

About the Project

FlexFunction2Sustain project aims at creating an Open Innovation Test Bed for nano- functionalisation technologies that enable sustainable and smart plastics and paper based products. The ecosystem will support innovative SMEs and industries by drastically reducing the time-to-market for novel concepts, ideas and products.

Industrial Validation

- Relevant industrial use cases will validate and demonstrate the performance of the novel nano-functionalised plastic, paper and membrane surfaces and processes:
- Marine-degradable shampoo sachets
- Paper-based fresh food packaging
- Biodegradable security label
- Recyclable mono-polymer drink pouches
- Innovative plastic surfaces in cars Selective and switchable water filter membranes

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Open Innovation Ecosystem for Sustainable Nano-functionalized Flexible Plastic and Paper Surfaces and Membranes

Acronym: FlexFunction2Sustain
Code: H2020-DT-NMBP-03-2019
Type of action: Innovation action (IA)
Duration: 48 months



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Project Workplan

2024: Sustainable FlexFunction2Sustain OITB Operation

Jul 2022 and Jan 2023: Open Calls Cut-off dates for pre-commercial pilot projects

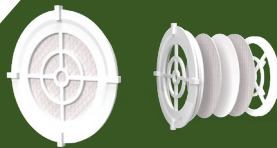
Oct 2022: Pilot lines upgraded for biodegradable plastics and increased productivity and reliability

Mid-2022: OITB Association created and ready to accept new members. Single Entry Point Company operational

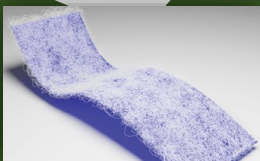
2021: OITB Member Pilot Facilities accessible for Customer(direct contracts)

BL Nanobiomed's Outcomes

Development of NanoFilters®



Development and Nano-Characterization of Antimicrobial Surfaces



Antimicrobial – Toxicity - Biocompatibility Services

Partners



AMIRÈS

Objectives

- Establish a self-sustainable Open Innovation Test Bed
- Prepare technical facilities for bio- and recyclable polymers
- Validate upgraded facilities in industrial use scenarios
- Define an innovation service portfolio aligned to SME/industrial needs
- Set up a profit company as Single Entry Point for accessing the Open Innovation Test Bed

Open Innovation Test Bed

The Open Innovation Test Bed (OITB) is a collaborative platform that provides shared facilities and services for developing, testing, and scaling nanotechnology and advanced materials in industrial settings. Its objective is to bridge the gap between laboratory validation and prototype creation by making these technologies accessible to companies and users. The OITB ecosystem offers easy access to holistic innovation support services through a Single Entry Point company, enabling users to collaborate with partners across multiple EU countries in their preferred language. This integration reduces the time and cost required to transform ideas into successful products.