



# Universität Potsdam

## Job Announcement

Young, modern, and research oriented... the University of Potsdam has firmly established itself within the scientific landscape since its founding in 1991. Nationally and internationally renowned scientists teach and perform research here at Brandenburg's largest university. The University of Potsdam is successful in acquiring third-party funds, delivers outstanding performance in technology and knowledge transfer, and has a very service-oriented administration. With about 20,000 students studying at three campuses – Am Neuen Palais, Griebnitzsee and Golm – the University of Potsdam is a prominent economic factor and engine of development for the region. The University of Potsdam has a total of about 2,750 faculty and staff members and is located in one of Germany's most scenic areas.

The **University of Potsdam, Institute of Biochemistry and Biology, Biochemistry - Wendler Research Group** is seeking to fill the following position in close collaboration with Prof. Dr. Silke Leimkühler possibly by 01.11.2017

### Academic Staff Member (m/f) Requisition No.: 163/2017

The position is for 26.8 hours of work per week (67 %). The salary is determined by the collective bargaining agreement for public employees in Germany (TV-L 13 Ost). This is a temporary position limited to a term of 14 Months in accordance with Section 2 subsection 1 of the Academic Fixed-Term Contract Law (WissZeitVG). There is a possibility of an extension to prepare a PhD if the personal and pay scale classification conditions are met.

R. capsulatus formate dehydrogenase (FDH) is a  $(\alpha\beta\gamma)_2$  heterotrimer that catalyses the reversible oxidation of formate to carbon dioxide. Aim of the project is to acquire a structural and functional understanding of this FDH enzyme in the oxidised and reduced state. We use single particle cryo electron microscopy in combination with other biophysical techniques to obtain structural snapshots of the complex enabling us to deduce its function. The successful applicant is expected to collect and analyze data, participate in the experimental design and method development and to interact with external and internal collaborators. Techniques involved will include handling of multi protein complexes, high resolution imaging using cryo EM, image processing, 3D reconstruction and molecular modeling. Relevant publications:

Hartmann, T., Schrapers, P., Utesch, T., Nimtz, M., Rippers, Y., Dau, H., Mroginski, M.A., Haumann, M., Leimkühler, S. (2016) The Molybdenum Active Site of Formate Dehydrogenase Is Capable of Catalyzing C-H Bond Cleavage and Oxygen Atom Transfer Reactions. *Biochemistry*, 55(16):2381-9.

Hartmann T, Leimkühler S. (2013) The oxygen-tolerant and NAD<sup>+</sup>-dependent formate dehydrogenase from *Rhodobacter capsulatus* is able to catalyze the reduction of CO<sub>2</sub> to formate. FEBS J. 280:6083-96.

**Qualifications:**

You should have a University degree in Biochemistry, Biotechnology, Bioinformatics, Physics or other related fields, and have a strong interest in biology and biophysical techniques. Computational skills or experience in statistical analysis are an advantage. You should also have excellent technical skills, good interpersonal skills and the enthusiasm to apply and develop new techniques.

**Scientific Environment:**

The position is funded by the Unicat (Unifying concepts in catalysis) cluster of excellence, bringing together chemists, biologists and engineers to advance basic research into applied processes. Potsdam University is located in the Berlin/Brandenburg research area. It is dedicated to excellent research and teaching, offering a stimulating environment, including open minded, ambitious young teams and state-of-the-art scientific training.

Under the laws of the federal state of Brandenburg, employees under this contract are permitted to dedicate at least 33% of their contract time for their scientific qualification. The University of Potsdam strives to maintain gender balance among its staff. Severely disabled applicants shall receive preference in case of equal qualifications. We expressly invite applications from people with migration backgrounds.

**Contact:**

Further information can be obtained from Prof. Dr. Petra Wendler. Please send your application in English or German by email to [petra.wendler@uni-potsdam.de](mailto:petra.wendler@uni-potsdam.de) until **25.09.2017**. The application should comprise a cover letter with a brief statement of research experience and interests, a CV as well as copies of undergraduate and graduate certificates.

In order to return your application documents, we request that you include a self-addressed stamped envelope.

Potsdam, 25.08.2017