



UNIVERSITÄT  
BAYREUTH

## 2 PhD positions

### „Nanostructure formation in organic solar cells“

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 processing tools and characterization techniques for functional thin films, 2 PhD positions are available as soon as possible.

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 Bayreuth, Munich and the USA 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 projects will require independent work in equipment development, sample preparation, measurements and data analysis. Results are expected to be published in the form of refereed article contributions and in presentations at international conferences.

#### Requirements:

- Excellent degree (Master or equivalent) in Physics, Material Science or comparable
- High motivation to understand fundamental processes in structure formation
- Laboratory skills (Physics and/or Chemistry lab)
- Programming skills (Python, LabView)
- Strong interest in developing x-ray methods or processing tools

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](mailto:eva.herzig@uni-bayreuth.de) until the 30<sup>th</sup> of November 2017. Further information on our research can be found on [www.herzig.uni-bayreuth.de](http://www.herzig.uni-bayreuth.de).