

PhD Scholarship in Biophysical Chemistry

Constructor University, Bremen, Germany



The **Biomolecular Systems and Design Lab** at **Constructor University** in Bremen, led by **Assistant Professor Dr. Torsten John**, invites applications for a **PhD scholarship**. This 3-year scholarship (€1,365/month) offers a unique opportunity to work at the intersection of **biophysical chemistry**, **biomolecular self-assembly**, and **bionanomaterials**.

Project Overview

The successful candidate will investigate **peptide self-assembly of fibril-forming sequences**. The research aims to understand how these peptides interact with membranes and to explore the engineering of **peptide-cell interactions**. This research will shed light on essential biological processes, including viral activity, and may lead to applications in drug delivery, biosensing, and biomaterial design. The project will primarily involve **biophysical experimental methods**, with optional opportunities for computational simulations (e.g., molecular dynamics).

Candidate Profile

We are looking for a highly motivated candidate who demonstrates:

- A Master's degree in chemistry, biochemistry, biophysics, or a related field
- **Hands-on experience** in experimental laboratory work (e.g., peptide handling, liposome work, and biophysical techniques such as plate reader, DLS, CD spectroscopy, QCM)
- Strong communication skills for effective collaboration and open sharing of ideas
- Fluency in English (German is not required but may be helpful in daily life)
- Interest in computational simulations (e.g., molecular dynamics) is a plus

Why Join Us?

- Complete your PhD in a collaborative, interdisciplinary research environment
- Constructor University ranks #3 among the world's most international universities
- Benefit from **close mentoring** and **strong supervision** in a new, dynamic research group

How to Apply

Please submit a **motivation letter** (maximum 2 pages on why you want to join the lab), **CV** (including your experimental skills and contact information for two academic references), and **MSc transcript** as <u>a single PDF</u> to <u>tjohn@constructor.university</u> with the subject line "Application for PhD Scholarship in Biophysical Chemistry". Applications will be reviewed on a rolling basis beginning on 18 November until the position is filled.

Scan the QR code or visit <u>www.johnlab.de</u> for more information!

