



The Max Planck Institute for Multidisciplinary Sciences is a leading international research institute of exceptional scientific breadth. With more than 40 research groups and some 1,000 employees from over 50 nations, it is the largest institute of the Max Planck Society.

The Department of *Theoretical and Computational Biophysics* (Prof. Dr. Helmut Grubmüller) is inviting applications for a

**PhD Student (f/m/x)
for the project**

– Microtubule mechanical failure and interaction with tau proteins –

The project aims at elucidating the mechanical properties and failure of microtubule filaments as well as their interactions with intrinsically disordered proteins such as tau proteins, which are involved in neurodegenerative diseases. To this end, atomistic molecular dynamics simulations and non-equilibrium statistical mechanics methods will be used.

Please visit the project website for more details: <https://www.mpinat.mpg.de/grubmueller/microtubules>

Your profile

You have a strong physics or chemistry background and strong skills in statistical mechanics and scientific computing; experience in structural biology will be helpful. You hold (or expect to complete soon) a Master's or equivalent degree in any of these or a related field with very good grades. You have a keen interest in interdisciplinary research and enjoy collaborating with experimental groups. You are fluent in English (certificate) and will have the opportunity to learn German in free in-house language courses.

You will have the opportunity to join the established PhD Research Training Group "Cytoskeletal elements of active matter – from molecular interactions to cellular biophysics" (RTG 2756 CYTAC) in collaboration with the University of Göttingen.

The RTG 2756 offers a vibrant academic environment, joint supervision of PhD candidates by thesis committees, and a structured study program with many opportunities to improve scientific and personal skills.

General information on the RTG 2756 is available at www.uni-goettingen.de/rtg2756.

What we offer

- State of the art on-site high performance/GPU compute facilities.
- A wide range of offers to help you balance work and family life, such as an on-campus kindergarten and parent-child offices.
- On-campus cafeteria with a wide range of meals (including vegan/vegetarian).
- Health management: free fitness and yoga rooms, sports groups, "active break" courses.
- Initiatives for sustainability and a green environment with a new biotope.

The historic city of Göttingen, located in the heart of Germany, offers great outdoors and cultural opportunities, a vibrant student scene, and an impressive scientific heritage.

Position Details

Payment and benefits are based on the wage agreement for public service personnel (TVöD Bund) guidelines. The position is funded for 3 years (with a possibility of extension). We would like to fill the position as soon as possible, but the exact start date is flexible.



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. The Max Planck Society strives for diversity and gender equality and welcomes applications from all backgrounds.

Application

Applications will be reviewed on a rolling basis until the position is filled.

Requested documents

- Cover letter (explaining background and motivation, limited to 500 words).
- CV & publication list.
- School leaving exam certificate (A-level, Abitur, European Baccalaureate, or equivalent).
- Master's degree and transcript (Please provide transcripts translated in English or German, if applicable).
- English language certificate.
- References: names and contact details of two senior academics that know you well (Please do not upload reference letters).

Please submit your application preferably via e-mail and as a single PDF file to:

ausschreibung28-24@mpinat.mpg.de

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Information pursuant to Article 13 DS-GVO on the collection and processing of personal data during the application process can be found on our website below the respective job advertisement.

