

## Institute of Microelectronics of Barcelona IMB-CNM CSIC

### Cleanroom Engineer Metallisation and Implantation Areas Funded by the Spanish National Research Council (CSIC) under the JAE Programme.

The **IMB-CNM** is the largest institute in Spain dedicated to the research and development of Micro and Nano Technologies and Microsystems and with unique capabilities in silicon technology. It belongs to CSIC since its foundation in 1985 and is distinguished as a María de Maeztu Unit of Excellence.

IMB-CNM aims to contribute to the advancement of knowledge and to the economic and social development of society, as well as to the training of researchers and engineers and to the advice to public and private entities.

Research activities of IMB-CNM are dedicated to Micro/Nano Integrated Systems: miniaturised electronic systems which include sensing and/or actuating capabilities in addition to electronic information processing, power management and external interfaces.

The IMB-CNM is located on the Autonomous University of Barcelona (UAB) Campus and contains the largest clean room facilities in Spain with full capability to process its own CMOS technologies and laboratories.

#### Project:

IMB-CNM Cleanroom is one of the nodes of the MICRONANOFABS Unique Scientific and Technical Infrastructure (ICTS), a leading facility in Spain for the research and development of micro- and nanofabrication technologies.

The work will focus on the areas of metallisation and ion implantation, both of which are fundamental processes for the manufacture of advanced silicon-based devices and other emerging technologies. It will involve both, carrying out technological processes and optimising and developing innovative solutions for high-level scientific and technological projects.

Key tasks include the deposition of metallic and dielectric layers using PVD (Physical Vapour Deposition) techniques such as thermal evaporation and sputtering; ion implantation for the doping of semiconductor materials; the characterisation of processes using profilometry and electrical measurements; and the analysis and validation of results in accordance with advanced quality standards.

#### Key Responsibilities:

The successful candidate will work alongside a highly specialised team of operations technicians, engineers and researchers, and will take part in technological innovation activities that combine cleanroom experimentation, process simulation and a review of the scientific literature. This experience will provide a comprehensive understanding of the microelectronics and nanofabrication technologies used in cutting-edge research projects.

#### Education and Experience

- ✓ Bachelor's degree in a technical field, such as Semiconductor Engineering, Nanoscience and Nanotechnology, Engineering Physics, Materials Science and Engineering, or an equivalent qualification.

## Institute of Microelectronics of Barcelona IMB-CNM CSIC

- ✓ Interest in working in a highly technological environment
- ✓ Hands-on experience of advanced equipment and complex processes
- ✓ Initiative to take on responsibility for technical tasks.
- ✓ Previous experience in micro- and nano-fabrication processes in a cleanroom will be an advantage, particularly in metallisation or ion implantation.
- ✓ Key Skills: Teamwork, Critical thinking and problem solving, Independence, proactivity, communication.

### What We Offer

- ❖ The opportunity to join one of Spain's leading research centres in micro- and nanotechnologies, internationally recognised for the excellence of its scientific and technological activities.
- ❖ Access to state-of-the-art nanofabrication facilities and advanced research infrastructure.
- ❖ A stimulating research environment where innovative devices and technologies are developed for applications in microelectronics, sensors, nanomedicine, and advanced systems.
- ❖ A structured and specialised training programme providing hands-on experience in advanced manufacturing processes, operation of cutting-edge equipment, technology simulation, quality management according to ISO 9001 standards, and applied research methodologies.
- ❖ Employment contract (M2 category) according to CSIC's salary scale and regulations.
- ❖ Expected start date: December 15<sup>th</sup>, 2026

### Interested in joining us?

Complete this [form](#) and send your CV and Motivation Letter to [Talent@imb-cnm.csic.es](mailto:Talent@imb-cnm.csic.es), with the subject: **"Cleanroom Engineer - Metallisation and Implantation Areas"**. Incomplete or non-eligible applications will be automatically rejected.

\*Applicants are kindly advised to ensure that their CVs clearly demonstrate compliance with the requirements of the position. CVs should include precise dates, relevant skills, and notable achievements that evidence the candidate's suitability and distinction in the selection process.

### Deadline: September 27, 2026

Shortlisted candidates will be contacted by the first week of October, 2026 to be informed of next steps.

Check our [website](#) for more information about the IMB-CNM and our research activities

### Take the next step in your research career with us!

By applying, you accept our [data protection policy](#).

IMB-CNM (CSIC) adheres to the [European Charter and Code of Conduct for Researchers](#), ensuring full alignment with their principles and requirements, including equal opportunity, transparency, merit and ability, caring for an open, fair, and excellence-based hiring processes.

IMB-CNM holds the [HR Excellence in Research award](#), which acknowledges CSIC's commitment to continuous improvement in HR strategies for researchers.