

The Technical University of Munich (TUM) at Campus Straubing is looking for a

Postdoc (f/m/d) Material science / Chemistry / Electrocatalysis

About us:

The Technical University of Munich is located in the south of Germany and is **one of the most renowned universities** with worldwide leading rankings in research and teaching.

Our group "Sustainable Energy Materials" concentrates on the preparation of heterogeneous catalysts and the understanding of structure-performance indicators in electrocatalytic reactions. Our catalysts are the heart of sustainable energy conversion processes such as in hydrogen fuel cells or electrolyzers. Utilizing innovative, automated characterization techniques we evaluate the catalyst's performance. This enables the examination of numerous materials in a short time and thus accelerates the discovery of new materials. We work closely with various institutions and companies from all over the world, especially the USA, the UK, and Germany.

Your Profile:

- Ph.D. in chemistry, material science, engineering, physics, or a closely-related field
- Knowledge in material science, inorganic chemistry, or heterogeneous catalysis (e.g. noble metals, nanomaterials, TEM, XRD, ICP-MS, XPS, Schlenk line, XRF)
- You have first experience/interest in electrochemistry (electrocatalysis, plating, corrosion...)
- Excellent English speaking and writing abilities, no German language skills required
- Interdisciplinary team working skills with high independency
- Outstanding academic performance
- Hands-on mentality
- Enthusiasm to supervise Ph.D. students

Applicants should submit their CV including bachelor's and master's degrees, and a motivation letter detailing their interest and suitability for the position.

Mission:

We synthesize and test novel catalysts for sustainable energy conversion processes such as polymer electrolyte fuel cells or electrolyzers, H₂O₂ production, or electrochemical CO₂ reduction. To do so, the preparation of novel catalyst materials is of pressing concern. You will continue our research line around the preparation of novel catalysts based on mixed metal alloys on the nanoscale (previous works e.g.: <https://www.nature.com/articles/s41563-019-0555-5>). You will also supervise one Ph.D. student who will work on a complementary topic guaranteeing quick output and ideal preparation for an academic career. Ideally, the applicant takes over the co-supervision of selected Ph.D. candidates. We are looking for an individual with a high willingness to take initiative and motivation to start her/his career at TUM, Campus Straubing.

We offer:

We offer excellent working conditions in a young and interdisciplinary team. In an open environment, you will have the freedom to develop and realize your own ideas. Situated on the Bavarian forest gate, Straubing, the old ducal town on the Danube, is the intellectual hub for renewable materials and technologies for sustainability in Germany. The successful applicant will hold a 2-year contract that can be prolonged. We offer a competitive salary and benefits depending on work experience and seniority in accordance with the public service wage agreement of the Free State of Bavaria - TV-L E13 (100%). As an equal opportunity and affirmative action employer, TUM explicitly encourages applications from women and all others who would bring additional diversity dimensions to the university's research and teaching strategies. Preference will be given to disabled candidates with essentially the same qualifications.

Interested?

We are looking forward to receiving your application via e-mail to marc.ledendecker@tum.de. The position will be open until an appropriate candidate is found. Publication date: 06.10.2022

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