Paderborn University is a high-performance and internationally oriented university with approximately 20,000 students. Within interdisciplinary teams, we design forward-looking research, innovative teaching and the active transfer of knowledge into society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our more than 2,300 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!

In the Faculty of Science, the Group of Optoelectronic Materials and Devices (Department of Physics) is seeking applications for the following position:

**Group Leader (m/f/d)**

**Molecular Beam Epitaxy**

*(pay scale E 13 TV-L or Bes.-Gr. A 13)*

In the Group of Optoelectronic Materials and Devices, the research focus is on the fabrication of classic III-V-based as well as GaN-based heterostructures by molecular beam epitaxy and their structural, electrical and optical characterization. So far we concentrate on group-III arsenides and cubic group-III-nitrides.

The candidate is expected to pursue an excellent, internationally recognised research programme in the field of molecular beam epitaxy. The material systems covered should include GaN-based heterostructures but other material systems compatible with the existing MBE equipment are welcome. The candidate will be involved in the supervision of Bachelor, Master and PhD thesis. It is expected that the candidate actively acquires third-party funding. For her/his research, the candidate can use the whole infrastructure of the group for Optoelectronic Materials and Devices and of the “Center for Optics and Photonics Paderborn” (CeOPP), with its excellent clean room facilities and semiconductor technology.

As well as pursuing his or her own research agenda, it is expected that the candidate will actively engage with the overall research strategy of the Physics Department. This includes the transregional “Sonderforschungsbereich” (special research focus project) SFB-TRR 142: “Tailored Nonlinear Photonics: from fundamental concepts to functional structures”, where an active role as a principal investigator with innovative project ideas is demanded. Participation in the “Center for Optoelectronics and Photonics Paderborn” (CeOPP) and the newly-founded Institute for Photonic Quantum Systems (PhoQS) is desirable. The candidate will have to take part in teaching duties within all courses the department is involved. In general it is expected that the candidate can teach in German as well as in English. For non-native German speakers, the teaching can be done in English only for a transition period. The candidate is expected to take part in the self-administration of the department.

The position is initially limited to three years and can then be extended up to another three years. This position should be used for further scientific qualification (e. g. “Habilitation”). The salary is according to the regulations for the public service in Germany (TV-L E13 or A13 on time depending on the personal situation). **It is intended to convert the position to a lifetime group leader position.**

**Hiring requirements:** A university degree in physics, electrical engineering, material science or similar subjects is required. Mandatory are an excellent PhD degree and several years of experience in the area of molecular beam epitaxy, preferably at least partly in the area of Nitride-based materials. Experience in the (In,Ga,Al)As system would be a plus. Knowledge in structural material analysis, e. g. XRD, SEM and AFM, electrical and optical characterization, e. g. low temperature magneto-transport experiment, photoluminescence and single quantum dot spectroscopy are desirable but not necessary.

Since Paderborn University seeks to increase the number of female employees, applications of women are especially welcome. In case of equal qualification and scientific achievements, they will receive preferential treatment according to the North Rhine-Westphalian Equal Opportunities Policy (LGG), unless there are cogent reasons to give preference to another applicant. Likewise, applications of disabled people with appropriate qualification are explicitly requested. This also applies to people with equal status according to the German social law SGB IX.

Applications with the common material must be received by **03 May 2019** (Ref. No. 3777). Please send your application (preferably in a single pdf file by e-mail to dirk.reuter@upb.de) to the head of the Group of Optoelectronic Materials and Devices:

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