

<b>Call reference number</b>	(2023-11)
<b>Call name</b>	Postdoctoral IKUR Neutronics position: Understanding and Modification of Electroactive Materials for Advanced Applications
<b>Application Deadline</b>	2023/02/26

### 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. Recently, BCMaterials has started a collaborative research project with the Polymers & Soft Matter Group (PSMG) at the Materials Physics Center (MPC). The PSMG addresses the structure and dynamics of polymer and glass-forming systems in general at different length and time scales. For more information, visit: <http://www.sc.ehu.es/sqwpolim/PSMG/>

BCMaterials and MPC are looking for a motivated and experienced scientist to fill a two-year POST-DOCTORAL position in Smart materials and Neutron Science, for the nanoscale structural characterization of various electroactive materials by neutron scattering methods complemented by laboratory available techniques. Structure and dynamic properties of smart composites at nanoscale are key to understand the organization of the components and improve the performance for advanced applications. This posdoctoral position is funded by the IKUR strategy. IKUR is the strategic program promoted by the Education Department of the Basque Government to boost Scientific Research in specific strategical areas.

For the successful candidate, the position represents an excellent opportunity to develop both collaborative and personal scientific research career, exploiting the capabilities of neutron scattering technique for nanodiagnostic of complex composites for further successful application. The posdoctoral position is framed within the PSMG at MPC (San Sebastián) and the research areas of Smart materials and Neutrons science of the BCMaterials. Arantxa Arbe and Jon Maiz are contact persons at the MPC and Senentxu Lanceros and Viktor Petrenko from BCMaterials side. The research topic for this project targets the development of smart composites for advanced applications.

### Skills and Requirements

PhD in Physics, Chemistry, Materials Science or related areas.  
 Demonstrated experience in the field, particularly in neutron scattering for structural investigations at nanoscale, polymer science and soft matter.  
 Experience in the use of different large-scale facilities and data treatment.  
 A team player who can collaborate with other research groups and lines.  
 Proficiency in speaking and writing in English.

### Skills and Requirements

Self-motivation and willingness to lead independent research.  
Presentation skills and ability to meet the deadline are also required.

### Work Program / Duties / Responsibilities

The main task of the project is devoted to the development and characterization of various types smart composites for advanced applications. Postdoctoral research fellow will be responsible for the development of smart and active materials and its nanoscale structural diagnostic, especially by neutrons scattering techniques. Large-scale facilities in Europe and worldwide will be used to perform structure and dynamics investigation of the materials.

### 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

Interview will be conducted soon after the deadline. The starting date to join is as soon as possible.