Job Advertisement

Clausthal University of Technology is a research-intensive university with strong national and international networks. Around 80 professors, 1,100 employees, and 3,000 students benefit from short distances, a personal atmosphere, and the fascinating landscape in the UNESCO World Heritage Harz region. As the largest employer in the region, TU Clausthal is a key economic factor and offers cultural diversity and internationality. The university has committed itself across all departments to the guiding theme of the “circular economy” and aims to contribute to building a sustainable society in the digital age through research, teaching, and administration.

At the Institute of Chemical and Electrochemical Process Engineering at Clausthal University of Technology, the following position is available:

Research Associate (m/f/d)

(Pay grade 13 TV-L, 100%)

Subject to project approval by the Federal Ministry for Research, Technology and Space (BMFTR), the position is **to be filled full-time for a fixed term of 3 years starting on July 1, 2026**. The position offers the opportunity to pursue a doctoral degree (PhD) at TU Clausthal.

The Institute of Chemical and Electrochemical Process Engineering (ICVT) develops catalysts and reactors for chemical and electrochemical processes. Alkaline membrane electrolysis is a novel method for producing green hydrogen based on renewable energy, characterized by high efficiency and the use of low-cost materials. A process that is not yet fully understood in water electrolysis is the permeation of produced gases through the membrane (“crossover”), which reduces efficiency and may lead to safety-critical conditions. Within the project, the various processes contributing to crossover will be experimentally investigated to better understand these mechanisms and derive measures to reduce crossover. The project is funded by the Federal Ministry for Research, Technology and Space (BMFTR) and carried out in cooperation with the Chair of Electrical Energy Storage Systems at Leibniz University Hannover (LUH).

Your main tasks within the project include:

- Setting up an experimental system for investigating alkaline membrane electrolysis
- Procuring suitable commercially available base materials (substrates, membranes, ionomers)
- Producing electrode materials using various coating processes
- Physicochemical characterization of cell components (e.g., porosimetry, porometry, BET surface analysis, SEM)
- Development of specialized laboratory cells for quantifying different crossover processes
- Conducting systematic measurements to quantify diffusion, migration, supersaturation and recombination
- Contributing to the development of mathematical crossover models by LUH

Your profile should include:

- An above-average Master’s degree in chemical engineering, process engineering, or a related field
- Very good written and spoken English skills; good German skills are desirable
- In-depth background in electrochemical process engineering
- Analytical, structured, and independent working style, as well as strong teamwork skills
- Experience with software and programming (e.g., Python, MATLAB) is an advantage

We offer:

- A family-friendly and collegial working environment in dedicated teams, with interdisciplinary and diverse tasks
- Salary in accordance with the German public service collective agreement (up to pay grade 13 TV-L), including an annual bonus and additional occupational pension scheme (VBL)
- Family-friendly working conditions (e.g., flexible working hours, childcare services, part-time options)
- Occupational health management and university sports programs
- Future-oriented development and qualification opportunities
- All the benefits of employment in the public sector

Equality in all its dimensions, equal opportunities, diversity, and family-friendliness are important concerns of TU Clausthal. Severely disabled applicants will be given priority if equally qualified. Applications from people of all nationalities are welcome.

Interested?

Please submit your complete application (cover letter, certificates, CV, etc.) **as a single PDF file** via the application portal to Prof. Thomas Turek, who will be happy to answer any questions (turek@icvt.tu-clausthal.de).

Applications can be submitted via our online portal (see below) with the usual documents no later than **May 15, 2026**.

Please submit your application with the usual documents via the online application portal

https://karriere-ausbildung.tu-clausthal.de/jobposting/ee83fa0ba258e2459d8b8f7012a35383a5d1a4fc0

"Please submit your application exclusively via the link above".

Unfortunately, application costs cannot be reimbursed. Application documents will be destroyed after completion of the selection process in accordance with legal requirements. Please note our data protection information for the application process at: https://www.tu-clausthal.de/en/university/careers-vocational-training/job-offers/information-on-data-protection-in-the-application-process

We look forward to receiving your application!