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# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





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# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

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## ترد بالاصل



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

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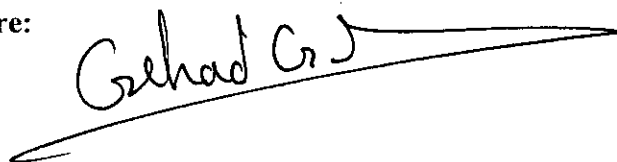
**Title of [M.Sc.] Thesis:** Spectrophotometric determination of some pharmaceutical drugs.

**Name of candidate:** Ahmed Fathi Farghali Hagag

**This thesis has been approved for submission by the supervisors:**

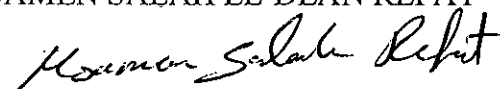
**1- Prof. Dr. GEHAD GENIDY MOHAMED**

**Signature:**



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

**Signature:**



**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 Unpublished Master of Science Thesis, Faculty of Science-Cairo University, 2009.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  $\pi$ -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  $\pi$ -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  $\pi$ -acceptors, using elemental analysis (C, H, N), I.R.,  $^1\text{H}$ NMR and mass spectrometry.

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

Supervisors:  , 

Prof. Dr. Mohamed M. Shoukry



Chairman of Chemistry Department.

Faculty of Science-Cairo University.



## 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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