



Valorization of industrial waste for the production of bioplastics via fermentation

In the recent years, there is a clear trend towards the production of biodegradable bioplastics due to the advantages they offer over fossil-based polymers. Generally, in the industry, these polymers are produced from renewable biomass as corn or soy. However, with the aim of not competing with feedstocks destined for human or animal consumption, other alternative sources for their production are being explored. In this context, industrial waste with high organic content (starch, cellulose, volatile fatty acids, etc.) is starting to be used. The use of this waste will reduce market price of bioplastic making them more competitive and will contribute to the principles of the circular economy, generating valuable products that can be incorporated into the industry itself. This webinar will explore the different methods currently available for the production of bioplastics through waste valorization.

Objectives

- The objective of this webinar is to describe fermentative processes leading to the production of bio-based and/or biodegradable plastic.
- The current state of fermentative processes for the production of bioplastic as well as the future perspective of these processes will be discussed.

Who is it aimed at?

- Companies in the plastic sector

- > Empleos of the sector and technological centers
 - > Companies that generate potentially fermentable waste (fruit and vegetable industry, dairy industry, paper industry, etc.)
 - > Se dará prioridad en las inscripciones a las empresas industriales asociadas y clientes
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Programme

INTRODUCTION

- > What are bioplastics?
- > Differences between bio-based, biodegradable and biocompostable
- > Current market status

OBTAINING BIOPLASTICS THROUGH FERMENTATION

- > Feedstocks used for the production of bioplastics
- > Waste pre-treatment
- > Production of fermentable products
- > Fermentation process and main microorganisms used

PRINCIPAL BIOPLASTICS

- > PLA
 - > PHAs
 - > Other bioplastics
 - > Main constraints of the process
 - > Possible solutions and future paths
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Organized by:

