ACKNOWLEDGEMENTS
ACKNOWLEDGMENTS

I am extremely thankful to my mentor, guide and philosopher Dr. Rakesh Kumar Sharma, Scientist 'E' & Additional Director, DRL(T) for his guidance and encouragement throughout the course of the studies. I would also like to express my special gratitude to Dr. Rajesh Arora, Scientist 'D', INMAS, Delhi for his encouragement, inspiration and also for teaching me how to tackle scientific queries. Their constant supervision gave logical direction to my strategies and thought processes.

I am highly grateful to Dr. Haider Ali Khan of the Department of Medical Elementology and Toxicology, Jamia Hamdard, Hamdard Nagar, Delhi for providing me a free mind and helping me in all possible ways. His kind behaviour and scientific advice helped me immensely to complete the studies on time. I am also thankful to Dr. Ehsan A. Khan, Head, Department of Medical Elementology and Toxicology, Jamia Hamdard, Delhi for his constant involvement and advice towards my research work.

I am extremely thankful to Dr. Subbarao of the Department of Bioinformatics, Jawaharlal Nehru University, Delhi for his help in applying the bioinformatics solutions to the queries generated in the wet laboratory at INMAS.

I wish to place on record my sincere thanks to my colleagues Mr. R.K. Sagar, Ms. Shikha Singh, Ms. Gurpreet Kaur, Mr. Pankaj Singh, Mr. Lakhman Singh, Ms. Soniya Tyagi, Mr. Pankaj Chaudhary, Mr. Anupam Hasg, Ms. Tamana, Ms. Shalini, Mr. Anand Mohan, Dr. Raj Kumar, Mr. Ashok Kumar Sharma, Mr. Suresh Singh, Mr. Jagdish Prasad, and Dr. Sanyog Jain for sharing their scientific acumen. I thank Ms. Kanchan Verma and Rajender for helping me by providing secretarial assistance, whenever required.

I am also extremely thankful to Dr. G.N. Qazi, Director, Dr. S.C. Puri, Scientist 'E' and their team at the Regional Research Laboratory, Jammu as well as Dr. P.S. Ahuja, Director, Dr. A.K. Sinha, Scientist E-II and their colleagues at the Institute of Himalayan Bioresource Technology, Palampur for providing phytochemistry support.

This arduous task could be established with the kind blessings of my family members (lovable thanks to Mom and elder brothers Shyam and Chetan). I am extremely grateful for their kind support and patience throughout the complete studies. I would like to pay my gratitude towards the calm soul of my father Late Shri Yash Paul Chawla whose blessing and constant inspiration inside my heart makes me brave enough to go through all the heart-throbbing tests of my life. I would like to give special thanks to my friend Ms. Sarita Jaiswal for her constant help, inspiration and involvement throughout my work. I would also like to acknowledge my friends Ms. Sushma Jaiswal, Ms. Arti Jaiswal, Mr. Sanjay Singh and Mr. Vivek Vishal for their moral support.

I am grateful to Dr. R.P. Tripathi, Director, INMAS, Delhi for providing research facilities (under the program HARP) and organizational support all along my tenure. Last but not the least, I am thankful to CSIR for providing me with a Research Fellowship tenable at INMAS, Delhi from Dec. 2003-06.

Above all I am thankful to the almighty God for His grace and blessing.

Date: March 2007

(Raman Chawla)