# **Special Issue**

# Ion-Selective Electrodes and Membrane-Based Ion Sensing Devices: Materials, Mechanisms, and Applications

# Message from the Guest Editors

Ion-selective electrodes (ISEs) with sensitive membranes are economic and efficient electrochemical sensors with the ability to detect multiple ion concentrations, playing an essential role in our daily lives. Through studies on ISEs that encompass topics such as membrane material developments and the application of sensors in daily life, the aim of this Special Issue is to collate novel research that displays the diversity of ISEs and highlights the advances and current development of fields related to ISEs. Topics of interest include, but are not limited to, the following: New concepts/readouts for ISEs with ion-selective membranes;

Fundamentals and modeling studies of membrane ion sensing:

Development of ionophore-based membranes; Functionalization of nanomaterials as sensing membranes;

Development of biodegradable and biocompatible membrane materials;

Advances of ISEs in ocean monitoring; Application of ISEs in wearable sensors; Application of ISEs in environmental analysis; Application of nano/micro-electrodes for ion sensing. For this Special Issue, we welcome the submission of both original research papers and review articles.

#### **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 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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