

ICN2 is a renowned research centre. Its research lines focus on the newly discovered physical and chemical properties that arise from the behaviour of matter at the nanoscale.

The Institute promotes collaboration among scientists from diverse backgrounds (physics, chemistry, biology, and engineering) to develop basic and applied research, while seeking out new ways to interact with local and global industry.

It also offers researchers training in nanotechnology, develops numerous activities to promote and enable the uptake of nanotechnology by industry, and promotes networking among scientists, engineers, technicians, business people, society, and policy makers.

ICN2 was accredited in 2014 as a Severo Ochoa Centre of Excellence and is a founding member of the Barcelona Institute of Science and Technology (BIST). The aim of the Severo Ochoa Program, sponsored by the Spanish Ministry of Economy, Industry and Competitiveness, are to identify and support those Spanish research centres that demonstrate scientific leadership and impact at global level.

Job Title: Postdoctoral position at P2N Group (NANOPOLY project)

Research area or group: Phononic and Photonic Nanostructures (P2N)

Description of Group/Project:

A post-doctoral research position is available in the Phononic and Photonic Nanostructures (P2N) group (<https://www.icn2-p2n.eu/>) led by Prof. Clivia M. Sotomayor-Torres, in the Catalan Institute of Nanoscience and Nanotechnology (www.ICN2.cat). This exciting project provides excellent opportunities for career development in Nanoscience and Nanotechnology. The P2N group carries out research in nanoscale heat transport in semiconductor, organic and oxide nanostructures, phonon confinement, opto-mechanics, nanofabrication and nanometrology.

The candidate will join the ICN2 team of the project NANOPOLY that has received funding from the European Union's Horizon 2020 research and innovation programme (GA829061), which is a new FET-OPEN project on 'Artificial permittivity and permeability engineering for future generation sub wavelength analogue integrated circuits and systems'. The candidate will join a dynamic team working at the leading edge of 2D- and meta-materials development and will focus on the development of characterization tools

Main Tasks and responsibilities:

The candidate will contribute to the development of a Frequency Domain Thermoreflectance (FDTR) set-up, to the experimental characterisation of 2D materials with other available techniques available in the group (Raman spectroscopy, SEM/TEM, AFM, etc) including the analysis and interpretation of data, preparation of manuscripts and dissemination of results at national and international meetings. The candidate will take an active part in the project, participate in the meetings and in the preparation of deliverables.

Education, Experience, Knowledge and Competences required:

Education: The candidate must have a Ph.D. in Physics or in physical electronics, with hands-on experience in optical characterisation techniques applied to 2D materials.

Experience and Knowledge: A solid background in solid state physics and spectroscopy is required. Nanofabrication skills as well as knowledge of simulation tools, such as Matlab and COMSOL would be an asset. Candidates must have good command of both written and spoken English.

Competences: Applicants should have good organisational skills and be able to work both independently and in a team environment.

Research Career Profile (According to the European Framework for Research Careers):

R2 Recognised Researcher or R3 Established Researcher.

Summary of conditions:

- Full time work (37,5h/week)
- Contract Length: 24 months.
- Location: Bellaterra (Barcelona)
- Salary will depend on qualifications and demonstrated experience.
- Salary according to the cost of living in Barcelona.
- Support to the relocation issues.
- Life Insurance.

Estimated Incorporation date: February/March 2019

How to apply:

All applications must be made via the ICN2 website <https://jobs.icn2.cat/job-openings/162/postdoctoral-position-at-p2n-group-nanopoly-project> 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: January 15th

Equal opportunities:

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