The Electrochemical Approach towards Proton Coupled Electron Transfer Reaction Pathways for Oxidation of Thymine in Water

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The electrooxidation of DNA bases, amino acids and electroreduction of dyes are reported elsewhere [1-3]. However, the interest is focused particularly on the determination of voltammetric oxidation / reduction peak potentials. This work repots the experimental determination of reversible redox potential for irreversible systems such as DNA bases, amino acids, dyes etc., by analyzing cyclic voltammograms at various sweep rates. Furthermore the obtained redox potentials were used to investigate the reaction mechanisms which are involved in proton coupled electron transfers for the oxidation of thymine in water [4, 5].

References

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