

Postdoctoral Open Position

SPIN-CHARGE CONVERSION IN QUANTUM PARAELECTRIC INTERFACES

Gervasi Herranz (ICMAB, CSIC)

Position offered

We offer a position for a postdoctoral researcher in the framework of the project “Heavy Element-Free Green Electronics (HEGEL)” to be developed at the Laboratory of Multifunctional Oxides and Complex Structures within ICMAB.

Main Tasks and Responsibilities

Magneto-transport and spin pumping (FMR) experiments performed in devices patterned with optical and e-beam lithography, defined in oxide interfaces grown by PLD (in-situ RHEED). The successful candidate will be involved in materials preparation (thin film growth, optical/e-beam lithography) and magnetotransport/FMR characterization and modelling.

Requirements

- PhD degree in Physics or Materials Science or related disciplines.
- A good knowledge of English is required.
- Documented skills of communicating science

Conditions

- The contract will be full time.
- Duration of 24 months with possibility of extension.
- The starting date will be from December 2022/Early 2023

How to apply

The selection process will be continuous until a good candidate is found. Interested persons should send an email to gherranz@icmab.cat attaching:

- CV
- Letter of motivation
- Contact details of a reference persons.

ICMAB is an equal opportunity employer committed to diversity and inclusion of people with disabilities.

About the MULFOX group

The Laboratory of Multifunctional Thin Films and Complex Structures (MULFOX) focuses on developing new oxide-based materials and oxide-based thin film devices to be applied in the field of next generation green and sustainable electronics. Oxides offer an extremely broad range of properties of major interest for science and technology.

At MULFOX, we are interested on developing new oxide-based materials with enhanced or emerging properties with special focus on their electric, magnetic and optical properties, and to establish the links between their structure, morphology and functional properties. Current activities are focused on photoresponsive oxides and transparent metal oxides for photoconversion applications, ferroelectric materials for data storage, new concepts and materials for spin-charge conversion and 2D systems with emerging properties.

About ICMAB

ICMAB is one of the world's leading institutes in Materials Science research, located at Campus UAB, very close to Barcelona. One of the main ICMAB's strategic objectives and missions is to make an impact in the field of new materials for applications in energy, electronics and health.

ICMAB provides facilities, state-of-the-art equipment and most importantly, excellent scientists and professionals, to assure you a rewarding environment. In the last years, we have grown up to build up a team devoted to project managing, technology transfer, innovation, communication, maintenance, technical services and administration, to team up with the researchers for the advancement of science.

The diversity of our people and the interdisciplinary research fields related to Materials Science ensures an enriching and inspiring working environment. If you are an enthusiastic and highly motivated person and would like to work in a multidisciplinary and multicultural environment, join us!