



We are looking for a highly motivated and ambitious

Postdoc (f/m/d) in Physics-based Machine Learning

Scientific environment

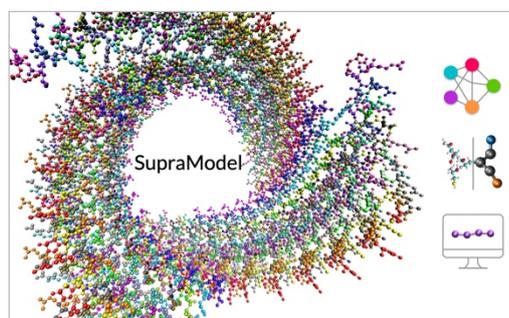
The Multiscale Modeling of Fluid Materials group provides a unique interdisciplinary environment, integrating state-of-the-art machine learning, multiscale simulations, and statistical physics to understand and exploit soft matter systems. The group, led by Prof. Julija Zavavlav, is part of the School of Engineering and Design at one of Europe's top universities, the Technical University of Munich. For more information, visit www.epc.ed.tum.de/en/mfm.

Project description

The position is offered in the context of an ERC Starting Grant project called 'SupraModel: Peptide-based Supramolecular Co-assembly Design: Multiscale Machine Learning Modeling Approach.' ERC Starting Grant is a highly competitive funding program by the European Research Council (ERC) to support ground-breaking research in Europe.

SupraModel proposes a novel computational framework that will enable a rational design of peptide-based materials used in emerging technologies ranging from drug delivery to soft semiconductor devices. The

successful applicant will work with other project members to advance supramolecular peptide-based materials with next-generation in-silico methods employing molecular simulations, deep learning, and Bayesian uncertainty quantification.



Your profile

The position is open to candidates holding (or who will hold) a Ph.D. degree in computational physics/chemistry, machine learning, or related fields. We are particularly interested in applicants with:

- strong background in molecular simulations, statistical physics, machine learning, and Bayesian methods
- proficiency in programming languages (especially Python)
- fluent in spoken and written English (knowledge of German is not required)
- strong publication track record

Our offer

Join our research group with a scientifically stimulating atmosphere and participate in cutting-edge physics-aware machine learning research! The position is available immediately and for a duration of two years. Salary is based on the Free State of Bavaria public service wage agreement (100%, TV-L E13, level 3). Additional funding is available for scientific equipment and conference travel expenses.

How to apply?

Please send your application or questions regarding the position by e-mail to info.mmfm@mw.tum.de. The application should include (in one single PDF document): a cover letter stating your motivation and background for applying for this position, a CV containing a list of publications, transcript of grades, certificates, and contact information of two references. Preference will be given to applications received before **May 15th, 2023**.

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.