Spectrophotometric and potentiometric determination of carbamazepine, mosapride citrate and chlorpromazine hydrochloride

Presented by

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(B.Sc. Degree, Chemistry, Cairo University 2008)

A Thesis Submitted
To
Faculty of Science

In the partial fulfillment of the requirements for the M.Sc Degree
(Analytical Chemistry)

Submitted To

Chemistry Department
Faculty of Science
Cairo University

(2011)

APPROVAL SHEET FOR SUBMISSION

Title of [M. Sc] Thesis: Spectrophotometric and potentiometric determination of carbamazepine, mosapride citrate and chlorpromazine hydrochloride.

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Acknowledgement

First and foremost I want to thank Allah Almighty, the most beneficent, unlimited and continuous blessing on me, and for all gifts he gave to me. I wish to express my respectful thanks and full gratitude to ***prof. Dr. Mohamed Abd El-Gawad Zayed ,*** *Professor of Analytical chemistry,* ***prof. Dr. Mohamed Mohamed Omar*** *and* ***prof. Dr. Gehad G. Mohamed****, Professor of Inorganic and Analytical chemistry, Chemistry Department, Faculty of Science, Cairo University, for this research project, valuable guidance and fruitful comments for their perfect supervision and continuous support, which were indispensable to the completion of this work.*

I would like also to express my profound gratitude to ***Dr. Eman Y.Z. Frag****, Lecturer of Analytical Chemistry, Chemistry Department, Faculty of Science, Cairo University for her valuble contribution and perfect guidance during the whole work.*

Finally, I would like to thank my family in supporting me during my studies and urging me on. My deepest appreciation is extended to my great my father, my mother, my sister and Arwa for their constant support, who were the source of calm and comfort.

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ABSTRACT

Name: Sally El-Sayed Ahmed El-Ashery

Title of the thesis: Spectrophotometric and potentiometric determination of carbamazepine, mosapride citrate and chlorpromazine hydrochloride

Degree: (M.Sc) published M.Sc of Science Thesis, Faculty of Science- Cairo University, 2011.

This work has been carried out to investigate:

1- Spectrophotometric determination of carbamazepine (CBZ) drug in pure and in pharmaceutical preparations through the ion-pair formation reaction with Mo(V)-thiocyanate binary complex.

2- Spectrophotometric determination of mosapride citrate (MOC) via charge transfer complex formation between MOC (electron donor) and DDQ (π-acceptor) reagent. Also spectrophotometric determination of MOC through the ion-pair formation reaction with some dyestuffs such as bromothymol blue (BTB) and bromocresol green (BCG) reagents.

3- Development of carbon paste ion-selective electrode for the determination of chlorpromazine HCl (CPZ.HCl) drug. The work has focused on the fabrication of ion selective electrodes for determination of the drug under investigation using potentiometric titration with sodium tetraphenylborate. The performance of such sensor in the potentiometric determination of CPZ.HCl is compared with those of PVC membrane, coated wire and coated graphite electrodes.

Keywords: carbamazepine and mosapride citrate, ion-pair formation, charge transfer, spectrophotometry, chlorpromazine hydrochloride, potentiometric titration.

Supervisors:

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1- **Prof. Dr.** Mohamed Abd El-Gawad Zayed

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