Aim of the work

This work is concerned with the study of some antibacterial drugs [ciprofloxacin HCl (CIP), levofloxacin (LEV), norfloxacin (NOR) and enrofloxacin (ENR)]. The aim of the present investigation is to develop simple, rapid, accurate, sensitive, suitable for the micro determination of these drugs in pure and pharmaceutical formulations possibility of using acid dyes derivatives (rose bengal and erythrosine) and (bromocresol purple) as reagents, transition metals (ferric chloride) and uranium nitrate for quantitative determinations of these drugs spectrophotometrically under the optimized conditions. Complexes formed are studied as well as in the solid forms as their stability constant are determined.

For this purpose the thesis includes:

1- Systematic spectrophotometric studies of ion pair complexes in solution.

2- Determination of the cited drugs via metal chelate complex formation.