

O 11. HYDROGEN PEROXIDE SENSOR APPLICATION OF TI AND TINI CATALYSTS

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ABSTRACT: Hydrogen peroxide is a typical product of oxidase based enzymatic reactions, and a substrate for peroxidases. Therefore, its determination is still too important. In comparison with other methods, electrochemical sensors offer fast, simple, sensitive and cheap application. In this study, hydrogen peroxide sensor activity of commercial Ti and TiNi catalysts were investigated. The performance of the commercial Ti and TiNi catalyst for the hydrogen peroxide sensor was determined using cyclic voltammetry (CV) and chronoamperometry (CA). As a result of the electrochemical measurements made, TiNi (51:49) catalyst showed the best activity and long term stability.

Keywords: sensor; hydrogen peroxide, Ti;TiNi