ACKNOWLEDGEMENTS

My sincere and deep sense of gratitude goes first to my adored teacher and research supervisor Prof. V. Krishna Reddy (Retired), department of Chemistry, Sri Krishnadevaraya University, Anantapuramu for his inspiring guidance, scholarly advice and consistent encouragement in completing the research work successfully. He is a person with endless patience and cordial and positive disposition: I consider it as a great opportunity to do my doctoral research under his guidance.

I am grateful to Sri Krishnadevaraya University, Anantapuramu for providing me an opportunity to carry out this research project as scholar of the university.

I sincerely thank Prof. K. Hussain Reddy and Prof. P. Ravindra Reddy for their significant help. I also thank all the faculty members and non-teaching staff of the department of Chemistry for their cooperation during this work.

I am highly indebted to Dr. B.V. Subba Reddy, Sr. Principal scientist, IICT, Hyderabad and Dr. B. Ram and Dr. B. Balram, Green Evolution Laboratories, Wangapally Village, Nalgonda for extending their moral support, scholarly assistance and providing facilities to carry out this research.

I would like to thank IICT-CCMB Library, Tarnaka, Hyderabad for according permission to visit and collect literature.

I am extremely thankful to Dr. N. Sivasankara Reddy for his selfless and timely help. I also thank IICT research scholars Vikram, Hanuman, Anji, Prudhi, Prabhakar, Srinu, Aneesh and my co-research scholar Mahesh for their cooperation during this work.
I am beholden to Sri K.K. Krishnakumar, former Lecture-in-Charge, Smt. K. Udayasree, present Lecture-in-Charge, Department of Chemistry, and all other colleagues in Govt. Degree College for Men (A), Kadapa for their moral support. I thank my former colleagues Dr. M. Pragathi and Sri. M. Satyanarayana Rao for their support.

I would like to acknowledge all the teachers I learnt from since my childhood for their guidance, blessings and support.

I am greatly indebted to my uncle Sri. R. Ranga Reddy and my aunt Smt. R. Savitramma for their unremitting help and infusing confidence in prosecuting my academic learning.

I invariably feel short of words to express my heartfelt gratitude to my parents late Sri. R. Valasa Reddy and late Smt. R. Bayamma for their care and affection.

My special heartfelt gratitude goes to my wife Kalavathi, my daughter Nikhila and my son Kuladeep Reddy for their unconditional support whatever I decided. There are so many others whom I may have inadvertently left out and I sincerely thank all of them.

R. Adinarayana Reddy