

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





SYNTHESIS OF SELF-EMULSIFYING AGENTS FOR PETROLEUM OILS

CY I'M

A Thesis

Submitted to Institute of Graduate Studies and Research
University of Alexandria
In Partial Fulfillment of the
Requirements for the Degree

of

Master

in

Materials Science

By

Mohamed Abd Elrzzak Ibrahim Ahmed

B.Sc. of Chemistry and Physics, 1995Faculty of Science,Diploma in Materials Science, 2003University of Alexandria

Approval Sheet

Synthesis of Self-Emulsifying Agents for Petroleum Oils

Thesis

Submitted to Institute of Graduate Studies and Research
Alexandria University
In partial fulfillment of the requirement for
The Degree of Master in
Materials Science

By

Mohamed Abd Elrzzak Ibrahim Ahmed

The committee of examiners

Prof. Dr. Fatima Zahra Hanafi Ashour Faculty of Engineering – Cairo University

Prof. Dr. Yasser Mohamed Mahmoud Mustafa Petroleum Research Institute - Cairo

Prof. Dr. Tawfik Ali Ramadan Institute of Graduate Studies and Research - Alexandria University

Prof. Dr. Hemdan Mohamed Nour Eldin Midor Chairman Technical Consultant-Alexandria

	-		

Advisors' Committee:

Dr. Hemdan Mohamed Nour EldinMidor Chairman Technical Consultant
Alexandria

Dr. Tawfik Ali Ramadan Materials Science Department Institute of Graduate Studies and Research Alexandria University

Dr. Olfat Mostfa SadekMaterials Science department
Institute of Graduate Studies and Research
Alexandria University

Greeting to The Spirit of My Father and My Mother

ACKNOWLEDGMENT

In the name of Allah, the most gracious, the most merciful. I am deeply thankful to God and it is my pleasure to acknowledge with deep gratitude the efforts of all those people who helped me in the execution of this work.

My deepest appreciation and sincere gratitude to **Dr. Hemdan Nour Eldin**, Midor Company, for suggesting the project of research, generous supervision and for his continuous guidance, advice, valuable help through this work, devoting much of his time for discussing and reviewing this thesis, also effort to complete this work.

I would like to express my thanks to Dr. Tawfik Ramadan, Materials Science Department, Institute of Graduate Studies and Research, University of Alexandria, for his supervision with keen interest and for devoting much of his valuable time for discussing and reviewing this thesis.

I am deeply thankful to **Dr. Olfat M. Sadek**, Materials Science Department, Institute of Graduate Studies and Research, University of Alexandria, for her supervision with keen interest of this subject.

I also wish to express my thanks to "Alex. Mineral Oil Co." for continuous help and encouragement through all the work.

Special thanks are extended to my wife whohelped me during the time needed to accomplish this work and for her patience. I wish to express my heartfelt gratitude to my parents for their encouragement, constant prayers and continuing support.