
analytical application for the determination of aminoglycoside antibiotics via ion-pair formation and their biological activities

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This present thesis comprises four chapters :Chapter 1 includes an introduction and literature survey on the method of determination of amikacin sulphate , neomycin sulphate, tobramycin sulphate and vancomycin hydrochloride. Chapter 2 includes the experimental part , the materials , preparations of the solid ion-pair complexes, solution , instruments determination of the optimum experimental conditions for ion- pair precipitation from aqueous solutions and the quantitative determination of the drug used. Also , this chapter includes the optimum experimental conditions for conductimetric determination, atomic absorption study and spectral measurement of the investigated drugs. The solid ion - pair complexes of the drugs under investigation with ammonium reineckate , potassium ferrocyanide, cobalt thiocyanate, nickel thiocyanate and sodium nitroprusside are confirmed by elemental analysis and determination of metal content.