

A C K N O W L E D G E M E N T

In presenting this thesis it is worthwhile to express my sincere thanks to all those who have helped me during the course of this research work.

I express my deep sense of gratitude to my research guide Prof. A.K. Rakshit for his excellent guidance, constant encouragement and the unfailing academic support throughout the course of this study, without which it would not have been possible to complete the work.

I am grateful to Prof. A.C. Shah, Head, Department of Chemistry and Prof. P.K. Bhattacharya for kindly providing me the laboratory and instrumentation facilities.

I would also like to acknowledge with gratitude the timely help and valuable suggestions I received from Dr. Surekha Devi, especially in polymer synthesis.

I am thankful to Dr. V.K. Kaushik, Dr. Krishnamurthy and Dr. Noble George (R&D, IPCL, Baroda) for the ESCA and surface area analysis.

I express my sincere thanks to Dr. J.T. Guthrie, Department of Colour Chemistry, Leeds University, Leeds, U.K. for DSC measurements.

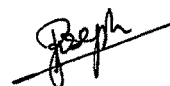
I take this opportunity to thank Dr. D.D. Sood, Head, Fuel Chemistry Division, BARC, Bombay for kindly allowing me to work on Isoperibol Solution Calorimeter at BARC, Bombay.

It is a pleasure to thank all my colleagues who helped me in various ways in the preparation of this thesis.

I gratefully acknowledge the financial support from the Department of Atomic Energy (DAE), and the Council of Scientific and Industrial Research (CSIR) during the tenure of this research work.

I owe a word of thanks to my parents, sisters, brothers, relatives and friends for their encouragement and moral support throughout the study.

Lastly, I thank Mr. Mody of M/s. Swastik XERO-TYPE for doing an excellent typing and bringing this thesis in the final form.



ROYCHEN JOSEPH