ACKNOHLEDGEMENTS

The author takes an opportunity to express his indebtedness to Dr. M. P. Patel, Reader in Geology, Faculty of Science, M.S. University of Baroda, without whose elaborate, innovative and meticulous guidance, this would have been an abortive attempt.

The author thanks the Head of the gelology department for providing all facilities in carrying out this study. He further extends his gratitude to Prof. S. J. Desai, In Charge Head of the department, for critically going through the manuscript. The initiation and inspiration to this problem by Prof. S. S. Herh is also gratefully acknowledged.

The author will fail in his duty, if the help rendered by Dr. N. H. Hashiwi and Dr. V. Purnachandra Rao of N.I.O. (Goa) in carrying out the XRD studies is not acknowledged. Prof. T. R. Joshi and Dr. K. V. R. Murthy of Applied Physics department are acknowledged for TL facilities and Dr. S. P. H. Sychanthavong for SEM micrographs. Shri Shailesh Vyas, Director of AIMS Institute, Baroda is acknowledged for imparting training to the author to independently manage his data on computer.

Special thanks are due to Shri C. P. Mistry for his excellent artistic support in line diagrams. Shri K. W. Christian is acknowledged for his assistance in data entry. The author also appreciates the constant encouragement provided by the teachers and research scholars of the department. The co-operation rendered by the administrative staff of the department is also acknowledged.

The author intends to make a mention of his parents and other family members, and all those who very warmly extended their fullest inspiration and moral support all throughout.

The present study is carried out with the financial assistance from the Council of Scientific and Industrial Research, India as Jr. Res. Fellowship vide No. 9/114(56)90/EMR-I dated 25-4-91. The author is highly greatful to CSIR for the most requisite support.