

Photocatalytic degradation of toxins secreted to water by cyanobacteria and unicellular algae and photocatalytic degradation of the cells of selected microorganisms

Andrzej Makowski, Władysław Wardas

Excessive algal growth in drinking water sources is responsible for toxin generation, and disinfection-by-product formation. In the photocatalytic degradation of organic contaminants, titanium dioxide has been found to be highly efficient in the generation of hydroxyl radicals, which are considered responsible for degradation of toxins and inactivation of water-borne microorganisms. The paper reviews the investigation about photocatalytic degradation of hepatotoxins and inactivation of bacteria, viruses and protozoan parasites.