ACKNOWLEDGEMENT

“A journey is easier when you travel together. Interdependence is certainly more valuable than independence. This thesis is the result of four years of work whereby I have been accompanied and supported by many people. It is a pleasant aspect that I have now the opportunity to express my gratitude for all of them”.

It gives me immense pleasure to accord my sincere and heartfelt gratitude to Prof. M. Basavanna, Dept. of Studies in Geology, Karnataka University, Dharwad, under whose guidance the present work has been carried out. I sincerely thank him for his valuable supervision, productive comments, continued interest and encouragement.

I am indebted to Dr. H.M. Jayasheela, Chairman, Dept. of Studies in Geology, Karnataka University, Dharwad, and other faculty members of the Department viz., Prof. B.P. Waghamare, Prof. S.C. Puranik, Dr. B.V. Nadagouda, Dr. A.G. Ugarkar and Dr. A. Sreenivasa for their continued executive support and encouragement.

I am highly grateful to Dr. B.R. Raghavan, Reader and Dr. H. Gangadhara Bhat, Reader, Department of Marine Geology and Geoinformatics, Mangalore University, Mangalagangothri., also to Prof. T.J. Renuka Prasad, Dept. of Geology, Bangalore University, Dr. Jagadeesh T Gudagur and Dr. S. Manjunatha, Senior Lecturers, Karnataka Science College, Dharwad for their valuable advise and suggestions for successful completion of this work.

I express my gratitude to Dr. S. Manjappa, Assistant professor, PG Dept of Analytical Chemistry, University BDT College of Engineering, Davanagere, Dr. Manjappa and Prof Basavarajappa, Bapuji Institute of Engineering and Technology, Davanagere, for their help in carrying out groundwater analysis for fluoride and nitrate contents.

I wish to extend my sincere thanks to Shri. T. M. Hunse, Regional Director, Central Ground Water Board (CGWB), South Western Region, Bangalore. Shri. B. V. Chinagudi, Assistant Geophysicist and Shri. K. T. Suresh, Scientist 'B' (Geophysics), CGWB, South Western Region, Bangalore for providing me valuable secondary data.

I take this opportunity to express my sincere thanks to the Department of Mines and Geology, Chikkamagalure, Indian Meteorological Centre, Bangalore, Geomatics
Centre, Bangalore for having allowed me to work at their centres and providing me valuable secondary data pertaining to my work.

My special thanks to Shri. Tejaswi K Lakkundi, Research Scholar, Dept of Studies in Geology, Karnataka University, Dharwad, Dr. Ramu Natikar (Senior Geologist, Madagascar), Dr. D.V. Sarwade, Research officer, Central Soil and Materials Research Station, New Delhi, Shri. Parusharam Ganikoppa, Dharwad, Shri. Siddu Kalagudi, GIS Manager and Shri. Chandrashekara Appa Agasanahalli, Geologist, MSPL Ltd, Hospet, Shri. Mahaveera K.A., Geologist, Dept. of Mines and Geology, Chitradurga for their suggestions and help during the course of the work.

My special thanks to my friends especially Shri. Kumar, Research Associate, IISc, Bangalore, Shri. Anil. P., Assistant Manager, SECON Survey, Bangalore, Shri. Gururaj, MSPL Ltd, Hospet and Dr. Girish K. Huchannanavar, Research Associate, Dept. of Civil Engg., SDM College of Engg. & Tech., Dharwad.

I articulate my honest thanks to Ms. Shalini A. Beharry, Auditor, Mr. Prasanna Kumar Muttu, Auditor and Mr. Donakl Singh, Georgetown, Guyana, South America, Mr. Ganapathi Hegde (Geologist) and Sunil Kapoor (Dy. General Manager), ESSAR Minerals, Georgetown, Guyana. South America, Shri. Lokesh M, Environmentalist, L&T Limited, Oman for their help and inspiring suggestions.

I express my deep sense of gratitude to my father Danavadi Patel Chandrappa, my brothers, sisters and other family members for their constant motivation, support, encouragement and blessings in successful completion of this work.

This work is dedicated to my beloved mother Late Smt. Savithramma, who formed part of my vision and taught me the good things that really matter in life. The happy memory of my mother still provides a persistent inspiration for my journey in my life.

I would like to thank all those who have helped and supported me directly or indirectly in completion of this programme.

Place: Dharwad
Date: 13.01.2009

(D. C. Kantharaja)