



PhD position available

„Efficient data analysis of x-ray scattering data“

processing

x-ray characterization

structure – function relationships

As one of Germany's youngest universities, the University of Bayreuth values academic freedom, scientific progress, and social responsibility. It offers an excellent infrastructure in the vibrant research field of soft matter with key labs offering latest high-end preparation and characterization tools. The Herzig Group is part of the Physics Department and focuses on dynamics and structure formation in thin film systems.

For further developments in the data analysis of in house and synchrotron data, mainly grazing incidence x-ray scattering carried out to characterize structural evolution in functional thin films, a PhD position is available to start as soon as possible, the latest mid 2023.

Our research is concerned with the relationship between material properties and the nanostructure of materials. The expertise of our group is to exploit x-ray scattering for structural, time-resolved and dynamic investigations on the nanoscale. We work closely with specialists in spectroscopy, chemistry, simulation and data analysis in Germany and other countries to enhance the outcome of our research. Most of the work takes place in the laboratories in Bayreuth, but trips to international large scale facilities will be required as well as an international research stay of at least 3 months.

The PhD project will require independent work in software development, some basic sample preparation, measurements and data analysis. Results are expected to be published in the form of refereed article contributions and to be presented at conferences.

Requirements:

- excellent degree (master or equivalent) in Physics, Computer Science or comparable
- high motivation and ideally some experience to understand fundamental issues of scattering and processes in structure formation
- programming skills (Python, others)
- ideally basic laboratory skills (Physics and/or Chemistry lab)
- strong interest in improving and developing x-ray methods

Interested candidates are asked to send their full application (CV, 2 letters of reference and a letter of motivation addressing and evaluating each given requirement) to eva.herzig@uni-bayreuth.de as soon as possible. Applications are continuously evaluated and the position is filled as soon as a suitable candidate is found. Further information on our research can be found on www.herzig.uni-bayreuth.de.