

ELECTROCHEMICAL BEHAVIOUR OF METHIONINE

N. PRIYANTHA AND M. RIZAN

Department of Chemistry, Faculty of Science, University of Peradeniya, Sri Lanka

Methionine undergoes anodic oxidation at + 0.9 V vs. SCE at bare Pt electrodes, showing a significant response in strong acidic medium. This oxidation is accompanied by a large background current due to the formation of platinum oxide at high +ve potentials, which ultimately reduces the quality of the detection method. Experimental parameters such as supporting electrolyte composition, pH of the medium and the application of surface-active compounds on the electrode surface affect the electrochemical behaviour of Methionine. A series of cyclic voltammetric experiments conducted under the controlled conditions for different concentrations of the amino acid under investigation reveals that there is a linearity between the concentration and the instrumental response.