

As a flagship research center in nanoscience and nanotechnology, our mission is to open and explore new frontiers of knowledge at the nanoscale, and bring value to society in the form of new understanding, capabilities and innovation, while inspiring and providing broad training to the next generations of researchers.

Our research lines focus on the newly-discovered physical and chemical properties that arise from the behaviour of matter at the nanoscale. ICN2 has been awarded with the Severo Ochoa Center of Excellence distinction for three consecutive periods (2014-2018 and 2018-2022 and 2023-2026). 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: Research Technician/Lab Engineer

Research area or group: Advanced Electronic Materials and Devices

Description of Group/Project:

Advanced Electronic Materials and Devices 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 (MoS₂). 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 2D materials by CVD and MOCVD, surface functionalisation, advanced characterisation), through to devices (fabrication technology, nanofabrication) and applications (biosensors, neural implants and biomedical technologies, energy storage and conversion).

Main Tasks and responsibilities:

The successful candidate will give support to the research team in the following topics: i) CVD and MOCVD growth of 2D materials, in particular graphene and MoS₂, , ii) device fabrication based on these materials. The responsibilities of the candidate will involve the operation of the growth reactors of the team (growth optimization and material production), maintenance of the reactors, and implementation of upgrades (new gas lines, etc); they can also involve providing support to device fabrication in a cleanroom environment. As part of the responsibilities, the candidate will contribute to general tasks related to lab organization, operation and equipment maintenance. The research activity of the candidate will be part of the BrainGraph project (PLEC2022-009232) financiado por MCIU/AEI /10.13039/501100011033 y por la Unión Europea NextGenerationEU/ PRTR.



Requirements:

- **Education:**
Engineer/Master degree in Material science, Chemistry, Technology, Microfabrication
- **Knowledge and Professional Experience:**
Thin film deposition (CVD and/or MOCVD experience will be highly valued).
Vaccum technology.
Lab chemistry.
Device/semiconductor microfabrication technology (cleanroom experience).
Design of data acquisition software (Labview, Labwin, Python).
3 years experience in a research lab/environment.
- **Personal Competences:**
Proficiency in English
Teamwork skills

Summary of conditions:

- Full time work (37,5h/week)
- Contract Length: Permanent
- 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/691/research-technicianlab-engineer> 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.

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.