

Ph.D. position in Machine Learning-Powered Molecular Simulations

The Multiscale Modeling of Fluid Materials group at the Technical University of Munich is looking for talented and ambitious scientists interested in unique interdisciplinary research, integrating molecular simulations, machine learning, statistical physics, multiscale modeling, and uncertainty quantification.

In particular, openings are available in connection with the following projects:

- Developing a novel computational framework to discover rational design rules of peptide-based materials used in emerging technologies ranging from drug delivery to soft semiconductor devices.
- Advancing material design for modern additive manufacturing techniques, such as laser powder bed fusion, with state-of-the-art simulations, enabling accurate alloy microstructure prediction.

For more information, visit our webpage www.epc.ed.tum.de/en/mfm.

Your profile

- M.Sc. degree in physics, chemistry, computer science, or engineering (candidates that will soon obtain the degree are also welcome to apply)
- strong background in molecular simulations and/or machine learning
- proficiency in programming (especially Python)
- fluent in spoken and written English (knowledge of German is beneficial but not required)

Our offer

The position is available immediately and for a duration of three years (possible extension). Salary is based on the Free State of Bavaria public service wage agreement (100%, TV-L E13). Additional funding is available for scientific equipment and conference travel expenses.

How to apply?

Please send your application by e-mail to **info.mmfm@mw.tum.de** with the **subject "PhD Application".** The application should include (in one single PDF document): a cover letter stating your motivation and background for applying for the position in our group, CV, certificates, transcript of grades, and contact information of two references. Applications will be reviewed on a rolling basis until the position is filled.

For any questions, please do not hesitate to contact Prof. Dr. Julija Zavadlav (info.mmfm@mw.tum.de).

Contact

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TUM is an equal opportunity employer. TUM aims to increase the proportion of women, therefore, we particularly encourage applications from women. Applicants with severe disabilities will be given priority consideration given comparable qualifications. Data Protection Information: As part of your application for a position at the Technical University of Munich (TUM), you submit personal data. Please note our privacy policy in accordance with Art. 13 General Data Protection Regulation (DSGVO) http://go.tum.de/554159 for the collection and processing of personal data in the context of your application. By submitting your application, you confirm that you have read the privacy notice of TUM.