

Special Issue

Liposomes as Membrane Models in Drug-Lipid Interactions

Message from the Guest Editor

The pharmacokinetics and pharmacodynamics of a pharmacologically active molecule in the human body presuppose, in some phases, the interaction of these molecules with cell membranes. Drug absorption is generally achieved at the expense of molecules migrating across the lipid bilayer, as well as interaction with intramembrane or intracellular receptors that can condition the mechanism of action.

In this context, studies of the interaction of molecules with the membrane can be performed using liposomes, as these lipid structures have a membrane similar to that of cells and whose composition and complexity can be easily modulated. Natural biological membranes have a complex structure, whereas lipid-based membrane models offer a simple and useful alternative for studying drug-membrane interactions.

This Special Issue intends to make a collection of papers in this field, focusing both on liposomes of different compositions and manufacturers used as membrane models and on the techniques used to study these interactions. It is expected that the conclusions are of interest to the scope of Pharmacology and the Pharmaceutical Industry and that future perspectives will also be discussed.

Guest Editor

Dr. Carla Matos

1. FP-I3ID (Instituto de Investigação, Inovação e Desenvolvimento Fernando Pessoa), Porto, Portugal
2. LAQV/REQUIMTE, Department of Chemical Sciences, Faculty of Pharmacy, University of Porto, Porto, Portugal
3. RISE-Health, Faculty of Health Sciences, Fernando Pessoa University, Fernando Pessoa Teaching and Culture Foundation, Rua Carlos da Maia 296, 4200-150 Porto, Portugal

Deadline for manuscript submissions

closed (20 March 2025)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/155406

*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)