Special Issue

Ionic Liquids as Novel Antimicrobial Agents

Message from the Guest Editors

Monic liquids (ILs), which are organic salts with melting points below 100 °C. One property of ILs was their antimicrobial, antifungal and virucidal activity. The great advantage of ILs in this context is the strong correlation between their chemical structure and physicochemical properties such as bioavailability, biodegradability, solubility and antimicrobial activity. On the flipside, the possibility of synthesizing > 1018 new ILs by structural variation makes traditional screening with experimental studies unfeasible to identify new compounds with the desired properties. It is necessary to identify structureactivity relationships (SARs) to predict IL antimicrobial activity and to elucidate their mode of action at the cellular level. This Special Issue invites studies that not only report antimicrobial activity data of novel ILs but also contribute to a deeper understanding of the correlation between IL structure and their mechanism of action at the molecular level.

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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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