Special Issue

New Strategies against Microbial Biofilms

Message from the Guest Editor

Microbial biofilms, communities of microorganisms that are attached to a substratum and encased in a self-produced extracellular matrix, are the most common state of microbial growth found in nature and in patients infected with pathogenic organisms. Planktonic cells and sessile cells are genetically identical but express different genes. Sessile cells exhibit an altered phenotype often correlated with antibiotic resistance. Therefore, the discovery of innovative strategies to treat microbial biofilm is of great interest. This Special Issue aims to highlight the research on new strategies for harmful biofilm prevention. The following topics will be included, amongst others:

- -New antimicrobial strategies against microbial biofilm;
- -The immobilization of antimicrobial compounds for the development of films with anti-biofilm properties;
- -Novel nanoparticles for the delivery of antimicrobials active against bacterial or fungal biofilm;
- -Coatings releasing antibiofilm agents;
- -Experimental research to quantify and evaluate the activity or distribution of sessile organisms

Guest Editor

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Deadline for manuscript submissions

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Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.
Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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