

Panel E- ***MARINE BIOTECHNOLOGY AND SOCIETY***

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Conclusions and recommendations

Marine Biotechnology has a great potential for boosting emerging industries. It therefore represents an excellent opportunity to set up new solutions for policy, market and industrial sectors. The Mediterranean and Black Seas host high species richness, exceptional concentrations of endemic species and a diversity of easy-to-reach extreme environments that harbour unique forms of life (particularly microbes) and remarkable ecological processes. They also border highly diversified economic and socio-cultural systems with fast expanding markets, and so offer a most appropriate and effective scale to test biotechnology solutions responding to the various user communities' needs.

The Panel discussions saw opportunities for joint actions in a number of cross-cutting sectors such as:

- microbiological sampling (bioprospecting marine enzymes),
- bioactive molecules (e.g., processes for optimizing low environmental impact aquaculture systems, including probiotics, growth factors; for ex Fucoïdan),
- anoxic oil degradation (improving the use of oil-degrading marine bacteria),
- molecular-based tools for surveys
- new cloning/ expression vectors to shorten experimental paths,
- new culture methods,
- innovative market solutions for marine biotech products (i.e., chitosan),

Further Recommendations

Joint selection of target species and of comparative efforts;

Joint exploratory oceanographic cruises for bioprospection;

Joint legal support services for patent solutions;

Development of a CIESM Marine Biotech Network, with a specific webpage as a 1st step.