



Open Innovation Test Bed for nano-enabled Membranes



THE PROJECT

INNOMEM aims at developing a sustainable OITB (Open Innovation Test Bed) to foster deployment and scale-up of innovative nano-enabled membranes and their derived products.

Within the scope of INNOMEM, different types of membrane materials (polymeric, ceramic, metallic and nanocomposite), surface modification, membrane morphology and geometry and applications will be covered, providing for the first time a Single Entry Point (SEP) to provide the businesses in the sector with a one-stop-shop of the best available experts and technologies. European companies, mainly SMEs, will access through the SEP to develop, test and adopt, new high performance, multifunctional, safe and environmentally friendly nano-enabled membranes in a cost-effective and sustainable way while opening-up opportunities for demonstration of innovative nanomembranes in real life industrial problems (TRL7) and thus accelerating the market opening for these new products.

INNOMEM gathers some of the most recognised Membrane departments (>20) in Europe and acknowledged facilitators of technology transfer, corporate finance, funding and coaching, making available (i) the most promising and breakthrough manufacturing pilots and (ii) advanced characterization techniques and modelling together with (iii) non-technical services through this Test Bed: while relevant improvement metrics can be defined, the potential network of reachable stakeholders counts thousands of businesses on an international scale.

OBJECTIVES

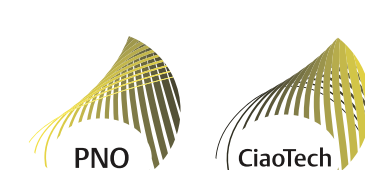
- Development and organization of the OITB: by upscaling/upgrading of 14 Pilot manufacturing lines, and developing associated Technological and non-technological services
- Set-up a Single Entry Point for easier access to SMEs and sustainable operation/ commercialization of the OITB service offer
- Validation of the upscaled/upgraded pilots and services through 10 Showcases
- Set-up of two waves of Open Calls to validate the SEP and ensure the sustainability of INNOMEM
- Development of the Democases selected in the Open Calls with the project partners in continuous collaboration with the applicants (Industries, in particular SMEs).

IMPACTS

INNOMEM will upgrade and up-scale 14 Pilot Lines facilities. These Pilot Lines and technological services come from past investments at Regional (RIS3), National and European levels. The goal is to upscale/upgrade them to achieve a future sustainable manufacturing ecosystem and to complement them with technological and non-technological services to support companies for further development of marketable nano-enabled membrane products.

■ Technical ■ Non-Technical

Membrane Productivity Improvement	>20%	10
Membrane Verification Improvement	>30% faster	>20
Co ₂ emission reduction per showcase	>40%	>100
Energy reduction per application	>40%	>300



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