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Current Advances in Phosphate Bioisosters and Mimics

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Message from the Guest Editors

The phosphate function is of high importance in a plethora of biological events. For instance, phosphates are involved in regulation of the kinase activity or nucleic acid replication. Therefore, the design of phosphate-based drugs has become an attractive strategy. However, the development of biological active-phosphate-containing molecules is still challenging due to the enzymatic lability of this residue in vivo and the poor cellular penetration of the charged phosphate. To overcome these limitations the implementation of bioisosters and mimics is an appealing strategy to open new avenues for the discovery of new bioactive molecules and drugs. In this Special Issue, we will highlight the recent progress made in the field of phosphate biosisosters and mimics. We welcome contributions that describe new progress in the synthesis of phosphate bioisosters or mimics, newly designed bioisosters, and new applications of these mimics in the quest for bioactive molecules. In addition, review articles from experts in the field will be considered.

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Message from the Editor-in-Chief

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