

## **Job advertisement: PostDoc at TU Braunschweig, Institut für Halbleitertechnik**

Braunschweig University of Technology, with its 20.000 students and about 3.700 employees, is the largest University of Technology in northern Germany. We stand for a strategic and performance-oriented thinking and acting, for relevant research, motivated teaching and a successful transfer of knowledge and technology into industry and society.

TU Braunschweig (Institute of Semiconductor Technology) offers a position as a scientific staff (PostDoc) in “Development of AlN high power transistors” in the group of Prof. Andreas Waag. The activities will be part of an DFG project, based on the advanced infrastructure of the Epitaxy Competence Center (ec<sup>2</sup>) and the Laboratory for Emerging Nanometrology (LENA) at Braunschweig (<https://www.tu-braunschweig.de/ihf/epitaxy-competence-center-ec2>, <https://www.tu-braunschweig.de/mib/lena>).

Presently we are looking for talents worldwide, who would like to join our team. Here, we refer to the following open position:

### **PostDoc: “Development of AlN high power transistors” (TV-L E13, 100%)**

#### **Job description:**

- (1) Designing suitable vertical transistor concepts based on AlN technology and transferring these concepts into devices
- (2) Epitaxy and processing of AlN based electronic devices
- (3) Electrical characterisation and theoretical analysis of the fabricated devices
- (4) Publication of research results in scientific journals and international conferences
- (5) Project controlling and research reports

#### **Job qualifications:**

The main criterion is excellence, dedication, good communication and a fast learning curve. A Master's degree in the field of electrical engineering, physics, nanotechnology or comparable is required. A doctorate in electrical engineering, physics, nanotechnology (or similar) is desirable. In addition, expert background in one or more of the following fields would be advantageous:

- (1) Expertise in AlN processing
- (2) Expert knowledge in III-nitride high power electronics

- (3) Strong interest in multidisciplinary research
- (4) Very high proficiency in English as well as excellent scientific writing skills for collaborative research proposals and journal publications. Fluency in the German language is preferable.
- (5) Committed, self-motivated, self-driven, and proactive team player with good communication and interpersonal skills.

Depending on the assignment of duties and fulfillment of personal requirements, payment is up to EG 13 TV-L (100 %, a reduction to a 50% position is possible). Contract duration will be two years with the possibility to a further extension. Application costs cannot be reimbursed. Personal data will be stored for the purposes of the application process. TU Braunschweig is an equal opportunity employer committed to excellence through diversity. Disabled persons will be given preference in the case of equal suitability (proof must be enclosed). Applications from people of all nationalities are welcome. The TU Braunschweig strives to reduce underrepresentation in all areas and positions in the sense of the NGG. Therefore, applications from women are especially welcome.

#### **How to apply and contact:**

Please send a complete written application (in English) as a single PDF file consisting of a cover letter (statement of purpose), full CV, academic certificates and transcripts (bachelor, master, and if applicable PhD), and other supporting certificates to Dr.-Ing. Jana Hartmann (E-mail: [Jana.Hartmann@tu-braunschweig.de](mailto:Jana.Hartmann@tu-braunschweig.de)). With sending the application via email the candidate agrees that personal data will be stored for the purpose of the application procedure and that the application can be forwarded internally to other job offers.

Postal applications can be send to Institut für Halbleitertechnik, Jana Hartmann, Hans-Sommer-Str. 66, 38106 Braunschweig.