

Kurt-Schwabe-Institut für Mess- und Sensortechnik Meinsberg e.V. - HR



Wir entwickeln fortschrittliche Sensoren und Messtechnologien, um nachhaltiges Umweltmanagement zu unterstützen, die Ressourceneffizienz in industriellen Prozessen zu steigern, das Tierwohl zu verbessern und Arzneimittelentwicklung sowie Gesundheitslösungen voranzubringen.

PhD Position (m/f/d) - Chemical Process Engineering & Laboratory Automation

Development of automated laboratory systems for biomolecular processes

City: Waldheim; Starting date (earliest): At the earliest possible; Duration: 36 months;
Remuneration: According to TV-L E13, 75%

Tasks

- Development of automated workflows for biomolecular conjugation reactions
- Working with robotic liquid handling, spectroscopy and chromatography
- Implementation of Python-based automation and data analysis
- Contribution to a machine-learning-driven experimental platform
- Comparison of automated and manual experiments

Requirements

- Master's degree in chemical engineering, biotechnology, chemistry, physics or related field
- Interest in laboratory automation and data-driven experimentation
- Basic programming skills (preferably Python)
- Independent and structured working style

What we offer

A scientifically ambitious PhD project at the interface of chemical process engineering, robotics, analytical chemistry, programming, and machine-learning-guided experimentation

The opportunity to develop and program components of a novel robotic platform for automated biomolecular conjugation chemistry

Access to modern laboratories, analytical instrumentation, microfabrication facilities, and automation infrastructure at KSI

Close collaboration with industrial software and automation partners

Doctoral supervision in cooperation with TU Dresden, a German University of Excellence

A highly interdisciplinary research environment in sensor technology, bioanalytics, micro/nanotechnology, automation, and scientific instrumentation

The opportunity to publish results in peer-reviewed journals and present them at scientific conferences

Transport option (KSi shuttle) between Dresden and Meinsberg

Application

<https://ksi-sensors.de/join-us/>

More information at <https://stellenticket.de/205229/TUD/>
Offer visible until 23/07/26

