Open position as a research scientist with the opportunity to acquire a doctoral degree (m/f/d)

Naturwissenschaftliche Fakultät, Erlangen, A 13, Vollzeit, Befristete Anstellung: 12 Monate, Bewerbungsschluss: 02.09.2025

Your Workplace

The successful candidate will be part of the Functional Particles and Interfaces group (Prof. Tobias Unruh) at the Institute for Crystallography and Structural Physics (ICSP) of the Friedrich-Alexander-Universität Erlangen-Nürnberg and closely integrated in the Collaborative Research Center 1719 “ChemPrint — Next-generation printed semiconductors: Atomic level engineering via molecular surface chemistry”, funded by the German Research Foundation (DFG). The doctoral researcher will be a member of the integrated Research Training Group (iRTG) of CRC 1719 within the Graduate School “Engineering of Advanced Materials”. The iRTG offers to its young scientists excellent scientific training, an interdisciplinary network, dual supervision, the opportunity to spend a research period at an international institution and further opportunities for their own personal and professional development.

Benefits: We Have a Lot To Offer

- Regular promotion to the next level and increase in salary pursuant to the collective bargaining agreement for the public service of the German Länder (TV-L) or remuneration pursuant to the Bavarian Public Servants Remuneration Act (BayBesG) plus an additional annual bonus
- 30 days annual leave at five working days per week with additional free days on December 24 and 31
- Occupational pension scheme and asset accumulation savings scheme

Your Tasks

Within the ChemPrint project the Unruh group works on the preparation and structural characterization of thin semiconductor films for electronic and optoelectronic applications. The successful candidate will develop strategies for the deposition of semiconductor layers from the liquid phase on top of solid supported self-assembled-monolayers with atomic precision. The deposition process will be observed in-situ by X-ray reflectometry (XRR) and grazing incidence wide and small angle scattering (GIWAXS, GISAXS). These methods will be complemented by contact angle (CA) measurements, Raman spectroscopy and X-ray photoelectron spectroscopy (XPS). The successful candidate will apply for beamtime and prepare and perform the corresponding measurements at large scale facilities such as DESY (Hamburg) and ESRF (Grenoble) to perform the in-situ X-ray studies.

Your Profile

- Excellent scientific university degree (master/diploma [university]) in physics or a closely related

field of study
- Interest to work in an interdisciplinary research environment
- Ability to communicate and coordinate efficiently within a collaborative scientific environment
- Experience in chemistry lab work
- Fluent oral and written English language skills
- Practical experience in conducting X-ray scattering experiments is advantageous
- Python programming skills are desirable

Additional Information

Further information available: https://www.icsp.nat.fau.eu/

Please submit the following documents: (1) Letter of motivation including a short summary of research experience and the master's project, (2) Curriculum vitae, (3) Transcript of records or educational certificates, (4) List of publications (if applicable).

There is a possibility that the position will be extended for further years.

Interessiert?

Die vollständige Stellenausschreibung sowie alle Infos zum Bewerbungsverfahren finden Sie hier: