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Analytical studies of some nitrogen containing drugs

Presented by

Neveen Said Ibrahim

(B.Sc. Degree, Chemistry 2004)

A Thesis Submitted

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APPROVAL SHEET FOR SUMISSION

Title of [M.Sc.] Thesis: Analytical studies of some nitrogen containing drugs.

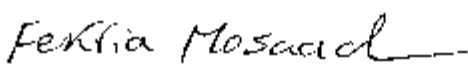
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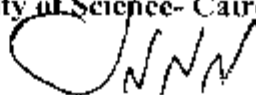
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Preliminary courses for M.Sc.

Beside the work carried out in this thesis, the candidate had attended and successfully passed a final examination of M.Sc. courses (2005) in non-organic chemistry covering the following topics:

- 1- Inorganic reaction mechanism.
- 2- Advanced analytical chemistry.
- 3- Compleximetry.
- 4- Statistical thermodynamics.
- 5- Quantum chemistry.
- 6- Molecular structure.
- 7- Molecular spectroscopy.
- 8- X-ray analysis.
- 9- Surface chemistry.
- 10- Electrochemistry of molten salts and physical metallurgy.
- 11- Voltammetry.
- 12- Nuclear chemistry.
- 13- Electrochemistry.
- 14- Electrokinitic phenomena.
- 15- Catalysis.
- 16- Inorganic chemistry
- 17- Double layer.
- 18- Polymer.
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ABSTRACT

Name: Neveen Said Ibrahim Abdel Hamid

Title of thesis: Analytical studies of some nitrogen containing drugs.

Degree: (M.Sc) Master of Science Thesis, Faculty of Science, Cairo University, 2009.

This work has been carried out to determine desloratadine (DES) as an antihistaminic drug in pure and pharmaceutical preparations using new spectrophotometric and HPLC procedures. The spectrophotometric methods are carried out by the reactions of this drug via charge transfer complexation with 2,4-dichloro-6-nitrophenol (DCNP), 2,4- dinitrophenol (DNP) and picric acid (PA) reagents and through ion-pair formation with bromocresol green (BCG) and bromothymol blue (BTB) reagents. The sensitivity of these procedures has been improved and the optimum practical conditions for the analysis of this drug are selected. Also optimum conditions for the determination of DES drug in pure form and pharmaceutical preparations using HPLC is studied.

Keywords: Desloratadine, charge transfer, ion-pair, 2,4-dichloro-6-nitrophenol, 2,4-dinitrophenol, picric acid, bromocresol green, bromothymo blue, spectrophotometry and HPLC.

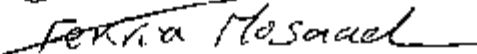
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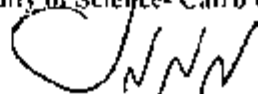
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