



## 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

 Deadline: 2022-09-30  
 Category: Academia  
 Province: Bizkaia

 Country: Basque Country  
 City: Leioa

## Company

BCMaterials



## Main functions, requisites & benefits

### Main functions

The open pre-doctoral position is in the area of Computational materials science.

The research topic for this project targets materials for low-light detection, focusing on "green" semiconductor quantum dots that work in the infrared region of the solar spectrum with application in fields spanning automated automobiles, food sorting, etc. These materials will be studied using a combination of first-principle simulations and machine-learning tools in close contact with experimental groups at the BCMaterials and worldwide. The research topic for this project targets materials for low-light detection, focusing on "green" semiconductor quantum dots that work in the infrared region of the solar spectrum with application in fields spanning automated automobiles, food sorting, etc. These materials will be studied using a combination of first-principle simulations and machine-learning tools in close contact with experimental groups at the BCMaterials and worldwide.

### Requisites

The candidate must have a PhD in Materials Science, Chemistry, Physics 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. Other relevant information: Include contact details for 2 referees. Interview will be conducted soon after the deadline. The starting date to join is as soon as possible.

