



Blue Biotechnology Services Section Home

History

The term "blue biotechnology" emerged in the early 21st century, highlighting the distinction from other biotechnology sectors. However, the use of marine resources for various purposes dates back centuries. Indigenous cultures used marine organisms for food, medicine, and even dyes. In recent decades, advances in technology have enabled scientists to explore marine ecosystems more deeply, uncovering novel organisms and compounds.

Paul J. Scheuer

He is known for discovering bioactive compounds from marine organisms, leading to the development of new drugs.

2.

Margarita Stoeva

Her work on marine microbial diversity has expanded our understanding of potential applications in various industries.

Industrial Applications

1.

Cosmetics

Marine ingredients are used in skincare and beauty products due to their unique properties.

3.

Bioremediation

Marine microbes are harnessed to clean up pollutants and waste in aquatic environments.

5.

Biofuels

Microalgae can be cultivated to produce biofuels, reducing dependence on fossil fuels.

7.

Marine Biomaterials

Organisms like mollusks inspire the development of biomaterials for medical and industrial use.
9.

Bioplastics

Marine-based polymers offer biodegradable alternatives to traditional plastics.
11.

Marine Biotechnology Tools

Tools developed from marine organisms aid in biotechnology research.
13.

Marine Genomics

Genomic studies of marine organisms have revealed potential applications in medicine and industry.
15.

Marine-Derived Enzymes

Enzymes from marine organisms are used in various industrial processes.
17.

Food Additives

Marine-derived compounds enhance food quality and shelf life.
19.

Biomedical Materials

Marine organisms inspire materials for wound healing and tissue engineering.