



Biorefinery of agroindustrial wastes to produce bioactive compounds under a circular economy approach

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Salone Nobile, Villa Cambiaso

Nowadays, great amounts of residues are discharged due to food and feed production. In this sense, agro-industrial production usually dismisses non-edible residues, which are also called by-products or even co-products. They are considered as a resource of valuable ingredients since they are susceptible to be valorized following the biorefinery principles. Hence, the use and exploitation of this material, instead of its combustion or disposal, can provide value added products and, at the same time, can preserve the environment. Particularly, this conference will explore effective biorefinery processes to obtain some interesting biomolecules from by-products.

Topics to be addressed:

- Presentation of the “Industrial Biotechnology and Environmental Engineering (BiotecnIA) Group” and the Erasmus project for the internship of students
- By-products derived from agro-industrial wastes
- The biorefinery concept
- Conventional pretreatments to release sugars
- Novel pretreatments to release sugars: the use of deep eutectic solvents (DES)
- Lactic acid bacteria in biotechnology
- A practical example: Search of effective biorefinery processes in chestnut by-products to obtain biomolecules to be applied in the own chestnut food field
- Comparison between conventional and novel pretreatments
- Evolution and future perspectives: circular economy



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