Paderborn University is a high-performance and internationally oriented university with approximately 20,000 students. 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 more than 2,600 employees in research, teaching, technology and administration a lively, family-friendly, equal opportunity environment, a lean management structure and diverse opportunities.

Join us to invent the future!

The Department of Physics at the Faculty of Science – Nanophotonics & Nanomaterials group – offers a position for a

**Researcher (Postdoctoral researcher) (f/m/d)**

(pay scale E 13 TV-L)

with 100% of the regular working time. This is a project-related position within the meaning of the Wissenschaftszeit-vertragsgesetz (WissZeitVG), which serves to promote a doctoral program in the field of physics. The position is temporary for the duration of the doctoral procedure, depending on the qualification achieved so far, but for a period of usually 3 years.

**Project description and tasks:**

- Fabrication of semiconductor-based nanostructures for plasmonics and photonics using electron beam lithography and plasma processes.
- Characterization of semiconductor heterostructures and optical layer systems by optical and structural methods (ellipsometry, Fourier and photoluminescence spectroscopy, X-ray diffraction, electron and optical microscopy).
- Deposition of thin films by physical and chemical deposition.
- Numerical simulation of plasmonic and dielectric nanostructures using time and frequency space methods.
- Assistance in the supervision of students.
- Teaching responsibilities usually amounting to 4 SWS.

**Hiring Requirements:**

- Completed university studies in physics (diploma, master, as well as comparable M.Sc. with focus on photonics).
- Knowledge in electron beam lithography, deposition techniques, as well as characterization of thin films.
- Very good knowledge in optical spectroscopy and experience in handling lasers.
- Knowledge of programming with Matlab and/or experience with scripting languages such as Python, Pascal scripts or similar.
- Team spirit
- Very good English language skills

Applications from women are particularly welcome and, in case of equal qualifications and experience, will receive preferential treatment according to state law (LGG). Part-time employment is generally possible. Qualified disabled people (in the sense of the German social law SGB IX) are also encouraged to apply.

Applications with the usual documents are requested under the **reference number 5564**, preferably in electronic form, by **20.11.2022** to cedrik.meier@uni-paderborn.de

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