TECHNOLOGY OFFER

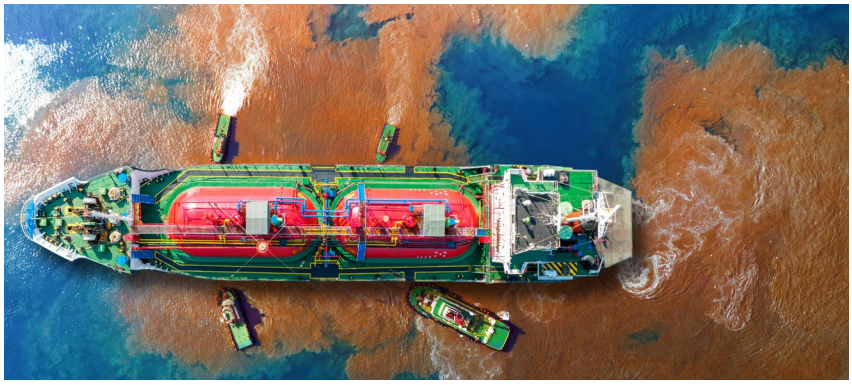
SYNERGISTIC BIOREMEDIATION COMPOSITION FOR HYDROCARBON POLLUTANT DEGRADATION

Background

Hydrocarbon pollution from anthropogenic activities threatens our marine ecosystems, whether by acute events of contamination, such as oil spills, or chronic contamination.
Bioremediation technologies are considering promising ecologic alternatives to the current physical-chemical techniques used to tackle hydrocarbon pollution.

Technology

The present disclosure relates to an innovative, effective and environmentally friendly synergistic bioremediation composition for hydrocarbon pollutants degradation, namely for oil spills and maritime fuels.
The formulation is composed of different autochthonous microorganisms - isolated from the Atlantic Iberian Peninsula Coast, supported by a cocktail of nutrients to stimulate microbial activity.



Advantages

- Use of autochthonous microorganisms, avoiding the introduction of additional chemical or biological additives to the ecosystem;
- Increased efficiency;
- Formulation can degrade, in natural seawater, between 50% and 90% of petroleum hydrocarbons from different origins (e.g. crude oil, turbine oil, diesel oil).

PATENT STATUS

European Patent Application
EP4491704
Priority date: 30.06.2023
Pending in Europe

DEVELOPMENT STAGE

TRL4 – Technology validated in lab
Further development for validation in large scale setups required.

APPLICATIONS

Oil spills and maritime fuel degradation.

COOPERATION

Research Cooperation Agreement;
Licensing Agreement.

KEYWORDS

Bioremediation
Hydrocarbon pollutant degradation
Microbial consortia

DEVELOPED BY

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