

Post-doctoral position in molecular magnetism

Location: Laboratoire de Chimie Inorganique et Matériaux Moléculaires
Université Pierre et Marie Curie – Paris 6

Start: January 2008

Duration: 12 months (funded by French ANR projects)

Salary: 2500 € per month

Keywords: Coordination chemistry – Organic chemistry (radical ligands) – Molecular magnetism – X-ray diffraction

This post-doctoral position takes part of a starting research project on molecular magnetism. The aim of this project is to elaborate new molecular architectures involving *3d* and/or *4f* ions connected by new ligands that might have non-innocent behaviour such as radicals. These new molecules will be scrutinized both physically (crystal structure, magnetic, optic...) and theoretically (DFT, *ab initio* calculations).

This position is mainly devoted to the experimental aspect of the project (synthesis and physical characterizations). The future candidate will have then to synthesize original radical ligands and to complex them with *4f* and *3d* elements in order to isolate new magnets exhibiting potentially multi-dimensional networks. All this work will be performed in strong collaboration with specialists of theory (ENS Lyon). Strong knowledge in organic synthesis (radical ligands) and coordination chemistry (tentatively of lanthanide ions) are required. Some backgrounds in characterization techniques like X-ray diffraction, spectroscopy, magnetism and NMR would be appreciated.

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