

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 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: RESEARCH SUPPORT TECHNICIAN

Research area or group: Nanostructured Functional Materials Group

Description of Group/Project:

Nanostructured Functional Materials Group works with 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.

Main Tasks and responsibilities:

Development of photothermal chromogenic materials. The project involves:

- optical study of the behaviour of halochromic dyes in phase change materials (PCMs) in the solid and liquid states,
- synthesis of solid lipid particles and capsules of the phase change materials/dye mixture,
- preparation and optical characterization of impregnated cellulose papers with PCM/dye mixtures or their nanostructures,
- preparation and characterization of photothermal agents (e.g. gold nanoparticles) and integration in the PCM mixtures,
- Patterning of the materials and integration in the final device.

Education, Experience, Knowledge and Competences required:

- Education and professional experience:
 - Degree in Chemistry or Nanoscience and Nanotechnology and/or experience in the preparation of organic and inorganic nanomaterials, in particular:
 - in the synthesis of organic nanoparticles through emulsion methods,
 - experience in steady-state and time resolved characterization of color changing materials,
 - previous experience in the characterization of micro/nanomaterials with optical and electronic microscopy,
 - ability to prepare power point presentations in Spanish and/or English

The project is in collaboration with another company, so a previous experience in working in technology institutes or for other companies will be highly evaluated.

- Competences:
 - Good communication and writing skills in Spanish and English will be required.

Summary of conditions:

- Full time work (37,5h/week)
- Contract Length: Permanent
- 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 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: 29th September 2022

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.