



BIOMAT

Open Innovation Test Bed (BIOMAT-TB)

Innovative technologies and supporting services to develop advanced and bio-based polyurethane (PUR) foams and composites.

www.biomat-testbed.eu

Major Markets

BIOMAT is a highly innovative 4-year European Project aiming to enable, accelerate and facilitate the uptake of innovative nano-enabled bio-based cellular materials. This will be achieved by the establishment of an Open Innovation Test Bed (BIOMAT-TB) to provide Technologies Transfer and accompanied services to a wide range of European SMEs and industries.

BIOMAT consortium has identified a large demand for nano-enabled bio-polyurethane (bio-PUR) foams with very large markets. Thus, BIOMAT project selected three of these targeted markets for proof of concept: Building, Construction, Automotive, Furniture & Bedding.

BIOMAT

01
Automotive



02
Building &
Construction



03
Furniture
& Bedding



Technical Services

12 Pilot Lines for process optimization and up-scale production

- Production and functionalization of bio-based silica nanoparticles
- Functionalization of lignocellulosic materials
- Nanoformulation of adhesion promoters
- Production of Modified Cellulose NanoCrystals (MCNC)
- Functionalization of Crystalline Nano-Cellulose (CNC) and silica nanoparticles with biobased polyol for polyurethane foam composites
- Production of polyurethane foam panels
- Production of thermoset resin prepregs
- Bio-based, nano reinforced soft PUR-foam formulations
- Microwave-assisted chemical and chemo-enzymatic recycling of bio-PUR-based composites
- Formulation of bio-based polyols
- Production of bio-PUR aerogel materials
- Preparation of (nano) filled polyol/resin formulations

Support Services

- Products Characterization
- Development of sensors for in-line analysis of products based on NIR or UV spectroscopy in bioprocess & chemical process
- Evaluation of nanosafety and toxicity
- Digital Twin Pilot (DTP)
- Business Plan development
- Life Cycle Assessment (LCA) and Life Cycle Costing (LCC)
- Legal and Intellectual Property Support
- Mentoring for fundraising

The **BIOMAT-TB** will be operated via a **Single Entry Point (SEP)**

SEP WEB PLATFORM

SEP – The Single-Entry Point to the TB



Proof of Concept through the
OPEN TENDER

Open access to a wide range of physical facilities (pilot tests towards technology transfer) and to technical / horizontal services at fair conditions and competitive prices!

More information can be found in BIOMAT website. Stay tuned!

CUSTOMERS ‹ › BIOMAT SEP ‹ › SERVICES

Meet our Partners





CONTACT US

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements N^o. 953270