

A call for 3 years postdoctoral contracts has been recently launched by the Spanish Research Council (CSIC). We are looking for interested candidates to work in our group at the Materials Science Institute of Madrid (ICMM) in one of the following subjects:

- Oxide heterostructures. The research will consist in the study of the electronic, magnetic and conduction properties at the interfaces of oxides or similar materials (fluorides, nitrides), investigating the origin of some of the singular properties recently observed (formation of a 2D electron gas, magnetic and superconducting states), and looking for new physical phenomena. Special interest will be devoted to the study of the conditions leading to the onset of magnetoelectric effects or multiferroism. Both first-principles calculations and simple theoretical models will be used.
- Spin dynamics and multiscale approaches. Starting from fully relativistic first-principles calculations, the research will consist in the development of a multiscale approach to deal with the dynamical evolution of the magnetic properties of low dimensional systems (surface alloys, ultrathin films, nanoparticles) under temperature or external fields. The ultimate goal is the search of new materials with optimized properties for magnetoelectronic and spintronic devices.

A PhD. in condensed matter theory is required. Experience in any of the above subjects, or in first-principles calculations (DFT and beyond) is welcome.

Further details can be requested to the contact persons below. All information about the call can be obtained at <http://www.csic.es/vapc/JAEDoectores2008> (only in Spanish). Please notice that the deadline for applications is **December 16**.

Interested candidates please send an e-mail attaching the CV to:

Prof. M.Carmen Muñoz (mcarmen@icmm.csic.es)

or

Dr. Silvia Gallego (sgallego@icmm.csic.es)