ACKNOWLEDGEMENTS

I am extremely thankful and owe a special debt of sincere gratitude to my teacher and research guide Prof. K. S. Rangappa Ph.D., D.Sc., FRSC., FNASc., Professor of Chemistry, Department of Studies in Chemistry, Manasagangotri, University of Mysore, Mysore, for welcoming me in his group, entrusting me with challenging projects, and for generous financial support. He also constructively criticized me and motivated to peruse my research goals.

Words are inadequate to express my profound sense of gratitude and thanks to Prof. B. N. Achar, Chairman, Department of Studies in Chemistry, Manasagangotri, University of Mysore, Mysore, for providing necessary facilities required for my research work.

I sincerely acknowledge my grateful thanks to Prof. M. N. Subash, Head of the Department, Neurochemistry NIMHANS, Bangalore, for their help in providing necessary facilities required for my in vitro receptor binding studies.

I also sincerely acknowledge my gratitude to Manish Malviya, who helped me in training practical aspects of receptor binding studies.

I would also express my gratitude to Prof. Elango and Anil Kumar, department of Pharmacology, J.S.S.college of pharmacy, for their help in providing necessary facilities and guidance required to carry out different in vivo behavioral studies.

I sincerely thanks to teaching staff Dr. S. Ananda, Prof. K. M. Lokanath Rai, Prof. Nagendrappa, Prof. Akheel Ahemd, Dr. P. Nagaraju, Dr. S. Shashikanth, and all other teaching and non teaching members of the Department of Studies in Chemistry, University of Mysore, Mysore for their constant support and useful suggestions.

My special thanks are to Dr. Shaukat Ara Khanum Dept. of Chemistry, Yuvaraja College, Mysore, for valuable suggestion in synthetic chemistry.

I sincerely acknowledge my grateful thanks to Prof. Mewa Sing, who helped me in designing animal experiments. Department of Psychology Mysore, Dr. Farathkhanum and Mrs. Pooja, Department of Biochemistry DFRL Mysore, for their help in providing necessary facilities and devoted their time for my research work.
I would like to express my thanks to C.V. Kavitha, who helped me in sharing her time in synthesis of my compounds and I even thank my friend and colleague C. T. Sadashiva, who helped me in arranging and executing different experiments.

I really express my gratitude from bottom of heart to Ashwini Kumara Shresta, who helped me in extending valuable suggestions related to my research work.

I am indeed indebted and extended my deep sense of gratitude to my friends/colleagues Mr. S. Nanjunda Swamy, Dr. Narendra Babu, Mr. K. C. Ponnappa, and Mr. Fayaz for their help and numerous fruitful chemical and biological discussions.

I truly express my thanks to my research colleagues Dr. B. S. Priya, Dr. M. P. Sadashiva, Dr. Basappa, Dr. N. S. Linge Gowda, Dr. K. Mantelingu, Dr. K. Jayalakshmi, Mr. S. B. Benaka Prasad, Mr. Y. C. Sunil Kumar, Mr. C. S. Ananda Kumar, Mr. N. R. Thimmegowda, Mr. S. Chandrappa, Mr. K. Vinay, Mr. D. Prasanna Miss. D. Asha, Mr H. R. Girish Mr. Girish, Mr. Chandra Shekar, Dr. Raju and Sathisha who have helped me during my research work.

I would also like to thank all other research colleagues in the department of chemistry who are very friendly with me during my research period.

My thanks are also due to my old friends; Nagendra, Sudhi and Babu, who helped me morally in difficult situations.

I have no words to express my gratefulness to my brothers Dr. Rajiva Poorna Chandra and Mr Aravinda Tejas Chandra, my sister-in law, Chandrakalak and my cute niece Pragna, all my other family members for their encouragement and moral support, love and affection, which enable me to pursue my goal.

Last, but not the least, I wish to acknowledge all those who knowingly and unknowingly helped me in completion of this research work.

(J. N. NARENDRA SHARATH CHANDRA)