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شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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Cairo University



Faculty of Science
Department of Chemistry

CAOUP
A THESIS ENTITLED

Synthesis and Reactions of New Heterocyclic Compounds
as Bases for Some Nucleosides with Expected Biological Activities

Presented By

Naglaa Salem El-Sayed Ibrahim

(B.Sc., Ain Shams University, Very Good Degree, 2003)

A Thesis Submitted

To

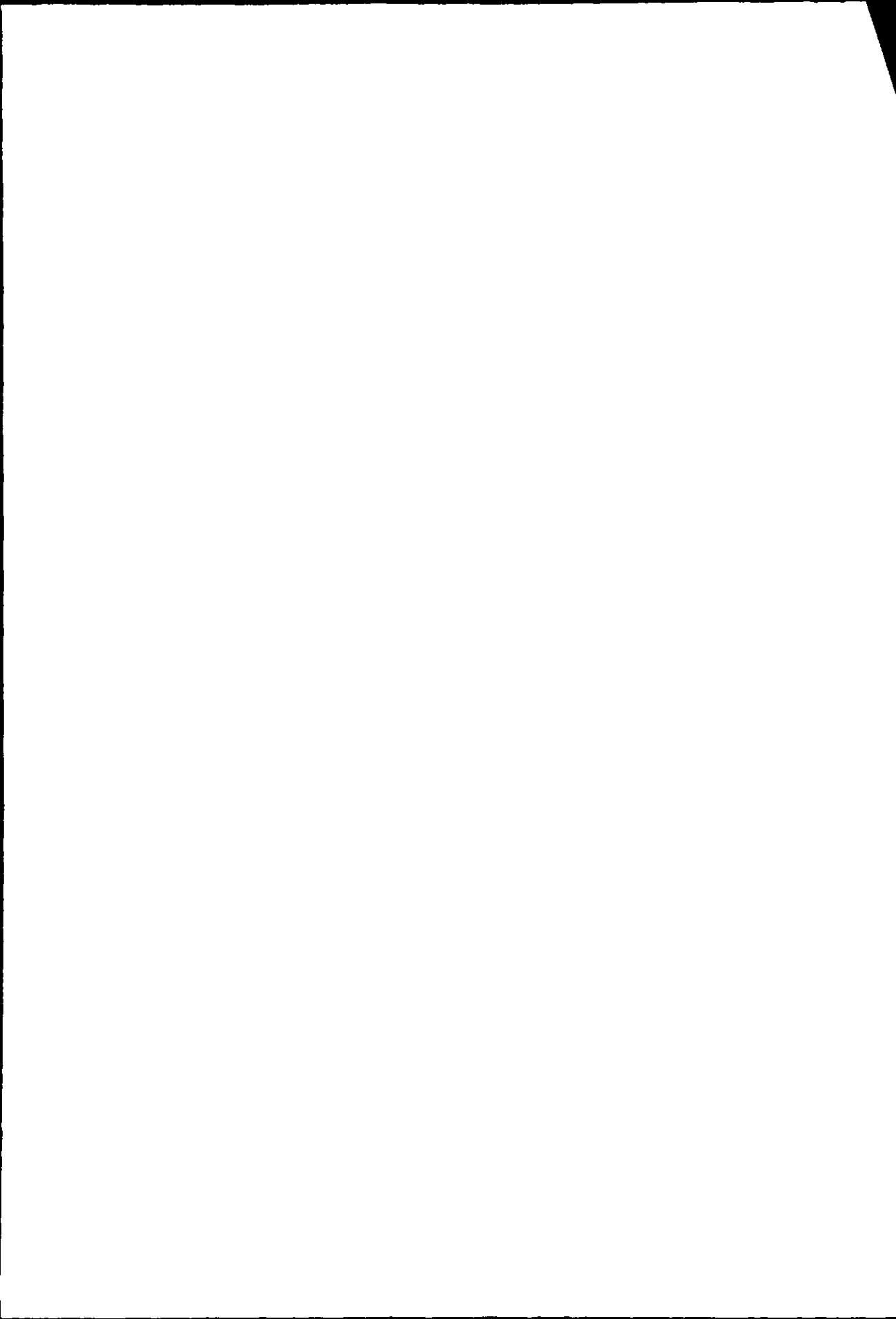
Faculty of Science

In Partial Fulfillment of the Requirements

For The Master Degree of Science

(Chemistry)

Chemistry Department
Faculty of Science
Cairo University
Giza, Egypt
2010



Abstract

Name of Candidate: Naglaa Salem EL-Sayed Ibrahim

Title of M. Sc. Thesis: Synthesis and Reactions of New Heterocyclic Compounds as Bases for Some Nucleosides with Expected Biological Activities

Degree: M.Sc. (Organic Chemistry)

This work has been carried out to investigate the synthesis of some new nicotinonitrile derivatives, as well as, 5,6-dimethyl-4-(4-methoxyphenyl)pyrazolo[3,4-*b*]pyridin-3-amine, that was utilized as a good synthone for the preparation of different heterocyclic compounds, by its reaction with various electrophiles.

In addition, investigating the analgesic and anti-inflammatory activities of some selected compounds.

Moreover, the preparation of some acyclic nucleosides and cyclic thioglycosides.

Key words: 2-oxo-1,2-dihydropyridine-3-carbonitrile , pyrazolo[3,4-*b*]pyridine derivatives, active methylene containing reagents, pyridopyrazolo-pyrimidine, diazocoupling, glycosides, pharmacological activity.

Thesis supervisors:

1- Prof. Dr. Abdel-Samei M. Abdel-Fattah

2- Prof. Dr. Ahmed Saleh Ali El-Sayed

Signature

A. M. Abdel-Fattah

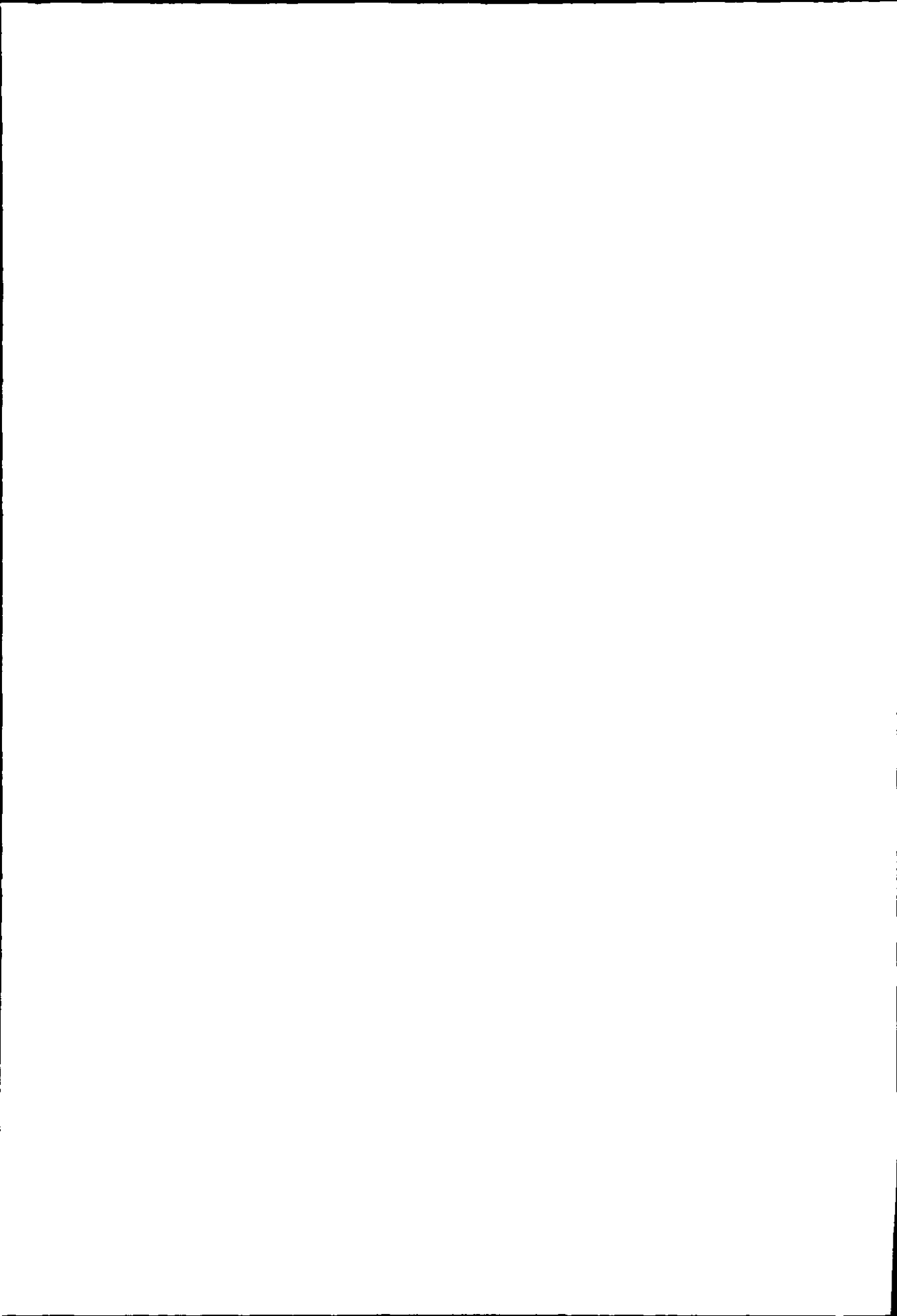
..... A. S. Ali

Prof. Dr Mohamed Mohamed Shokry

Chairman of Chemistry Department

Faculty of Science - Cairo University

M. M. Shokry



APPROVAL SHEET FOR SUBMISSION

Title of (M. Sc.) Thesis:

**Synthesis and Reactions of New Heterocyclic Compounds
as Bases for Some Nucleosides with Expected Biological Activities**

Name of Candidate: Naglaa Salem EL-Sayed Ibrahim

This thesis has been approved for submission by the supervisors:

1- Prof. Dr. Abdel-Samei M. Abdel-Fattah

Signature *A. M. Abdel-Fattah*

2- Prof. Dr. Ahmed Saleh Ali El-Sayed

Signature..... *A. S. Ali*

Approved by

Prof. Dr. Mohamed Mohamed Shokry

Chairman of Chemistry Department

Faculty of Science - Cairo University

M. M. Shokry



To

My Family for Their Helpful Advice and Encouragement

The Author

Naglaa Salem El-Sayed Ibrahim Aboud



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Naglaa Salem El-Sayed Ibrahim Aboud

