ACKNOWLEDGEMENT

I, from core of my heart, express my gratitude towards my academic mentor, guide and thesis supervisor Dr Manohar Chandwani. If not limited by words, then really I will need one dedicated chapter to express my feelings, guidance given, support extended and motivation provided by Dr Chandwani. I would have withdrawn from Ph.D. or gone for another registration, if he has not supported and motivated me. So, I strongly feel that the opportunity for writing this acknowledgement was could not possible without him. I also express my sincere gratitude to the family members of my supervisor Dr Chandwani, who sacrificed their valuable time for my supervisor, so he could spare time with me. I do not forget to acknowledge remote yet constant support & motivation given by Hon’ble VC Dr Pramod K Mishra and Hon’ble Rector Dr Ashutosh Mishra. Two more persons, who also play most important roles in my life, were very keen and vigilant that I should focus on my work and complete the thesis. First, is my beloved and respected father and second is my better half, my beloved wife Jayshri. Like all fathers do, my father Dr I B Bansal has motivated me a lot to complete this task, but apart from that he also gave some useful suggestions from his vast experience for the time management. This has helped me for putting my all energy in constructive way on all parts of the life. I am grateful to god to have him as my father. Jayshri was working as a silent bridge between me, my guide and my father so I can get proper environment and sufficient time to work. The time she spent without me and waiting for me so I can complete the thesis can not be re-charged. This has made me her debtor for the life. Her sacrifices can not be compensated.

I also acknowledge the motivation given by my beloved & respected mother, Mrs Savitri Bansal. She has been the source of inspiration and internal power to me. In fact the final writing work was started and completed smoothly with her motivation only.

Two of my friends and colleagues are like troubleshooters to me. I always call to Dr Govind Maheshwari and Mr Hemant Mehta to seek advices, for all my academic and professional queries. Dr Govind Maheshwari was kind enough to spare his time for my thesis and also helpful in providing his insight towards research and thesis organization. Mr Hemant Mehta is like ready-reckoner to me, who was always available throughout this work, at any instance of time. I would like to express my sincere thanks to HOD(IT), Dr (Mrs) Vrinda Tokekar for providing continuous support and motivation throughout the work. Also, I am
thankful to her for sparing me from majority of administrative responsibilities, so I could focus on my thesis work.

I am grateful to my senior colleagues Dr Sanjiv Tokekar, Dr Suresh Jain, Dr Ajay Verma, Dr Shashi Prakash and Dr Ashesh Tiwari for supporting and motivating me during entire duration of work. I am thankful to Mr Lalit Gehlod and Mr Amit Mittal, who are my friends and colleagues; presence of both makes me elevated and has motivated to complete the task.

I am thankful to Dr S P Singh and Dr Rajeev Dixit, my senior colleagues in the University for providing me moral support during the entire period of thesis writing.

Mr Paresh Atri, Administrative Officer, IET, who happens to my friend also, has supported me a lot and also taken pains in completing the formalities as earliest. I am thankful to him. I am also thankful to Mr Manish Lashkari, Mr Vijay Pawar and Mr Rajesh Binjwa, my colleagues at IET for providing me continuous support during my work. I am thankful to my students Pranay, Shantilal & Vishal for helping me in arranging the references in order.

My respected sisters and their family members have scarified a lot of their valuable time, when I was busy in this work. They have been cooperating, kind and also supportive to me and my family throughout this work. I am thankful and feel grateful to them from the bottom of my heart.

My children have cooperated me and accepted my situation, though they do not understand the meaning of work in which I was busy. Now, it is the time to fulfill their commitments and compensate what they have missed.

I am fortunate to have such a good neighbors, who supported my family in my absence and especially in late hours when I was on the verge of completion of the thesis and sparing more time at Institute.

We get motivated from words and behavior of others and some time we have to deduce motivation by their actions. So, I express my gratitude to all who helped me a lot through their words, behavior and actions.

In the last I am highly grateful to my Institute- IET, my University- DAVV and the Society for giving me this opportunity and the Universe and the Supreme Cosmic Power for making me capable to do this work.

Pratosh Bansal