Research Assistants/Associates (f/m/non-binary) Antennas / EMF Exposure Assessment **Provider**

Institute of High Frequency Technology

Our profile

The Institute of High Frequency Technology comprises the Chair of High Frequency Technology (Prof. Dr.-Ing. Heberling, Institute Director), the Chair of Radar Systems Engineering (Prof. Dr.-Ing. Knott) and the research group Aachen of the Fraunhofer Institute for High Frequency Physics and Radar Techniques with currently a total of 22 scientists.

While the Chair of High Frequency Technology is primarily focused on the development of antennas and antenna measurement techniques, the work at the Chair of Radar Systems Technology deals with architectures and components for radar systems in various applications.

The institute is equipped with a wide range of modern high-tech equipment and software. In particular, 4 different measurement chambers for state-of-the-art antenna and radar measurements up to 90 GHz.

We are a young, dedicated team and work on both fundamental and applied research questions in an exciting interdisciplinary and international environment:

Our research group Antenna Design explores novel antennas and antenna systems for applications in mobile and satellite communications, as well as radar sensors.

In the area Antenna Measurement Techniques, we implement innovative algorithms and procedures to determine antenna and radar parameters.

We are also undertaking high-profile research in relation to assess the exposure to radiofrequency electromagnetic fields used specifically in current and future radio communication systems.

Your profile

- Above-average university degree (university diploma/master) in electrical engineering, information technology or physics.
- High competence in microwave technology/radar technology is desirable.
- Ideally, you have previous knowledge of electromagnetic field simulations (using e.g. CST or FEKO), antennas, radar systems, and Matlab.
- You are familiar with typical measurement equipment used in high frequency technology laboratories (e.g. VNA).
- You have a high interest in scientific research, contributing to industrial R&D projects, and to pass on your knowledge to students.
- You have an independent working style, are communicative, and a team player.
- Furthermore, you have a very good command of written and spoken English.
- A good knowledge of German is a plus.

Your tasks

- Participation in the development of research ideas as well as the application, independent management and successful implementation of industrial and research projects.
- Development of novel antenna concepts, their fabrication in our workshop, and performing associated performance measurements.
- Development of algorithms for the implementation of novel measurement methods (antennas, radar, RF EMF exposure) as well as their evaluation.
- Publication of scientific milestones at national and international conferences as well as in journals.

 Participation in the education of students by supervising relevant student projects and by assisting in teaching.

Our offer

The position is offered as an employee. The position is to be filled as soon as possible and is initially limited to 1 year. An extension to 4 years is possible and desirable. The position is full-time. There is the possibility of a doctoral degree. The position is rated TV-L EG 13.

The RWTH Aachen University is certified as a family-friendly university.

At RWTH Aachen University, we particularly want to promote the careers of women and therefore welcome female applicants.

Women are given preferential consideration in cases of equal suitability, ability and professional performance, provided that they are underrepresented in the organizational unit and provided that reasons relating to the person of a competitor do not prevail.

Applications from suitable severely disabled persons are expressly encouraged.