ACKNOWLEDGMENTS

I consider myself lucky to work under the able supervision of Dr R Shankar, Reader in Marine Geology, Mangalore University, with whom I had a nice association both academically and otherwise. I thank him for suggesting the research topic and for his help in completing it. His comments, suggestions and the painstaking corrections have largely improved the quality of my research work and the presentability of the thesis. His useful tips to finish a work efficiently and accurately are reflected in the statistical analysis of voluminous data and the quality of PC-based figures. I thank him profusely for all these.

I gratefully acknowledge Dr B R Manjunatha, Lecturer in Marine Geology, for closely monitoring my research and giving useful suggestions and solutions whenever I faced problems. I thank him for teaching me the basics of geochemical analysis, making me understand the concepts through his collection of literature and for helping me in the interpretation of the data. I thank him for the field trip that he made in one season and for his vital help during the second.

I am grateful to Dr M M Sarin, Physical Research Laboratory, Ahmedabad, for providing analytical facilities for radiochemical analysis. My thanks are due to him and Mr Rengarajan for helping me understand the principles of radiochemical analysis and training me in this field. Dr Sarin was kind enough to go through and offer his comments on the draft manuscript of the radionuclides chapter. I thank Dr M V M Desai, BARC, Mumbai for
helpful discussions in the initial stages of this work.

Dr T R Mahalingam, Indira Gandhi Centre for Atomic Research, Kalpakkam provided ICP-MS and AAS facilities for which I am grateful to him. I thank Ms Vijayalakshmi, Ms Uma and Messrs Krishna Prabhu, Thiruvengadasami and Sekhar who helped me in ICP-MS and AAS analysis. I thank Dr B R J Rao, former Deputy Director General, GSI, for providing AAS facilities at GSI's Mangalore unit.

I appreciate Prof K Siddappa, Department of Physics, Mangalore University for providing gamma spectrometry facilities. I thank Dr H M Somashekarappa and Mr K Karunakara for discussions and assisting me in the gamma spectrometric analysis. Dr Somashekarappa kindly provided a few soil samples of the Kaiga area.

Statistical analysis and data tabulation in the computer laboratory, Department of Statistics was made possible with the permission accorded by Prof K K Achary. I owe my sense of gratitude to him. Dr T P M Pakkala and Mr Santosh Kumar were generous to allow me to use the computer lab beyond office hours. I am grateful to them for their kind gesture. Miss Rajashree Kamath taught me Harvard Graphics and suggested the layouts of multiple figures. I thank her for her time and patience.

I acknowledge Prof Nanjungud and Mr Vijay, for permitting me to use the computational facilities at the University Computer Centre.
I thank Prof T R Sreedhara Murthy and Prof K R Subrahmanya who were Chairman of the Department of Marine Geology for providing the laboratory facilities.

Many persons have assisted me during the field trips. A few of them are: Prof Neelakantan, Department of Marine Biology, Karwar who provided field equipment and manpower, Dr T R Prakash, CGWB, Bangalore, who assisted me in the on-site physico-chemical analysis of water samples, Mr G C Suresh and Mr N A Harry who helped me in the collection of large volume water samples. I am grateful for all their help.

I thank Mr Satish, Megha Xerox, for drafting a few figures, neat printing and photocopying of the thesis. I thank my fellow researchers especially Dr D Krishna Bhat, Messrs. Blaise Lobo, Vijay Kumar, Badarees, Rajesh and Prabhu for giving me the moral support and for keeping me in good humour.

I owe my gratitude to my parents Keshava Bhat and Bharathi, and sisters Achala and Shubha who gave me the much needed confidence and encouragement which has helped me in completing this work successfully.

Financial assistance provided by the Board of Research in Nuclear Sciences, Department of Atomic Energy, for carrying out this work is gratefully acknowledged.