# Special Issue

# Flexible Membranes for Batteries and Supercapacitor Applications

## Message from the Guest Editor

To improve battery safety, there is a need to research and develop fully flexible solid polymer electrolyte membranes, which in turn must have good ionic conductivity to ensure efficient battery performance. The research and development of less-studied but effective ion exchange membranes for supercapacitors (e.g., proton exchange membranes (PEM) and anionic hydroxide exchange membranes (AEM)) also requires improved scalable synthesis techniques, manufacturing techniques, and understanding of fundamental physical processes. The development of high-performance flexible batteries and supercapacitors relies heavily on innovative materials that have good electrical and mechanical properties. The Special Issue "Flexible Membranes for Batteries and Supercapacitors" is devoted to fundamental research on the ion transfer process of flexible membranes and the problems of synthesis, development, and technologies for creating polymers for obtaining membranes of electrochemical energy sources. Prof. Dr. Olga E. Glukhova

## Guest Editor

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## Deadline for manuscript submissions

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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

Prof. Dr. Spas D. Kolev
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