Special Issue

Exploring Synthetic Organic Chemistry to Combat Pathogenic Infections

Message from the Guest Editors

The global rise in antimicrobial resistance has intensified the need for new and effective strategies to treat infectious diseases. While traditional antibiotics continue to lose efficacy, synthetic organic chemistry emerges as a powerful tool in the discovery and development of novel antimicrobial agents. This Special Issue aims to showcase recent progress in the synthesis of bioactive compounds designed to target resistant and emerging pathogens. Topics of interest include, but are not limited to, the following:

- Synthesis of novel antimicrobial agents.
- Synthetic modifications of natural products.
- Structure–activity relationship (SAR) and/or molecular docking studies for antimicrobial molecules.
- Biological evaluation of the antimicrobial potential of new compounds.
- Multifunctional and resistance-bypassing compounds.
- Targeted drug delivery strategies involving new synthetic molecules.

Through this Special Issue, we seek to highlight the essential role of synthetic chemistry in the development of next-generation antimicrobials and to encourage collaboration between chemists, microbiologists, and clinicians.

Guest Editors

Dr. Cătălin Araniciu

Dr. Ioana Ionuț

Dr. Gabriel Marc

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Antibiotics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antibiotics@mdpi.com

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About the Journal

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.

Editor-in-Chief

Prof. Dr. Nicholas Dixon
School of Chemistry and Molecular Bioscience, University of Wollongong, Wollongong, NSW 2522, Australia

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