

SPACE FOR YOUR TALENT.



The world is changing at an ever-faster pace. At the Johannes Kepler University Linz, we work on technologies and the ideas of tomorrow on a daily basis. At the same time, we educate over 23,000 young people to meet the demands of today's job market. In short, we are Upper Austria's largest institution for education and research. Are you interested in being a part of shaping the future at Austria's most attractive campus university? We currently have a job opening starting July 1, 2022, for:

2 x University Project Assistant (must hold a Doctorate/Ph.D.) for a full-time position at the Institute of Biophysics in collaboration with Keysight Technologies (Austria), CNRS Tokyo (Japan), ECsens (Netherlands), University Twente (Netherlands) to July 31, 2024

Job Reference Number: 4877

The Nanoelectronics group is looking for two PostDocs to work with us on an EU project that develops a biosensor platform for virus detection. The platform will be based on an approach that uses single-entity biosensing by combining DC electrochemical measurements and AC detection at GHz frequencies. The successful candidate will focus on the implementation of the Surface GHz Resonance detector. Both detection modalities will be combined in purpose-made lithographically fabricated nanodevices.

The university partners of this project developed the technology in recent years and published it in high-impact journals, while the industrial partners are a biotech start-up and a leading electronics technology provider and will give a good inside into an industrial R&D environment.

The work will be supervised by Dr. Georg Gramse (JKU, Biophysics, Keysight).

Job Duties:

- Design and implementation of a RF-electrical sensor for a microfluidic device
- Improvement and development of measurement routines for a high frequency electrochemical sensor
- Systematic nano-electrochemistry measurements for scientific publications

Your Qualifications:

- The successful candidate must hold a Doctorate/Ph.D. in physics, nanoscience, electrical engineering or a related discipline
- must have a good background in at least 2, better 3 of the following fields: high frequency electronics, nanotechnology, microfluidics, electrochemistry
- Some of the following skills are highly required: Multiphysics or RF finite element modelling, scientific computing ie. matlab, python, labview or similar
- Should be curious to solve new problems, have an attitude to solve problems self-driven and independently with the support of our team
- As good team player, you like working in small teams in an international environment where a good communication internally and externally is crucial
- Besides good subject knowledge, emphasis will be on creative thinking, motivation, ability to cooperate, initiative to work independently and personal suitability for scientific thinking
- Clear communication skills to engage with key partners of the project

What We Offer:

- On the basis of full-time employment (40 hours/week) the minimum salary in accordance with the collective agreement is € 4,061.50 gross per month (14 x per year, CA Job Grade: B1)
- Stable employer
- Attractive campus environment with good public transportation connections
- Attractive continual educational opportunities
- State-of-the-art research infrastructure
- Dynamic research environment
- Broad range of on-campus dining services/healthy meals (organic food at the cafeteria)
- Exercise and sports classes (USI)
- ...and much more

Application Deadline: May 1, 2022.

The Johannes Kepler University wishes to increase the proportion of academic female faculty and, for this reason, especially welcomes applications by qualified women. If applicants are equally qualified, a woman will be given preference for this position. The university welcomes applications from qualified applicants with physical disabilities. These applications will be given special consideration.

How to Apply:

Prospective applicants interested in the multifaceted position are requested to electronically send an application in adherence to the stated criteria together with the requested documentation via mail to georg.gramse@jku.at.

Contact:

If you have questions, please contact: Priv. Doz. Dipl. Phys. Dr. Georg Gramse, MSc P +43 732 2468 7649,
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