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## Formidable approach to reduce sea pollution caused by heterogeneous hydrocarbons

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Sea pollution by introducing heterogeneous hydrocarbons due to human pursuit and accidental leakages during ship operations created drastic environmental issues all over the world. Although different synthetic methods are used to abate such pollution, but simultaneously it is affecting environment in distinct way. Using biosurfactants is one of the leading techniques for managing diverse pollution caused by heterogeneous hydrocarbons. Biosurfactants are surface active molecules synthesized by microorganisms. Due to various dominance over synthetically produce surfactant, the demand for biosurfactants has been increasing rapidly to replace their chemically synthesized counterparts. In present study, isolation and identification of biosurfactant producing bacteria were assessed from oil-spilled area of Arabian Sea, Mumbai (INDIA). To confirm the ability of isolates in Biosurfactant production, various biosurfactant activity assay tests were performed. Biosurfactants produced by some marine microorganisms have been paid more attention, particularly for the bioremediation of the sea, polluted by crude oil. Among all of the isolated strains, strain 1 (Bacillus sp.) exhibit the elevated biosurfactant activity. The isolated culture filtrate was found to be highly effective in microbial enhanced oil recovery (MEOR) using sand pack method.

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