

Postdoctoral position at the Defect Engineering of Responsive Advanced Materials Team

Job description

We are seeking a leading Postdoctoral researcher to lead the project entitled 'Self-assembly of Multivariate Modulated MOFs'. The **full-time position** is financed for **1 year** and will be carried out at the Institute of Molecular Science of the University of Valencia, with starting date **September 2026**. The salary is according to the Spanish regulations.

The applicant should demonstrate a willingness and initiative to apply for external funding opportunities and fellowships to support and advance their research.

Requirements and core scientific knowledge

- Applicants must have a PhD in Chemistry, Materials Science or equivalent.
- Expertise in the synthesis and characterization of metal-organic frameworks
- Experience in photocatalytic applications
- Understanding of defect engineering and self-assembly of MOFs

Experimental techniques

-Required: Powder X-ray Diffraction, Thermogravimetric Analysis, Scanning Electron Microscopy, Transmission Electron Microscopy, Fourier Transform Infrared Spectroscopy, Nuclear Magnetic Resonance spectroscopy, and Ultraviolet–Visible spectroscopy in both liquid and solid states.

-Desirable: Advanced structural characterization techniques such as Small-Angle X-ray Scattering (SAXS), Pair Distribution Function (PDF) analysis or Extended X-ray Absorption Fine Structure (EXAFS) spectroscopy using synchrotron radiation.

*Applications should be addressed to **Isabel Abánades Lázaro** and sent via email to (abanadeslazaro.lab@gmail.com). This should include a **curriculum vitae**, a **motivation letter**, and **contact details for at least two references**. All the documents should be in English. Applicants must have excellent spoken and written English. All communications will be performed in English.*