



At the group of Prof. Etzold (Department Technische Chemie 1 at the Technische Universität Darmstadt, the position of a

Research Assistant (Ph.D. Student) (f / m / d) – 67 %

is to be filled at the earliest opportunity in an employment contract limited to 3 years.

As part of a project funded by the German Science Foundation (DFG) iron molybdate catalysts for the oxidative dehydrogenation of ethanol. Therefore, kinetic studies and transient response experiments are carried out. Special focus of the research is on the stability of the materials and on the influence of reactant concentration and temperature on deactivation. To decouple mass- and heat transfer influences resulting in concentration and temperature gradients, additional insights are obtained by chemical reaction engineering simulations. Furthermore, a project partner will develop a novel laser diagnostic experiment for determining concentration and temperature profiles on catalyst pellets. Strong interaction with this partner is envisaged.

Required qualification:

Motivated candidates with a completed scientific university degree (M.Sc.) in chemistry, chemical engineering, or an equivalent degree should have in-depth knowledge on heterogeneous gas phase catalysis, preferably in the field of oxidation catalysis and chemical reaction engineering. Background and practical experience in kinetic studies and reaction engineering simulations are advantageous.

The general tasks include the supervision of students in the field of industrial chemistry, e.g. in internships, exercises and seminars, as well as participation in the research and teaching process. There is an opportunity to prepare for a doctorate. The provision of the service also serves the applicant's academic qualification

The remuneration is based on the collective agreement for the Technische Universität Darmstadt (TV - TU Darmstadt).

Application process:

Applications must be sent to Prof. Bastian Etzold latest 31st of January with the usual documents (including copies of certificates) in the form of a single, coherent PDF document. Email: bastian.etzold@tu-darmstadt.de.