

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

### **Job Title: Doctoral Student**

### **Research area or group: Supramolecular Nanochemistry and Materials Group (NANOUP)**

#### **Description of Group/Project:**

The Supramolecular NanoChemistry and Materials Group (NANOUP) is focused on controlling the supramolecular assembly of molecules, biomolecules and nanoscale building blocks at the nanometer scale for the design of novel functional architectures and devices.

Funded by a Generación de Conocimiento (National project), the group is seeking a candidate to be employed as a PhD student for the Study of different Au@MOF composite assemblies performing their photonic-properties and sensing studies (MOFTONIC).

#### **Main Tasks and responsibilities:**

During the project (three years), the selected candidate will design and create colloidal porous Metal-Organic Framework (MOF)-based particles and use them to self-assemble superstructures and composites, which will then be used as new sensors or adsorbents for water purification.

The candidate will acquire a great experience in chemistry, surface chemistry and nanotechnology, as well as in the use of a wide range of characterization techniques. The candidate will develop her/his thesis in excellent scientific infrastructures, highly international atmosphere and will count with the expertise of NANOUP team (please, visit our group at [www.nanoup.org](http://www.nanoup.org))

#### **Requirements:**

- **Education**

Bachelor's degree in Chemistry, Nanochemistry or Materials Science.

Master in Chemistry, Materials Science or Nanotechnology.

- **Knowledge and Professional Experience:**

Organic and/or coordination chemistry.

- **Competences:**

Intrinsic motivation, strong commitment, fluent in English, good communication skills, responsibility, independence

### Summary of conditions:

- Full time work (37,5h/week)
- Contract Length: Temporary (3 years)
- Location: Bellaterra (Barcelona)
- 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 <https://jobs.icn2.cat/job-openings/437/doctoral-student-supramolecular-nanochemistry-and-materials-group> and include the following:

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

Applications will be continuously reviewed. Shortlisted candidates will be invited for interview.

The candidates pre-selected for this position will need to apply for the associated Project Fellow in order to secure the funding required to formalise their contract. The ICN2 will provide full support to these candidates for the preparation of their fellowship applications.

### 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.