Effects of Ranitidine Hydrochloride in Organic Electrolyte System on the Electrochemical Reduction Reaction

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The voltammetric experiments were performed using an electrochemical analytical system. A glassy carbon working electrode (geometric area=0.0774 cm^2), a Ag/AgCl reference electrode and a platinum counter electrode and standard one-compartment of 15 ml capacity with a three-electrode cell arrangement were used in all experiments. The supporting electrolyte used for the electrochemical determination was an aqueous 1 M KCl buffer medium and it was modified with different amounts and compositions of ranitidine hydrochloride, riboflavin, and polypyrrole. The electrochemical behavior with pH variations also monitored. Results of the measurements using cyclic, differential pulse and stripping voltammetry especially to investigate the effects of ranitidine hydrochloride on the electrochemical reduction reaction of the glassy carbon electrode will be presented and discussed in more detail.