POSTDOCTORAL RESEARCHER ON INFORMATION TECHNOLOGY BASED ON HYBRID ORGANIC

Company Description

NanoGUNE is a research center devoted to conducting world-class nanoscience research for a competitive growth of the Basque Country. NanoGUNE is a member of the Basque Research and Technology Alliance (BRTA) and is recognized by the Spanish Research Agency as a María de Maeztu Unit of Excellence.
The Nanodevices group, co-led by Prof. Luis E. Hueso and Prof. Fèlix Casanova, is currently composed of 25 members including senior and junior researchers. The group counts with extensive research facilities for fabrication and characterization of devices and several active research lines spanning from nanofabrication to 2D electronics and spin transport. More information can be found at http://nanodevices.nanogune.eu

Information

Deadline: 2021-01-11
Category: Business
Province: Gipuzkoa
Country: Basque Country
City: Donostia-San Sebastián

Company

CIC nanoGUNE

Main functions, requisites & benefits

Main functions

The candidate will work alongside an international consortium on the SINFONIA project (Selectively activated INFOrmation technology by hybrid Organic Interfaces), which proposes a novel approach to information technology, based on hybrid organic/inorganic low-dimensional systems. The research will include the design of patterned molecular nanostructures on magnetic surfaces (including thin-film deposition, ultraviolet and e-beam lithography, etching), the study of the propagation of spin information in these nanostructures (by using electrical transport experiments) and the realisation of proof-of-concept hybrid magnetic circuitries.

Requisites

PhD in Physics or similar. Nanofabrication (e-beam lithography, materials growth and characterization, etching). Electrical transport measurements. Previous knowledge in molecular electronics and/or spintronics. Proficiency in spoken and written English. Although not compulsory, the following points will be considered: Previous track record in publications at the highest level. Self-motivated and a team player willing to coordinate the research in a particular topic.

Benefits

An International and competitive environment, state-of-the-art equipment, and the possibility to perform research at the highest level. A Teamwork in a diverse and inclusive environment and welcome all kinds of applicants regardless of age, disability, gender, nationality, race, religion, or sexual orientation. The position is expected to start on April 1, 2021 and go on for up to 3 years in the Nanodevices group. The contract will be funded by the European Union's Horizon 2020 research and innovation programme.