

Special Issue

Research and Applications of Electrochemical Sensors and Biosensors

Message from the Guest Editor

A chemical sensor can be defined as a simple to use, robust device that, in conjunction with straightforward instrumentation, provides analytical information (quantitative or qualitative) for atomic, molecular, or ionic species. A sub category is a biosensor, which generally uses bio-material to facilitate in taking measurements of materials derived from living substances. These sensor systems have additional desirable attributes, such as being cheap to mass manufacture in bulk, require no or minimal pre-use calibration, and possess the on-board ability to transmit data remotely. Electrochemical sensors and biosensors use many techniques in order to achieve successful and practical devices. Examples of sensors that fulfill the desired criteria and that are used routinely are as follows:

- pH using a glass electrode and high impedance potentiometry
- blood glucose using a confined volume cell and variants of amperometry

This Special Issue will focus on the aspects of research and applications that have the potential to be translated into viable, commercially successful sensor systems.

Guest Editor

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Deadline for manuscript submissions

closed (31 July 2021)



Applied Sciences

an Open Access Journal
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Impact Factor 2.5
CiteScore 5.5



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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