

## Special Issue

# Biomolecules in the Treatment of Biofilm-Related Diseases

### Message from the Guest Editors

Biofilms are adhesive macrostructures build by various microorganisms together with produced by them extracellular matrix. Studies on classic antimicrobial agents such as antibiotics and disinfectants indicate that microorganisms enclosed in a biofilm are 10 to 1000 times more resistant to their action compared to planktonic form of the same microorganism. This poses a challenge to conventionally used antimicrobials and indicates the need for developing new therapies. Newly developed strategies to combat biofilms on one hand should effectively break the biofilm barrier, on the other, overcome gradually increasing resistance mechanisms, by interfering with new molecular targets.

In this issue, we would like to take up the topic of natural origin substances, which can provide therapy targeted on treatment of biofilm related diseases by interfering with biofilm formation on all stages of this process. The topic of interest includes, but is not limited to: antimicrobial peptides, enzymes, natural-origin small molecules as well as biologically active nanomaterials.

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### Guest Editors

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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