

MAFEN MASTER

Academic Year 2025 - 2026

Proposal of M1 tutored project

PROJECT TITLE AND SUMMARY:

Covalent interactions between phenolic compounds and macromolecules: mechanism and identification of adducts

Non-covalent and covalent associations between phenolic compounds with food macromolecules are two of the most fundamental factors affecting the quality of polyphenol-rich food products. Whereas the biochemical bases of non-covalent associations between phenolic compounds and macromolecules, that is, proteins and polysaccharides, are well understood, little data is available in the literature about the covalent complexation of phenolic compounds with macromolecules and the neoformation of complexes. Our intent is to provide a level of understanding that can be used to underpin future research directions. This will help to resolve existing issues that limit organoleptic and nutritional qualities of polyphenol-rich foods and drinks and to better understand the functional consequences of these interactions on food/biological systems

HOST UNIT:

SQPOV INRAe

MAIN ACTIVITIES:

Directrice de Recherche, HDR. Equipe QuAlim

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