

Special Issue

Synergy of Proteins, Peptides and Lipid Membranes in Vital Cellular Processes

Message from the Guest Editors

In membrane biophysics, we commonly focus on the activity of specific proteins responsible for various functions in cells. However, the lipid component of cellular membranes sometimes plays a decisive role in processes, which are connected with membrane rearrangements during fusion, fission, tubulation, and pore formation in biological membranes. Specific features of membrane lipids may stimulate protein clustering and signal transduction. Thus, membrane biophysics concerns the synergy of proteins, peptides, and the lipid matrix, which together orchestrate vital cellular processes. The aim of this Special issue is to highlight the role of interactions between different components of cellular membranes in regulating cell metabolism. We plan to specifically focus on the role of membrane elastic properties in protein organization and signal transductions, as well as to give new insights into sophisticated and sometimes surprising methods of protein–lipid interactions in membrane biophysics.

Guest Editors

Dr. Oleg V. Batishchev

Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences, 31/4 Leninskiy Prospekt, 119071 Moscow, Russia

Dr. Sergey A. Akimov

Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences, 31/4 Leninskiy Prospekt, 119071 Moscow, Russia

Deadline for manuscript submissions

closed (31 December 2023)



Membranes

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 7.9
Indexed in PubMed



mdpi.com/si/168131

Membranes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
membranes@mdpi.com

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





Membranes

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 7.9
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

You are cordially invited to contribute a research article or a comprehensive review for consideration and publication in *Membranes* (ISSN 2077-0375). *Membranes* is an international, peer-reviewed open access journal of membrane technology published monthly online by MDPI. The journal covers the broad aspects of the science and technology of both biological and non-biological membranes, including membrane dynamics and the preparation and characterization of membranes and their applications in water, environment, energy, and food industries. Articles contributing to better understanding of transport processes in all types of membranes are also welcome. The scientific community and the general public have unlimited and free access to the content as soon as it is published. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Spas D. Kolev
School of Chemistry, The University of Melbourne, Melbourne, VIC
3010, Australia

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), Ei Compendex, PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Polymer Science) / CiteScore - Q1 (Chemical Engineering (miscellaneous))