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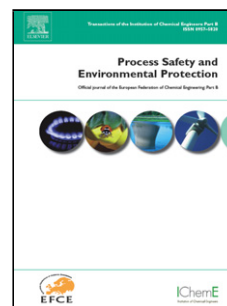
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Physicochemical characterization of *Enterobacter cloacae* C3 lipopeptides and their applications in enhancing diesel oil biodegradation

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Highlights

- Lipopeptides produced by *Enterobacter cloacae* C3 strain solubilize compounds present in diesel oil.
- *E. cloacae* C3 strain is able to grow in a mineral-salts medium supplemented with diesel oil.
- The degradation of diesel oil by *E. cloacae* strain reached a maximum value of 48% after about 15 days of incubation, in the presence of 1 g/l lipopeptides C3.
- The excellent physicochemical properties of lipopeptides C3 suggest that are potent surface active agent and make the strain an efficient bioremediation tool for use as microbial-enhanced oil recovery.

Abstract

Enterobacter cloacae C3 strain was isolated from a soil contaminated by natural-gas condensate in Sfax City, Tunisia. This strain was selected for further studies based on its high surface activities. The physicochemical properties and stability of produced biosurfactants

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