ACKNOWLEDGEMENT

I take this opportunity with pride and enormous gratification to express the feelings of thanks and gratitude from the core of my heart to all individuals who abided with me directly and indirectly throughout the lean and lush phases during the materialization of this thesis.

While writing these lines, the first name which comes to my mind is of my reverend guide and supervisor Dr. Malay K Samanta. I have been in this project since the year of 2010 when I started my Ph.D. assignments. During this period, I had the privilege to know him as a thorough gentleman and a magnanimous person who never compromised on his principles. His unfailing enthusiasm and integral view on research coupled with his mission to provide high quality work has made a deep impression on me. I thus owe him a lot for having guided me on to the right path to transverse on research work ahead in my life. His sage counsel, well-meaning criticism and able guidance have aided me in many ways to write this thesis in innumerable ways.

I owe my special gratitude to Dr. B. Suresh, Vice Chancellor, JSS University, Dr. S.P. Dhanabal, Principal, Dr. Md. Afzal Azam, Vice-Principal, JSS College of Pharmacy, Udhagamandalam and Mr. Puttarajappa, Superintendent, JSS College of Pharmacy, Mysore for providing the research facilities for the successful completion of our work at JSS college of Pharmacy, Udhagamandalam.

I am grateful for the graciousness with which Dr. K. Elango, Professor, Department of Pharmacology, JSS College of Pharmacy, Udhagamandalam, responded me. His suggestions, constructive criticism and sustained encouragement have been of constant help.

I express my sincere thanks to Dr. Jeffrey Conn, Director; Dr. Craig W. Lindsley, Director of Medicinal Chemistry and Dr. Thomas A. Ekman, Project Consultant, Vanderbilt Center for Neuroscience Drug Discovery, USA for providing the gift sample of BQCA.

It’s my pleasure to express my solely gratitude to Dr. K. Gowthamarajan, Professor and Head, Department of Pharmaceutics and Dr. M. N. Satish Kumar, Professor and Head, Department of Pharmacology for their untiring support, encouragement and suggestions in completing this work successfully.

My sincere thanks to Dr. S.N. Meyyanathan, Professor and Head, Department of Pharmaceutical Analysis, and Dr. V. Senthil, Mr. N.Jawahar, Dr. A.R. Srividya, Mr. R. Rajesh Kumar and other lecturers of JSS College of Pharmacy for their continuous co-operation during every aspect of the work.

I appreciate the consistent help of all the lab assistants of the JSS College of Pharmacy, Ooty, mainly Mr. Vrusbendra, Mr. Gurumurthy, Mr. Nagendran, Mr. Mani, Mr. Siddaraju, Mr. Mahadeva Swamy, Mr. Shivakumar, Mr. Mahadeva Swamy, and Mr. Basavaraj.
A good support system is important to surviving during the journey of Ph.D. I was lucky to have my support system in the form of my best buddies, Anil, Chinni and Jayasankar. Their attitude of living every moment as it comes, making serendipitous observations and converting them to new possibilities, correlating ideas and understanding the obvious has helped me come a long way. The work done with them has taught me how a person can succeed in achieving what seems impossible to begin with...... Thank you buddies for everything.

It is my pleasure to express my sincere thanks to my closest friends, Mahendra and Kishore it was due to their impetus and constant boosting of my moral that helped me in getting out through my difficult times.

I wish to acknowledge my co-research scholars Vishal, Ashish Wadhwani, Ashish Zalke, Nilesh, Viral, Shanmugam, Srinivas, Shashank M, Shashank T, Siddu, Satyana Rayana Raju, Karthik Y, Abhilash, Anu Alex, Dubey and Manjunatha for their handful help throughout the work.

I take this opportunity to sincerely acknowledge the Council of Scientific and Industrial Research (CSIR) and Indian Council for Medical Research (ICMR), New Delhi, for providing Senior Research Fellowship award for financial assistance during the period of my research.

A special thanks to ICMR and CSIR, New Delhi, India; DST, New Delhi, India; Alzheimer’s Association, USA; Parkinson’s Disease and Related Disorders Association, The Netherlands and Indian Pharmaceutical Association, The Nilgiris; Society for Laboratory Automation and Screening’s Program Committee, USA and Centre for International Co-operation in Science, Chennai, India; Asian and Oceanian Association of Neurology, New Delhi India for providing travel support to attend 2nd Nano Today, (Hawaii, USA); CSPS 2013 (Vancouver, Canada); Alzheimer’s Association International Conference 2013 (Boston, USA); XX World Congress on Parkinson’s Disease and Related Disorders (Geneva, Switzerland); Third Annual SLAS Conference and Exhibition (San Diego, USA); 14th Asian and Oceanian Congress of Neurology (Macau, China).

Last in line but first in mind, I wish to extend my deepest and heartfelt thanks to my parents and family for their continuous support, encouragement and patience throughout these years.

--Rizwan Basha Khatwal