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Special Issue on

The Power of Light: Functional Surfaces for Safer Environment

CALL FOR PAPERS

Photons are nowadays a powerful tool for environmental remediation. Light enhanced advanced oxidation technologies are used during the last decades to degrade diverse organic pollutants. Supported photocatalysts emerged during the last years as effective against many recalcitrant pollutants.

During the last decade, there has been a growing interest in the design, synthesis, and characterization of efficient bactericide coatings due to the increasing resistance of toxic bacteria to antibiotics. Indoor environment as hospitals and public areas (buses, trains, planes, administrations, etc.) can easily bring infections to their users. This is a growing problem for human health with its associated higher health care costs. For instance, *E. coli*, methicillin-resistant *Staphylococcus aureus* (MRSA), and *P. aeruginosa* are the major causes for nosocomial hospital acquired infections (HAI) accounting for 70% of the bacteria infecting the people contracting with hospital acquired infections (HAIs). Antibacterial coatings are drawing attention in many industrial applications related to medicinal devices, food processing, water treatment, ceramics, paints, and many other fields.

We invite investigators to contribute original research articles as well as review articles that seek to address the mechanisms and significance of photocatalytic antibacterial surfaces for safer environment. A particular interest will be given to papers exploring innovative photocatalysts and surfaces engineering.

Potential topics include but are not limited to the following:

- Antibacterial photocatalytic textiles
- Antimicrobial surfaces
- Surfaces engineering/pretreatment for indoor environment
- Innovative antimicrobial polymers
- New generation of antibacterial ceramics
- Light enhanced dyes degradation
- Photons and water treatment

Authors can submit their manuscripts through the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/ijp/plfs/.

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