

Computational Materials Science Lab at Institute of Mineral Engineering (GHI), Division of Materials Science and Engineering, Faculty of Georesources and Materials Engineering, RWTH Aachen University has an opening for

Postdoc Position in Electron-Phonon Coupling

Job Description and Qualifications

The **computational** research involved in this position is **electron-phonon coupling**, with particular interest in **phonon transport** at the interface of materials and energy nanotechnology.

The candidate should have a PhD degree in Physics or Engineering (preferably Mechanical Engineering or Materials Science and Engineering). Background in atomistic simulation such as DFT / *ab initio* calculations or classical molecular dynamics is essential. The candidate should be capable of calculating phonon transport of materials and electronic transport of metals. Previous experiences of modeling using simulation packages, including VASP, CASTEP, SIESTA, QUANTUMESPRESSO, CPMD, CP2K, and CP-PAW are strong advantages. The salary will be according to the standard policy and salary rates of RWTH Aachen University. The postdoc position starts from November 1st, 2016. Earlier start date is also possible, depending on the financial management. The initial contract is one (1) year and can be extended upon mutual agreement.

Candidates should have the ability to think creatively with high motivation and have an excellent English written ability and fluent communication in general. Knowledge of German is a plus but **not** required.

Interested candidates may submit electronically a complete CV including list of publications and contact information of at least two (2) references (all application materials must be in **English**) to:

Prof. Dr.-Ing. Ming Hu

Institute of Mineral Engineering (GHI)

Division of Materials Science and Engineering

Faculty of Georesources and Materials Engineering

Joint with Aachen Institute for Advanced Study in Computational Engineering Science (AICES)

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Profile of the principle investigator: <https://www.ghi.rwth-aachen.de/simulation>