

Electrode Kinetic Study of Complexes of Ga (III) with Some Amino Acids Polarographically

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Abstract: Electrode kinetics and complex formation of Ga(III) with some amino acids (L-Threonine, Glycine) have been studied in 1 mM KNO₃ which was used as supporting electrolyte. The reduction of Ga(III) has been found to be irreversible and diffusion controlled and involved three electrons transfer process. The complexes of Ga(III) have been investigated and their kinetic parameters viz. transfer coefficient (α), degree of irreversibility (λ) and rate constant (k) have been determined in aqueous medium at 308K by applying Koutecky's method.

Keywords: Gallium(III), Electrode kinetics, L-Threonine, Glycine, Koutecky's method

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