

IKUR QUANTUM TECHNOLOGIES – QPROT PREDOCTORAL POSITION ON CONDUCTION AND SPINTRONIC PROPERTIES OF BIOMATERIALS AND HYBRID STRUCTURES DEVICES

Call reference number	(2025-08)
Call name	IKUR Quantum Technologies – QProt Predoctoral position on conduction and spintronic properties of biomaterials and hybrid structures devices
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 an predoctoral researcher with a background in Physics and Engineering and experience in Materials Science and Biophysics, in particular, in the characterization of electrical properties of biomaterial assemblies, to work in a project involving electrical and spin conduction in 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 the design and fabrication of electrical characterization experimental setups at vacuum, and variable humidity and temperature.
- -Experience in sample preparation and characterization of biomaterial samples, in particular, with protein-based self-assemblies.
- Experience with instrumentation automation and data analysis with LabView and Matlab.
- Excellent writing and presentation skills.

Work Program / Duties / Responsibilities

The IKUR Quantum Technologies – QProt project includes preparation of samples and fabrication of devices with protein-based biomaterials, construction and upgrading of measurement setup for determination of conductivity and spin polarization of samples at variable humidity and temperature, including automation tasks. The candidate will also analyse data, participate in results interpretation with the PI and collaborators, elaborate written and oral reports of the results.





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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 (https://www.bcmaterials.net/join-us).

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.

