SYNOPSIS
SYNOPSIS OF THE THESIS TO BE SUBMITTED TO THE UNIVERSITY OF MUMBAI FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN CHEMISTRY

Title of the thesis: Simultaneous determination of active ingredients of a combined drug formulation by electroanalytical methods.

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Introduction
Polarography, especially differential pulse polarography, and other voltammetric techniques are becoming increasingly important in determination of molecules of biological and pharmaceutical significance. Simultaneous determination of API from their formulation is mostly done by chromatographic methods.
The present work deals with development and validation of method for simultaneous determination of some of the binary drugs formulation from tablet and from urine, using differential pulse polarography.

Chapter I: Introduction
The chapter consists of three sections
Section 1: Introduction of electroanalytical technique
Section 2: Introduction to method validation.
Section 3: Introduction of analytes.

Chapter II: Simultaneous determination of some cephalosporin antibiotics with potassium clavulanate.
This chapter deals with method development and validation for simultaneous determination of some cephalosporin antibiotics with potassium clavulanate in tablet and from urine by differential pulse polarography.
The chapter consists of three sections
Section 1: Simultaneous determination of cefixime trihydrate and potassium clavulanate.
Section 2: Simultaneous determination of cefuroxime axetil and potassium clavulanate.
Section 3: Simultaneous determination of cefpodoxime proxetil and potassium clavulanate.
Chapter III: Simultaneous determination of cefixime trihydrate and ofloxacin.

This chapter deals with method development and validation for simultaneous determination of cefixime trihydrate and ofloxacin in tablet and from urine by differential pulse polarography.

Chapter IV: Uncertainty Estimation in the determination of the drugs from pharmaceutical formulation using Differential Pulse Polarography.

This chapter deals with uncertainty estimation in simultaneous determination of some cephalosporin antibiotics with potassium clavulanate in formulation using differential pulse polarography.

Chapter V: Degradation study

This chapter deals with degradation study of some cephalosporin antibiotics, using differential pulse polarography.

The chapter consists of three sections
Section 1: Degradation of Cefixime trihydrate
Section 2: Degradation of Cefuroxime axetil
Section 3: Degradation of Cefpodoxime proxetil
References


