

The Institute for Auditory Neuroscience at the University Medical Center Göttingen is looking for the following position as soon as possible:

Research Assistant / Student Researcher – COMSOL Modeling for Medical Implants (Part-time/Full-time)

About Us

The Institute for Auditory Neuroscience is working on researching the fundamentals of hearing at the molecular level and is using this knowledge to develop innovative methods for restoring hearing and bringing them into **clinical application**.

Job Overview

We are looking for a motivated candidate to support our research and development of novel **optical cochlear implants** by evaluating **electromagnetic effects** using **COMSOL Multiphysics**. This role involves developing, refining, and analyzing simulations related to **MRI compatibility, defibrillator shocks, and ultrasound interactions** with medical devices. The position is open to Master's and Bachelor's students, as well as graduates, provided they meet the qualifications.

Your Tasks

- Develop and refine COMSOL models for simulating electromagnetic interactions.
- Run simulations and analyze results to assess implant performance and safety.
- Document findings and contribute to research reports and presentations.
- Collaborate with researchers and engineers to improve model accuracy.

Your Profile

- Background in **Biomedical Engineering, Electrical Engineering, Physics, Computer Science**, or a related field.
- Basic understanding of **electromagnetic theory** and **medical devices**.
- Experience with **COMSOL** or other simulation tools is a plus.
- Strong **analytical skills** and ability to interpret simulation data.
- Programming knowledge (**MATLAB, Python, or COMSOL's Method Editor**) is beneficial.
- Interest in medical device safety and electromagnetic compatibility regulations.
- Fluent German or English language skills.

What We Offer

- Hands-on experience in cutting-edge **biomedical research** and **product development**.
- Flexible working hours to accommodate your studies.
- Opportunity to work in an **interdisciplinary research team**.
- Possibility to contribute to **scientific publications**.

How to Apply

Submit your **resume and a short cover letter** to **Dr. Lakshay Khurana (lkhurana@dpz.eu)** by **31 March 2025**.