

RESEARCHE/ ENGINEER POSITION



AgriLoop: Pushing the frontier of circular agriculture by converting residues into novel economic, social and environmental opportunities



<u>nathalie.gontard@inrae.fr</u> <u>helene.coussy@umontpellier.fr</u> <u>chahinaz.aouf@inrae.fr</u>

Application:

by email: letter, CV + publications list

General information

Workplace: INRAE Montpellier, Southof France (UMR IATE, ePOP group)

INRAE: the place where science is dedicated to life, humans, and the earth

Contract: 1 year renewable 2/3 times

Expected starting date: February 2024

Proportion of work: full time- Flexible working hours-8 weeks' holidays year.

Gross remuneration: 2604 up to 3293 €/month depending on experience

Skills: spontaneous anticipation and proactive interactions with people

Highly motivated by circular economy and environmental stakes

Fluent English speaker and strong scientific paper writer

Essential qualifications to be demonstrated in the CV:

High level Master/Engineer degree or PhD in environmental, life, material or agricultural science

High proactive team player capabilities in real conditions

Knowledge in life cycle analysis

Your mission: You will be involved in a collaborative International research project, as a cohesive element of the coordination team. The project aims to extend the agricultural production value of two major players of the global bioeconomy: EU and China, by eco-efficiently upgrading underexploited residues into a portfolio of high added-value bio-products able to substitute oil-based equivalents, such as plastic materials. The project associating 35 partners-half academic, half private- is financed by the European Commission (Horizon Europe) and the Chinese Ministry of Science and Technology. You are expected to strongly interact with a panel of leading European and Chinese academic and industrial partners.

You will support the AgriLoop scientific coordination team to initiate, organize and facilitate a range of planned collective scientific activities, according to the predefined project agenda. These activities include stakeholders' events, consortium meetings, training session, webinars, young scientists' networks or even collective position papers, in close relationship with the scientists and others people in charge of these events. This implies to cultivate and value relationships with all types of partners within the consortium and also beyond at the European and international levels with the European Commission officer, representative, others projects coordinators, industries etc. Anticipation and proactive interactions with all will be the key of the success in your work. In addition, and in parallel, you will be offered to be involved in specific activities of the ePOP research group related to ecological organic materials development, depending on your profile and willing. This last aspect should be discussed with you.

The AgriLoop project: AgriLoop will develop safe-and-sustainable-by-design bioconversion processes integrated in a cascading biorefinery approach (Fig.1), to convert a range of agri-residues into plant and microbial proteins, polyestersand other bio-based chemicals to be used for food, feed, health and materials applications.

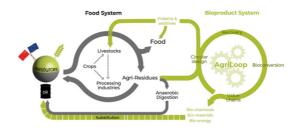


Fig. 1: AgriLoop concept and strategy toward sustainable biorefineries based on agricultural residues

AgriLoop scientific and technical structuring objectives are i) to improve the recovery of highly functional native molecules from primary and secondary residues and to tailor bioconversion schemes toward microbial proteins and polyesters, for overcoming in a balanced way the limitations related to feedstock complexity, processes eco-efficiency and end-products performances, and in parallel ii) to anticipate the complex circularities of such biorefinery to comply with safe and sustainable requirements, guide scientific and technological advances of AgriLoop cascading processes toward end-products tailored to the just necessary (frugal design) and fast track their further adoption.