



## Nature Inspired Antibiotic Adjuvants to Face the Problem of Multidrug Resistance and Biofilm Infections

Guest Editors:

### Dr. Anabela Borges

Laboratory for Process Engineering, Environment, Biotechnology and Energy (LEPABE), Department of Chemical Engineering, Faculty of Engineering, University of Porto, 4099-002 Porto, Portugal

### Dr. Manuel Simões

LEPABE, Department of Chemical Engineering, Faculty of Engineering, University of Porto, Rua Roberto Frias, s/n, 4200-465 Porto, Portugal

Deadline for manuscript submissions:

**closed (31 March 2022)**

### Message from the Guest Editors

Dear Colleagues,

Multidrug resistance to antibiotics reached a large scale, threatening the effective prevention and treatment of an ever-increasing range of infectious diseases. Biofilm-related infections are one of the leading reasons for the increased antibiotic resistance. Despite the global concern and actions to counteract this big problem, the World Health Organization warns for the lack of innovation and investment for R&D in antimicrobial chemotherapy. This Special Issue aims to gather original research papers or high-quality reviews on these subjects. Contributions of interest include (but are not restricted): the identification and development of new natural-based products to improve/recycle antibiotic activity against microorganisms in planktonic state and in biofilms; the antimicrobial mode of action of natural-based products; antivirulence mechanisms to control infections through non-antimicrobial effects; drug-repurposing strategies for antimicrobial chemotherapy; bioinformatics in antibiotic development.





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 & Pharmacy*) / CiteScore - Q1 (*General Pharmacology, Toxicology and Pharmaceutics*)

## Contact Us

---

*Antibiotics* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

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