

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

**Presented by**

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## ***APPROVAL SHEET FOR SUBMISSION***

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

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**Sally El-Sayed Ahmed**

## ***ABSTRACT***

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

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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 ( $\pi$ -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.

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