I acknowledge with respect the encouragement, help and advice given by my research guide Dr. D.K. Ganguly during the period of work. The thesis would not have reached its final stage without his unfailing counselling and continued assistance in all respects.

My sincerest thanks are also due to our colleagues who ungrudgingly rendered their help in carrying out and compilation of the work. I also take this opportunity to thank Mr. D.R. Sengupta (Jr. Stenographer) for his meticulous typing, Mr. H.N. Dutta (Artist) for drawing of the figures and Mr. D.D. Banerjee (Photographer) for processing the photograph.

Sincere thanks are due to Prof. R.B. Barlow of University of Edinburgh, Scotland for the gift of C₁₀Dichol.

Finally, I would like to express my sincere gratitude to the Council of Scientific and Industrial Research and Prof. R. N. Chakravarti, Director, Indian Institute of Experimental Medicine, Calcutta for providing all the laboratory facilities.