

PhD project in crystallography:

For a joint research program between the Crystallography group (Prof. R. Neder) at the FAU, Erlangen, Germany and the Crystallochemistry group at the University of Warsaw, Poland we seek a PhD student.

We will investigate novel computational techniques in the field of total scattering powder and single crystal diffraction experiments. By implementing new strategies and concepts we plan to improve the precision and detailed information to be extracted from powder diffraction pattern and the pair distribution function (PDF) to place the interpretation of diffraction data of disordered materials onto new level.

Your previous education should include:

- Master of Science or equivalent degree in Physics, Chemistry, Materials Science, Geoscience with crystallographic focus or a closely related field
- Experience with diffraction experiments
- Good knowledge of crystallography
- Computational experience with C, Fortran, Python is a plus
- Good communication skills in English

The position is available for three years starting 2023. It is a part time position (75% of standard weekly hours), paid according to German tariffs.

A successful applicant will be based in Erlangen, Germany, but will be in close collaboration and scientific exchange with the partner groups in Warsaw, Poland. You will carry out diffraction experiments on a wide range of materials in Erlangen/Warsaw and at synchrotron facilities. Besides using established analysis techniques you are challenged to develop and implement new algorithms into our software packages.

For further information inquire at Reinhard Neder: reinhard.neder@fau.de.

To apply send your CV including copies of the transcripts and letters of recommendation to Reinhard Neder at reinhard.neder@fau.de.

This announcement is provisional, pending final approval of the project expected by Mid December 2022.