ACKNOWLEDGEMENTS

For all the kind encouragement sustained interest and affection that I have received throughout my tenure as Ph.D. student in this department, with a deep sense of gratitude and pleasure, I express my heartfelt thanks and indebtedness to my research supervisor Dr. L.S. Kakhandki Prof. of Physical Chemistry (Rtd.), Karnataka University, Dharwad. I indeed consider myself to be extremely fortunate to have come under the shelter of his scholastic arena, intellectual magnetism, awe inspiring personality matched by a rare combination of human simplicity.

I sincerely thank prof. V.B. Mahale, present chariman; prof. C.D. Daulatabad former chairman, and physical chemistry section head prof. M.L. Budni, Department of chemistry, Karnataka University Dharwad for providing me the necessary facilities to carryout this investigation.

I am thankful to Dr. S. A. Chimatadar, Reader, Physical Chemistry for their affection, concern and encouragement during my research work and Dr. M.V. Kulkarni, Reader, Organic Chemistry for his help in interpreting IR and NMR spectras of synthesized organic compounds. Also I take this opportunity to thank all the faculty members of the department of Chemistry, Karnataka University, Dharwad, for their help. I thank staff members of USIC, K.U.D. for their help in recording the UV, IR and NMR spectras of my research compounds.

I am grateful to Mrs. Pushpa L. Kakhandki for their affection, concern and encouragement during my research work and also I thank Mr. Arun, Smt. Anjali, Aravind Rajapur and Akshata for their help during my research work.

I have absolutely no words to express my deep sense of gratitude to Sri. Mahantesh S. Yatnatti, Lecturer, Neheru College, Hubli, and Sri, V.N. Kalasa,
Lecturer, Govt. Science College, Naragund for their ever lasting interest, moral support and encouragement throughout my research work.

I am extremely thankful to Smt. Basamma Dodamani for providing hostel facility during my research work. I also thank Shambu Pujar Vikram auto service Hubli, Sri. B.D. Dodamani and Balesh Hegganavar for their help.

I also thank shri and smt Ankad, Vimal computer's for providing me the computer facilities and who put the effort in converting my research records in to beautiful manuscript.

I am highly indebted to my friends and research colleagues shri. S. N. Shivalingappa, SJIT, Ranebennur, Mr. Rajesh S. Baligar, Mr. Ramesh H.S. Mr. Gururaj M. Neelgund, Mr. Mahaveer Kurkuri, Mr. B. G. Gouda, Dr. S.B. Koujalagi, Dr. Vasudev Nayk and Mr. Sateesh B. Hegde, who were always on their feet to help me in one or the other way.

I acknowledge my gratitude to my beloved and respected parents Smt. Sharada C. Hadimani and Sri Chanamallappa C. Hadimani who laid the foundation of my academic pursuit right from my childhood and for their sacrifice, they are source of great inspiration to me and I hold them in great esteem. I am very much grateful to my father-in-law Raju B. Karki and Gangadhar M. Kattishetty, sisters Dhvakshayani and Gayathri for their help and encouragement. Heartfelt thanks to my sisters' kids Ravi, Rashmi, Smitha, Vijay and Vinod.

Lastly, my heartfelt thanks to my brother Mohan for his inspiration, unfailing co-operation and the patience throughout my research work.

Dharwad

(C.C. Hadimani)