Acknowledgements

It is indeed great pleasure to express my deep sense of gratitude to my teacher and research supervisor Dr. Manohar V. Kulkarni, Professor of Organic Chemistry, Karnataka University Dharwad for his dedicated efforts, valuable guidance and constructive criticism throughout my research tenure. Apart from the professional growth which I observed under his guidance, words remain beyond comparison for the support, concern and moral built up in all the times.

I sincerely extend my thanks to Dr. S. T. Nandibewoor, Chairman, Dept. of Chemistry and Prof. S. C. Paranjik, Dean, Faculty of Science, Karnataka University Dharwad for providing all the necessary facilities for my research work.

I am left with the memories of my teacher Late Dr. (Smt.) G. M. Kulkarni, Sr. Lecturer, Karnataka Science College, Dharwad, her dedicated inspiration, moral support, and blessings made my dream come true, with deep remembrance, I acknowledge her.

I am grateful to my teachers Dr. K. M. Hosamani, Dr. I. M. Khazi, Dr. S. A. Chimmatdar, Dr. S. A. Patil, Dr. N. B. Mallur, Dr. V. K. Revankar, Dr. K. B. Gudasi, Dr. L. A. Manjeshwar, Dr. M.Y. Karidurgannavar of post Graduate Dept. of Studies in Chemistry, Karnataka University Dharwad for generosity in sharing their knowledge and encouragement.

I sincerely extend my thanks to my teachers Late Shri C. J. Ezra, Principal, B.M.E.M.H.S., Dharwad, Prof. B. R. Krishnapur, Rtd. Lecturer in Organic Chemistry, Dept. of Chemistry, Dr. K .P. Kolkar, Associate Professor, Dept. of Botany, Karnataka Science College, Dharwad for their concern, inspiration and encouragement. All my other teachers are not only acknowledged but for which I remain ever grateful to all of them in my life.

I have absolutely no words to express my deep sense of gratitude to Shri Basheer ahmed, Department of Genetics, Karnataka University Dharwad forever lasting interest, moral support, encouragement and help throughout my post graduation and research work.

I thank all the members of University Scientific Instrumentation Centre (USIC), Karnataka University Dharwad, Satish, Dept. of M.B.U, I.I.Sc Bangalore.
and CDRI Lucknow for the spectral data. I would like to express my thanks to Dr. T. N Gururow, Department of S.S.C.U, I.I.Sc Bangalore, Anilkumar G. N, Lecturer in Physics, Ramaiah Institute of Technology, Bangalore for providing X-Ray crystal data, Dr. Igor N. Schcherbakov, Department of Physical and Colloid Chemistry, Southern Federal University, Rostov-On-Don, Russia for the Quantum Chemical Studies, Dr. M. D. Ghate, Head, Dept of Pharmacy, Nirma University, Ahmedabad, Gujarat, Dr. A. R. Kulkarni and shri Sanjeev Karale, Sonia Pharmacy College, Dharwad for the pharmacological screening of synthesized compounds.

Dr. G. P. Pandey, Head, Division of Organic Chemistry Synthesis (OCS), National Chemical Laboratory, Pune, Dr. (Smt.) Smita R. Gadre, N.C.L. Pune are acknowledged for their support and sustained interest.

I thank Dr. B. Ravindranath, Managing Director, Bharavi Laboratories [P] Ltd, Bangalore for his moral support and valuable training in experimental chemistry. I am also thankful to Dr. K. Sandhya, Prod. Manager, Bharavi Laboratories, Bangalore for her concern and for making me learn various industrial experimental techniques.

I pay my heartfelt thanks to Dr. M. A. Pasha, Professor of Organic Chemistry, Bangalore University, Bangalore for his support and concern during my Ph. D tenure.

I take this opportunity to thank our research team, my teacher Dr. K. Shivashankar, Reader in Organic Chemistry, Bangalore University, Bangalore and senior research colleagues Dr. Vithal B. Jadhav and especially Dr. Mahantesh B. Patil, my junior research colleagues Marulsiddaya, Reshma J. Naik, Madhura V, Geeta M. Pawshe, Kiran K. Pujar and Hrishikesh Revankar are acknowledged for mutual understanding, support and more importantly adjustability with a working prospect in the laboratory. My labmates deserve my heartfelt thanks for cooperation throughout my research work and remembrance forever!

Literally words cannot depict the depth of my feelings to express sincere thanks to my friends Padma, Naseem, Venktesh, Pradeep, Mohammed Ikraam, Tulasigeri, Narasimhamurthy, Sunil, Shabbir Khazi, Kavitha, Veena Ammanna.
I acknowledge the help and cooperation rendered by Dr. R. R. Kamble, Dr. L. A. Shastri, Faculty, Dept of Chemistry, K. U. Dharwad and my research colleagues Dr. (Mrs.) Jolly, Dr. Raghavendra, Dr. Santosh, Shri B. R. Patil, Vani, Dr. Naveen, Dr. Srivivas, Gurunath, Anupama, Girish, Mallikarjun, Ashraf, Iqbal, Sandeep, Uday, Shreeshail, Vinod, Chetan, Tasneem, Roopa and others.

My heartfelt thanks to Anupama M. Kulkarni for her support and encouragement during my post graduation studies and research. I heartly thank Smt. Lalitha. M. Totiger for her love and help during my stay at Bangalore for spectral analysis and Mrs. and Mr. Sunkanna for their support and concern.

I am also thankful to the non teaching faculty members of the department for cooperation and help during the Ph.D tenure.

The prayers of my late mother Smt. Aarifa begum and father Shri Budan baig, who laid the foundation of my academic pursuit right from childhood, their sacrifice and great moral support have made this endeavor of mine a reality, and for which I am privileged to dedicate this work to them. Further I express my gratitude to my aunty Hayaatbee, my elder brothers Roshan baig, Gulshan baig, Shaheen baig, sister in laws-Aasha, Shabana, Shahnaaz. I express my love and affection to my nieces Shagufta, Simran, Sha and nephews Arbaaz baig and Muzaffar baig whose innocent smile and support encouraged me in every stage of my higher education.

I thank Mahaganpati Computers, Dharwad for computer work.

My sincere and heartfelt thanks to University Grant Commission, New Delhi for awarding Meritorious Research Fellowship, authorities of Karnatak University Dharwad for providing me an opportunity for pursuing Ph. D degree.

Finally I wish to thank all of them who helped me directly or indirectly to complete my Research work.

($) 05-2011

Naazneen B. Yaragatti