

شبكة المعلومات الجامعية







شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

## جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها على هذه الأفلام قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار في درجة حرارة من ١٥-٥٠ مئوية ورطوبة نسبية من ٢٠-٠٠% To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%



# بعض الوثائـــق الإصليــة تالفــة



# بالرسالة صفحات لم ترد بالإصل

## 1.40

# New Synthetic Approaches For Azines And Their Fused Derivatives

Thesis Submitted In Partial Fulfillment Of The Requirement For

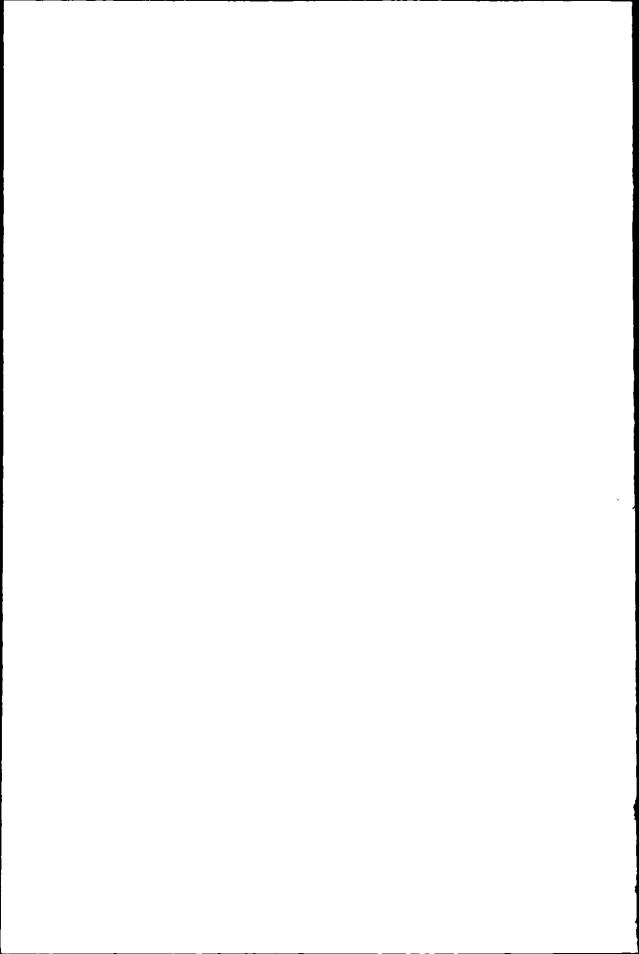
The Master Degree Of Science (Organic Chemistry)

By

**Esam Ahmed Abdel-Karim Ahmed** 

B. Sc. 1998

Department Of Chemistry
Faculty Of Science
Cairo University
Giza
Egypt



#### APPROVAL SHEET FOR SUBMISSION

Title of (M.Sc) Thesis: New Synthetic Approaches For Azines And Their Fused Derivatives

Name Of The Candidate: Esam Ahmed Abdel- Karim Ahmed

Signature:

This Thesis Has Been Approved For Submission by the Supervisors

1- Prof. Dr. Sherif M. Sherif Sheif M. Sherif

Signature:

2- Associate Prof. Dr. Mohie A. Sharaf

Signature:

Prof. Dr. Mohamed M. Shokry

Chairman Of Chemistry Department

Faculty Of Science - Cairo University

#### **EXAMINERS**

1- Prof. Dr. Cyril Parkanyi

Professor and Interim Chair

Department of Chemistry and Biochemistry

Florida Atlantic University

2 - Prof. Dr. Abdel Haleem Mostafa Hussein

Professor of Organic Chemistry

Department of Chemistry

Faculty of Science

Al -Azhar University

Assiut - Egypt

3- Prof. Dr. Sherif M. Sherif

Vice Dean for Postgraduate Studies and Research

Professor of Organic Chemistry

Department of Chemistry

Faculty of Science

Cairo University

Giza - Egypt

50-1,593

## **ABSTRACT**

Name: - Esam Ahmed Abdel-karim Ahmed.

Title of thesis: - New Synthetic Approaches For Azines And Their Fused Derivatives.

Degree (M.Sc) Thesis, Faculty of Science, Cairo University, 2010.

This work has been carried out to investigate the synthesis of new derivatives of 3-cyanopyridine-2(1H)-thione containing cycloketones. The reactions of the latter compounds with halogenated compounds were studied. The studied halogenated compounds were  $\alpha$ -chloroacetanilides, 3-bromoacetylcoumarin , 3-chloropentan-2,4-dione and  $\gamma$ -bromoacetoacetanilide, The products of some foregoing reactions were used for synthesis of heterocycles e.g. pyrazole, isoxazole, pyridine and pyrimidine incorporated with cyanopyridine moiety. The structures of all compounds were elucidated by elemental analysis and spectral data.

Key words: pyridinethiones, α-halogenated compounds, functionalized azines

Supervisor: Prof. Dr. Sherif M. Sherif Sherif M. Sherif

Associate Prof. Dr. Mohie A. Sharaf.

Prof. Dr. Mohamed M. Shokry

Chairman of Chemistry Department

Faculty of Science - Cairo university.

### **STATEMENT**

Beside the work carried out in this thesis, the candidate Esam Ahmed Abdel-karim Ahmed has attended post graduate courses as fulfillment of the requirements of the master degree of science

- 1- Mathematics and Mechanics.
- 2- Advanced analytical chemistry.
- 3- Chemistry of carbohydrates.
- 4- Advanced physical organic Chemistry.
- 5- Designing organic synthesis.
- 6- Chemistry of natural products.
- 7- Applied organic spectroscopy.
- 8- Heterocyclic chemistry.
- 9- Pericyclic reactions.
- 10- Chemistry of dyes.
- 11- Quantum chemistry.
- 12- Biochemistry.
- 13- Polymer chemistry.
- 14- Organic photochemistry.
- 15- Selected topics.
- 16- Germany.
- 17- Oral exam and article.

Prof. Dr. Mohamed M. Shokry

Chairman of Chemistry Department

Faculty of Science - Cairo University