

ACKNOWLEDGEMENT

I express my deep sense of gratitude to Dr. N. Leelananda Rao, Professor and Head of the Department of Applied Geology, University of Madras for showing utmost care and concern for me especially in my academic pursuit and for his constructive criticism and constant encouragement throughout the course of my research work.

I am indebted to my guide Dr. S.C. Jacob, Lecturer, Department of Applied Geology, University of Madras for the personal and persistent interest he has taken in guiding and supervising my work throughout the course of my research.

My thanks are due to the following who were of immense help to me in the preparation of this thesis: Dr. B.R. Reddi, Dr. D. Jayakumar, Dr. U.S. Ramachandran, Dr. D. Henry Rajan, Dr. V.A. Chandrasekaran, Dr. P. Periyakali, Dr. C. Mohana Doss and Mr. B. Sekar.

My thanks are also due to Mr. N.K. Samiraj for preparing micro-sections, to Mrs. B.M. Indira Devi

and Mr. Viswanathan for drawing the figures, to Mr. T. Loganathan for photographic assistance, to Mr. K.C. Madhavudu for preparation of photographs and ammonia prints and to Mr. V. Subramanian for typing the thesis. Also I thank Mr. S. Venugopal for his continuous help during the preparation of the thesis.

My sincere thanks are due to Mr. Michael Weisberg of Brooklyn College of The City University of New York, U.S.A. for doing the microprobe analyses of minerals.

I thank the authorities of the University of Madras for permitting me to be a part-time research scholar in the Department of Applied Geology, University of Madras.

I also thank the Government of Tamil Nadu and the Director of Museums, Government Museum, Madras for permitting me to be a part-time research scholar in the Department of Applied Geology, University of Madras.