# Permanent research positions in Cambridge, MA, USA
# Computational design of energy materials

Bosch Research is looking for computational physicists, chemists and materials scientists and engineers to join the growing materials design team. Our goal is to enable deeper understanding of thermodynamic and transport phenomena in electrochemical systems on atomic level using both quantum and classical simulations. Strong focus is placed on development and application of computational and data science methods for understanding and automated discovery of next-generation materials, primarily for energy storage and conversion.

As part of Bosch Corporate Research, we are dedicated to long-term fundamental investigations of transformative energy technologies. Located in Cambridge, close to MIT and Harvard, our materials computation team works to support global experimental efforts with fundamental understanding, emphasizing innovation and high technological impact. Using both internal funding and government grants, we collaborate closely with a network of leading computational and experimental teams which includes top universities, national labs and industrial partners. We encourage high-impact publications and patent applications.

**Job Description:**

- Development and application of atomistic methods for understanding and designing thermodynamic and transport properties of materials in electrochemical systems
- Computational discovery and characterization of next-generation materials systems
- Application of machine learning / data science methods to materials screening
- Establishing and directing projects within a global network of research collaborators

**Requirements:**

- PhD from a top university in physics, chemistry, chemical engineering, materials science, or a related field. Proven research track record and a strong foundation in thermodynamics, chemical kinetics, transport phenomena and electronic structure.
- Background in quantum chemistry or first-principles computations of materials properties, experience with electronic structure methods and molecular dynamics.
- Fluency in Python, experience with Fortran or C++ preferred.

## Application instructions:

Submit your full CV, 1-page cover letter, up to 3 publications and list of 3 references as a single pdf by email to Boris Kozinsky boris.kozinsky@bosch.com with subject “Job application”.