Special Issue

Membrane Systems: From Artificial Models to Cellular Applications

Message from the Guest Editors

In this special issue, "*Membrane Systems: From Artificial Models to Cellular Applications*", we explore how simple model membranes can be powerful tools for uncovering the complexities of biological membranes. Artificial membranes, such as liposomes and supported lipid bilayers (SLBs), offer a controlled environment where specific aspects of membrane behavior can be isolated and studied in detail. These simplified systems allow researchers to dissect the fundamental principles governing membrane dynamics, lipid-protein interactions, and other critical processes. By stripping down the complexity, these models provide clear insights that can be difficult to obtain in more intricate cellular systems. However, the challenge remains to translate these findings from model systems to the intricate environment of living cells, where membranes are dynamic and highly heterogeneous, interacting with a myriad of proteins, lipids, and other biomolecules. For this special issue, authors are invited to present any new research developments, reviews in membrane science, from the refinement of artificial models to their application in studying cellular processes.

Guest Editors

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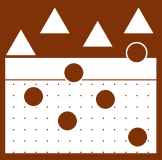

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Message from the Editor-in-Chief

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 accessjournal 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

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