

## 1 PhD + 1 Postdoc Positions in Organic Nanophotonics for Energy Harvesting

**Project: ADAPTATION. European Innovation Council- Pathfinder Open.**

The Group SUPREMA at ICMM is seeking highly motivated candidates to join the European Project ADAPTATION. This pioneering initiative focuses on organic nanophotonics for energy harvesting, developing a next-generation solar material platform that integrates thermal management and energy collection within a single material. To achieve this, **we will prepare materials and devices inspired by the two most efficient energy management processes in Nature:**

- **Photosynthesis** – Nature’s way of capturing solar energy efficiently.
- **Terrestrial radiative cooling** – A natural mechanism for thermal regulation.

### PhD position (3 years + 1 possible extension)

#### Essential Requirements

- Bachelor Degree in Physics or Engineering, or a related field with photonics/nanoscience.
- Master in Physics or Engineering, or a related field with photonics/nanoscience.
- Ability to work in an international team (English as the working language).

#### Main Tasks & Learning Areas

- Fabrication and characterization of nanophotonic structures.
- Mounting optical set-ups.
- Design and simulation of organic nanophotonic structures for light trapping.
- Data analysis and interpretation of experimental results.

### Postdoc position (2 years)

#### Essential Requirements

- PhD in Physics, Chemistry, Engineering, or related fields.
- Strong hands-on experience in chemistry and/or optics laboratories.
- Experience in materials fabrication and characterisation.
- Ability to work in an international team (English as the working language).

#### Valuable experience

- Expertise in organic nanophotonics and light-matter interactions.
- Hands-on experience in polymers, supramolecular materials, and colloidal chemistry.
- Experience working in cleanroom facilities.

#### Main Tasks

- Fabrication of thin-film devices, nanoparticles, and nanostructures.
- Optical and structural characterization of nanomaterials and thin films.
- Supervising and mentoring PhD students within the team.
- Writing scientific papers, project reports and assisting in project coordination activities.

### How to Apply

Interested candidates send your CV and two reference contacts to [S.Nunez.Sanchez@csic.es](mailto:S.Nunez.Sanchez@csic.es) **before the 23<sup>rd</sup> of March**. PhD candidates, please include BSc and MSc degree marks.

**Estimated starting date:** June 2025 (flexible depending on the profile of the candidates).