



Post-doctoral position available at CEA Grenoble

We are seeking to recruit a Postdoctoral Research Fellow to work under the supervision of Murielle Chavarot-Kerlidou (LCBM, CEA Grenoble/CNRS/Université Grenoble Alpes; www.solhycat.com). The position is awarded by CEA (2017 DRF Impulsion call) and is available for a 12 month period. Settling-in service will be provided by CEA through LC mobility (www.lc-mobility.com). Applicants should be available to start work on October 1st, 2017.

Research project

The research project focuses on the synthesis and application for charge photoaccumulation of novel ruthenium photosensitizers featuring poly-*N*-heterocyclic ligands as electron storage sites.

The group previously designed and synthesized by a “chemistry on the complex” strategy a series of Ru polypyridyl complexes possessing π -extended ligands (*Dalton Trans.* **2016**, *45*, 16298). Moreover, photoaccumulation of two electrons was shown to successfully occur on a fused dipyrrophenazine-pyridoquinolinone-based complex (manuscript in preparation).

The objectives of the project is now to store electrons at a more negative potential, suitable to drive multielectronic reduction processes, thanks to a targeted functionalization of the pyridoquinolinone core. The synthesis of new complexes will be undertaken and their properties determined by a combination of electrochemical studies, spectroscopic characterizations and photolysis experiments (either @SolHyCat or thanks to various collaborations). Specifically, advanced EPR studies will be carried out in the SyMMES group at CEA Grenoble to provide a detailed understanding of the electron storage process. This will finally allow to assess the potential of these new photosensitizers for photocatalytic applications.

Qualifications:

Applicants should hold a Ph.D. degree in molecular chemistry. A strong expertise in both organic synthesis and coordination chemistry is mandatory. A good knowledge on inorganic spectroscopic techniques will be appreciated.

Please send a CV, a short cover letter and contact details for potential referees.

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