

## Scientific Member of Staff (m/f/d) - Diode Lasers for Future Solid State Laser Systems -

The High Power Diode Lasers Lab at the FBH is seeking a scientific co-worker, to perform studies in device physics and engineering of high power diode lasers in the 630 - 800 nm wavelength range, as needed for future solid state laser systems.

### (Reference number 36/19)

GaAs-based diode lasers are the most efficient and highest power light sources today and are key components for the world's largest (and rapidly growing) laser market, in material processing. The FBH performs research into the next generation of diode lasers and modules for this market, and these must deliver continually increasing output power and conversion efficiency.

The successful candidate will focus on the design, development and analysis of high power diode lasers in the 600 – 800 nm wavelength range. Direct applications include material processing, display, medical and cosmetics. These lasers are also in strong demand for the pumping of Thulium-doped YAG or Alexandrite laser crystals, or alkali-gas cells, which can be used for the generation of mid-infra-red light, for medical and sensing applications, or for use in future compact particle accelerators.

The work includes the design, fabrication and delivery of advanced prototype lasers to partners in research and industry. Experimental diagnostic studies of diode lasers and their physical and technological limits will also be performed. In addition to experimental studies, the work will also include the use of the most modern simulation techniques. All work will be performed in close cooperation with the relevant specialist teams at the FBH.

Candidates must have completed their doctoral studies in physics or electrical engineering.

Experience with diode lasers, epitaxial growth, semiconductor technology or optical resonators is preferred.

Diode laser fabrication involves long process chains and is performed within an international team. Therefore, good team work skills and an excellent command of English language are essential for this position.

The position can be filled immediately, and is initially limited to two years.

Payment is according to TVöD Bund (collective salary scheme for German public service). FBH is an equal-opportunity employer. Female candidates are encouraged to apply. Among equally qualified applicants, preference will be given to handicapped candidates.

Have we piqued your interest? Then we look forward to your online application. Please click on "[Apply online](#)" and submit your complete application documents by **30.11.2019**.

If you have any questions about the application, please contact: Ms. Manuela Münzfeld, Phone: 030 6392-2641  
Email: [manuela.muenzfeld@fbh-berlin.de](mailto:manuela.muenzfeld@fbh-berlin.de)

### Profile

The Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik (FBH) within the Forschungsverbund Berlin e.V., is a leading international research institute that studies diode lasers, LEDs and microwave devices.

On the basis of III/V semiconductors, it researches and implements components and systems for applications in communications, traffic and production technology, medicine and biotechnology. It covers the entire value chain from design to ready-for-delivery systems.

For more details, visit: [www.fbh-berlin.com](http://www.fbh-berlin.com)