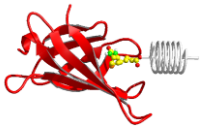
MAX-PLANCK-INSTITUT FÜR BIOPHYSIKALISCHE CHEMIE
KARL-FRIEDRICH-BONHOEFFER-INSTITUT
GÖTTINGEN



The **Department for Theoretical and Computational Biophysics** aims at an understanding of the physics and function of proteins, protein complexes, and other biomolecular structures at the atomic level through molecular dynamics simulations and invites applications for positions as

Ph.D. Student (f/m)
(Code number 16-16)

or

Postdoc (f/m)
(Code number 17-16)

We offer the possibility to participate in projects listed below, but are evenly interested in discussing your own ideas and suggestions!

- Understanding how molecular machines work: The ribosome and the F-ATP Synthase
- Dynamic protonation algorithms for biomolecules in molecular simulations
- Interpretation of single-molecule experiments
- Statistical mechanisms of biomolecules
- Accurate free energy differences from non-equilibrium simulations
- Molecular recognition mechanisms in protein-ligand and protein-protein binding
- Understanding SNARE-mediated membrane fusion
- Computational electrophysiology of ion channel permeation and selectivity
- Conformational dynamics of allosteric transitions

You should have a strong background in physics, chemistry, computer science and/or mathematics and hold a Master's (or equivalent) or Ph.D. degree in any of these or a related field, be highly interactive and willing to collaborate efficiently with experts from all natural sciences. Depending on the topic, candidates should be able to translate physical concepts into program code and be familiar with a scripting and a programming language.

Ph.D. candidates have the chance to participate in one of several available interdisciplinary Ph.D. programs in collaboration with the University of Göttingen. The successful applicant will receive a salary of the pay category 13 (75 %) TVöD Bund.

The Postdoc position is limited to **two years** with a possible extension. The payment and benefits are based on the German **TVöD guidelines**.

The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals.
Furthermore, the Max Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

Please send your application including cover letter (explaining background and motivation), CV, and publication record preferably via e-mail as single PDF file in relation to the code number to

ausschreibung16-16@mpibpc.mpg.de (Ph.D. Student Position)
or
ausschreibung17-16@mpibpc.mpg.de (Postdoc Position)

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