ACKNOWLEDGEMENT

Completing a research work is a complex task which requires cooperation from many people. The work of research is not complete without acknowledging the sincere efforts of all those concerned. It is my privilege and an opportunity to express my feelings of gratitude to all those who helped me in bringing out this thesis.

Words are not enough to express my gratitude to my Supervisor, Dr. (Mrs.) Paramjeet K. Walia who not only supervised my work with great patience but has also been a constant source of inspiration since the beginning of my research work. Her generous nature and her willingness to go an extra mile stood me in good stead all along. I am deeply grateful to her for her outstanding academic inputs and guidance in my research work. I will always continue to appreciate her fine and sympathetic humane qualities.

I am extremely thankful to all the Librarians, Scientists, Technical Officers, Technicians and Research Scholars from CSIR family for responding to my appeal to fill up the questionnaires for data and providing all supplementary information as and when required during follow up interactive sessions. This could not have been possible but for their unflinching cooperation.

I am thankful to Mr. N K Wadhwa and all my colleagues (Mr Jagdish Prashad, Mrs. Manju Sharma, Mrs. Neetu Chandra, Mr. Abhishek Sharma, Mr. Abhishek Yadav, Dr. Jyotilata Pandey, Ms. Archana Puri, Mr. Vinay Rampal, and Deepika Kataria) for their constant support and encouragement in the completion of this study. I am grateful to my friends Ms. P. Nishy, late Sh. Inder Sen, NISCAIR, New Delhi, Sh Kashmiki Lal, NISTADS, Mr. Mukhtiyar Singh, IHBT, Palampur and Ms. Sangita Tanwar NBPGR for their untiring support and encouragement in my research pursuits.

I bestow the credit of my work entirely on my Son Kaartik and Wife Sarika who have been supportive during the entire period of my research. Finally, I wish to dedicate this
thesis to my reverent parents who had always encouraged me for higher studies and
would be the happiest persons if they were alive to see me so successful in my studies
and my life.

RAJPAL WALKE