ACKNOWLEDGEMENT

I thank Dr. D.K. Ganguly, my research guide, for the help, advice and valuable guidance given to me during the period of work.

- Mr. J.R. Vedasiromoni for his help in preparing the manuscript.

- Mr. S.C. Sharma and Mr. S.P.S. Chauhan for their technical assistance.

- my colleagues and friends who at various stages helped me in finishing this work.

- Mr. S.K. Chaudhuri (Jr. Stenographer) for his meticulous typing.

- Mr. H.N. Dutta (Artist) and Mr. D. Banerjee (Photographer) for the illustrations.

- Prof. R.B. Barlow of University of Edinburgh, Scotland for the generous gift of $C_{10}$ Dichol.

- Dr. Josef Fried of the University of Chicago, Illinois for supplying 7-oxa-13-prostynoic acid as gift.

- Dr. Cooper of MSD for sending indomethacin as gift.

- Prof. B.K. Bachhawat, Director of Indian Institute of Experimental Medicine, Calcutta for providing laboratory facilities.

and - my husband for his moral support.

(Minati Datta)