




## Company Description

CIC nanoGUNE is a research center devoted to conducting world-class nanoscience research for a competitive growth of the Basque Country. NanoGUNE is a member of the Basque Research and Technology Alliance (BRTA) and is recognized by the Spanish Research Agency as a María de Maeztu Unit of Excellence.

## Information

 **Deadline:** 2020-07-20  
 **Category:** Business  
 **Province:** Gipuzkoa

 **Country:** Basque Country  
 **City:** Donostia-San Sebastián

## Company

CIC nanoGUNE



## Main functions, requisites & benefits

### Main functions

The successful candidate will form part of an international and multidisciplinary research group focused on fabrication of hybrid materials. The group has a strong experience in application of ALD to (bio)materials and fabrication and characterisation of enzyme hybrids. The research will be conducted under supervision of Prof. Mato Knez and Dr. Ana Beloqui. The aim of the project is to apply Atomic Layer Deposition (ALD) technique to functional proteins, i.e. enzymes, seeking the stabilisation and the modulation of the properties of the biomolecules. Catalytic proteins will be deposited on a surface as thin films using a functional polymeric matrix. A range of different methods for protein deposition will be evaluated. Deposited films will be further modified using vapor deposition techniques (mainly ALD) for the fabrication of organic-inorganic biocatalytic films. These biomaterials are expected to show good mechanical properties and new catalytic behaviour in biosensors and energy harvesting materials. All materials will be structurally and biochemically deeply characterised.

### Requisites

The candidate is expected to have a university degree in chemistry, biochemistry or related discipline. Ideally, the candidate should have passed her/his studies with high marks (>7.0) and should be willing and eligible to apply for the Basque and national PhD grant for securing funding beyond the first year. Moreover, the candidate should have a cooperative attitude to teamwork, interest in multidisciplinary work, and the capacity to work in an international environment. We are looking for a highly motivated candidate to work in a multidisciplinary project, at the interface of biomaterials science and surface chemistry. Good interpersonal skills, as well as, written and oral communication skills in English are required.

### Benefits

We offer an international and competitive environment, state-of-the-art equipment, and the possibility to perform research at the highest level. We promote teamwork in a diverse and inclusive environment and welcome all kinds of applicants regardless of age, disability, gender, nationality, race, religion, or sexual orientation.