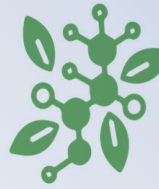




Oil Spill Project



BIOMASS-DERIVED POROUS MATERIALS FOR OIL-SPILL CLEANUP

introduction

water purification

removal

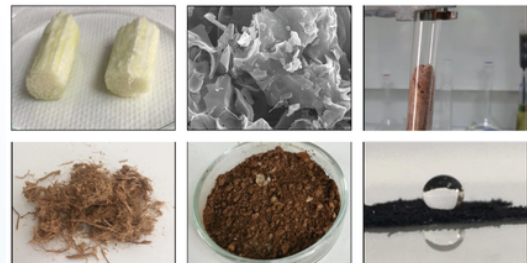


New Naval Ltd, Thrace Nonwovens & Geosynthetics S.A. and FORTH/ICE-HT have joined forces in a government funded research program to develop new, biomass-derived porous materials for oil spill cleanup.

The scope of the program is to identify low density, high porosity and hydrophobicity, eco-friendly materials that will provide highly efficient, low-cost oil absorption in oil spill recovery operations in a sustainable manner.

An innovative composite fabric will incorporate the absorbent material in the actual new product for cleaning oil spills. The product will have an improved cost/benefit ratio, ecological character and high domestic added value compared to existing commercial products.

Sustainability will be expressed through the selection of renewable biomass for the synthesis of adsorbents and the eco-friendly character of the new products through their life cycle.



Oil Spill Project

Advantages:
low density, high porosity, high hydrophobicity,
high oil sorption capacity, eco-friendly,
inexpensive

The project aims to create innovative industrial products with significant commercial and economic impact:

- Increase in non-woven sales for the world market
- Expansion of New Naval's product portfolio
- New investments in green solutions for increased sustainability
- Strengthening the position, reputation, and environmental profile of companies due to the promotion of high-tech products that differ from the competition
- Launching a new partnership between Thrace NG and New Naval



The Institute of Chemical Engineering Sciences (ICE-HT) was established and began operating at Patras, Greece in 1984 as an independent academic institute. In 1987, ICE-HT was incorporated into the structure of the Foundation for Research and Technology-Hellas (FORTH).

During its operation, ICE-HT has developed into a pioneering center for the promotion of high-quality scientific knowledge in the fields of Chemical Engineering. Currently, ICE-HT carries out around 50 major R&D projects in collaboration with industrial companies, universities, and research organizations from Greece, the EU, the USA, Japan, etc.

These projects are funded by national and European competitive Research Programs, as well as directly from industrial companies. The role of ICE-HT in the OilSpill project is the development of low-cost absorbent materials that can be directly scaled-up for industrial production. The overall approach includes the sustainability factor focusing on biomass-derived raw materials for oil absorbents synthesis.



Since 1978, New Naval has evolved to become one of the leading European manufacturers of Oil Spill Response and Marine Environment Protection equipment solutions, with state-of-the-art facilities in Lavrion, Greece, featuring multiple production lines, test tanks, offices and training center.

More than 85% of our equipment is designed and manufactured in-house by our expert R&D team and engineers under ISO certified production, with 75+ innovative products exported to over 32 countries across the globe.

Designed for both on land and at sea applications, our equipment specializes in Oil Spill Response, Marine Litter, Jellyfish and Sediment Containment.

Protection of the marine environment and our water resources is not only our mission; it is our commitment to our children and to our planet. We continuously invest our team, R&D and future-forward challenging Research Programs, resulting in flagship innovation such as our Clean Trash™ Marine Litter Collection system, approved and funded by EU's HORIZON2020.



Thrace Nonwovens & Geosynthetics S.A. produces technical fabrics, yarns and fibers made of polypropylene.

Thrace NG's strategy revolves around growth through long-term customer relationships, applying state-of-the-art technologies and investing in innovation. Some of the products produced by the company are: woven polypropylene fabrics of flat and circular weave, non-woven needle and spunbond fabrics, multi-strand yarns and tapes, knitted nets of high-density polyethylene tapes, single-stranded yarn, ropes, moisture control membranes, roofing membranes and specialized fabrics.

The fields of application of the above products are geosynthetics, agriculture/horticulture, construction, industrial fabrics, packaging, furniture & mattress, filter fabrics, hospital and work uniforms.



<http://oilspill.iceht.forth.gr>



Co-financed by Greece and the European Union

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