ABSTRACT OF THE DISCLOSURE

PHOTOCATALYST AND PROCESS FOR PURIFYING WATER WITH SAME

A photocatalyst comprising inorganic porous particles having photosemiconductor particles deposited on at least a part of the surfaces and at least a part of the walls of the pores of the particles, and a photocatalyst comprising inorganic porous particles having photosemiconductor particles and microorganisms possessing water purification activity deposited on at least a part of the surfaces and at least a part of the walls of the pores of the particles are disclosed. The photocatalysts have a stable photocatalytic function for an extended period of time and easy separability from the treated water system so that it is useful for various photocatalytic reactions. Particularly they can be effectively used in water purification, and allow annihilation of harmful organisms such as algae, fungi and bacteria, decomposition of deleterious materials, as well as deodorization and decoloration to be conveniently and easily accomplished.