- the analysis of nanostructures / -inhomogeneities in pressurized single-phase systems for the generation of fine particles
- and the analysis of microstructures during single-phase high pressure mixing processes for the generation of tailor made particles.

In-house developed optical measurement techniques as well as neutron and X-ray techniques at Europe's advanced beam lines will be used as analysis/diagnostics tools.

**Salary:** 13 TV-L  
**Termination:** April 30<sup>th</sup>, 2020 (extension pursued)

### Tasks:

- Self-reliant processing of project tasks
- Development of laser measurement techniques
- Development of high pressure processes for efficient mixing and particle generation
- Supporting undergraduate students during their graduation thesis
- Administration of the project
- Presentation of the results at international conferences
- Preparation of reports

### Qualifications expected:

- Graduation (ideally Master) in Mechanical Engineering, Process Engineering, Energy Engineering, Electrical Engineering or Physics
- Interest in optical diagnostics and process engineering
- Basic understanding of thermodynamics
- Willingness to travel, as this project is part of a collaboration with research institutes from Italy, France and Spain
- Thirsty for knowledge, innovative, well organized, determined
- Good English skills
- Intention to graduate as Doctor in Engineering

In case of any question, please call Andreas Braeuer – +49 1705460655 – or write an e-mail to [andreas.braeuer@tu-freiberg.de](mailto:andreas.braeuer@tu-freiberg.de)

TU Bergakademie Freiberg is an equal opportunity employer and encourages applications from women and all others who bring additional diversity. Disabled persons with equal qualifications will be preferred.

Please submit your application documents under the reference number 08-E/2018 before **February 15<sup>th</sup>, 2018** to

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

Your application documents will not be returned to sender. Therefore, please submit copies only! Other vacant positions can be found here:

<http://tu-freiberg.de/wirtschaft/karriere/stellenausschreibungen>