

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: Specialist Technician

Research area or group: NanoBiosensors and Bioanalytical Applications Group

Description of Group/Project:

NanoB2A group focuses on the development of novel nanobiosensor devices based on plasmonics, nanoplasmonics and silicon-based photonics principles, including surface biofunctionalization, microfluidics for automatic fluid delivery and complete lab-on-a-chip integration for point-of-care devices. The application of the nanobiosensor devices in real clinical diagnostics and environmental control is one of the Group's main objectives. The Job is framed within a recently granted National project (PN Líneas Estratégicas) aiming at the development of nanophotonic Biosensors for the diagnosis and clinical management of bacterial infections at the point-of-care. The job will be essentially related to the implementation of the optical platform developed in the group for the defined target applications, specially focusing on the research line of biofunctionalization and bioassays development. If you are interested in joining to a young, dynamic and highly multidisciplinary team, with a highly innovative research project, this could be your opportunity.

Main Tasks and responsibilities:

The research technician will be involved in the implementation of proprietary nanophotonic biosensors for the detection and quantification of different bacterial-related entities with the aim of achieve rapid and efficient detection, diagnosis and management of infectious diseases.

This will include the following tasks:

- Assessment of sensor chip surface chemistry and biofunctionalization strategies.
- Development and optimization of the biosensor analytical performance, including the evaluation of assay conditions, analytical characterization, stability and robustness studies, and final validation.

Education, Experience, Knowledge and Competences required:

- **Education:**
Degree in Chemistry, Biochemistry, Biotechnology, nanotechnology or similar.
- **Experience and Knowledge:**
Background in analytical chemistry and/ or biology, immunochemistry and nanotechnology.
Basic knowledge in biosensors, optics and physics will be highly considered.
Experimental optical setup design and implementation will be a plus.
Excellent level of English (Fluent in writing and speaking) is required.

Previous research Experience is mandatory (preferably in biofunctionalization techniques and bioassays development).

- **Competences:**

Highly motivated, enthusiastic, proactive and responsible. Good communication and organization skills.

Summary of conditions:

- Full time work (37,5h/week)
- Contract Length: temporary (2 years)
- 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/332/specialist-technician-nanobiosensors-and-bioanalytical-applications-group> 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.