

2 PhD Positions in Theoretical Chemistry/Theoretical Physics

Technical University of Munich is seeking two Research Associates (f/m/d) to study electronic processes in energy conversion and new materials, combined with the opportunity to pursue a PhD.

Project Description:

The research of our group at TU Munich (TUM) develops computational approaches and produces theoretical knowledge in the strategic field of solar energy conversion. The group is part of the **Cluster of Excellence "e-conversion"** and benefits from highest-level experimental and theoretical collaborations. TUM is ranked among the top universities in Europe.

Your activities will focus on **electronic structure simulations** and **modelling of dynamical processes** (including excitonic properties, electronic transport and spin phenomena). One position will focus on transition metal oxides, the other on organic semiconducting systems based on molecules. The ability to work in a team and a strong motivation to advance the scientific project are expected. As the successful candidate, you will benefit from the membership at the TUM Graduate School, be part of an active international scientific network and present your results in national and international conferences.

Your qualifications:

For a successful application, a Master degree in Physics or Chemistry will be necessary at the starting time of the PhD project. The candidates are expected to have a background in theory and interest and experience with computer simulations. They should enjoy taking on new challenges and have first experience with programming. Knowledge of ab initio simulations would be of great advantage. Very good communication and writing skills in English are further expected.

Our offer:

We offer each position as research associate with the opportunity to pursue a doctoral degree. The positions are available immediately for the duration of three years. Payment will be based on the Public Sector Collective Agreement of the Länder (TV-L E13 scale). TUM strives to raise the proportion of women in its workforce and explicitly encourages applications from qualified women. Applications from handicapped persons with essentially the same qualifications will be given preference.

Application:

Application documents (CV, motivation letter, certificates, up to two reference contacts) should be sent as a single pdf file to frank.ortmann@tum.de. Subject: "Application PhD2023-2", Deadline: **15.07.2023**. Successful candidates can be hired immediately.

As part of your application, you provide personal data to the Technical University of Munich (TUM). Please view our privacy policy on collecting and processing personal data in the course of the application process pursuant to Art. 13 of the General Data Protection Regulation of the European Union (GDPR) at <https://portal.mytum.de/kompass/datenschutz/Bewerbung/>. By submitting your application you confirm to have read and understood the data protection information provided by TUM. Find out more about us at www.tum.de.