

## **FQM-273 Molecular and Supported Metal Complexes of Biological or Technological Interest**

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The group comprises researchers with extensive experience in organic and inorganic synthesis, coordination chemistry and functionalization of carbon materials and their applications. In addition, the group is equipped for conducting structural characterization of materials via different physical, spectroscopic and X-ray diffraction methods.

### **Research lines**

- Thermodynamic study of metal complexes and supramolecular species in solution
- Synthesis (conventional, solvothermal, electrochemical and in vacuum line) of metal complexes with potential pharmacological applications
- Structural studies by means of thermal, spectroscopic and X-ray diffraction methods
- Preparation, characterization and technological applications of metal complexes supported on solid carbon-activated surfaces, carbon nanoforms and polymer materials
- Hybrid materials based on carbon nanoforms (carbon nanotubes, graphenes, graphene oxides, etc.) with catalytic properties
- Photocatalysts derived from carbon nanoforms
- Hydrogen photogeneration from sunlight

### **Related services and products**

- [Attractant and procedure for controlling the Euzophera pinguis \(Haw.\) moth](#)
- [System and procedure for obtaining, classifying and selecting olive oil](#)
- [System for the automatic classification of olives](#)
- [Procedure for obtaining carbon-based hybrid materials](#)
- [Characterization of solid materials](#)
- [Design and preparation of active-carbon-based molecular filters](#)
- [Heterogenization and adaptation of catalysts to solid bases](#)
- [Electrochemical and hydrothermal synthesis](#)
- [Specialization courses in thermal, potentiometric and X-ray diffraction analysis](#)

**Spanish website:** <https://bit.ly/2EBpglO>