



## Postdoctoral Position in Organic Chemistry and Green Chemistry

Employer: URD ABI

Duration: 12 months

Starting: Avril 2020

Workplaces: Université de Reims Champagne-Ardenne (Reims) and AgroParisTech (CEBB, Pomacle).

Skills area: Chemistry of biobased compounds; organic chemistry; photochemistry.

The photochemistry research group is part of the Institut de Chimie Moléculaire de Reims localized at the University of Reims (ICMR, UMR 7312). We have an outstanding experience synthetic organic photochemistry. Currently, worldwide activities in this field are growing (*Chem. Rev.* **2008**, *108*, 1052; *ChemSusChem* **2012**, *5*, 352; *Eur. J. Org. Chem.* **2020**, DOI: 10.1002/ejoc.201901190). Such transformations are also interesting in the context of sustainable (green) chemistry.

URD ABI is a research and teaching unit of AgroParisTech dedicated to the valorization of agro-resources and biorefineries byproducts, founding member of the CEBB and member of both IAR cluster and SFR Condorcet. With expertise in white biotechnologies, green chemistry and process engineering, the team works on multi-disciplinary research projects aiming at the development of new industrial processes allowing integrating the transformation of byproducts of agriculture into high value-added chemicals such as biopolymers, fine chemicals, functional additives or cosmetics.

The proposed research of the postdoctoral position deals with organic photochemical reactions of levoglucosenone (LGO) and its derivatives. This compound is produced by pyrolysis of cellulose and is now available on large scale. Numerous chemical transformations of this polyfunctional molecule can be carried out which makes it an interesting platform compound for chemical and pharmaceutical industry. In the context of the postdoctoral research project, two approaches of sustainable chemistry are combined: Biomass based compounds as renewable feedstock are used. Photochemical reactions are a key method of green chemistry for organic synthesis.

Profile of the candidate:

Solid experience in organic chemistry, open spirit for interdisciplinary research (photochemistry, photocatalysis, chemistry of biomass based compounds), autonomy, team work.

Monthly salary (gross): 2600 - 2800 € (depending on research experience after PhD Thesis)

Contact: Dr. Norbert Hoffmann ([norbert.hoffmann@univ-reims.fr](mailto:norbert.hoffmann@univ-reims.fr)) phone: + 33 (0)3 26 91 33 10)

Prof. Florent Allais ([florent.allais@agroparistech.fr](mailto:florent.allais@agroparistech.fr)) phone: + 33 (0)3 52 62 04 62