



Specialized Coatings Interacting with Human Pathogens

Guest Editors:

Dr. Thomas D. Michl

School of Engineering, University of South Australia, Adelaide, Australia

Dr. Akash Bachhuka

University of Adelaide, Adelaide, Australia

Dr. Behnam Akhavan

School of Biomedical Engineering and School of Physics, The University of Sydney, Sydney, Australia

Deadline for manuscript submissions:

closed (31 December 2020)

Message from the Guest Editors

Even ever-improving sanitation and preventative care have done little to lower the baseline-threshold of implant-related infections. Furthermore, with the increasing use of medical implants in the general population, this baseline of infections will contribute to a rising number of actual cases of infections. Thus, to better understand how to reduce the number of infections, we must first understand how human pathogens attach to surfaces and then subsequently colonise them. This understanding goes then herein with how we can ward off pathogens from doing what they have evolved to do by using novel coatings.

The main subject of this Issue seeks manuscripts which use specialised coatings that either study, prevent or eradicate human pathogens from surfaces. Manuscripts which use thin-film deposition methods, such as PVD or PECVD, are particularly encouraged. The same applies for manuscripts that provide a mechanistic understanding of how human pathogens colonise surfaces & form biofilm and how this process can be changed via specialized coatings.

Keywords: Bacteria; fungi; biofilm; medical device; infection prevention; coatings; plasma polymerization; PECVD; PVD





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Nicholas Dixon

School of Chemistry and
Molecular Bioscience, University
of Wollongong, Wollongong, NSW
2522, Australia

Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. *Antibiotics* is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (General Pharmacology, Toxicology and Pharmaceutics)

Contact Us

Antibiotics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/antibiotics
antibiotics@mdpi.com
X@antibioticsmdpi