Call reference number	(2024-18)
Call name	Post-doctoral researcher on polymer-based energy harvesting system
Application Deadline	2024/12/ 10

Introduction and main description

BCMaterials is searching for a motivated and experienced Postdoctoral Researcher for researching on polymer-based energy harvesting system.

Piezoelectric materials suitable for energy harvesting will be developed both for piezoelectric, triboelectric and thermoelectric energy harvesting. Pristine polymers and polymer nanocomposites will be prepared, fully characterized and formulated to be processed by additive manufacturing technologies. Particular attention will be given to environmental friendly polymer such as PLLA and PHBV, as well as to the selection and/or synthesis of the active fillers able to improve harvesting performance.

Candidates with experience in the processing and characterization of biobased electroactive polymers and/or stimuli responsive nanoparticles are particularly welcome.

This post-doctoral position is to work in the ENHARPE project, funded by the Basque Government under the Elkartek program. The project funding will end on 31/12/2025.

Skills and Requirements

PhD in Physics, Chemistry, Materials Science or related areas.

Demonstrated experience in any of the following fields: processing and characterization of electroactive polymers; synthesis and characterization of multifunctional stimuli responsive (nano)particles.

Experience in additive manufacturing, electrical, mechanical and thermal characterization of materials, in the use of different facilities and data treatment will be valorized.

A team player who can collaborate with other research groups.

Demonstrated ability in technical writing for technical reports, scientific publications, and presentations.

Excellent communication skills in English.

Work Program / Duties / Responsibilities

- 1. Materials selection and/or synthesis
- 2. Design and development of stimuli responsive materials for energy harvesting. applications in single layer and multilayer systems, as well in 3D shapes by additive manufacturing for targeted functional response
- 3. Evaluation of the functional response of the materials and structures.
- 4. Integration into functional applications.



POST-DOCTORAL RESEARCHER ON POLYMER-BASED ENERGY HARVESTING SYSTEM

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.