

Special Issue on
**Advances in Research towards New Strategies against
Fungal and Polymicrobial Biofilm**

CALL FOR PAPERS

Infectious diseases represent a substantial proportion of deaths worldwide. Biofilms are the most common state of microbial growth found in nature and in patients infected with pathogenic organisms. Biofilm cell communities are more resistant to antimicrobial drugs than planktonic cells. Many medically important fungi produce biofilms. Fungal biofilms, an important clinical problem, are ubiquitous, located in the human host, including the oral cavity, respiratory tract, gastrointestinal tract, and urinary tract, wounds, and on biomedical devices. Biofilms are often polymicrobial, formed from eukaryotic and prokaryotic pathogens. Bacterial-fungal interactions are relevant to human disease. Fungal biofilms are recalcitrant to the majority of the current arsenal of antifungal agents. Polymicrobial interactions determine the cellular and biochemical composition of the biofilm and influence drug and host resistance and virulence. Therefore, the discovery of novel compounds and innovative strategies to treat fungal biofilms and polymicrobial biofilm is of great interest. The study of polymicrobial biofilm using animal models and proteomic and genomic approaches may help to discover antibiofilm drugs or new strategies that target the multiplicity of species.

This special issue aims to highlight the recent medicinal chemistry research on new trends and on new antifungal drugs against fungal and polymicrobial biofilm. Both *in vitro* and *in vivo* studies are encouraged. We invite authors who are leading experts in the field to contribute with original articles that are not yet published or that are not currently under review by other journals for promotion, integration, and dissemination. The publication of articles in this special issue should provide a forum for researchers to share their recent findings and offer exposure of the published articles to the scientific community. We hope that the special issues will advance knowledge and stimulate new collaborations and new research directions.

Potential topics include but are not limited to the following:

- ▶ Drugs active against fungal biofilm and their mode of action
- ▶ Drugs active against polymicrobial biofilm and their mode of action
- ▶ Overcoming the adverse effects of drugs active against fungal or polymicrobial biofilm
- ▶ Novel nanoparticles for the delivery of drugs active against fungal or polymicrobial biofilm
- ▶ New discoveries in natural occurring agents active against fungal or polymicrobial biofilm
- ▶ Discovery of new synthetic compounds active against fungal or polymicrobial biofilm

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jchem/medicinal.chemistry/artn/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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