

Introduction and Overview of Biosensors

Iman Sohrabi Moghadam Chafjiri College of Skills and Entrepreneurship, Lahijan Branch, Islamic Azad University, Lahijan, Iran Mehdi abbaspour Sama high school, Islamic Azad University, Lahijan, Iran

Abstract

Goal of this paper is to introduction and overview of biosensors. Biosensors measure biological or chemical reactions by generating signals proportional to the concentration of an analyte in the reaction. Nowadays, they are a crucial aspect of biomedical diagnosis, as well as in other areas of point-of-care monitoring of treatments and progression of disease. This paper concludes with a brief discussion on the outlook for integrating biosensors with emerging technologies. The general aim of the design of a biosensor is to enable quick, convenient testing at the point of concern or care where the sample was procured. The existing application of these devices in fields of biomedicine, drug discovery, food safety, and environmental monitoring get remarkable importance. Each particular type of biosensor has to be evaluated in terms of its detection range, selectivity, reliability, shelf life, versatility, size and, for some applications, biocompatibility, sterility and suitable packing are crucial. In the specialized literature, hundreds of biosensors have been described for the determination of a very large number of analytes and properties.

Keywords: biosensor, transducer, electrodes, analytical information, control