

Strengthening the potential of marine biotechnology in a Flemish and European context

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The changes facing marine environments due to human-driven factors mean that we are currently in the midst of a critical period for preservation of these ecosystems. Yet concurrently, the seas represent one of the most abundant sources of food and energy production on the planet, as well as containing the potential for countless innovations in drug production, industrial process development, ecosystem management and other related fields. Consequently, research into marine environments is incredibly important, both in discovering critical products and processes, and avoiding over-exploitation either for food production, aquaculture or any other uses.

Biotechnology has the power to realise this potential by providing knowledge and methodologies for sustainable exploration and use of marine biodiversity. Marine biotechnology challenges must be better defined and coordinated so that high quality research is more effectively utilised. This can be achieved through a number of carefully considered measures including common research and innovation agendas, better use of infrastructure, improved stakeholder participation and the identification of existing gaps and barriers to cooperation.

At a local level the ‘Mariene Biotechnologie Platform Vlaanderen’ⁱ was established, early 2012, to increase the visibility of marine biotechnology in Flanders where a significant number of scientists are involved in various research aspects. Also from the industry there is a great interest in marine biotechnology research and industrial applications. This platform may contribute to the general recognition of marine biotechnology research, lead to improved cooperation between experts from academia and the industry and promote interdisciplinary collaborations and networking.

At a European level, research activities are currently very fragmented. The ‘CSA MarineBiotech’ⁱⁱ project, a synergy between 11 partners and led by Dr Steinar Bergseth of the Research Council of Norway, was launched in 2011 for an 18-month period to improve the current level of collaborative research. It is designed to deliver the first concrete steps towards better coordination of relevant national and regional RTDI programmes. Reduced fragmentation and duplication, and paving the way for common programmes and cooperation in the provision and use of infrastructures through a future ERA-NET in marine biotechnology will be the result.

Marine biotechnology can and should make an important contribution towards meeting the Grand Challenges for the 21st century and the development of greener, smarter economies, central components of the Europe 2020 Strategy. Both local and European initiatives are therefore crucial to allow this potential to be realised.

References

¹ <http://www.mariene-biotechnologie.be/>

² <http://www.marinebiotech.eu/>