

## *Internship*

Master 2 – Chemistry – 6 months from February 2023

### CONTEXT AND OBJECTIVES OF THE INTERNSHIP

Through its partnership with Prof. Richard Gross' research team at the Rensselaer Polytechnic Institute (Troy, NY, USA), the URD ABI has access to a lactonic sophorolipid produced by biotechnology. Sophorolipids belong to the family of glycolipids. These molecules have significant surfactant properties and very high eco-compatibility. The aim of the internship will be to bring new functionalities to this sophorolipid by grafting on it different compounds using synthetic strategies in accordance with green chemistry principles.

### HOST LABORATORY

Located at the heart of the Pomacle-Bazancourt biorefinery, URD ABI AgroParisTech is a research and development unit of AgroParisTech dedicated to valorization of agrosources and biorefinery byproducts. 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 polymers, fine chemicals, functional additives or cosmetics.

### ASSIGNMENTS

- Organic synthesis by applying the principles of green chemistry
- Purification of the products obtained
- Characterization of purified products by NMR, HRMS, etc.
- Characterization of the properties of new compounds (anti-UV, antioxidant, anti-bacterial, etc.)

### REQUIRED PROFILE

Master 2 Chemistry training.

Rigorous, autonomous and dynamic student

### TRAINING PLACE

Centre Européen de Biotechnologies et Bioéconomie (CEBB), 51110 Pomacle, France.

Please send your cover letter and CV to Amandine FLOURAT ([amandine.flourat@agroparistech.fr](mailto:amandine.flourat@agroparistech.fr))