

## PhD position in Green Chemistry

*(Doctorant(e) en chimie verte)*

**Keywords:** green chemistry, biocatalysis, cellulose-derived compounds, biomimetic UV filters

URD ABI of AgroParisTech (<https://urd-abi-agroparistech.com/Home/>), located in the European Center of Biotechnology and Bioeconomy (CEBB, <https://cebb-innovation.eu/Home/>) at Pomacle (20 km from Reims, France), is looking for an enthusiastic and outstanding graduate/PhD student to work on the green synthesis and characterization of sustainable and safe Nature-inspired UV filters for the cosmetic industry.

### THE LAGOON PROJECT (ANR PRCE)

UV filters, molecules capable of protecting us from sun damage, are today criticized because of their toxicity towards humans, but also towards marine fauna and flora. Finding non-toxic substitutes for them is therefore a matter of public health and environmental preservation. Moreover, due to their petroleum origin, their price is extremely fluctuating and most UV filters are not biodegradable. There is therefore today a strong demand – from both industry and consumers – for new innovations enabling the production of alternatives to current UV filters that are both renewable and safer.

Starting from building blocks easily accessible from lignocellulosic biomass, LAGOON is precisely designed to overcome the aforementioned obstacles by offering sustainable chemo-enzymatic industrially-relevant synthetic pathways toward biomimetic molecules which can advantageously replace current petro-based UV filters.

A public-private partnership has been set up to carry out this multidisciplinary and ambitious project: two French laboratories internationally recognized in green chemistry (URD ABI) and in complex mixtures/formulations for cosmetics (URCOM) will work hand in hand with a world-class company specializing in the production of cosmetics (LVMH).

### ABOUT URD ABI

URD ABI is a research and development unit of AgroParisTech dedicated to the valorization of agro-resources and biorefineries byproducts. URD ABI is founding member of the CEBB and member of both B4C and Cosmetic Valley clusters. 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.

### CANDIDATE PROFILE

We are looking for highly motivated and dedicated candidates holding a Master (or equivalent) in chemistry (organic/green chemistry). Experience in biocatalysis would be highly appreciated.

This position is based at: CEBB – 3, rue des Rouges Terres 51110 Pomacle, FRANCE

### APPLICATION

Application and informal inquiries about the position should be sent to Professor Florent Allais ([florent.allais@agroparistech.fr](mailto:florent.allais@agroparistech.fr), Phone: + 33 3 52 62 05 62). Applications must include: a motivation letter, a full and up-to-date CV, and letters of recommendation.