

# POST-DOCTORAL POSITIONS: COMPUTATIONAL MATERIALS SCIENCE

### Company Description

BCMaterials, Basque Center on Materials, Applications and Nanostructures, is an autonomous research center launched in June 2012 by Ikerbasque, the Basque Foundation for Science and the University of the Basque Country (UPV/EHU) as a research center for Materials, Applications and Nanostructures. The Center is included in the BERC's (Basque Excellence Research Centers) Network, and its mission is to generate knowledge on the new generation of materials, turning this knowledge into (multi)functional solutions and devices for the benefit of society.

## Information



## Company

**BCMaterials** 



## Main functions, requisites & benefits

#### Main functions

The research topic for this project targets structural and electronic properties of metal halide perovskite nanocrystals and infrared semiconductor quantum dots computed at the Density Functional Theory level and with classical molecular dynamics simulations. Attention will be paid to understanding how tuning and modulating the surface of these materials affect their emission and absorbance characteristics. Calculations will be carried out in close collaboration with experimental groups at BCMaterials and worldwide.

### Requisites

The candidate must have a PhD in Materials Science, Chemistry, Physics, Biology, Biotechnology or related areas. Proficiency in speaking and writing in English. Self-motivated and ability to work in a team and willing to coordinate the research in a particular topic. A high level of motivation and independent thinking abilities. Ability and eagerness to learn new skills outside own discipline Presentation skills and able to meet the deadline are also required.