

Special Issue

Peptide and Protein Chemistry: Design, Synthesis, and Applications

Message from the Guest Editor

Peptide and protein chemistry has evolved and matured remarkably in the past few decades, and significant momentum has developed in the creation of novel synthetic peptides and proteins for basic research and therapeutic development. The ability to modify virtually any desired residue at the atomic level has enabled the production of peptides and proteins with novel physicochemical properties that are difficult to obtain via standard molecular biology approaches. Recent advances in solid-phase synthesis, chemoselective ligation methods, protecting group chemistry, and post-synthetic modifications have enabled the preparation of complex and uniquely modified biomolecules for a variety of applications. This special issue of *Molecules* highlights the recent progress and novel applications now available in peptide and protein chemistry. Original research is welcome in the form of articles or minireviews that discuss new chemistry and methodologies for synthesizing and functionalizing peptides and proteins, along with research on their applications in various fields.

Guest Editor

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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 30th 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 all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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