

(54) Title of the invention : A METHOD OF PREPARATION OF TITANIUM COATED GRAPHITE-CARBON NANOTUBE (CNT) ACRYLONITRILE-BUTADIENE-STYRENE (ABS) NANO COMPOSITE FOR DYE-REMOVAL

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(57) Abstract :  
 ABSTRACT: Title: A Method of Preparation of Titanium coated graphite-Carbon Nanotube (CNT) Acrylonitrile-Butadiene-Styrene (ABS) Nano composite for Dye-Removal The present disclosure proposes a method for preparing titanium coated graphite-carbon nanotube (CNT) acrylonitrile-butadiene-styrene (ABS) Nano composite for dye-removal. The titanium was coated on graphite using the electrolysis method. The titanium coated graphite nanoparticle was modified with CNT-ABS Nano composite by a sequence of steps, that is, sensitizing, activating, and coating with prior cleaning step. The titanium coated graphite with and without CNT-ABS Nano composite was characterized by using X-ray diffraction, Fourier transform infrared spectroscopy, scanning electron microscopy, and transmission electron microscopy. The dye absorption efficiency is checked with and without Nano composite of CNT-ABS. Malachite green dye was used as organic toxic waste. The proposed method for preparing titanium coated graphite CNT-ABS Nano composite has better absorbance compared to titanium on graphite.

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