ACKNOWLEDGEMENT

Guidance in the proper direction is a necessity for any form of success in life. It gives me immense pleasure to express my deepest and heartfelt gratitude to my guide, Dr. E.T. PUTTAIAH Professor, Department of Post graduate studies and Research in Environmental Science and Department of Water Management and Water Harvesting, Jnana Sahyadri Shankaraghatta, for his genuine interest, who always was a tremendous source of inspiration and of invaluable help in channeling my efforts in the right direction. It is my privilege to thank Smt. Susheela Puttaiah and Dr. Chithkala for their cooperation.

It is my privilege to thank Dr. M.S. Shivakumar, Principal, Dr. Sucharita Ranganathan, former Professor & Head, Basic Sciences and Engineering, Atria Institute of Technology, Bangalore.

I go down my words if I don’t express my sincere and warm gratitude to Sri. A. S. Chinnaswamy Raju, Managing Trustee, Atria Institute of Technology, Bangalore.

I would like to express my sincere thanks to Dr. Jayadev, Professor and Head, Department of Chemistry, SJBIT, Bangalore. I also extend my sincere thanks to L. Sripatby, Selection Grade Lecturer, Department of Chemistry Vivekananda First Grade College, Bangalore.

It is my privilege to thank Dr. J Narayan, Chairman, Department of Environmental Science and Dr. S. V. Krishnamurthy, Professor, Department of Environmental Science, Kuvempu University, Jnana Sahayadri, Shankaraghatta, for their support throughout the study. I also thank Dr. K. Yogendra, Professor, Department of Environmental Science and Dr. Hina Kausar, Professor, Department of Environmental Science.

It is the immense pleasure to express my sincere thanks to Smt. Renuka C, Senior Lecturer, Atria Institute of technology. I also thank Smt. Y. Vijayalakshmi and Smt. Kalpana, Professor, Govt. First Grade College. Bangalore.

It is my esteemed duty to reserve my high regards to my colleagues and friends Sri. D.K.Bhoopesh, Sri. Jayakirthi, S.B. Rajesh, Dr. T Aswathanarayana, Lecturer, RC college Bangalore, Smt. Nalinakshi N, Smt. Vasanthi, and Sri Y H Krishne Gowda, Atria Institute of Technology for their kind help and co-operation during my research work.
I thank the staff members of the Kuvempu University Library, for providing useful information for my research work. I extend my thanks to the office and Technical staff of the Environmental Science Department for their help during my research programme.

I would like to express my sincere and deepest gratitude to my father Dr. V Muniswamy Raju, mother Smt. N. Padmavathamma, for their love and blessings made me the person I am today. I would like to express my sincere and deepest gratitude to my elder brother M. Jayachandra Raju and Sisters Smt. Chandramma and Smt. Kamala Kumari.

I would like to render my deep sense of gratefulness to my father-in-law late Sri. N Narayana Raju Mother-in-law Smt. Nethravathi for their cooperation during period of my research work.

I have had the good fortune of receiving very generous and spontaneous moral support, cooperation from my wife Smt. Jayashree Raju, throughout the period of my research work. I remain ever grateful to her.

I am very happy to express my deepest love to my daughters Kumari Lahari Harish Raju and Kumari Mokshaa Harish Raju, for their cooperation during my research work.

(Harish Raju M)