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## Design and Discovery of New Antibacterial Agents: Past, Evolution, and Perspectives

Guest Editor:

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Deadline for manuscript  
submissions:

**15 December 2024**

### Message from the Guest Editor

Dear Colleagues,

Millions of human lives are being saved annually throughout the world because of antibiotics, be they natural (i.e., produced by microorganisms in their own habitat) or of synthetic origin. However, concern about antibacterial resistance increased in the late 1990s, and since then, many governmental and agency reports have advised decreasing use of antibacterials, appropriate choice of antibacterials and regimens, prevention of cross-infection, and development of new antibacterials. The dearth of new medicines effective against antibiotic-resistant bacteria represents a growing global public health concern. This Special Issue invites manuscript submissions (research articles or reviews) to enlighten the scientific community on recent studies regarding the synthesis and/or biological evaluation of new antibacterial agents. In vitro and in vivo studies are encouraged, as well as papers regarding clinical studies, molecular modeling studies, ADMET studies, nanotechnology-based innovation, biomaterials, nanomaterials, hybrid materials, core-shell materials, thin films, and self-assembling systems for the development of new antibiotics.



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# Special Issue



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## Editor-in-Chief

### Prof. Dr. Nicholas Dixon

School of Chemistry and  
Molecular Bioscience, University  
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## 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.

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