

## PhD Position in Protein-design of functional bio-inspired systems

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### Biomolecular Nanotechnology Group

### CIC biomaGUNE, San Sebastian, Spain

A PhD position is available in the area of **Protein-design of functional bio-inspired systems**.

The project is in the framework of an ERC Consolidator Grant (ProNANO) focused on the development of a modular versatile platform for the fabrication of protein-based hybrid functional nanostructures for their use in different applications including molecular electronics, optical plasmonics, bioorganic catalysis, and photoactive systems among others.

The project involves the design and functionalization of protein scaffolds to obtain functional hybrid structures. The candidate will be focused mostly on the generation of biomolecular materials through the design of protein scaffolds, their functionalization and supramolecular assembly for applications in the field of bioelectronics. The candidate will carry out the design, production, characterization and selection of the scaffolds. At a second stage the produced scaffolds will be used for the precise spatial arrangement of active components in order to create units with defined structures and functions. Finally these molecular units will be assembled into complex multi-functional materials and their performance and potential integration into devices will be evaluated.

The project is to be carried out at the **CIC biomaGUNE**, a vibrant multidisciplinary and international research institute in San Sebastian, Spain. **CIC biomaGUNE** has established a state of the art research program at the interface between the chemical, biological and physical sciences. It offers excellent working conditions and is well equipped with instrumentation and facilities.

#### **Required qualifications and experience.**

Candidates should have a Master degree in Chemistry, Biochemistry or a related discipline. Candidates that are in the process of their Master thesis defense in the next 3 months will also be considered.

We are looking for a candidate with some background in **protein chemistry and design, structural biology, biophysics, and chemical biology**, or have equivalent experience. In particular, experience in some of these topics is highly desirable: **protein engineering, molecular biology, computational biology, nanobiotechnology, and biomaterials**. The candidate is expected to have interest in multidisciplinary work, and the capacity to work in an international environment. Excellent interpersonal skills as well as written and oral communication skills in English are required.

#### **Conditions.**

The successful candidates will be hired by CIC biomaGUNE for a 3-year PhD program. Starting date at the earliest convenience.

Candidates should submit a motivation letter, CV and the contact information of two referees using the following [form](#) and indicating "329-PhD\_student" as reference. The deadline for application is September 30, 2019.