

BioPackMan

BIODEGRADABLE PACKAGING MATERIALS ADVANCING
CIRCULARITY, SUSTAINABILITY & ECO-INNOVATION

biopackman.eu

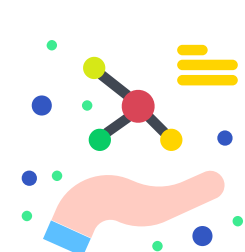


About the project

A New generation of biodegradable packaging materials

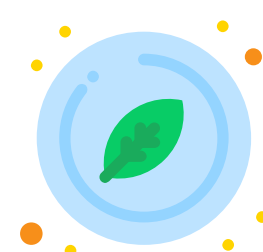
BioPackMan pioneers an innovative approach **to packaging design** by merging **biodegradable materials** with advanced modelling tools. The project focuses on **replacing conventional plastics** with modular, **eco-designed solutions** tailored for real-world use and environmental performance.

Objectives



Sustainable Bio-Polymers

Development of competitive and sustainable bio-degradable polymers and blends



Smart Bio-Additives

Sustainable additives for functional performance and tuneable biodegradability



Digital Bio-Design

End-to-end digital toolset to accelerate the design and virtual screening of biodegradable compounds



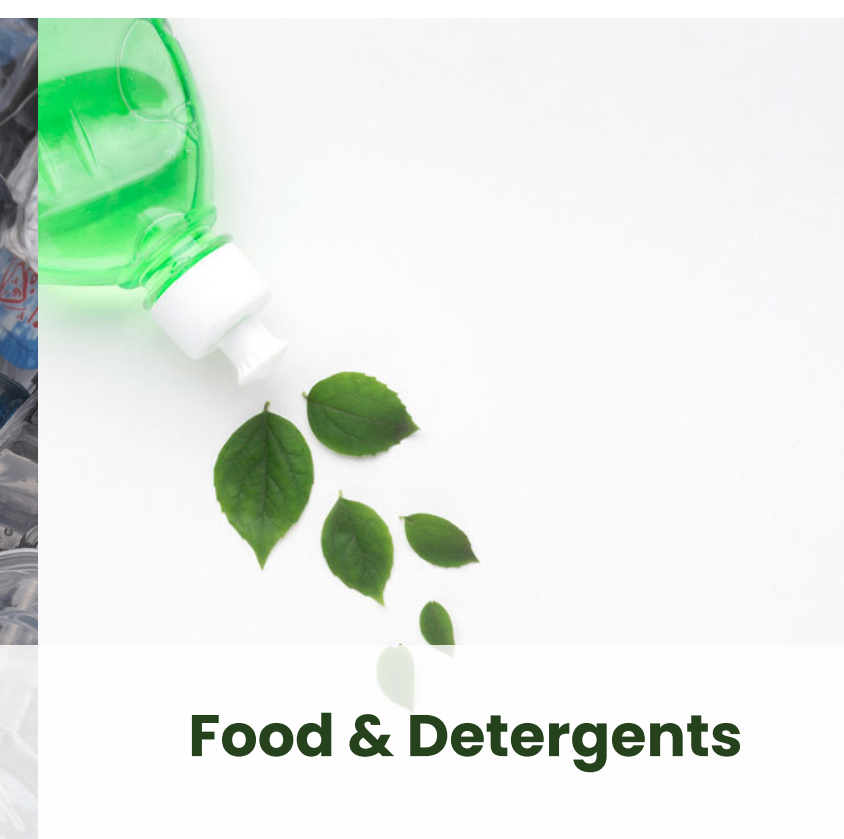
NextGen Biopackaging

Biodegradable high-performance packaging intermediates

Case Studies

Scientific Validation of Circular Packaging Solutions

To ensure that our materials and models are robust, scalable, and aligned with market needs, we will test our approach through a set of **strategic case studies**. These case studies reflect a variety of product sectors, material states, and packaging formats, helping us to explore circularity from multiple angles.



Expected Results

- Reduce CO₂ emissions by up to 50–75% compared to fossil-based packaging
- Strengthen EU market leadership in biodegradable packaging
- Create new eco-jobs in materials science, recycling, and digital manufacturing
- Advance European Green Deal, Circular Economy Action Plan, and Fit for 55 targets



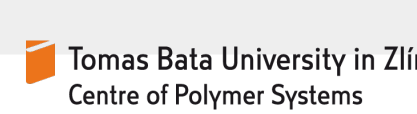
beWarrant



Bioplostech



Instituto Tecnológico de Aragón



Project details

Project number: 101178576

Project name: BIODEGRADABLE PACKAGING MATERIALS ADVANCING CIRCULARITY, SUSTAINABILITY & ECO-INNOVATION

Project acronym: BioPackMan

Call: HORIZON-CL4-2024-RESILIENCE-01-TWO-STAGE

Topic: HORIZON-CL4-2024-RESILIENCE-01-35

Type of action: HORIZON Innovation Actions

Project duration: 48 months

EU Contribution: 7.999 292,51 Euro

PROJECT COORDINATOR

Prof. Costas A. Charitidis

National Technical University of Athens
charitidis@chemeng.ntua.gr

DISSEMINATION MANAGER

Isella Vicini

beWarrant – Tinexta Innovation Hub
isella.vicini@tinextainnovationhub.com



"Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them."G.A. n 101178576