



Groupe des
Matériaux
Inorganiques

POSTDOC POSITION AVAILABLE IMMEDIATELY

Duration: one year, renewable one year

Subject:

This post-doc position is associated with the French Research National Agency (ANR) Young Researcher Contract 2006 "COORDHYB" (COORDination complexes for new multifunctional HYBrid structures). The present project will deal with functionalisation of magnetic lamellar hydroxides by transition metal (or rare-earth) complexes and with the study of the properties (structural, magnetic, optical...) of the resulting hybrid systems.

This project will necessitate the synthesis of new functional coordination complexes, properly designed to bring the desired property and to be incorporated into the host compound. Complexes must bear at least one **functional group** to allow for subsequent grafting. The design and complexation of the necessary heteroditopic ligands will be an important part of the work. Moreover the complexes must be **stable** in solution, and must remain undamaged during the grafting reaction. Finally the complexes must bring along the **desired property** (NLO, photoluminescence, (photo)magnetism).

The second step will consist in the functionalisation of magnetic lamellar hydroxides (of general formula $M^{II}_2(OH)_3(X) \cdot mH_2O$) by these coordination complexes and in the study of the properties of the resulting hybrid systems and of the possible **synergy** between the properties of the two components.

Candidate profile:

It is preferred that the candidate has good competence in coordination chemistry (synthesis of ligands, complexation, basic characterization, crystallogeneses). Knowledge in X-ray diffraction, NLO or photoluminescence will also be appreciated.

Interested candidates should send a letter including detailed CV to the contact below.

Contact:

Guillaume ROGEZ

IPCMS-GMI

23, rue du Loess

B.P. 43

F-67034 Strasbourg cedex 2

Tél.: (+33) (0)3.88.10.71.92

(+33) (0)3.88.10.71.32 (Secrétariat)

Fax: (+33) (0)3.88.10.72.47

E-mail: rogez@ipcms.u-strasbg.fr

Website: www-ipcms.u-strasbg.fr