ACKNOWLEDGEMENTS

I express my heartfelt gratitude and deep indebtedness to Dr. Ram Mohan, Professor and Head, Department of Atmospheric Sciences, Cochin University of Science and Technology, whose incessant encouragement and valuable guidance made it possible to complete my research work and present this thesis.

I take this opportunity to thank the Director, Collegiate Education, Government of Kerala and the Principal, University College, Thiruvananthapuram, for permitting me to do part time research.

I am grateful to Dr. N.R. Menon, Director, School of Marine Sciences and Dr. P.G. Kurup, Head, Department of Physical Oceanography, Cochin University of Science and Technology for giving me an opportunity to do research.

I am profoundly thankful to Prof. V. Damodaran Nair, Head, Department of Geography, University College, Thiruvananthapuram, for his advice and encouragement ever since my undergraduate studies.

I thank my colleagues Sri. R. Thulaseedharan Pillai, Sri. D. Nandakumar, Sri. J. Anilkumar, Sri. B. Rajasekharan, Sri. M.B. Salim and Smt. Hema S. Menon, Department of Geography, University College, Thiruvananthapuram, and Dr. R. Anil Kumar, Lecture in Geography, Sanskrit University, Kaladi., Prof. P.J. Joseph and Sri. A. Kaladharan Unni Department of Geography, Government College Chittoor, Sri. T. Jayachandra Kumar, Department of Geography, Government Training College, Thiruvananthapuram, and Sri. M. Ramachandran. APS
to the Minister of Forest, Govt. of Kerala, for their constant motivation and support given to me.

I express my sincere thanks to Dr. E. Saravanan, Scientist, Centre for Earth Science Studies, Thiruvananthapuram, for his valuable suggestions and all the helps provided to me.

I am grateful to Dr. P. Ramasubramonian, formerly Director, NARP. College of Agriculture, Thiruvananthapuram, for his valuable assistance and encouragement.

I avail myself of this opportunity to thank Dr. Mohan Kumar, Dr. C.A.Babu, and Sri. Baby Chakrapani, Department of Atmospheric sciences, Sri. Seshagiri Rao, Department of Physical Oceanography, Cochin University of Science and Technology and Sri. P.V.S.S.K. Vinayak, Centre for Earth Science Studies, Regional Centre, Kochi, for their timely advice and suggestions.

I am also thankful to Mrs. Haseena Raghavan, formerly research scholar, Department of Atmospheric Sciences, Cochin University of Science and Technology, for her suggestions and help.

Sri. Sreekumar, Smt. Girija and Smt. Sreedevi, staff, Department of Atmospheric Sciences, Cochin University of Science and Technology, also extended their help and services during my association with the department. I take this opportunity to express my sincere thanks to them.

I acknowledge Miss. M.C. Chithra for her excellent cartographic assistance. I take this opportunity to thank all my former and present students who have helped me in various forms and extended their co-operation during the tenure of my research.
former and present students who have helped me in various forms and extended their co-operation during the tenure of my research.

My thanks are also to Smt. Chithra Varma, Miss. V.K. Sindhu Kumari and Miss. J. Bindusree of M/s. Brain Computers, Thiruvananthapuram, for their admirable support in the data entry and preliminary analysis.

No words are adequate to thank Mr. Hari and Mr. Jayan of M/s. Soorya Xerox, Thiruvallam, Thiruvananthapuram, for their help in taking the final print outs of this thesis.

I acknowledge with thanks the commendable reprographic works of Sri. Radhakrishnan.

I am also thankful to my brother Sri. T. Radhakrishnan for his assistance in the GIS operations.

I am indebted to my parents and uncle who stood by me and provided me with pertinacious support and encouragement all through the years of my study.

I am also thankful to my wife, children and other members of my family for their co-operation, love and affection.