

**Sustainable Exploitation of bio-based
Compounds Revealed and Engineered
from naTural sources**



9th PRESS RELEASE

**Advancing Sustainable Marine Biotechnology
for Europe's Bio-Based Future**



The SECRETed project has received funding from the European Union's Horizon 2020 research and innovation programme under the Grant Agreement No. 101000794. This publication reflects only the author's views and the European Union is not liable for any use that may be made of the information contained therein.



Four Years of Innovation, Impact, and Collaboration

The EU-funded SECRETed project (H2020) has concluded after four years of pioneering research in marine biotechnology, sustainable bioprocessing, and bio-based innovation. Since its launch in June 2021, the project has united leading European universities, research organisations, and industry partners to harness marine microorganisms for the production of high-value biosurfactants and siderophores with applications across pharmaceuticals, cosmetics, agriculture, food, and environmental protection.

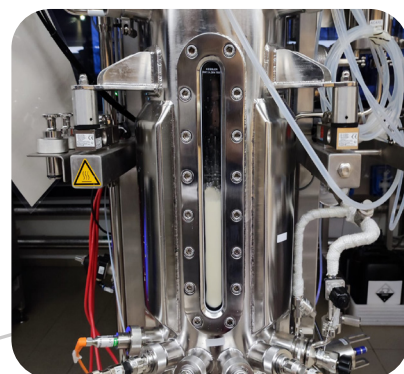
Over its duration, SECRETed developed an integrated framework that combines bioprospecting, advanced biotechnology, computational modelling, industrial scale-up, and sustainability assessment. This holistic approach accelerated the creation of safer and more sustainable bio-based solutions, advancing methodologies in strain engineering, omics-driven discovery, process optimisation, formulation, and multi-sector validation—solidifying marine biotechnology as a key contributor to Europe's circular economy.



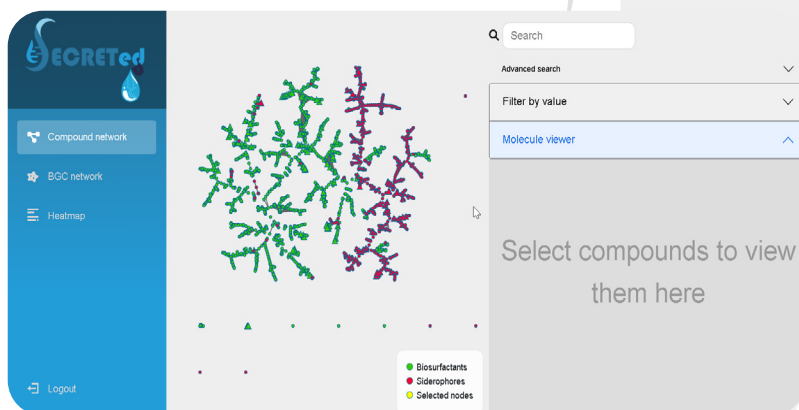
SECRETed implemented an extensive communication, dissemination, and social-awareness programme that greatly increased its visibility across Europe, including participation in over 60 conferences and events, close to 20 scientific publications, three Social Awareness Workshops, and broad outreach through social and traditional media. The project also played a leading role in establishing the A.I.M.S. Cluster, uniting four EU-funded initiatives working on natural bio-compounds and fostering long-term collaboration. As part of its final activities, the consortium presented its results at BIOKET 2025 in Brussels, engaging directly with hundreds of stakeholders from the bioeconomy, biotech, pharmaceutical, cosmetics, and agri-food sectors—strengthening connections and exploring pathways for future industrial adoption.

Key Achievements

- Identification and characterisation of new marine microorganisms capable of producing bioactive compounds.
- Development of a model-assisted platform for biosurfactant and siderophore production and optimisation.
- Successful laboratory and pilot-scale validation of selected bioprocesses.



- Comprehensive sustainability and techno-economic assessments supporting future industrial deployment.
- Demonstration of practical applications in multiple industrial sectors.
- Strong engagement with stakeholders, policymakers, industry leaders, SMEs, investors, and the scientific community.



A Foundation for Future Innovation

SECRETed has demonstrated the transformative potential of marine biotechnology in supporting Europe's sustainability goals, offering viable alternatives to conventional chemical processes and advancing greener, safer, and more resource-efficient production pathways. The knowledge, methodologies, datasets, and technological tools developed within the project provide a strong basis for continued research, industrial exploitation, and policy development.

The consortium expresses its sincere gratitude to the European Commission, all project partners, stakeholders, and the broader community whose support and contributions made SECRETed a success.

