

Special Issue

Peptide Synthesis and Drug Development: Exploring Progress and Potential

Message from the Guest Editors

Peptides are becoming increasingly important in a variety of fields such as drug development, immunology, sensing, and biomaterials. Because of their significant binding footprint with therapeutic targets, peptides are regarded as superior to their small-molecule counterparts. On the other hand, they encounter stability challenges due to enzymatic degradation. Ongoing efforts to harmonise interdisciplinary fields have been instrumental in improving the pharmacokinetic and pharmacodynamic profiles of peptides. Out of roughly 102 approved peptides, since 1923, a mere 11 have been found to be suitable for oral administration. This represents only 3.4% of all approvals. While traditional chemical methods have been employed to improve peptide stability, there has been a lack of exploration into innovative chemistries. For this Special Issue, we invite authors to present and/or review novel strategies for addressing this challenge. This includes introducing new synthetic methodologies and formulation strategies. Additionally, computational studies aimed at achieving the same objective are also encouraged.

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Editor-in-Chief

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