

SCIENTIFIC EMPLOYEE (M/F/D) with the aim of obtaining a doctorate

Department Chemie- und Bioingenieurwesen (CBI), Erlangen, TV-L E 13, Teilzeit, Befristete Anstellung,
Bewerbungsschluss: 31.05.2024

Ihre Aufgaben

Responsibility

The tasks of a research assistant (M/F/D) include research and teaching activities. There is the opportunity for further academic training and, in particular, for the preparation of a PhD thesis.

Field or research

The use and production of renewable hydrogen plays an important role in the future production of basic chemicals and energy sources. This requires robust and selective heterogeneous catalyst materials for hydrogenation and dehydrogenation reactions. Both the resistance and selectivity of transition metal catalysts can be increased by doping with foreign elements that have an electronic and steric effect. Phosphorus has proven to be a particularly effective impurity for the modification of heterogeneous catalysts. For example, the doping of noble metals with phosphorus and the formation of crystalline ordered transition metal phosphides (TMPs) has shown positive effects on activity, selectivity and stability in various hydrogenation and dehydrogenation applications. The project, funded by the German Research Foundation, focuses on the development and investigation of TMP catalysts for the dehydrogenation of linear and cyclic hydrocarbons in fully automated and continuously operated reaction plants. A variety of analytical methods are used to characterize the catalyst materials in order to identify the structure-activity relationships of the catalysts.

Ihr Profil

Notwendige Qualifikationen:

Above-average degree in chemical engineering, process engineering or a comparable course of study. You should have the ability to work independently and creatively, to critically evaluate your own results and to collaborate in a broader research team. A good command of English is required. Experience in chemical reaction engineering, analytics and working in chemical laboratories is desirable.

Stellenzusatz

Befristetes Forschungsvorhaben

The following applies to all job advertisements: The Friedrich-Alexander-University promotes the professional equality of women. Women are therefore expressly encouraged to apply. Severely disabled persons within the meaning of the Severely Disabled Persons Act will be given preferential

consideration if they have the same professional qualifications and personal suitability, if the advertised position is suitable for severely disabled persons. Details can be found in the respective job advertisement under "Remarks". At the applicant's request, the Equal Opportunities Officer can be consulted during the interview without the applicant suffering any disadvantages as a result. Please note that we cannot return application documents. Therefore, please do not submit any originals. We will destroy your documents at the end of the procedure.

Interessiert?

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