



## Biochemical and Biophysical Approaches to Elucidate the Functional Mechanisms of Membrane Proteins

Guest Editors:

**Dr. Elka R. Georgieva**

Department of Chemistry and  
Biochemistry, Texas Tech  
University, Lubbock, TX 79409,  
USA

**Dr. Joachim Weber**

Department of Chemistry and  
Biochemistry, Texas Tech  
University, Lubbock, TX 79409,  
USA

**Dr. Saman Majeed**

Department of Chemistry and  
Biochemistry, Texas Tech  
University, Lubbock, TX 79409,  
USA

Deadline for manuscript  
submissions:

**closed (10 September 2022)**

### Message from the Guest Editors

Dear Colleagues,

Biological membranes determine the boundaries between cells and their surroundings, as well as compartmentalize the cells of higher organisms into organelles. These membranes have a complex organization, which is, in general, provided by the lipid bilayer and the proteins. Membrane proteins play fundamental roles in the physiology of living cells and multi-cell organisms. In addition to their physiological significance, numerous links have been identified between abnormal membrane protein function and life-threatening diseases, and the function and proliferation of proteins from human pathogens can be targeted pharmacologically. Therefore, in-depth understanding of the mechanisms of normal function and inhibition, as well as the pathology of these proteins, requires sufficient information about the coupling of structure and function.

This Special Issue aims to bring together the effort of scientists utilizing diverse biochemical and biophysical/structural biology approaches to elucidate membrane protein structure and conformational dynamics, as well as to develop assays to assess the functional activity of these proteins.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Spas D. Kolev**

School of Chemistry, The  
University of Melbourne,  
Melbourne, VIC 3010, Australia

## 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.

## 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 (*Chemistry, Physical*) / CiteScore - Q2 (*Chemical Engineering (miscellaneous)*)

## Contact Us

Membranes Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/membranes](http://mdpi.com/journal/membranes)  
[membranes@mdpi.com](mailto:membranes@mdpi.com)  
X@Membranes\_MDPI