

Modified Poly (Pyrrole) Film-Based Biosensors for Phenol Detection

Authors : S. Korkut, M. S. Kilic, E. Erhan

Abstract : In order to detect and quantify the phenolic contents of a wastewater with biosensors, two working electrodes based on modified Poly (Pyrrole) films were fabricated. Enzyme horseradish peroxidase was used as biomolecule of the prepared electrodes. Various phenolics were tested at the biosensor. Phenol detection was realized by electrochemical reduction of quinones produced by enzymatic activity. Analytical parameters were calculated and the results were compared with each other.

Keywords : carbon nanotube, phenol biosensor, polypyrrole, poly (glutaraldehyde)

Conference Title : ICEBESE 2015 : International Conference on Environmental, Biological, Ecological Sciences and Engineering

Conference Location : Prague, Czechia

Conference Dates : March 23-24, 2015