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(57) Abstract :

ABSTRACT: Title: A Magnetite-Based Green Microalgae Nano-composite and Method of Synthesising the Same The present disclosure proposes a magnetite-based green microalgae nano-composite for the treatment of wastewater and degrading insecticide. The magnetite-based green microalgae nano-composite comprises a green microalgae powder and an electrochemical sludge. The electrochemical sludge comprises magnetite (Fe₃O₄). The green micro algae is (MTCC-2581)-pseudomonas auriginosa. The proposed method reuses the solid waste and synthesizes it into the magnetite-based green microalgae nano-composite to degrade the toxic pollutants. The proposed method removes the insecticides and other pollutants from the effluents released into the environment. The method for treating agricultural effluents to remove the pollutants under optimum conditions. Further, the used magnetite-based green microalgae nano-composite can again be discarded into the environment, as the toxic is been converted into non-toxic compounds.

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