

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 Researcher (Stability of Halide Perovskite Solar Cells)

Research area or group: Nanostructured Materials for Photovoltaic Energy Group

Description of Group/Project:

The Nanostructured Materials for Photovoltaic Energy Group at ICN2 is offering a PostDoctoral position for one year on the fabrication and characterization of stable perovskite solar cells. The group is expert on the synthesis of materials and their application of perovskite solar cells, our objectives are highly focused on the stability of PV devices. The project will be carried out under the supervision of Prof. Monica Lira-Cantu and the project aims are the development of novel materials and interfaces to advance in the perovskite thin-film PV technology. The group collaborates with other research laboratories and companies at European and International level.

Eligible applicants are required to have a PhD either in material science, physics, engineering or a related discipline. She/he will have proven experience in the fabrication of perovskite based optoelectronic devices. The successful candidate will be fluent in English.

Main Tasks and responsibilities:

Main task include: Synthesis of materials (oxides, perovskites), ink development, fabrication and characterization of thin films and devices. Electrical characterization of Solar Cells by nanocharacterization methods. Stability of halide perovskite solar cells. Ability for writing in english and manage Master and PhD students.

Education, Experience, Knowledge and Competences required:

- Education:
 - o PhD in Materials Science, Physics or Chemistry. Engineers are also welcome.
- Knowledge:
 - o Solar cells, specially Halide Perovskite solar cells, solution processing methods for solar cell fabrication, characterization of optoelectronic devices, impedance spectroscopy, PAIOS equipment.

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

R2 Recognised Researcher and R3 Established Researcher

Summary of conditions:

- Full time work (37,5h/week)
- Contract Length: 12 months
- Location: Bellaterra (Barcelona)
- Salary will depend on qualifications and demonstrated experience.
- Support to the relocation issues.
- Life Insurance.

Estimated Incorporation date: February 2019.

How to apply:

All applications must be made via the ICN2 website <https://jobs.icn2.cat/job-openings/165/postdoctoral-researcher-stability-of-halide-perovskite-solar-cells> 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 20.

Equal opportunities:

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