



The **Thorn Laboratory** at the **University of Würzburg** (Germany) is recruiting a

Postdoctoral Researcher (m/f/d) In crystallographic methods development

Structures of biomolecules, such as the DNA double helix or protein drug targets, are usually solved with single-crystal diffraction. However, these data are often flawed. We are looking to recruit a researcher to find the problems in the experiment and the subsequent data processing with our collaboration partners at BESSY and ESRF synchrotrons, the European Spallation Source as well as the European XFEL. You will then develop new automatic and visual diagnostics for these problems and diffraction experiments in general, employing statistical data analysis as well as machine learning. This will ultimately enable us to improve measurements and processing of diffraction data as well as to define new best practices for macromolecular diffraction experiments.

What we offer

We offer a 30-month full- or part-time position at the Rudolf-Virchow Center (RVZ) of the University Würzburg, the birthplace of X-rays, with a competitive salary; your position is funded by the German Federal Ministry of Education and Research (BMBF) in the [AUSPEX project](#). AUSPEX is part of the CCP4 suite for macromolecular crystallography. This exciting project will allow you to define new standards in macromolecular structure determination and to establish a network in the crystallographic community; your findings will be implemented in software and published in peer-reviewed journals. At the RVZ, a range of training and development opportunities will be available to you, including career support. You will have access to health care and both national and public-service pension schemes. The Welcome Center supports international candidates and the University also offers support for researchers with children, including flexible work hours and a kindergarten.

Your qualification profile

You should have a doctoral degree in structural biology, physics or other relevant subject or be due to complete your doctoral studies within 3 months of applying. You should have the necessary skills to successfully drive and complete a research project, both working independently and as part of a team. We are looking for someone with a good working knowledge of Linux, Python and C++. You should be good at data analysis and already have basic experience with crystallography. Female scientists are particularly encouraged to apply. Disabled applicants will be preferentially considered in case of equivalent qualification.

Applications should be sent by e-mail as one single pdf-document including: cover letter (stating why you are interested in this position specifically), curriculum vitae (detailing any software and crystallographic skills), diplomas/certificates and three addresses of referees **by January 31st, 2020** to andrea.thorn@uni-wuerzburg.de.

www.uni-wuerzburg.de/rvz/forschung/assoziierte-forschungsgruppen/ag-thorn/

