

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 (WGL) we are an independent research institute with about 100 employees and we collaborate with all three universities in Berlin. We are located in the very heart of the city near Gendarmenmarkt. You may find more details at www.pdi-berlin.de.

Postdoc for MBE of Phase Change Materials

The increased interest in amorphous material physics in the 1960's has facilitated the discovery of switching effects in chalcogenide-based phase-change materials, in which data can be stored by switching the material into either an amorphous (OFF) or crystalline (ON) state. PDI has pioneered epitaxy on phase change materials. Our focus is now directed towards the growth of high-quality layers of suitable composition, which would enable to study important parameters of the memory switching devices and their relation to the epitaxial quality of the material. As a distinctive experimental feature, the MBE chamber is located at the Berlin synchrotron BESSY II and allows in situ real-time analysis by X-ray diffraction. We are seeking a postdoc to strengthen our team for this activity. You will develop new growth strategies for phase change materials by MBE and analyze the resulting structures using the BESSY beamline. This work is partly supported by third party funding with partners both in academia and industry.

You should have a PhD in physics, materials science, electrical engineering, or a related field, and experience in experimental solid state physics. Expertise in growth of thin films or nanostructures is desirable. We are looking for a new colleague who enjoys working in a highly motivated team of researchers and technicians.

This position is temporary. Payment is according to TVöD (Treaty for German public service). PDI is an equal opportunity employer. Therefore, female candidates are encouraged to apply and will be preferred in case of adequate qualification. Among equally qualified applicants preference will be given to disabled candidates.

Please submit your application by September 12, 2010 to
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