

ACKNOWLEDGEMENTS

I would like to express my deepest sense of gratitude towards Dr. Nilesh Bhatt, Reader in Geology for his constant encouragement and pro-efficient guidance at all stages in carrying out this research work. His knowledge and understanding about Quaternary history and related proxies has helped me to decide work of action during the study, which in turn provided valuable clues to deduce vital conclusions.

Prof P.P. Patel Ex-Head and Prof N.D. Desai, the current Head of Geology Department of The M.S University of Baroda are gratefully acknowledged for all the support and departmental facilities made available during the course of investigation.

I gratefully thank Shri Hasmukh Shah, Chairman, Gujarat Ecology Society, who permitted me to take up this study. I express my gratitude towards Dr. Diwakar Sharma (Ex-Director) and Sri Vikram V. Desai, Honorary Director, Gujarat Ecology Society, for the encouragement and extending all the possible help to accomplish this thesis.

Valuable guidance and encouragement provided by Dr. Deepak Maurya and Dr. Vandana Prasad at various stages is thankfully acknowledged.

I sincerely thank Dr. M. Shanamukhappa, Dr A.K. Singh and Dr. K.K. Das of the ONGC for providing facilities for XRD analysis.

I extend my hearty thanks to my colleagues Dr. Uday Bhonde, Dr. Deppa Gavali, Dr. C. Raghunathan, Shri Unmesh Wangikar, Shri Shashi Bhushan Shukla, Shri Atul Kumar Patidar and Ms. Varthika Singh for support and constant help during the course of investigation.

I gratefully appreciate the help and support of Shri Sanjay Makwana in the field. The teaching and non teaching staff members of the department are also acknowledged for their help at various levels and in various capacities.

Last but not the least, I would like to mention about the inspiration, encouragement and whole hearted support with great understanding from my parents, wife and the other family members, without which this work would not have reach to this stage.

Jayendra J. Lakmapurkar