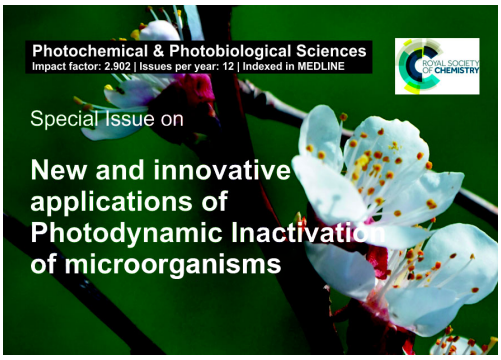

Special Issue on

New and innovative applications of Photodynamic Inactivation of microorganisms

in Photochemical & Photobiological Sciences

Call for Papers

The antimicrobial effect of Photodynamic Inactivation (PDI) is based on the light-induced and photosensitizer-mediated overproduction of reactive oxygen species in harmful or unwanted target cells. This approach aroused special attention since it allows for killing of a wide spectrum of microorganisms irrespective of their resistance to conventional treatment with antibiotics. Up to date, medical applications of PDI for management of clinical conditions from 'head to feet' are on their way to approval by health agencies.

Microbial pathogens trouble mankind in practically all habitats. Motivated by the outstanding success of PDI in human medicine, novel and very promising applications are constantly identified and explored by the research community, with nearly no limits of imagination and creativity. So, for example, Photodynamic Decontamination of food based on natural photosensitizers was recently introduced as efficient tool for improvement of alimentary safety. Furthermore, photodynamic procedures are applicable as photo-insecticides or to disinfect sensitive surfaces or water.

We invite investigators to contribute original research papers as well as review articles to this special issue that will stimulate the efforts to expand the convincing benefits of the antimicrobial photodynamic approach into new fields of applications apart from human medicine.

Potential topics include, but are not limited to:

* Application of PDI in veterinary medicine
* Photodynamic Decontamination of foodstuff
* Wastewater treatment by means of PDI
* Photo-insecticides
* Treatment of aquacultures to avoid microbial contaminations
* Photoactive textiles
* Disinfection of surfaces by photodynamic procedures
* Photosterilization of medical devices
* Self-disinfecting materials containing photosensitive molecules
* New light sources optimized for Photodynamic Inactivation

Before submission, authors should carefully read over the journal's Author Guidelines, which are located at http://www.rsc.org/journals-books-databases/journal-authors-reviewers/. Prospective authors should submit an electronic copy of their complete manuscript through the journal's submission system at https://mc.manuscriptcentral.com/rsc.

This issue of Photochemical & Photobiological Sciences will be published as a virtual special issue, which ensures rapid reviewing, fast publication of accepted manuscripts and a flexible time frame for submission:

Manuscript submission window: September 2018-February 2019
Publication Date: after acceptance, within the first available issue of the journal
Virtual issue will be populated progressively as papers are accepted

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