## Chemical technologies for the valorization of industrial wastes in the Pyrenees



**TRIPyr** (EFA 308/19)

Fonds Européen de Développement Régional (FEDER)

Acronym: TRIPyr

Project timespan: April 2020-May 2022

Project leader: LHFA-CNRS, Prof. Montserrat Gómez

Website: <a href="https://en.tripyr.eu">https://en.tripyr.eu</a>

**TRIPyr** is an interregional European project aiming to develop innovative catalytic technologies towards the transformation of two types of waste: fatty residues arising from the food industry and residues of lindane, a highly toxic pesticide stored in large quantities in the Pyrenees. For this, the project relies on a circular economy concept, in which the generated waste is used as raw material, for the production of high value-added products used in the material sector or fine chemical and medicinal chemical sectors.

TRIPyr is also committed to train young researchers in the development of environmentally friendly processes, and to inform the society about Green Chemistry, its principles and their applications in the waste treatment.

To achieve these multiple objectives, the TRIPyr Consortium is made up of 7 partners (6 beneficiaries and 1 associated partner) coming from Nouvelle-Aquitaine, Aragón, Catalonia, Navarra and Occitanie: the "Laboratoire Hétérochimie Fondamentale et Appliquée" (LHFA-CNRS, Toulouse, Project Coordinator), the "Institut Català d'Investigació Química" (ICIQ, Tarragona), the "Maison Européenne des Procédés Innovants" (MEPI, Toulouse), the "Asociación de la Industria Navarra" (AIN, Cordovilla), the Ecocene association (Pau), the PME Sapoval (Albi) and the "Instituto de Síntesis Química y Catálisis Homogénea" (CHESO, Zaragoza).

## Our expected results:

- Design of new catalysts: organocatalysts and (nano)catalysts of abundant and inexpensive metals;
- Synthesis of acids, amines and alcohols from fatty residues;
- Synthesis of polymers from lindane and fatty residues, including activation of CO<sub>2</sub>.

The purpose of this project is to contribute to the protection of the environment by promoting the life cycle of waste and toxic products, and boosting the economy of the trans-Pyrenean regions.

The project has been 65% co-financed by the European Regional Development Fund (ERDF) through the Interreg V-A Spain France Andorra programme (**POCTEFA 2014-2020**). POCTEFA aims to reinforce the economic and social integration of the French–Spanish–Andorran border. Its support is focused on developing economic, social and environmental cross-border activities through joint strategies favouring sustainable territorial development.

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