



Microorganisms Cell Factories for Biobased and Biodegradable Plastics

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Message from the Guest Editor

Plastic pollution is one of the main concerns worldwide because the accumulation of plastic objects and particles is negatively affecting wildlife, marine and terrestrial ecosystems and in general wellness of all living beings including human beings. To decrease plastic pollutions, several policies are being implemented worldwide including the reduction of plastic consumption, promotion of plastic recycling and the support of processes in which biodegradable plastics are made. Several microorganisms have revealed as potential producers of polymers able to replace those plastics obtained by chemical-based approaches. Biopolymers such as polyhydroxyalkanoates are produced in nature by numerous microorganisms thanks to fermentation of sugars or lipids. More than 150 different monomers can be combined within this family to give materials with extremely different properties, which behave as biodegradable plastics.

This Special Issue is dedicated to “Microorganisms as cell factories to produce biobased and biodegradable plastics.” Colleagues are cordially invited to contribute original research papers or reviews to this Special Issue.





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