

Scientist (Chemist / Chemical Engineer) (f/m/d)

The candidate will be responsible in the field of emission control for testing existing and new catalysts for the removal of harmful emissions resulting from combustion of sustainable and renewable fuels. The goal is to achieve reduction in CO, hydrocarbon, and oxygenate emissions for variable fuel compositions, combustion regimes, and catalyst systems. The candidate will prepare, systematically test and characterize catalysts (e.g. XRD, BET, IR, EXAFS, XPS, etc.). For a knowledge-based approach, operando techniques, in particular based on X-rays, will be used. You will discuss the results in an interdisciplinary research team and publish the results in scientific journals. In addition, you will be responsible for supervising Master/Bachelor students and co-supervise PhD students.

Personal qualification

- PhD as well as a very good university degree (Master or equivalent) in (physical/technical) Chemistry, Chemical Engineering, or related disciplines
- Very good experience in the area of exhaust gas aftertreatment, synthesis of catalysts (supported metals, metal oxides, zeolites), heterogeneous catalysis
- Experience with and fundamental understanding of catalyst characterization techniques (incl. in situ and operando)
- Experience with setting up catalyst test rigs and experience with online gas analytics
- Fluent in English, German is an advantage.

Salary

Salary category 13 TV-L, depending on the fulfillment of professional and personal requirements.

Contact person in line-management

For further information, please contact Prof. Dr. Grunwaldt.