An antibacterial is a compound or substance that kills or slows down the growth of bacteria. The term is often used synonymously with the term antibiotic(s); today, however, with increased knowledge of the causative agents of various infectious diseases, antibiotic(s) has come to denote a broader range of antimicrobial compounds, including antifungal and other compounds.

With advances in medicinal chemistry, most of today's antibacterials chemically are semisynthetic modifications of various natural compounds. These include, for example, the beta-lactam antibacterials, which include the penicillins (produced by fungi in the genus Penicillium), the cephalosporins, and the carbapenems. Compounds that are still isolated from living organisms are the aminoglycosides, whereas other antibacterials—for example, the sulfonamides, the quinolones, and the oxazolidinones—are produced solely by chemical synthesis. In accordance with this, many antibacterial compounds are classified on the basis of chemical/biosynthetic origin into natural, semisynthetic, and synthetic. Another classification system is based on biological activity; in this classification, antibacterials are divided into two broad groups according to their biological effect on microorganisms: bactericidal agents kill bacteria, and bacteriostatic agents slow down or stall bacterial growth.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on exploring antibiotics.

Authors should read over the journal’s Author Guidelines carefully before submission, Prospective authors should submit an electronic copy of their complete manuscript through the journal Paper Submission System.

Please kindly notice that the “Special Issue” under your manuscript title is supposed to be specified and the research field “Special Issue-Antibiotics Research” should be chosen during your submission.

According to the following timetable:

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