

Postdoctoral position at the Institute of Microelectronics of Barcelona IMB-CNM-CSIC

The Institute of Microelectronics of Barcelona (IMB-CNM-CSIC) offers <u>a postdoctoral position</u> within the subproject Hybrid Semiconductor-Superconductor Devices Enabled by Nanofabrication for Quantum Technology Applications (HyFab), funded by the Spanish Ministry of Science and Innovation.

Hybrid-Q is a coordinated project about the development and investigation of the quantum devices suitable for the implementation of a new type of qubits. The subproject **HyFab** adresses the challenge of developing the dedicated nanofabrication and processing sequences, as well as integration of novel functional nanomaterials, to provide the hybrid devices to be deployed as qubits within the coordinated project. **HyFab** includes devices production and consolidation which are based in semiconductor-superconductor nanowires, while open to explore original strategies to deliver nanodevices based on new ferromagnet-superconductor and 2D materials.

Interested candidates are expected to:

- Hold a PhD in Physics, Materials Science, Nanotech, Quantum, etc.
- Be experienced in experimental techniques, in at least two of the following areas:
 - Superconducting devices,
 - Thin film materials and techniques,
 - Micro/nanoelectronic device fabrication,
 - Transport measurements or spintronics,
 - Solid-state nanodevices.

Applications and requests for further information should be sent to

gemma.rius@csic.es

Interested researchers should include an **updated CV** with a **letter of intent or motivation**, and could arrange for **3 letters of recommendation**. The appointment is for **2 years**.

Proposed start of the appointment: Dec 2022 - Jan 2023

Closing date: Open until the position is filled



