



Green Synthesis of Cadmium Sulfide (CdS) Nanoparticles By Bacteria and Fungus & Their Characterization

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ABSTRACT: Cadmium Sulfide is an inorganic possessing semiconductor properties have unique potential for application in emerging field of nano-photonics & nanoelectronics. Physical methods are very expensive approach to synthesize nanoparticles & chemical approach uses toxic reducing agents and surfactants which make the surface of the nanoparticles toxic. To produce nanoparticles efficiently and cheaply biological methods for synthesis are being explored. In the present work we describes the synthesis of nanoparticles by microbes using biological techniques which was accomplished at room temperature. Their characterization were performed using visual analysis, U.V analysis and AFM (Atomic Force Microscopy) with their band gap determination and particle size determination. Photo-catalytic dye-degradation were also executed, to biologically synthesised cadmium sulfide. © 2014 iGlobal Research and Publishing Foundation. All rights reserved.

Conference Proceedings: International Conference on Life Sciences, Informatics, Food and Environment; August 29-30, 2014

Indo Global Journal of Pharmaceutical Sciences(ISSN 2249 1023 ; CODEN- IGJPAI; NLM ID: 101610675) indexed and abstracted in EMBASE(Elsevier), SCIRUS(Elsevier),CABI, CAB Abstracts, Chemical Abstract Services(CAS), American Chemical Society(ACS), Index Copernicus, EBSCO, DOAJ, Google Scholar and many more. For further details, visit <http://iglobaljournal.com>