Available online at www.joac.info

ISSN: 2278-1862



Journal of Applicable Chemistry



2019, 8 (3): 1001-1011 (International Peer Reviewed Journal)

Photocatalytic Applications of Semiconducting Metal oxide Materials: A Review

D. Nathiya¹, N. M. I. Alhaji¹*, M. Kavin Micheal², Mayuri Meshram^{2,3} and A. Ayeshamariam²

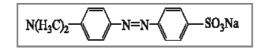
 Department of Chemistry, Khadir Mohideen College, Adirampattinam-614701, INDIA
Department of Physics, Khadir Mohideen College, Adirampattinam-614701, INDIA
Integrated Science Education and Research Centre (ISERC), Santiniketan, Bolpur, West Bengal-731235, INDIA Email: nmialhaji34@gmail.com

Accepted on 25th April, 2019

ABSTRACT

Semiconducting metal oxides are one of the important materials of a special attention with photocatalytic properties to clean water and preserve plants. To remove the impurities and dyes from effluents water technological approaches take the important tool to perform the purification on photocatalytic surfaces. Metal oxides such as ZnO, WO₃, TiO₂, CeO₂ AgO, Ga₂O₃, AgGaO₂ and ZnGa₂O₄ use their photocatalytic properties to clean water and soil and to inhibit the growth of undesirable micro-organisms, mold, algae, lichens and fungi. This review focuses about the reported research analyses of based on photocatalytic properties of metal oxides.

Graphical Abstract



Methyl orange

Keywords: Photocatalytic degradation, Water purification, Semiconducting oxides, Metal oxides.