



Cell-Penetrating Peptides (CPPs)

Guest Editor:

Dr. Rakesh Tiwari

Department of Basic Medical
Sciences, College of Osteopathic
Medicine of the Pacific-
Northwest, Western University of
Health Sciences, 200 Mullins
Drive, Lebanon, OR 97355, USA

Deadline for manuscript
submissions:

closed (30 May 2019)

Message from the Guest Editor

Dear Colleagues,

Cell-penetrating peptides (CPPs) containing 5–30 amino acid residues efficiently pass across cell membranes and are commonly used to deliver a wide range of cargoes intracellularly. CPPs consist of amino acids with a cationic and amphipathic nature. There are several examples of well-established CPPs, such as polyarginine, penetratin, TAT, SynB1, SynB3, PTD-4, MAP, and SBP. These CPPs can deliver drugs or macromolecules to the cytoplasm or the nucleus of cells. The growing interest in the area of peptide–drug conjugates utilizing CPPs to deliver cell impermeable molecules reflects their emerging applications. These CPPs are also utilized to understand transporters' properties, membrane dynamics, and mechanisms of internalization of micro/macromolecules.

This Special Issue aims to provide an update on the recent developments in the areas of design, optimization, and employment of CPPs for specific applications, such as drug delivery systems and diagnostic tools, and to explore the mechanisms of CPPs cellular internalization and their combination with nanoparticles.

Dr. Rakesh K. Tiwari
Guest Editor





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical
Biology and Phytochemistry,
University of Münster,
Corrensstrasse 48, D-48149
Münster, Germany

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.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Reaxys](#), [CaPlus / SciFinder](#), [MarinLit](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (*Chemistry (miscellaneous)*)

Contact Us

Molecules Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/molecules
molecules@mdpi.com
[X@Molecules_MDPI](https://twitter.com/X@Molecules_MDPI)