Mona maghraby

بسم اللّه الرحمن الرحيم

مركز الشبكات وتكنولوجيا المعلومات

قسم التوثيق الإلكتروني

Mona maghraby

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم باللّه العظيم أن المادة التي تم توثيقها وتسجيلها

علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

Mona maghraby

بعض الوثائق الأصلية تالفة
وبالرسالة صفحات لم ترد بالأصل

CONSTRUCTION AND PERFORMANCE CHARACTERISTICS OF NEW PLASTIC MEMBRANE ION-SELECTIVE ELECTRODES FOR SOME BRONCHODILATOR PHARMACEUTICAL COMPOUNDS IN BATCH AND FIA CONDITIONS

A Thesis Presented
To
FACULTY OF SCIENCE
CAIRO UNIVERSITY

By

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B. Sc. Chemistry (Honour)
1993
M.Sc (Analytical Chemistry)
1996

For the Degree of Doctor of Philosophy
in Science
(Analytical Chemistry)

2001

بِسمِ اللَّهِ الرَّحمَنِ الرَّحِيمِ

وقُل رِّبِّ زِدنِي عِلماً

صدق الله العظيم

ايه ١١٤ سوره طه

APPROVAL SHEET FOR SUBMISSION

Title of Ph. D. Thesis:

CONSTRUCTION AND PERFORMANCE CHARACTERISTICS OF NEW PLASTIC MEMBRANE ION-SELECTIVE ELECTRODES FOR SOME BRONCHODILATOR PHARMACEUTICAL COMPOUNDS IN BATCH AND FIA CONDITIONS

Name of the candidate: Rasha Mohamed Ibrahim Magdy El-Nashar

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ABSTRACT

Name: Rasha Mohamed Ibrahim Magdy El-Nashar

Title of thesis:

CONSTRUCTION AND PERFORMANCE CHARACTERISTICS OF NEW PLASTIC MEMBRANE ION-SELECTIVE ELECTRODES FOR SOME BRONCHODILATOR PHARMACEUTICAL COMPOUNDS IN BATCH AND FIA CONDITIONS

Degree: Doctor of Philosophy in Analytical Chemistry, Faculty of Science, Cairo University, 2001.

This work has been carried out to present and characterize new plastic membrane ion-selective electrodes based on individual and mixed ion-exchangers with phosphotungstic and/or phosphomolybdic acid to be used in the analysis of some important pharmaceutical bronchodilator compounds in batch and flow injection analysis (FIA) conditions. The performance characteristics of these electrodes are compared under the two studied conditions. Amoung these pharmaceutical compounds are: pipazethate hydrochloride, reproterol hydrochloride, salbutamol sulphate and terbutaline sulphate.

Key words: Pipazethate hydrochloride, reproterol hydrochloride, salbutamol sulphate, terbutaline sulphate, Bronchodilator, ISE, FIA, Potentiometry.

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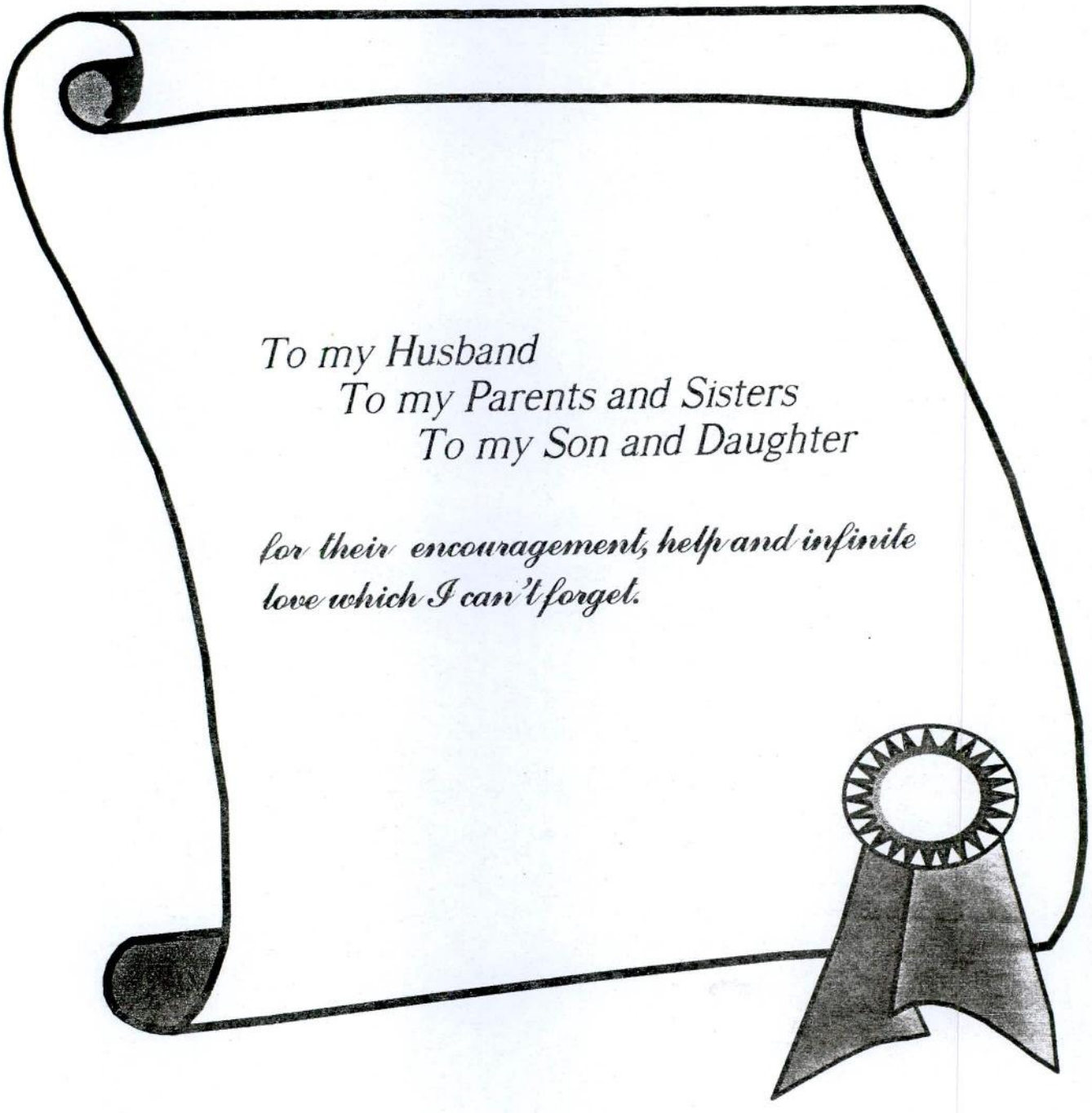

To my Husband
To my Parents and Sisters
To my Son and Daughter

for their encouragement, help and infinite love which I can't forget.

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The authoress

Rasha Mohamed El-Nashar

The original work of this thesis is published in the following papers:

1. Salbutamol Plastic Membrane Electrodes Based on Individual and Mixed Ion-Exchangers of Salbutamolium Phosphotungstate and Phosphomolybdate, ***Analyst***, 125, 2000, 1129.
2. Flow Injection Potentiometric Determination of Pipazethate Hydrochloride, ***Analyst***, 126, 2001, 79.
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5. Flow Injection Potentiometric Determination of Reproterol, ***Quimica Analitica***, accepted for publication, MS00-40, 2001.
6. Conductimetric Determination of Reproterol HCl and Pipazethate HCl and Salbutamol Sulphate in their Pharmaceutical Formulations, ***Journal Pharmaceutical and Biomedical Analysis***, accepted for publication, L00-205, 2001.
7. Construction and Performance Characteristics of Terbutaline Plastic Membrane Electrode in Batch and FIA Conditions, ***Microchemical Journal***, accepted for publication, MSP 049, 2001.

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