Special Issue

Carbohydrate Based Small Molecules: Sweet Spots in Medicinal Chemistry

Message from the Guest Editor

Carbohydrates play a vital role in numerous physiological activities as the main energy carriers and information molecules in organisms. In addition, many sugar-based small molecules, including amino sugars, are widely found in various medical and agricultural antibiotics. They play a vital role in the fight against diseases, and significantly increase and enhance the yield and quality of crops. The water solubility, biocompatibility and metabolic stability of these compounds have attracted extensive attention in the field of biomedicine in recent years. Carbohydrate derivatives modified from simple saccharide monomers by synthesis not only maintain the original biophysical properties of the group, but also endow or enhance the functional characteristics in terms of druggability. We have sufficient reason to believe that with the deepening of research, carbohydrate-based small molecules will have bright prospects in the field of medicinal chemistry. This Special Issue aims to provide a broad overview of the latest developments in pharmaceutically relevant carbohydrate-based small molecules.

Guest Editor

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Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

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