

Call reference number	(2025-16)
Call name	IKUR Neurobioscience-BIOELEC Postdoctoral position on microfabrication and sensor integration in an organ on a chip
Application Deadline	2025/05/28

Introduction and main description
<p>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.</p> <p>We are looking for a post-doctoral researcher to develop and validate new sensor prototypes, conducting characterization studies to assess sensitivity, specificity and reliability. He/she will further work on the integration of the sensors in the brain-on-chip platform. The work will be carried out at BCMaterials, in collaboration with Leartiker and Biolan research centers.</p> <p>The position will be carried out under the IKUR Neurobioscience BIOELEC project with an ideal starting date on 01/07/2025. The project funding will end on 31/12/2026. For experienced researchers competitive salary will be paid which are at par with other EU scientific establishments.</p>

Skills and Requirements
<p>The candidate must have a PhD in Physics, Chemistry, Electrical Engineering, Materials Science or related areas, with a marked interdisciplinary character.</p> <p>One or more of the following expertise will be highly valued:</p> <ul style="list-style-type: none"> - Experience on sensing materials and sensor technologies. - Experience in sensor integration and characterization. - Experience with microfabrication techniques. - Experience with multiple characterization techniques. - Proficiency in speaking and writing in English. - Capacity for teamwork in an interdisciplinary and international environment. - Self-motivation and willingness to perform independent research. - Supervision skills. - Creativity in problem solving. Ability and eagerness to learn new skills outside own discipline. <p>-Presentation skills and ability to meet the deadline are also required</p>

Work Program / Duties / Responsibilities

The research will be carried in the context of the IKUR Neurobioscience BIOELEC project, with the objective of establishing a new generation of brain-on-chip devices that closely replicate the native brain environment and thereby enable the understanding of complex neurological processes, and the screening of drugs in physiologically-relevant conditions. This will be achieved by (i) combining organoids with all relevant cell lineages of the brain, (ii) material-generated electrical stimulation, (iii) multimodal monitoring of biological activity and data integration, and (iv) precise control of environmental conditions.

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 further 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.