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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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Spectrophotometric determination of some pharmaceutical drugs

Submitted by

Ahmed Fathi Farghali Hagag

(B.Sc. Degree, Major chemistry, Cairo University 2004)

For

The Partial Fulfillment of Degree of Master (M.Sc.)

In

Analytical Chemistry

To

Chemistry Department

Faculty of Science

Cairo University

(2009)

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APROVAL SHEET FOR SUBMISSION

Title of [M.Sc.] Thesis: Spectrophotometric determination of some pharmaceutical drugs.

Name of candidate: Ahmed Fathi Farghali Hagag

This thesis has been approved for submission by the supervisors:

1- **Prof. Dr.** GEHAD GENIDY MOHAMED

Signature: Gehad G.J

2- **Dr.** MOAMEN SALAH EL-DEAN REFAT

Signature: Moamen Salah Refat

Prof.Dr. Mohamed M. Shoukry

Chairman of Chemistry Department.

Faculty of Science- Cairo University.

ABSTRACT

Name: Ahmed Fathi Farghali Hagag

Title of Thesis: Spectrophotometric determination of some pharmaceutical drugs.

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 Unpublished Master of Science Thesis, Faculty of Science-Cairo University, 2009.

This work has been carried out to investigate the:

1- Spectrophotometric microdetermination of albendazole (ALB), allopurinol (APN) and sildenafil citrate (SILC) via charge-transfer formation. This includes the utility of some π-acceptors such as , 2,3-dichloro-5,6-dicyano-p-benzoquinone (DDQ) and 3,6-dichloro-2,5-dihydroxy-p-benzoquinone (p-CLA) for estimation of ALB, APN and SILC drugs (act as è- donors).

2- These reactions are applied for determination of ALB, APN and SILC drugs in their pharmaceutical preparations coming from different companies.

3- Elucidation of the chemical structure of the solid CT complexes formed via reaction between drugs under study and π-acceptors, using elemental analysis (C, H, N), I.R., ^{1}HNMR and mass spectrometry.

Keywords: Albendazole, allopurinol, sildenafil citrate, DDQ, p-CLA, Spectrophotometry, Charge transfer complexes.

Supervisors: ----------, ----------

Prof. Dr. Mohamed M. Shoukry

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NOTE

Beside the work carried out in this thesis, the candidate had attended and successfully passed a final examination of M.Sc. courses (2006) in non organic chemistry covering the following topics:

1- Mechanism of inorganic reactions.

2- Advanced analytical chemistry.

3- Chelatimetry.

4- Statistical thermodynamics.

5- Quantum chemistry.

6- Molecular structure.

7- Solar energy.

8- X- rays thermal analysis.

9- Adsorption chemistry.

10 -Molten salts and Metallurgy.

11- Voltammetry.

12- Nuclear chemistry.

13- Group theory.

14- Electrochemistry.

15- Electro Kinetic phenomena.

16- Catalysis.

17- Advanced inorganic chemistry.

18- Physical polymer.

19- Statistical.

20- German language.

Prof. Dr. Mohamed M. Shoukry

Chairman of Chemistry Department.

Faculty of Science-Cairo University.

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Professor of Inorganic and Analytical Chemistry, Chemistry Department, Faculty of Science, Cairo University

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Assistant Professor of Inorganic Chemistry, Faculty of Science, Port Said University

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Ahmed Farghali

CONTENTS

List of Figures