

The Paul Drude Institute (PDI) performs basic research as a lively symbiosis of materials science and solid state physics. Our research aims at inspiring and demonstrating new functionalities for future information technologies. As a member of the Leibniz-Gemeinschaft and Forschungsverbund Berlin e. V., we are an independent research institute with about 100 employees and collaborate with all three universities in Berlin. We are located in the very heart of the city near the Gendarmenmarkt. You may find more details at [www.pdi-berlin.de](http://www.pdi-berlin.de).

## Postdoc Position for Terahertz Quantum-Cascade Lasers

In the framework of a joint research project with the National Laboratory for High Magnetic Fields, CNRS, in Toulouse, France, funded by ANR/DFG on “Far-infrared magneto-spectroscopy of novel semiconductor materials in megagauss magnetic fields using quantum-cascade lasers”, we offer a position of a postdoctoral researcher. The research focuses on the fabrication as well as on the investigation of the emission properties of terahertz quantum-cascade lasers for THz spectroscopy in pulsed megagauss magnetic fields. The work includes numerical simulations of the design of resonators, laser preparation, and Fourier-transform spectroscopy in the terahertz range including time-resolved experiments in the nano-to microsecond range. The laser structures will be grown by molecular beam epitaxy in the Epitaxy Department and processed in the Technology and Transfer Department at the Paul Drude Institute.

We invite applications from experimental physicists with a completed Ph. D. degree, a solid knowledge of semiconductor physics, and a background in quantum-cascade lasers as well as in terahertz spectroscopy.

The position is available for 3 years starting **April 1<sup>st</sup>, 2019**. Payment is according to TVöD Bund (Treaty for German public service). The Paul Drude Institute aims at increasing the quota of female employees. The application of women is therefore encouraged. Among equally qualified applicants, preference will be given to disabled candidates.

Applications should be sent by **February 28<sup>th</sup>, 2019**, to:  
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Please contact Prof. Dr. Holger T. Grahn for any scientific or technical questions related to the project, Email: [htgrahn@pdi-berlin.de](mailto:htgrahn@pdi-berlin.de)

