



Paderborn University is a high-performance and internationally oriented university. Within interdisciplinary teams, we undertake forward-looking research, design innovative teaching concepts and actively transfer knowledge into society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our employees in research, teaching, technology and administration a lively, family-friendly and equal opportunity environment, a lean management structure and diverse opportunities. **Join us to invent the future!**

The **Faculty of Science – Department of Physics** – and the **Institute for Photonic Quantum Systems (PhoQs)** offers the position of a

## Research Assistant (f/m/d)

(Salary level according to 13 TV-L)

with 75 % of the regular working hours. This is a qualification position within the meaning of the German Act on Fixed-Term Research Employment Contracts for Academic Staff (Wissenschaftszeitvertragsgesetz "WissZeitVG"), which serves to promote a PhD and its scientific qualification in the field of Quantumphotonics and integrated Quantum Systems. The position is, depending on the qualification achieved to date, initially limited for a period of three years.

This is a joint position between the research groups **"Quantumphotonics & Optoelectronics"** led by JProf. Güsken and **"Hybrid Quantum Photonic Devices"** led by Prof. Jöns. Research projects evolve around waveguide integrated quantum emitters for single photon sources and quantum repeaters. Paderborn University (UPB) has a strong research focus on integrated quantum systems, photonics, optoelectronics in experimental science and theory. A new institute building (PhoQs) has opened its doors this year, including a state-of-the art cleanroom and new research laboratories to Paderborn's infrastructure.

### Field of activity:

- Research on quantum emitters integrated in photonic integrated circuits
- Optics experiments at ambient and low temperature
- Optoelectronic measurements & characterization
- Nanofabrication of structures and devices in a cleanroom
- Optical Simulations
- Photonic circuit/device design
- Presenting research at international conferences.
- Collaboration in research and teaching duties usually amounting to 3 teaching hours (SWS) per week

### Recruitment requirements:

- Above-average scientific university degree (Master or equivalent) in Physics, related fields or in one of the involved disciplines
- Strong interest in pursuing research in the field of nanophotonics and quantumoptics
- An excellent command of written and spoken English
- Interest in interdisciplinary exchange and willingness to collaborate with others
- Highly motivated & curious, self-driven & self-learning
- Affinity to experimental work & learning to work with optical simulations (FDTD, Comsol, Lumerical, HFSS)
- Desirable: experience in the fields of research relevant to photonic quantum systems

### We offer:

- Flexible working hours and the individual option of mobile working
- Wide range of health, counseling and prevention services
- Attractive fringe benefits such as childcare facilities and sports activities
- Opportunities for internal and external training and development
- Additional benefits in accordance with the collective agreement of the federal states (TV-L), such as annual bonuses and capital-forming benefits as well as the VBL supplementary pension scheme
- Research in state-of-the art facilities, laboratories, cleanrooms, computer cluster

Applications from women are particularly welcome and, in case of equal qualifications and experiences, will receive preferential treatment according to to state law (LGG), unless there are preponderant reasons to give preference to another applicant. Part-time employment is generally possible. Applications from disabled people with appropriate suitability are explicitly welcome. This also applies to people with equal opportunities in accordance with the German social law SGB IX.

Please send your application documents using the **Ref. No. 7146** until **December 20<sup>th</sup>, 2025** to [ngusken@mail.uni-paderborn.de](mailto:ngusken@mail.uni-paderborn.de) and [klaus.joens@uni-paderborn.de](mailto:klaus.joens@uni-paderborn.de).

Information regarding the processing of your personal data can be located at: <https://www.uni-paderborn.de/en/zv/personaldatenschutz>.

### More information on our groups & the PhoQs can be found here:

<https://physik.uni-paderborn.de/en/quantumphotonics-optoelectronics>

<https://physik.uni-paderborn.de/joens>

<https://phoqs.uni-paderborn.de/en/>

LinkedIn

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HR EXCELLENCE IN RESEARCH

