

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 17 Research Groups, 7 Technical Development and Support Units and Facilities, and 2 Research Platforms, covering different areas of nanoscience and nanotechnology.

**Job Title: Senior Researcher**

**Research area or group:** Atomic Manipulation and Spectroscopy Group

**Description of Group/Project:**

The AMS group focus on the atomic-scale engineering of the quantum properties of novel nanomaterials. At the nanoscale, the properties of materials are dominated by quantum effects and interfacial phenomena, which impose strong limitations on the control and reproducibility of device performances, but also open up avenues for engineering new physical properties. Our aim is to understand and control quantum phenomena with atomic precision by chemical and structural manipulation, nanostructuring and interfacing materials that are identified as strategic in the roadmap for new technologies (hybrid metal-organic heterostructures, graphene-based 2D materials, topological insulators...).

**Main Tasks and responsibilities:**

The Senior Scientist will contribute in the overall managing of scientific activities of the SPM labs. The tasks will also include the supervision of students and postdoctoral researches. The scientific research will focus on the synthesis and characterization of nanostructured graphene, as well as its applications in (opto)electronic and sensing devices. It is expected that the candidate sets up new research lines and collaborations related to the topic.

**Requeriments:**

- **Education**

PhD in Physics

- **Knowledge and professional experience**

5 years of postdoctoral experience.

Expertise on scanning probe microscopy and spectroscopy (STM and nc-AFM), ultra-high vacuum instrumentation, bottom up synthesis of organic nanostructures, nanoelectronics

Experience on photoelectron spectroscopy (XPS and ARPES).

Fluent English

**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: 1st February 2020

**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: 23th January 2020

**Equal opportunities:**

ICN2 is an equal opportunity employer committed to diversity and inclusion of people with disabilities.