







Open postdoctoral position : Crystallography of photoswitchable luminescent crystals (18 months)



The context of this collaborative project is to design new multifunctional spin crossover complexes combining molecular switching and fluorescence. The aim is to reach a control of the switching parameters, and understanding the interactions between the fluorescent motif and the spin crossover center. The final objective is to propose new systems for magneto-optical switches and molecular multi-sensors.

The post-doctoral project consists in 1) developing a luminescence experiment on a single crystal diffractometer for probing simultaneously the optical response and the structural response of a photo-excited crystal by laser light, 2) performing photocrystallographic measurements on luminescent spin crossover crystals. In-house time-resolved millisecond experiments are also likely planned. The project will be carried out in collaboration with Prof. Smail Triki (CEMCA, Brest) and Prof. Kamel Boukheddaden (GEMAC, Versailles).

The recruited candidate must have a strong background in single crystal diffraction of molecular solids, skills in optical measurements (UV-vis absorption spectroscopy or photo-luminescence measurements) and interest in experimental developments. He/she will mostly carry out crystallographic experiments under laser light excitation.

All applications should be sent to Dr Sébastien Pillet (sebastien.pillet@univ-lorraine.fr) and must include a curriculum vitae with two recommendation letters and a one-page "expression of interest", stating the applicant's interest in working on that project.

<u>Post-doc duration</u>: 18 months. <u>Gross Salary</u>: 2100-2500 euros / month depending on the candidate experience (the project is funded by the French ANR Agency, project ANR-20-CE07-0028-03). <u>Starting date</u>: as soon as a suitable candidate is found.

Contact :

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