Technische Universität Berlin

Technische Universität Berlin offers an open position:

Research Assistant - 0.75 working time - salary grade E13 TV-L Berliner Hochschulen

Faculty II - Institute of Solid State Physics
Reference number: II-628/20 (starting at 01/11/20 / for a period of 3 years / closing date for applications 30/10/20)

Working field: Participation in the DFG project "Heterogenous quantum systems for single photon delay and pulse shaping (HQSys)". The overarching goal of this project is the development of an atomic quantum memory for storing, reading out and manipulating individual photons from quantum dot-based single-photon sources. In cooperation with the project partners, Prof. Janik Wolters (DLR Berlin) and Dr. Jin-Dong Song (KIST Korea), efficient and spectrally controllable single-photon sources are to be developed, which can be precisely tuned to atomic transitions in cesium. This should then be used to test the storage of individual photons in the quantum memory. The work forms an important basis for the development of future quantum networks and includes the following tasks: Numerical design, production and optical / quantum optical characterization of quantum light sources and their coupling to atomic systems. The exciting and highly topical project covers many aspects of quantum nanophotonics and provides a deep insight into central elements of the emerging photonic quantum technology.

Requirements: Successfully completed university degree (Master, Diplom or equivalent) in physics or similar courses with in-depth knowledge and experience in the manufacture and optical study of nanophotonic semiconductor structures and quantum light sources, in particular in the context of the final thesis, preferably in the field of arsenite semiconductors and / or quantum dot based semiconductor devices; Experience in the field of optical and / or quantum optical spectroscopy, for example on atomic systems, is desirable; also the willingness to interdisciplinary cooperation with external project groups; good command of German and/or English required; willingness to learn either English or German is expected.

Please send your application with the **reference number** and the appropriate documents (CV, certificates, a list of publications, and names and contact details of referees) **by email (in a single pdf file, max 5 MB) to reitzenstein.office@physik.tu-berlin.de**.

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guaranty for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/ or quick access 214041.

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities.

Technische Universität Berlin - Der Präsident - Fakultät II, Institut für Festkörperphysik, Prof. Dr. Stephan Reitzenstein, Sekr. EW 5-3, Hardenbergstr. 36, 10623 Berlin

The vacancy is also available on the internet at
http://www.personalabteilung.tu-berlin.de/menue/jobs/

Zertifikat seit 2008
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