PREPARATION OF SOME MEMBRANES BY RADIATION GRAFTING AND ITS APPLICATION

THESIS
Submitted to
University College for Girls
Ain Shams University
(Cairo)

541.13.

In the Fulfilment of the Requirements for the Degree of Doctor of Philosophy
In Chemistry

BY

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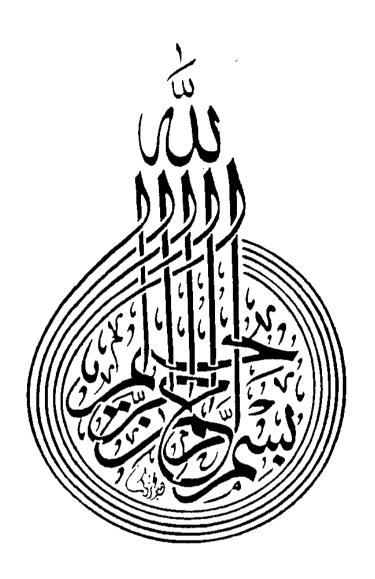
National Center for Radiation Research and Technology (Atomic Energy Authority)

> CAIRO, EGYPT 1997









TO MY FAMILY

PREPARATION OF SOME MEMBRANES BY RADIATION GRAFTING AND ITS APPLICATION

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ACKNOWLEDGEMENT

I would like to express my deepest gratitude and thanks to Prof. Dr. Ahmed A. Taha, Professor of Physical Chemistry, University College for Girls, Ain-Shams University, to Prof. Dr. Ahmed M. Dessouki, Head of Industrial Irradiation Division, National Center for Radiation Research and Technology (NCRRT), and to Assi. Prof. Dr. Nafossa H. Taher, for suggesting the point of research, supervision, continuous guidance and valuable discussions throughout this work.

Many sincere thanks to Prof. Dr. E.A. Hegazy, Head of Polymer Chemistry Department, for interest and facilities provided, also, my best thanks to all my colleagues in the Department and the center for their help in various ways.



ABSTRACT

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Preparation of some membranes by Radiation Grafting and its Application.

National Center for Radiation Research and Technology (Atomic Energy Authority of Egypt).

The main purpose of this study is to prepare grafted membranes with good properties by the direct radiation grafting method of various monomers such as N-vinyl-pyrrolidone (NVP), Acrylamide (AAm) and its binary system onto poly (tetrafluoroethylene-hexafluoro-propylene-vinylidine fluoride) films (TFB), and some polyolefins such as polyethylene films (PE) and polypropylene films (PP) for the same purpose.

These grafted membranes play a very important role in some practical applications in various separation processes. The most important applications of these synthetic membranes are in the medical and biomedical field. Also these synthetic membranes can be used in industrial mass separation processes such as micro, ultraand hyperfiltration, electrodialysis and gas separations. The results suggest that the prepared membranes can be used in the removal of some heavy metals such as Pb and Hg from waste water and may be used in other practical applications such as hemodialysis.

Key words: (Radiation, grafting, properties, applications)

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