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Supervisor page https://utc.hal.science/search/index/q/*/authIdHal_s/alla-nesterenko

Host Institution Université de Technologie Compiègne (UTC)

https://www.utc.fr/en/

Research Lab

Laboratoire Transformations Intégrées de la Matière Renouvelable

https://timr.utc.fr/

Research Team Équipe Interfaces et milieux divisés

https://timr.utc.fr/recherche/equipe-de-recherche-timr/imid-interface-et-

milieux-divises/

Project Title

New ways for protein functionalization in solventless conditions

Project Description

The use of biomass-derived proteins such as biopolymers for food, cosmetic, pharmaceutical applications is often compromised by unsuitable functionalities (e.g., low solubility, poor digestibility, insufficient gelling & emulsifying properties). The goal of the project is to carry out appropriate modifications of proteins (chemical and enzymatic) through mechanochemistry in solventless conditions. Then, the functional and physicochemical properties of the modified proteins will be characterized.

Keywords

protein, biomass, mechanochemistry

Description of the Host Lab

The research unit Transformations Intégrées de la Matière Renouvelable aims to develop, validate and implement knowledge and know-how for renewable material transformation processes and reactions.