

The mission of the Catalan Institute of Nanoscience and Nanotechnology (ICN2) is to achieve the highest level of scientific and technological excellence in Nanoscience and Nanotechnology. Its research lines focus on the newly-discovered physical and chemical properties that arise from the behavior of matter at the nanoscale. ICN2 has been awarded with the Severo Ochoa Center of Excellence distinction for two consecutive periods (2014-2018 and 2018-2022). ICN2 comprises 19 Research Groups, 7 Technical Development and Support Units and Facilities, and 2 Research Platforms, covering different areas of nanoscience and nanotechnology.

**Job Title: Technician for neural interfaces nanofabrication**

**Research area or group:** Advanced Electronic Materials and Devices

**Description of Group/Project:**

The Advanced Electronic Materials and Devices (AEMD) group focuses on the material sciences and technology aspects of novel electronic materials, with a strong emphasis on graphene as well as other 2D materials (MoS<sub>2</sub>). The group also works towards the development of technological applications based on these materials such as electronics, bioelectronics and biosensing, neural interfaces, etc.

The activities cut across different scientific aspects, from the fundamentals (the physics of devices and semiconductors) to materials (growth of graphene and MoS<sub>2</sub> materials by CVD and MOCVD, surface functionalisation, advanced characterisation), through to devices (fabrication technology, nanofabrication) and applications (neural implants and biomedical technologies, biosensors, flexible electronics).

**Main Tasks and responsibilities:**

As part of the AEMD team, the candidate will be working in a clean-room facility producing thin-film neural interfaces, collaborating with engineers and researchers to maintain equipment, improve quality of our technology, and help the team in developing new processes.

Responsibilities:

- Operate equipment such as reactive ion etcher, e-beam evaporator, photoresist spin coater, mask aligner, wet sink, etc.
- Troubleshoot and maintain equipment
- Collaborate with researchers and engineers to refine, troubleshoot, and improve processes
- Create and maintain proper documentation of the processes

The research activity of the candidate will be framed within the Neuro2Dtech project, entitled "Neural technologies based on 2D materials", PID2020-113663RB-I00 funded by MCIN/ AEI /10.13039/501100011033

**Requirements:**

- **Education:**  
Bachelor/Master in Materials Science, Nanotechnology, Engineering, Chemistry, Physics, or equivalent degrees
- **Professional Experience:**  
Demonstrated experience in a cleanroom and working with thin-film microfabrication processes (lithography, evaporation, RIE, etc)

Fluent English both spoken and written

- **Skills:**  
Resourceful, independent; teamwork in cleanroom

#### **Summary of conditions:**

- Full time work (37,5h/week)
- Contract Length: Temporary (2 years)
- Location: Bellaterra (Barcelona)
- Salary will depend on qualifications and demonstrated experience.
- Support to the relocation issues.
- Life Insurance.

Estimated Incorporation date: As soon as possible

#### **How to apply:**

All applications must be made via the ICN2 website <https://jobs.icn2.cat/job-openings/425/technician-advanced-electronic-materials-and-devices> and include the following:

1. A cover letter.
2. A full CV including contact details.
3. 2 Reference letters or referee contacts.

Applications will be continuously reviewed. Shortlisted candidates will be invited for interview.

#### **Equal opportunities:**

ICN2 is an equal opportunity employer committed to diversity and inclusion of people with disabilities. ICN2 is following the procedure for contract of people with disabilities according with article 59 of the Royal Decree 1/2015, of 30 of October.