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Thesis Quantum mechanical simulations of battery materials

Organization: Robert Bosch GmbH | Nation: Germany | Location: Renningen | Functional Area: Research & Development | Level: Thesis (Diplom/Bachelor/Master) | Date: 02.02.2017 | Reference no.: DE00507480

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Your contribution to something big

You are going to work in a motivated team of scientists and engineers with close contact to worldwide leading universities and research institutes. Subject of your work is the quantum mechanical simulation of battery materials to understand degradation mechanisms and derive possible counter-measures. You will do this by:

- Setup of appropriate atomistic models of the battery material
- Study the thermodynamics and kinetics of the atomistic models by means of density functional theory (DFT)
- Discuss your results with scientists in the laboratory

What distinguishes you

- You are studying physics, chemistry, materials science, or a similar field with above average success
- You have experience with quantum mechanics
- You have a keen interest in solid state physics
- You show initiative and have a systematic way of working
- You have the ability to work independently as well as within a team

Requirement for this thesis being enrolled in university. Please attach your examination regulations and when indicated work permit and legal alien resident.

Start: according to prior agreement
Length of this thesis: 6 months

For more information please contact Mr. Ziebarth.
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