



The Faculty of Mechanical, Process and Energy Engineering, Institute of Energy Process Engineering and Chemical Engineering (Professorship for Energy Process Engineering and Thermal Waste Treatment – EVT), invites applications for the position of a

### Research Associate / PhD Researcher

to join our junior research group starting from 1<sup>st</sup> October 2017 (subject to project approval by the project sponsor).

**Salary:** 13 TV-L  
**Scope:** 40 hours per week (1.0 full time position)  
**Period:** initially for 3 years (possibility for extension)

Part-time employment is possible; successful applicant has the opportunity to pursue a doctorate degree

R&D and education activities at the Professorship of Energy Process Engineering and Thermal Waste Treatment (EVT) at the Institute of Energy Process Engineering and Chemical Engineering (IEC) focus on the efficient and sustainable utilization of carbonaceous resources (fossil, renewable, primary as well as secondary). The junior research group will be integrated into the technology assessment division where an interdisciplinary and systemic approach is utilized to investigate technological and scientific developments that will pave the path for a low-carbon economy and support a sustainable transition in the energy and natural resource systems.

Research activities encompass the evaluation of technological and resource chains representing viable carbon feedstock alternatives for the industry to produce value-added products. The junior research group aims to develop interactive decision tools to break down the complexity of the decision-making environment. The objective is to facilitate a better understanding of the raw materials system as a socio-technical system to support decision-making and measures development for a transition to a competitive, low-carbon, secure and sustainable raw materials management for the industry.

To support our research activities, we are looking for a motivated and dynamic research associate to join our junior research group. Focus is also placed on the professional development of promising young researchers who will have the opportunity to participate in coaching and training activities both nationally and internationally.

Research tasks include:

- Project work and research activities in process chain development and integrated process assessment,
- Modelling of process chains for the production of basic chemicals and fuels based on various carbonaceous resources,
- Techno-socio-economic evaluations of entire value chains for various carbonaceous resources for the production of chemical products and fuels.

We welcome applicants with the following qualifications:

- An excellent university diploma or master degree, preferably in the field of business/industrial engineering or process engineering,
- Experience and knowledge in one or more of the following fields: economic process evaluation, chemical and energy process engineering, technological and socio-economic assessment,
- Experience with process simulation software (e.g. Aspen Plus) is beneficial, but not a prerequisite,
- Fluency in German and English.

We look forward to candidates who are interested to be part of our interdisciplinary team, possess social and intercultural competence, have the ability to organize their work with minimal supervision and who are reliable, versatile and performance-oriented.

For informal enquiries about the position, please contact Dr. Roh Pin Lee: Tel. +49 3731 394423  
E-Mail: [roh-pin.lee@iec.tu-freiberg.de](mailto:roh-pin.lee@iec.tu-freiberg.de).

We particularly welcome and encourage applications from women and disabled people, recognizing that they are under-represented in the TU Bergakademie Freiberg. The principles of fair and open competition apply and appointments will be made on merit.

Please include the **reference number (183-E/2017)** on your application. The deadline for applications is **20<sup>th</sup> August 2017**. Applications should be sent to:

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

Please note that your application documents will not be returned. Please submit only copies of your certificates. Travel and other costs for interviews will also not be reimbursed.