

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 21,000 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 of Austria's most attractive campus university? We currently have an immediate job opening for a:

University Assistant (must hold a Doctorate/Ph.D. degree) for a full-time position at the Institute of Semiconductor and Solid-State Physics, Department of Semiconductor Physics (to October 31, 2022)

Job Reference Number: 4471

Job Duties:

- Conduct research on III-V quantum dots (GaAs in AlGaAs for quantum optical applications in particular) and take part in corresponding research projects at the Institute for Semiconductor and Solid-State Physics
- Produce epitaxial quantum dot structures using molecular beam epitaxy (MBE) and characterize their structural, optical and electronic properties
- Take part in maintaining and calibrating the III-V MBE at the Dept. of Semiconductor Physics
- Design and process optoelectronic components, such as p-i-n diodes (light emitting diodes and photodiodes) in the cleanroom
- Simulate photonic structures as part of ongoing research projects
- Actively and reliably take part in ongoing national and international collaboration efforts (deliver samples and simulation results)
- Actively take part in research studies and projects (preparation, reporting)
- Actively take part in acquiring and commissioning a new etching system for III-V semiconductors in the cleanroom
- Independently supervise Bachelor's and Master's theses and instruct students (in the field of simulating and producing optoelectronic devices)
- Prepare academic/scientific publications and present findings at conferences and project meetings
- Take part in teaching and administration activities at the Institute for Semiconductor and Solid-State Physics, as well as hold courses, including tutorials and internships

Your Qualifications:

- The successful candidate must hold a Doctorate/Ph.D. in technical physics or a comparable doctorate degree
- Possess experience in conducting scientific research pertaining to semiconductor materials, in particular the growth and characterizing epitaxial layers with quantum dots using molecular beam epitaxy
- Experience in designing, fabricating, and optical and electrical characterizing diode structures made out of III-V semiconductors
- Experience in simulating photonic structures in order to optimize light extraction from quantum dots
- Experience in cleanroom processes (lithography, material deposition, etching)
- Experience presenting and publishing academic and scientific research finding
- Strong command of German and English (German: level B2+ and English: level B2+)

What We Offer:

- On the basis of full-time employment (40 hours/week) the minimum salary in accordance with the collective agreement is € 3,945.90 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: March 31, 2021.

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 our online portal jku.at/application or to the Johannes Kepler University Linz, Department of Human Resource Management, Altenberger Straße 69, A-4040 Linz. Please include "Job Reference Number 4471" in your application.

Contact:

If you have questions, please contact: Univ. Prof. Dr. Armando Rastelli, P +43 732 2468 9601,
E-mail: armando.rastelli@jku.at.