

ACKNOWLEDGEMENTS

Working on the Ph.D. has been a great experience. It is difficult to say how challenging the selection of a topic was, which has been the real learning experience, and how to write papers and proposals. Though sky is the limit to express gratitude and feelings, it gives me an pleasure to acknowledge those who supported me during the tenure of this study.

I am indebted to many people for helping me working on my Ph.D. an unforgettable experience. It is impossible to write in detail about the people inspired, encouraged and helped me in this achievement however; I will try to list few of those who have helped me through my whole journey.

I would first like to express gratitude from the depth of my heart to the Supreme power for His blessings and the strength showered upon me to complete the task. The next name I cannot forget throughout my life is my revered guide Prof. Hemant R Jadhav, Associate Professor, Dept of Pharmacy; Associate Dean, Academic Research Division, BITS, Pilani.

He went over each section of the work done and made many valuable suggestions to enhance its didactic value. I would like to take this opportunity to thank him from deep of my heart for his great help, guidance, parental behavior and inspiration bestowed upon me during my Ph. D work, which I shall cherish forever.

I am also highly indebted to Doctoral Advisory Committee (DAC) members Dr S Murugesan and Dr Atish T Paul for their valuable suggestions and evaluation of this work.

I am immensely thankful to the Vice-Chancellor, BITS Pilani, Prof. Souvik Bhattacharyya, Director, Prof. A K Sarkar and Dean, Administration, Prof. S C Sivasubramanian of Birla Institute of Technology & Science Pilani, Pilani campus for providing me the opportunity and necessary facilities to pursue my doctoral studies.

My sincere gratitude to Prof Sanjay Kumar Verma, Dean, Academic Research Division (ARD) and Doctoral Research Committee members of Department of Pharmacy for their inevitable support. I overwhelmingly acknowledge the teaching and nonteaching staff of ARD and Department of Pharmacy, for their help in one form or other.

I acknowledge SAIF, Panjab University, Chandigarh and central NMR facility, BITS Pilani for their technical support to access spectroscopy.

Further, my sincere thanks to Dr. Gautam Singhvi, Dr. Shvetank Bhatt, Dr. A Jaipal, , Dr. Priti Jain, Mr. Baldev and Ms. Archana K Kakkar for making the journey a memorable one. They all supported me personally as well as professionally.

I sincerely thank Prof. R N Saha (Director BITSPilani, Dubai Campus) and Prof. R Mahesh (Dean, Faculty Affairs, BITS Pilani) for their constant motivation to complete this task.

I express my sincere thank to Dr. Anil B Gaikwad (Head, Department of Pharmacy) for his constant motivation and friendly behave.

I also thank Prof. D Sriram, Prof. P Yogeewari, Dr. S Y Charde, Dr. Rajeev Taliyan, Dr. S K Dubey, Dr. Deepak Chitkara, Dr. Anupama Mittal, Dr. Anirudha Roy, Dr. Anil B Jindal and Dr. M M Pandey for their support and guidance all the way long.

I Wish to say special thank to Mr. Subhash Chander, research scholar Department of Pharmacy, for his company and technical support throughout the journey of my PhD work.

I also would like to thank all research scholars of Department of Pharmacy, especially, Ms. Almesh, Dr. Ankur, Ms. Anuradha, Dr. Arghya, Dr. Ashok, Ms. Deepali, Dr. Devadoss, Dr. Emil, Dr. Garima, Dr. Muthu, Ms. Nisha, Mr. Pankaj, Dr. Prashant, Dr. Pallavi, Mr. Santosh, Mr. Sourabh, Mr. Shridhar, Ms. Shruthi, Dr. Sushil, Dr. Vadiraj, Ms. Vajeer, Dr. Vibhu and Mr. Yeshwant for their support.

I will not forget to say thank whole heartedly to the non teaching staff, Department of Pharmacy for their support and help.

I sincerely express gratitude to my beloved parents, parents-in-law, family members, who always prayed to god for me and blessed me with patience to complete this work; They have always been a source of inspiration to me. Thank you with all my heart!

Whole heartedly I thank my wife, Ms. Jyoti for all her support and care she has showered throughout the journey. Finally, to the little ones, my daughter Vanshika and my son Lakshya. They always been a great support through their smile and made me a stronger person.

I am also thankful to all those who have been of immense help to me, either directly or indirectly and whose names I have unknowingly missed out.

Mahaveer Singh