

Call reference number	(2025-09)
Call name	IKUR Quantum Technologies-QProt Predoctoral position on synthesis and nanoscale characterization of protein-based systems for spintronics and quantum technologies
Application Deadline	2025/05/28

Introduction and main description

BCMaterials, Basque Center for 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.

We are looking for a predoctoral student with a background in Physics or Engineering and experience in Materials Science or Biophysics to work in a project involving spin conduction and quantum effects in engineered protein-based biomaterials. The position is open to start as 01/09/2025.

The position is funded under the IKUR Quantum Technologies – QProt project with an estimated completion date on 31/12/2026.

Skills and Requirements

-Bacherlor's Degree or Master in Physics, Engineering, Materials Science, Nanoscience and Nanotechnology or related areas.

-Experience in sample preparation and characterization of biomaterials will be positively evaluated

- Experience with nanoscale characterization techniques, such as atomic force microscopy, will be a plus

- Data analysis skills with Python or Matlab are required.
- Excellent writing and presentation skills.

Work Program / Duties / Responsibilities

The IKUR Quantum Technologies – QProt project includes design, and preparation of protein materials, optimization of self-assembly structures, preparation of samples for scanning probe characterization in electrical and magnetic modes. The candidate will also analyse data, participate in results interpretation with the PIs and collaborators, elaborate written and oral reports of the results.





Application Procedure

Apply by submitting a motivation letter and a CV (in English) using the "Contact" button at the corresponding offer, at the "Join Us" area on BCMaterials' portal (<u>https://www.bcmaterials.net/join-us</u>). Your name and email address will be required for furher contact too.

Other Relevant Information

We provide a highly stimulating environment with state-of-the-art infrastructures, and unique professional career development opportunities. We offer and promote a diverse and inclusive environment and welcomes applicants regardless of age, disability, gender, nationality, ethnicity, religion, sexual orientation or gender identity.

