

## **Importance of Photocatalysts in Environmental Remediation Application**

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In today's life, environmental contamination has far reaching negative significances in the lives of humans. Removal of organic pollutants, which have a toxic effect on the well-being of manhood, has simply become the center point of exploration efforts in today's scientific world. Contaminants that are produced from several sources pose severe environmental problem as the bio-degradation of these contaminants is frequently very slow and conventional treatment are mostly unsuccessful and not ecologically compatible. In this regard, application of photocatalysis, chiefly photocatalysis using semiconductor particulate system, appears to be the most attractive mean than the more predictable chemical oxidation methods for removal of toxic compounds to non-hazardous product. This is because of the fact that semiconductors are:

- (i) Economically low in cost
- (ii) Non-toxic
- (iii) High surface area
- (iv) Better light absorbing ability
- (v) Better multi electron transfer process.
- (vi) High Stability

Additionally, semiconductor particles recuperated by filtration or centrifugation or when halted in a fluidized bed reactor retain much of their native activity after repeated catalytic cycle. The common photooxidizing and photocatalytic properties of suspensions of semiconducting

particles are well established in the literature. In this newsletter, we highlighted the important factors of better photocatalytic materials and we highlighted about that. In order to produce better photocatalytic material to degrade organic pollutant the concentration on above mentioned parameters should be increased and that will lead to the successful fabrication of better photocatalytic materials.