شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومـــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـسـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

STUDIES ON PHYSICAL PROPERTIES OF SOME POLYMERS IN SOLUTIONS

B 1970

THISIS

SUBMITTED TO FACULTY OF SCIENCE,

SUEZ - CANAL UNIVERSITY

For

THE M.Sc. DEGREE IN CHEMISTRY

BY

GABER MAHMOUD EL - ENANY

(B.Sc)

1997

بسم الله الرحمن الرحيم

...يرفع الله الذين آمنوا منكم
والذين أوتوا العلم درجات
والله بما تعملون خبير"

صدق الله العظيم

(سورة المجادلة- الآية ١١)

This work was undertaken at the Phys. and Math. Eng. Dep. Faculty of Engineering Suez-Canal University, also in Polymers and Pigments Department, National Research Center under the Supervision of :

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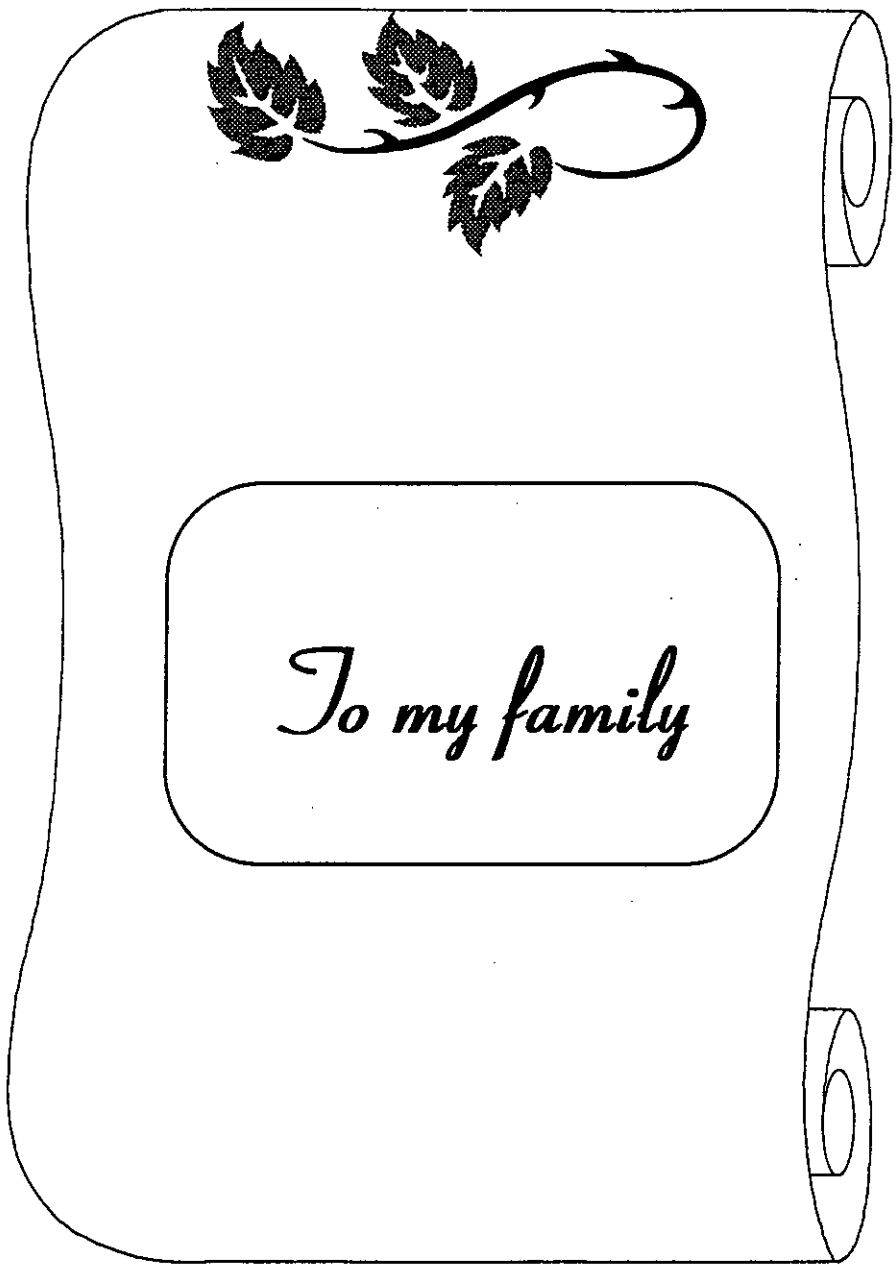
To my family

CONTENTS

AIM OF THE WORK

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Water soluble or dispersed clear microemulsion polymer solutions have found increasing commercial applications in pharmaceuticals, detergents, adhesives, textiles and many other applications.

The aim of the first part of the present work is to study the kinetics and mechanism of the microemulsion polymerization of styrene monomer using developed redox pair initiation system which consists of potassium persulphate as oxidizing agent with p-methyl benzaldehde sodium bisulphite adduct as an reducing agent. It is of interest to prepare different polystyrene microemulsion latices under different conditions for studding the rheological parameters of the prepared latices.

In the last part of the present investigation we intend to study, the effect of solvent on the unperturped dimensions of the poly(ethylene oxide) (PEO) in series of mixed solvents exhibiting synergistic effect, evolution of the expansion factor and effective hydrodynamic radius for PEO in each solvent mixture. Also, we intend to study the effect of isopropanol on the autodegradation of PEO .