


# Postdoctoral researcher in **Biohybrid Cells and Intracellular Microsystems**

*Frontier research at the intersection of microelectronics and life sciences*

The Institute of Microelectronics of Barcelona (IMB-CNM, CSIC) invites applications for a highly motivated Postdoctoral Researcher to join an ambitious project on Biohybrid Cells. The project aims to:

- Create miniaturized electronics chips capable of operating inside living cells, addressing long-standing challenges in bioelectronics.
- Enable next-generation cell analysis to unlocking unprecedented biochemical and biophysical studies.
- Overcome intracellular integration limits by addressing cell-size constraints through the integration of sensing, communication and energy-management functionalities into microscale devices.


## A PIONEERING PROJECT

 Overcoming the limitations of intracellular electronics through autonomous microsystem-based chips.

## HIGHLY INTERDISCIPLINARY

 Chip design, microfabrication, post-processing, electronics, optics, cell biology and BioMEMS.

## EXPERT ENVIRONMENT

 Work with leading scientists (ORCID) and advanced facilities in micro and nanoengineering:

- Prof. Plaza (0000-0002-8595-5580)
- Dr. Baldi (0000-0002-8198-8529)
- Dr. Serra-Graells (0000-0002-7274-1911)
- Dr. Hidalgo (0000-0002-8070-3499)
- Dr. Agusil (0000-0003-1127-1001)

## HIGH IMPACT

 Build your career through high-level publications and international visibility.

## ABOUT IMB-CNM

IMB-CNM is the largest institute in Spain dedicated to research and development of micro- and nanotechnology and microsystems with unique capabilities in silicon technology. Belonging to CSIC, IMB-CNM combines fundamental and applied research, technology development and training.

Our mission is to improve knowledge and contribute to the development of technology-based solutions to address societal challenges.

## KEY RESPONSABILITIES

- Contribute significantly to the scientific and technological development of the project.
- Participate in the design, fabrication and characterization of intracellular microsystems.
- Lead and contribute to publications in high-impact journals.
- Present results at leading international conferences.

## REQUIRED QUALIFICATIONS

- PhD in Physics, Materials Science, Nanotechnology, Microelectronics, Bioengineering, or related disciplines.
- Experience in one or several of the following areas is desirable:
  - BioMEMS, Optical MEMS.
  - Microsystems for cell biology.
  - Microfabrication and semiconductor processing.
  - Integrated devices for biomedical applications.
- Excellent written and oral communication skills in English.

## JOB CONDITIONS

Full-time postdoctoral contract.

Maximum duration: 2 years.

Estimated start date: September 2026.

Modality: On-site, Cerdanyola del Vallès, Barcelona, Spain.

## HOW TO APPLY

Applications should be sent by email to:

[talent@imb-cnm.csic.es](mailto:talent@imb-cnm.csic.es)

Please include "Postdoctoral Researcher in Biohybrid Cells" as the subject of the message and attach:

- A brief statement of research experience and interests.
- A CV.
- Two recommendation letters.

## DEADLINE FOR APPLICATIONS

**30 JUNE 2026**

[www.imb-cnm.csic.es](http://www.imb-cnm.csic.es)



## MARÍA DE MAEZTU UNIT OF EXCELLENCE

The institute of Microelectronics of Barcelona (IMB-CNM, CSIC) is recognized as a María de Maeztu Unit of Excellence by the Spanish State Research Agency for the period 2024 - 2030. The strategic research plan includes actions to maintain the institute's flagship position in fundamental and applied research for micro- and nanoelectronics.