W1 Tenure-track Professorship for Catalyst Materials for the Energy Transition
This junior professorship (W1) is financed from funds of the Federal-states Program Promoting Young Scientists.

Job description:

We are looking for an excellent early-stage researcher to represent the field of "Catalyst Materials for the Energy Transition" in research and teaching, focusing on the development and qualification of innovative catalysts for sustainable chemical processes. Applicants should have completed their studies of engineering or natural sciences, preferably of chemical engineering, process engineering, technical chemistry, inorganic chemistry, or materials sciences. The scope of activities executed so far should clearly reveal own, successful approaches to research into catalyst materials. Relevant scientific competences in areas of process intensification, catalyst characterization methods, and handling of big experimental data volumes are welcome.

At Karlsruhe Institute of Technology (KIT) you benefit from a unique environment for your research on innovative production of materials for use as catalysts of chemical, electrochemical, or bioelectrochemical processes. The candidate will apply her/his findings in the scale-up of catalyst syntheses and will use automated processes for preparation, characterization, or testing of catalysts. The candidate will make use of automated procedures for preparation, characterization, or testing of catalysts. In cooperation with colleagues of the institute, these procedures will be further optimized. The catalyst materials to be researched at your team are aimed, among other things, at the conversion of C1 building blocks to chemical intermediates and synthetic energy carriers and support the future change in the provision of energy and raw materials towards a circular economy. Work on the corresponding applications will take place in cooperation with partners in Germany and abroad.

Qualification:

Based on a target-oriented approach to working, the candidate will initiate projects and contribute to their successful completion. Applicants are expected to independently acquire third-party funding after an appropriate period of time. For this purpose, close cooperation with other catalysis research teams at KIT is envisaged, also the participation in collaborative initiatives.

For further personal development, KIT and the Helmholtz Association offer specific services. Gradually, the candidate is expected to assume leadership responsibilities. In the area of academic education, involvement in bachelor’s and master’s programs offered by the KIT Department of Chemical and Process Engineering is expected. Participation in teaching programs offered together with the KIT Department of Chemistry and Biosciences on the production of materials will be possible.

Institute:

Division I – Biology, Chemistry, and Process Engineering/ KIT Department of Chemical and Process Engineering/ Engler-Bunte-Institute, Division Fuel Technology/ Institute of Catalysis Research and Technology (IKFT)

Contract duration:

According to Article 51, LHG (Law of Baden-Württemberg on Universities and Colleges), candidates are expected to have completed their university studies, to possess pedagogic skills, and to be highly capable of doing scientific work. Employment as a civil servant (Beamter) or employee (Angestellter) is offered for six years. In the third year of employment, an
interim evaluation will be made. Outstanding achievements in research, teaching and innovation, which are recognized by external experts, are the prerequisite for a positive final evaluation. In case of a positive final evaluation, permanent professorship (W3) according to Article 15, par. 2, KITG (Act on Karlsruhe Institute of Technology) will be offered. The evaluation procedure and general evaluation criteria are outlined in the “Quality Assurance Concept for Junior Professorships and Tenure-track Professorships at Karlsruhe Institute of Technology (KIT)”. The scientific results on the synthesis of novel catalyst materials, as well as the development of new manufacturing processes for catalysts and their scaling, which are to be demonstrated in the form of peer-reviewed technical publications and acquired third-party funding, and the successful qualification of students in the form of bachelor's and master's theses represent subject-specific evaluation criteria.

Starting date: Earliest date possible
Application up to: January 31, 2021
Application:

Kindly mail your application, including CV including detailed previous employment periods, a research and teaching concept, publication list, acquired projects funded by third parties, and the three most important publications in electronic form to Professor Dr. Andrea Robitzki, Head of Division I – Biology, Chemistry, and Process Engineering, Karlsruhe Institute of Technology (KIT), c/o Dekanat der KIT-Fakultät für Chemieingenieurwesen und Verfahrenstechnik (Dean’s Office of the KIT Department of Chemical and Process Engineering), Kaiserstr. 12, 76131 Karlsruhe, Germany, email: ciw@kit.edu. In case of questions relating to scientific matters, contact Professor Dr.-Ing. Jörg Sauer, phone +49 721 608-22401, email: j.sauer@kit.edu.

For further career development, support and mentoring are offered. KIT wishes to increase the proportion of female professors and, hence, strongly encourages qualified women to apply.

Recognized severely disabled persons will be preferred if they are equally qualified.

KIT is certified as a family-friendly university and offers part-time employment, leave for family reasons, dual career services, and coaching to enhance the compatibility of job and family.

The processing of personal data by the Karlsruhe Institute of Technology (KIT) is carried out according to the Privacy Policy.

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