

## Company Description

BC3 is a Research Centre on the causes and consequences of climate change. Led by one of the most recognized scientists in the Climate Change field -Prof. Maria José Sanz, we produce multidisciplinary knowledge to support decision making towards sustainable development at the international level. With a multidisciplinary team, connected to the main scientific institutions, networks and socio-economic agents, for a decade, our contribution to research of climate change and to the science-policy interface puts us in a unique position to offer knowledge, tools, new methodologies and cross-cutting proposals, that we lead towards action in a collaborative framework with stakeholders, to design and help implement policies aimed at sustainable development.

## Information

 **Deadline:** 2024-04-05  
 **Category:** Academia  
 **Province:** Bizkaia

 **Country:** Basque Country  
 **City:** Leioa

## Company

BC3 Basque Centre for Climate Change



## Main functions, requisites & benefits

### Main functions

The Basque Centre for Climate Change (BC3) offers a full-time Post Doctoral position on the NBSOIL (Nature Based Solutions for Soil Management) Horizon project – HORIZON-MISS-2021-SOIL-02-08 – dedicated to soil health assessment and management using the ARIES (Artificial Intelligence for Environment & Sustainability) platform. The ARIES platform supports all activities of BC3 Research Line (RL) 5 on Integrated Modelling of Coupled Human-Natural Systems. The RL generates multidisciplinary scientific knowledge from human-nature interdependence to address complex sustainability problems through artificial intelligence (AI). The goal of the RL is to provide environmental data, models and understanding by retrieving, evaluating and integrating the existing information in order to support an effective policy-making where nature counts. Besides Ecosystem Services and Biodiversity, the RL also tackles Natural Capital Accounting, Conservation Finance, Food Security, Marine Spatial Planning, and Renewable Energy. All these products are used to inform sustainability decisions, e.g. SDGs. Job Description: We are looking for a Geospatial Scientist who can support the research projects and the development of ARIES technical tasks. The <https://aries.integratedmodelling.org/>, is a semantic web infrastructure that uses AI to build computational solutions to environmental, policy and sustainability problems. The Post Doctoral Researcher will be participating in various activities throughout the project, such as: Technical support in the development of the ARIES platform and in relation to ongoing research projects that use it, especially the NBSOIL project <https://nbsoil.eu/> and its open library of soil health variables and modelling components. Internal coordination of the data resources used by the ARIES teamwork within BC3. Coordinating with external project partners and stakeholders. Key Responsibilities: To support model development and data integration within ARIES platform. To support the data management and coordinate the NBSOIL project and further related projects. Technical support in relation to ongoing ARIES research activities, and in particular those related to NBSOIL. International travelling and participation to NBSOIL related meetings when required.

### Requisites

Main Requirements/Skills: PhD degree related to Geomatics. Previous experience in R&D projects. Previous exposure to Open Source Software related projects. Experience in geospatial data processing and management. A working knowledge of geomatics and in particular open source GIS and standards/protocols to expose geospatial assets (JSON at minimum). Experience with database management systems such as PostgreSQL. Experience in programming languages (any language and in particular Python and Java). Ability to participate in teamwork and interact with a broad range of collaborators. Ability to work independently, with a diverse, multi-location and multi-lingual team. Experience in agile management and in particular issue and project tracking. Desirable Requirements: Experience in environmental (or social or integrated) modelling. Experience with ARIES would be a plus. Familiarity with Docker containers. Exposure to Git and Maven technologies. Experience in project coordination and management. Excellent written and oral command of English. Excellent interpersonal and communication skills.