ACKNOWLEDGEMENTS

Above all my humble thanks to The Almighty for the light He has kindled in me, which has led the path I am on.

It is a great privilege to express my sagacious sense of gratitude and admiration toward my esteemed venerable supervisor Late Dr. Manjeet Singh for his illuminating guidance, incredible encouragement and personal interest in this project work. In a true sense he is my architect and has groomed my basic concepts in the area of research from the Postgraduate level to doctoral level, under whose guidance I have completed my M.pharma also. But his untimely sad demise shattered me and whole scientific world of unflinching support and scientific concepts. Arrival of His Teacher Prof PL Sharma has let me to believe that teacher occupies the place of God, whose indebtedness is impossible to return. I am thankful to God for providing me too with blessings of an ideal teacher who deserves a special honour, being the best teacher one could ever have. His expert guidance, genius ideas, never compromising attitude, imbibed the strength in me to work hard throughout this endeavor. At the same time, I am thankful to Mrs. Manjeet Singh and Mrs. PL Sharma for their hospitality, motherly affection and words of inspiration.

I expressed my words of thanks to Mr Parveen Garg, Chairman, ISF College of Pharmacy, a dynamic leader, who transforms his energy into his team as well, for giving me the research Facilities, time and exposure to scientific world.

Further research grant of worth Rs 17.40 Lac from All India Council for Technical Education, New Delhi(File No.-8023/BOR/RID/RPS-138/2009-10)under Research Promotion Scheme is also appreciated, that supported us financially to complete this research work. I am also thankful to Indian Pharmacological Society that appreciated my research work by giving two subsequent years (2nd in 2009 and 1st in 2010) oral best paper presentation OD Gulati awards in cardiovascular sciences.
I expressed my courteous gratitude to Faculty members of College Prof. R.D Budhiraja, Prof. KL Bedi, Prof. KL Dhar, Prof. TR Bhardwaj, Prof. AN Kalia, Prof. OP Suri, Prof. R.S.R Murthi, Prof Rajesh KS, Prof Kahlon, Dr SSV Padi for their valuable suggestions and inspiring advices.

I expressed my sincere thanks to Dr. Dhvanit Shah Associate Scientist and Instructor, Harvard Medical School, Boston for consistent help and encouragement, during all times whenever he was needed. I am equally thankful to Mrs Manjeet kaur madam, Punjab technical university whose unwavering support and kindness at each step let me to complete PhD with full enthusiasm and without any technical problem. I regard my sincere thanks to Prof. TC Nag, AIIMS for full co-operation and persistent support in Research Work.

I would like to mention here the ever willing help by the non-teaching staff Mr Mahinder singh, Mr Naresh, Mr Kapil, Miss Rekha, and laboratory Staff Ashok, Ranjeet, Sandeep, Aman, Radheshyam and Chandsingh.

My sincere appreciation goes to my friends Vivek Sharma, Gaurav Sharma, Jaswinder Singh, Vinay Kumar, Gitika Khana, BVK Reddy, Rahul Deshmukh, Zafar Ahmed Malik, Rajiv Sharma, Manav Malhotra, Dr HC Patil, Mrs Rajesh Patil and Yati Sharma.

I express my sincere love and affection towards my loving students Akram deep Singh, Deepak Bhatreja, Kavita Pabreja, Vijay Singh Nain, Amit Bhola, Chaitnya Kaushal, Sandeep Tyagi, Gargee Dubey and Shamsher Singh for their regard and making my time memorable with lot of reminiscences to look back at.

Words are insufficient to verbalize deep sense of gratitude and regards to my parents, in the first place is the person who put the fundament my learning character, showing me the joy of intellectual pursuit ever since I was a child. When my morals ebbed and enthusiasm waned, it was Mother and Father who helped me getting out of it, a feat that can never be paid back in
feelings or words. To them I owe my wonderful today and dream filled future. I find it difficult to pen down my deepest sense of indebtedness toward my second Parents My Father in law and mother in law who soulfully provided me their constant support and affection. Bhai, Bhabi, Sugandha and Ankush thanks for being supportive and caring siblings. My loving thanks to little Childs my Nephew Arnav and my daughter Elakshi as playing with them let me forget all stress and tension.

Words fail me to express my appreciation to my wife Shweta whose untired support, dedication, love and persistent confidence in me. Like all other spheres of life, for what I cannot measure but treasure, she believed in me before I believed in myself.

At last I Pay homage to those experimental animals that have sacrificed their life in making my endeavour successes. May god grant them eternal peace.

Many people participated in various ways to ensure my research to succeed. I am thankful to all the friends and well wisher who directly or indirectly helped or motivated me in this venture.

I seek pardon and apologise for any errata, which still aversion.

(Saurabh Sharma)