

Research Assistants at the Chair of Power-to-X Technologies with the opportunity to pursue a doctoral degree (m/f/d)

Friedrich-Alexander-Universität, Fürth, TV-L E 13, Teilzeit, Befristete Anstellung: 36 Monate,
Bewerbungsschluss: 14.10.2025

Your Workplace

The [Institute of Power-to-X Technologies](#) is part of the Department of Chemical and Biological Engineering at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU). Our research focuses on developing solutions for transforming the chemical industry towards the use of sustainable raw materials and green electricity. The inspiring research environment combines technology transfer and close collaboration with industry with fundamental research as well as experimental and simulation-based approaches. The interdisciplinary and international team supports and enriches each other in their research and project work.

Job Benefits

- 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

Description

About the Project

Within the project, we collaborate with 11 industrial partners from the chemical sector to develop innovative concepts for the electrification of chemical processes and the implementation of circular economy strategies. Using automated high-throughput simulations and neural networks, we create digital twins of existing processes and novel concepts. These digital twins serve as a basis for process optimization as well as ecological and economic assessments.

Your Role

Your work will focus on developing methods for applying **generative AI to the creation of process simulations**. The goal is to enable even less experienced users to design and set up process simulations. You will work closely with chemical engineers in the project team who provide the necessary domain expertise on chemical processes. Furthermore, you will use commercial process

simulation software, which will process the input generated by the AI.

Qualifications

- Completed university degree (Master's or Diploma) in AI, process engineering / chemical engineering, or a comparable qualification
- Both theoretical (coursework) and practical experience in modifying, training and applying AI, especially generative AI
- Proofed skills on applying AI in a foreign domain, collaborating with domain experts and probably even within chemical industry
- Proficient in programming languages such as Python
- Strong teamwork and communication skills
- Very good command of English

Supplementary description

We offer the opportunity to pursue a doctoral degree (PhD) within the scope of the research project.

Interessiert?

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

