

Research assistant position for electron microscopy at RWTH Aachen University

Our profile

The Joint Laboratory for Electron Microscopy (GFE) is a central institution of RWTH Aachen University and is active in the field of microstructure and surface analysis. In addition, it works intensively with research institutions, partners from large-scale industry and medium-sized companies.

Project description: In cooperation with the project partner MSE (Institute for Machine Elements and System Development), the influence of the composition and proportioning of a combined wear and corrosion protection additive in different polar lubricating oils on the wear protection in rolling bearings is determined. Additive interactions in the lubricant and their surface competitions are identified by analysing the boundary layer structure, durability and wear protection effect. In order to understand the competitive and complementary behaviour as well as the catalytic effect of the different additive types depending on the test parameters used, the surfaces of the test specimens are examined in their microstructure using various electron microscopic methods.

Your profile

University degree (Master or comparable) in physics, chemistry, materials science, materials engineering or related fields.

You enjoy working independently, are a team player, have organisational skills and are passionate about materials science and microanalytical issues.

Experience in the field of electron microscopy is an advantage.

Good knowledge of scientific programming (e.g. Python).

Very good English and good German language skills (spoken and written).

Your tasks

Independent supervision of the project with a high degree of personal responsibility. The focus of the work will be the Schottky emitter microprobe, which is sensitive for the analysis of thin films. Furthermore, you will have the opportunity to set your own research priorities. You can present your research results at national and international conferences and meetings. In addition, you will help develop and acquire new research and industrial projects, supervise industrial contracts and participate in teaching and internships.

Our offer

You will be employed as a staff member.

The position is to be filled as soon as possible and is initially limited to 2.5 years.

Further employment for a total of at least 4 years with the aim of obtaining a doctorate is envisaged.

The fixed-term employment is within the framework of the fixed-term possibilities of the “Wissenschaftszeitvertragsgesetz”.

The position is part-time.

The regular weekly working time is 30 hours.

There is the possibility of a doctorate.

The position is graded according to the TV-L.

The position is rated EG 13 TV-L.

About us

The RWTH is certified as a family-friendly university.

The RWTH offers a variety of health, counselling and prevention services (e.g. university sports) as part of a university health management program. Employees covered by collective bargaining agreements and civil servants have access to a wide range of continuing education programs and the opportunity to purchase a job ticket.

The job advertisement is aimed at all genders.

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

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

Applications from suitable severely disabled persons are expressly welcome.

In the interest of equal treatment, please refrain from submitting an application photo.

Information on the collection of personal data in accordance with Articles 13 and 14 of the General Data Protection Regulation (DS-GVO) can be found at <https://www.rwth-aachen.de/dsgvo-information-bewerbung>.

Please send your application by 31/05/2022 to

RWTH Aachen
Gemeinschaftslabor für Elektronenmikroskopie
Frau Dr. Richter (Tel.: +49 (0) 241 80-24348, richter@gfe.rwth-aachen.de)