

ABSTRACT

In this paper polypyrrole has been electrosynthesised from an aqueous media containing the pyrrole monomer and sulphuric acid as the supporting electrolyte. The redox properties of polypyrrole on carbon graphite working electrode and on a clay montmorillonite host matrix has also been reported. The results obtained from plots of oxidative and reductive peak currents yield redox efficiencies above 95% for the polypyrrole redox process. The polypyrrole redox process is also shown to be diffusion limited. The reduction in the rate of electrodeposition of polypyrrole on a polyaniline loaded clay montmorillonite host-matrix, is a veiled confirmation of intercalation of the polyaniline in montmorillonite matrix. KeyWords: Polypyrrole, Polyaniline, Electrosynthesised, Clay Montmorillonite (bentonite), Cyclicvoltammogram, Host matrix