

Environmental Assessment of Shakkar and PENCH River of Chhindwara District & Photodegradation of River Water by Nano Catalyst

Rani Barhaiya¹ and Dr. O. N. Choubey²

Research Scholar, Department of Chemistry, Barkatullah University, Bhopal, M.P.,¹
Principal, Government Narmada Mahavidhyalaya, Narvadapur, M.P.²

Abstract: *In this research paper deals with work discussing about photo-degradation of river water by nano catalyst. This review discusses the utilization of photocatalysis for the degradation of water pollutants. Emphasis is placed on TiO₂ nanoparticles as a benchmark photocatalyst for the destruction of microorganisms and the degradation of a wide variety of organic compounds like phenolics, dyes, pesticides and pharmaceuticals. The mechanism of photocatalytic degradation is elucidated, underlining the importance of reaction kinetics for the efficient design of the processes. The effects of different reaction parameters on photocatalytic degradation are discussed. Surface modification of TiO₂ for visible light response doping and heterostructuring is outlined. Finally, the challenges in the implementation of this technology for "real" waste water systems are summarized. Photo-degradation is the process of alteration of materials by light, refers to the combined action of light and air. It is usually oxidation and hydrolysis. Nano Catalyst is used for water purification. In this research paper work we are going to discuss about water purification of Shakkar & Peach river of Chhindwara District, Mphilisi M. Mahlambi (2015). The South African National Water Act (Act number 36 of 1998) specifically states that water resources must remain fit for use on a sustainable basis and that their quality must be constantly monitored. Therefore the availability of water should be based not only on the quantity but also on the quality of the available water. However, due to agricultural, industrial, and domestic activities the quality of river water or groundwater continues to deteriorate due to pollution by hazardous materials.*

Keywords: Environmental, Assessment, Shakkar, PENCH River, Chhindwara District, Photodegradation, Nano, Catalyst etc

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