

Special Issue

Peptides and Their Synthetic Analogs in Medicine and Biotechnology

Message from the Guest Editor

Peptides and short proteins provide a promising new generation of biologically active tools with a wide range of novel applications in medicine and biotechnology. Structural modification of peptides leads to the class of peptidomimetics whose value is considerably enhanced compared to their native predecessors. Peptides are employed to fight microbes or cancer, as neuromodulators or hormones or as a basis of vaccines and drug delivery systems. Self-assembling peptides may serve as biomaterials in tissue engineering for creating blood vessels or as substrates for neurite outgrowth and synapse formation. Finally, peptides may be applied in bionanotechnology to create microchips, sensors, electronic devices, as well as nanosized rods or tubes. For this Special Issue, we invite submissions of both topical reviews and original research articles focused on the synthesis as well as structural and functional studies of peptides and peptidomimetics to be applied in medicine or biotechnology.

Guest Editor

Dr. Volker Knecht

Institute of Physics, Universität Freiburg im Breisgau, Freiburg im Breisgau, Germany

Deadline for manuscript submissions

closed (1 October 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/99193

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, and molecular biophysics. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, PMC, MEDLINE, Embase, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)