ACKNOWLEDGEMENTS

The author wishes to express his deep sense of gratitude to Prof. S.J. Desai, under whose guidance and supervision the present investigation was conducted. Without the constant inspiration extended by him, the author would not have been able to write this thesis.

The author takes this opportunity to thank Prof.

D.R. Gadekar, Head, Department of Geology for providing the necessary facilities.

The author expresses his special thanks to Mr. C. Srikarni, Geologist, GSI, Gandhinagar who has helped him during the field investigations.

He takes this opportunity to acknowledge the help rendered to him by Drs. M.P. Patel, S. Ganapathi and S.P.H. Sychanthavong in various ways all throughout.

It is also the author's duty to acknowledge the all round help and co-operation received from Drs. K.C.Tiwari, A.V. Joshi, B.S. Deota, P.T.Deota Hassan Karami and Mr. Vinay Raole.

The author is also grateful to Mr.A.N.Pandey and Mr. H. Upadhyay, O.N.G.C., Baroda and the staff and research scholars of the Department of Geology, M.S. University, Baroda, who helped him in many ways.

The words fail to express the gratitude of the author to all his family members for their constant, continuous encouragement and guidance without which the author's academic career would not have reached this stage.

Finally the author thanks Mr. Snehal Shah for neat typing of the thesis and Mr. Chandrakant Mistry for preparation of diagrams.