Postdoctoral position in physical chemistry to study hydrogen-evolving photocatalytic systems

A post-doctoral position is available at the Université Grenoble Alpes (France), in the SyMMES (formerly SCIB) group (http://inac.cea.fr/en/Phocea/Vie des labos/Ast/ast groupe.php?id groupe=1238) and in collaboration with the LCBM laboratory (SolHyCat team; www.solhycat.com). The research project aims at the spectroscopic characterization of reactive intermediates formed in a hydrogen-evolving photocatalytic system combining a novel ruthenium photosensitizer and a cobalt catalyst. It will rely on the use of several advanced EPR methods, including pulsed multifrequency EPR and time-resolved EPR, in combination with other spectroscopic techniques and DFT simulations. The work will involve relatively simple sample preparation at LCBM and extensive spectroscopic analysis, which will be carried out at SyMMES. The two laboratories are located on the same scientific campus in Grenoble, France; they have a long history of collaboration, and are very well known in their respective fields of research (Berggren et al., Nature, 2013, 499, 66; Sicoli et al., Science, 2016, 351, 1320; Kaeffer et al. J. Am. Chem. Soc. 2016, 138, 12308).

Qualifications

We are looking for excellent candidates with a strong background in physical chemistry and spectroscopy. The candidate should hold a Ph.D. degree in chemistry or physics and have documented experience in demanding EPR, NMR or time-resolved spectroscopy (flash photolysis, etc.) experiments. Experience in DFT calculation would be a bonus.

Position Summary

Funding for this position has been awarded by the bio-driven chemistry laboratory of excellence ARCANE (https://www.labex-arcane.fr/). The position can be filled immediately, the initial contract will run for one year, with funding for a second year secured. The salary will depend on experience, with a net starting rate of pay of about €1700 /month. Health insurance and social contributions will be paid by the employer.

About Grenoble

Grenoble is a major university town in France with more than 58,000 students from more than 70 different countries and a unique combination of a major University, several state-owned basic- and applied-research organisations, high ranking international scientific facilities (ESRF synchrotron facilities and ILL neutron facilities) and major high-tech industries. Thanks to this diversity, Grenoble is a hive of activity at all hours of the day and night! Grenoble is also well known for its unique position in the French Alps with major ski resorts accessible in under an hour, and exceptional natural sites to visit in other seasons.

Applications

Candidates should contact

Serge Gambarelli, serge.gambarelli@cea.fr, +33438783940

or

Murielle Chavarot Kerlidou, <u>murielle.chavarot-kerlidou@cea.fr</u>, +33438789107

with:

- Cover letter (max. one page)
- CV
- PhD degree
- Transcript of academic records
- Letters of recommendation or contact details for potential referees

The deadline for applications is 31 March 2017, but the position will remain open until filled.