## **ACKNOWLEDGMENTS**

The author would like to thank Dr. R.V. Karanth (Department of Geology, M.S. University of Baroda, Vadodara, India) for his guidance and constant encouragement.

He is grateful to Professor M.P. Patel, Head of the Geology Department, M.S. University of Baroda for extending departmental facilities and for discussions. He is deeply indebted to Professor S.S. Merh (Vadodara) for providing the much needed inspiration and motivation. Professor Merh enlightened the author in the application of the techniques of structural analysis without which the tectonic complexities of the study area would have still remained a mystery. Thanks are due to Dr. S.P.H. Sychanthavong (Vadodara) who introduced the author to the study area. He would also like to thank Professor S.J. Desai (Vadodara) for useful discussions.

A part of the present research work was carried out at the Ruprecht Karls Universität Heidelberg (Heidelberg, Germany). The author would like to thank Professor R. O. Greiling for supervising the work in Germany. Discussions with Dr. Helga de Wall (Heidelberg), Professor Cees Passchier (Mainz, Germany), Professor Alfred Kröner (Mainz) and Professor Wolfgang Frank (Vienna, Austria) were found useful.

The author is grateful to Dr. Ronald Bakker (Heidelberg) for supervising the study on fluid inclusions. Professor Rainer Altherr (Heidelberg), Mr. Gültekin Topuz (Heidelberg) and Dr. Hans P. Meyer (Heidelberg) are thanked for helping with microprobe studies: The author would like to thank Dr. E.A.J. Burke (Free University of Amsterdam, The Netherlands) for carrying out Raman microspectroscopic analysis of fluid inclusions.

Special thanks are due to Professor Bruce D. Marsh and Mr. Micheal Zeig of Johns Hopkins University (U.S.A) for help in Crstal Size Distribution (CSD) studies of quartzites.

Several colleagues and friends in India as well as Germany extended help in various ways. The author is thankful to Dr. V. Sridhar, Dr. J.N. Malik, Mr. George Mathew, Mr. Aniruddha Khadkikar and Mr. Parag Sohoni (all in Vadodara, India) and Dr. Agnus Kontony, Dr. Lawrence Warr, Mr. Aung Moe, Mr. Carlo Dietel, Mr. Johannes Batrusch, Dr. Mohammed El Eraki, Mr. Stefano Febbroni, Mr. Axel Luther, Ms. Gabriel Froelich, Ms. Hoffmann, Ms. Heger, Mr. Diehl, Mr. Koch and Mr. Will (all in Heidelberg, Germany).

Various stages of the research were financially supported by - M.S. University Research Scholarship of M.S. University of Baroda (Vadodara, India); Fieldwork Grant from the William Greenwood Scholarship Fund of the Association of Geoscientists for International Development (AGID, Brazil); Senior Research Scholarship (SRF) of Council of Scientific and Industrial Research (CSIR, New Delhi, India; Scholarship No. 9/114/(92)/96/EMR-I) and German Academic

Exchange Service Fellowship (DAAD, Bonn, Germany; Fellowship No. A/97/00792). The author would like to thank all the above organizations.

Finally, the author would like to express his deep sense of gratitude towards his parents, brother and wife who provided extensive moral support throughout the duration of this research work.

Manish A. Mamtani