



REVIEW PAPER



A REVIEW OF FUTURE PERSPECTIVES IN GREEN NANOTECHNOLOGY FOR POLLUTION CONTROL

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Abstract:

Green nanotechnology holds a lot of hope for future attempts to stop pollution. It makes use of eco-friendly processes to create nanomaterials that may be applied to a range of pollution remediation approaches, such as air, soil, and water cleaning. By removing certain pollutants from polluted settings, these materials are designed to improve the quality of the air, water, and soil. Globally, wastewater contamination is a serious hazard to both the environment and public health. This study aims to provide light on the evolution of nanotechnology, including both the present and next phases. High surface area-to-volume ratios and customizable physicochemical characteristics are two special benefits of nanotechnology that make it possible to create remediation solutions that are both extremely effective and reasonably priced. Current developments in this subject include a range of nanomaterials, such as nanoparticles, nanocomposites, and nanomembranes, that are intended to remove a variety of pollutants, including organic contaminants, microbes, and heavy metals. This study examines the current and potential applications of nanotechnology in the cleanup of wastewater pollutants. The current analysis examines the developing patterns and encouraging opportunities for enhancing wastewater pollution removal efficiency via the use of nanoscale materials and methods.

Keywords : Nanotechnology; Pollution Control; Catalysis; Environmental Remediation