

Development of oxidoreductase based sensors using Prussian blue as mediator

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Abstract Prussian blue screen-printed electrodes were optimized in order to develop an NADH oxidase based sensor for real samples application. The catalytic effect, the sensitivity and the stability were determined for different pH buffer solutions and different voltage range, by cyclic voltammetry and amperometric measurements. The formal potential calculated by cathodic and anodic peak in voltammograms for the sensors is – 0.1 V vs Ag/AgCl screen-printed reference electrode.

Keywords: Prussian blue, NADH oxidase, screen-printed, optimization
