

عنوان مقاله:

Cyclic Voltammetric studies of calcium acetate salt with Methylene blue (MB) Using Gold Electrode

محل انتشار:

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خلاصه مقاله:

Cyclic Voltammetric studies of calcium acetate salt $[Ca(CH_3COO)_2]$ in absence or presence of Methylene blue (MB) were performed to predict and analyze the behavior of complexation between the ligand and metal ion in aqueous solution. From these studies, the values of solvation and kinetic parameters $[E_p$ (peak potential), I_p (peak current), ΔE_p (peak potential difference), $E_{1/2}$ (half wave potential), D (Diffusion coefficient), K_s (electron transfer rate constant), Γ (surface coverage) and Q_a (quantity of electricity)] were evaluated. In addition, the effect of different concentration and a scan rate of above the calculated quantities were studied. In case of presence MB, the stability constants and Gibbs free energies were performed.

کلمات کلیدی:

Cyclic Voltammetry, Gold Electrode, Calcium acetate, Methylene blue, redox reaction, Solvation parameters

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