

Special Issue

Selenium, Metals and Trace Elements in Novel Antimicrobial Compounds

Message from the Guest Editor

The search for novel antibiotics and antifungal agents is crucial today due to emergence of multidrug-resistant bacteria and fungi. We urgently need to open innovative approaches in search of novel antibiotics that differ from the classic one of seeking novel drugs based on modifications of existing antibiotics or in natural products. In this context and according to previous works, a promising strategy is designing novel compounds that include elements typically not found in organic compounds, such as selenium, tellurium, silver, palladium, or organic complexes of metals such as ruthenium, rhodium or zinc, among others. A second approach is preparation of metallic or non-metallic nanoparticles of these elements, and a third possibility is the use of their inorganic salts, either alone or in combination with existing antibiotics. In this Special Issue, we aim to present an overview of the recent discoveries in the use of all these elements in antimicrobial research. Articles that report the antibacterial or antimicrobial activity of compounds, nanoparticles, or salts of elements non-typically found in standard antibiotics and antifungal agents are welcomed.

Guest Editor

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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 disciplines 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

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