

Special Issue

Structural, Dynamical, and Functional Implications of Membrane Compositional Heterogeneity

Message from the Guest Editors

We invite you to report your research findings in this Special Issue of *Membranes: Structural, Dynamical, and Functional Implications of Membrane Compositional Heterogeneity*. Lipids are a varied and multifunctional group of molecules. Lipids have hydrophobic (water-repelling) tails that interact with each other and proteins, forming a stable core that protects the membrane from water and ions. This hydrophobic effect allows lipids to self-assemble into a myriad of structures, such as bilayers, micelles, and liposomes, which provide a framework for organizing proteins and other molecules within the biomembrane. This arrangement of lipids influences the mechanical properties of biomembranes and helps to maintain its fluidity, stability, and permeability. This Special Issue will focus on lipids, lipid compositions, lipid interactions, and the roles that lipid compositions play in regulating the physical properties of biological membranes. Also of interest is new technology or computational applications used to study the structures, functions, and dynamics of membrane transitions and their interactions with proteins.

Guest Editors

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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
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