OPEN PhD Position (FPI)

Sustainable Metal Architectures for a New Generation of Functional Systems in Luminescence, Medicine, and Catalysis

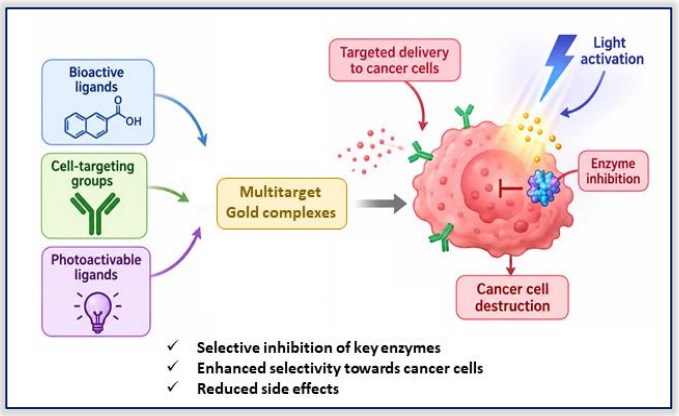
Instituto de Síntesis Química y Catálisis Homogénea (CSIC-Universidad de Zaragoza)

Zaragoza, Spain, Website: www.gimenogroup.com

PhD position available associated to the project **"Sustainable Metal Architectures for a New Generation of Functional Systems in Luminescence, Medicine, and Catalysis." (PID2025-167999NB-I00).**

Description

The project focuses on the design, synthesis, and characterization of gold complexes incorporating bioactive ligands, cell-targeting groups, and photoactivatable ligands. It aims to exploit the distinctive reactivity of gold complexes to selectively inhibit enzymes involved in essential cellular processes. The project will explore whether molecular targeting and controlled activation can enhance selectivity for cancer cells and reduce toxicity to healthy tissues.



The successful candidate will gain hands-on experience in coordination chemistry, from the synthesis and characterization of gold complexes to the evaluation of their anticancer activity. They will have opportunities to participate in national and international research programs and will be expected to present their findings at national and international conferences.

Selected publications from the group

J. Med. Chem. **2026**, DOI 10.1021/acs.jmedchem.6c01585 · *Inorg. Chem.* **2026**, DOI 10.1021/acs.inorgchem.6c03885 · *J. Med. Chem.* **2026**, *69*, 1724–1734 · *Inorg. Chem.* **2026**, *65*, 7210–7223 · *Chem. Sci.* **2026**, *17*, 10789–10803 · *Inorg. Chem.* **2025**, *64*, 9608–9620.

Candidate profile

Applicants must hold a master's degree and have experience in chemical synthesis and basic knowledge of cell culture techniques. Strong motivation and the ability to work effectively in a team are essential.

How to apply

Please send your **CV** to **M. Concepción Gimeno** (gimeno@unizar.es) before **15 December 2026**.