

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 values are Commitment, Collaboration and Transformation.

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: Lab Technician

Research area or group: Nanostructured Functional Materials Group

Description of Group/Project:

Nanostructured Functional Materials (Nanosfun) Group (www.nanosfun.com) is a group of ICN2 and focuses its research on molecular materials at the nanoscale. The nanostructuring confers properties not possible otherwise. The group works in two main research lines: nanomaterials for biomedical applications (e.g. Parkinson treatment) and chromogenic and emissive materials for energy efficient devices. The group is also strongly active in technology transfer and R&D projects with private companies.

The project belongs to the project call

Colaboración Público-Privada (CPP), CPP2021-008883, funded by MINISTERIO DE CIENCIA E INNOVACIÓN, EU Next Generation Plan de recuperación, transformación y resiliencia, AEI. This project is in collaboration with the spinoff company Futurechromes S.L. and Idonial research institute. It is focused on the development of highly transparent and long-lasting UV-responsive photochromic nanomaterials for building smart windows. These materials should allow to improve comfort and energy efficiency in buildings.

Main Tasks and responsibilities:

The candidate research activity will be related to the SOLAR project, with full dedication. It is an applied research project, in collaboration with companies (e.g. Futurechromes).

The project involves these main areas:

- preparation of water-resistant photochromic materials
- scale-up of the nanoparticles and films through industrial processes,
- characterization of chemical, morphological and optical properties of the materials synthesized.
- preparation of samples for the delivery to partners and companies.
- preparation of prototypes.
- Tests of energy saving in building models.

The hired person will be mainly focused on lab work to develop the project. It will be also asked the preparation of reports and presentations to show the latest results.

Requirements:

- **Education:** Bachelor or master degree in Chemistry, physics, Chemical Engineering, Nanoscience and Nanotechnology, Materials Science, and similar.
- **Knowledge and Professional Experience:**
Experience in lab work and research, especially in the synthesis and characterization of polymeric nanoparticles through wet methods (oil-in-water emulsions).
Expertise in films and coatings.

Experience in morphological and optical characterization of the nanomaterials.
Will to run an applied research project.
Modelling for calculation of light transmittance and energy modulation through surfaces.
Entrepreneur experience.

- **Personal Competences:**

Good spoken English would be appreciated as well.
Good attitude in working in a team.
Motivation and ability to overcome scientific challenges.

Summary of conditions:

- Full time work (37,5h/week)
- Contract Length: Temporary (6 months)
- Location: Bellaterra (Barcelona)
- Salary will depend on qualifications and demonstrated experience.
- Support to the relocation issues.
- Life Insurance.
- Work-Life Balance and Flexibility with flexible work schedules
- 28 holidays per year
- Flexible compensation plan: tax advantages contracting some products (health insurance, childcare, training, among others.)
- Training activities: languages, mentoring programme, wellbeing programme.
- International environment

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/717/lab-technician-nanostructured-functional-materials> and include the following:

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

Deadline for applications: 28/03/2025

This contract is part of the project CPP2021-008883, funded by MCIN/AEI/10.13039/501100011033 and by the European Union-NextGenerationEU/PRTR.



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.