

## **ACKNOWLEDGEMENTS**

Firstly, I would like to express my sincere gratitude to my guides Prof (Dr) Anil Kumar and Prof (Dr) T Joji Rao for the continuous support in my PhD study and allied research, for their patience, motivation, and immense knowledge. Their guidance helped me during every phase of research and writing of this thesis. The doors of my guides were always open whenever I ran into a professional doubt spot or had a question about my research or writing. They consistently allowed their experience to enrich my knowledge and work and always steered me in the right direction whenever they thought I needed it.

I could not have imagined having better advisors and mentors for my Ph.D. study.

Besides my advisors, I would like to thank the Faculty Research Committee. I would like to present my sincere gratitude to Dr. Anirban Sengupta, Maj Gen (Dr.) SPS Narang, Prof C P Sharma, Dr. Ashish Tripathi, and Dr. Ruchi Tyagi. Their insightful comments, advices, encouragement, and motivation incited me to widen my research from various perspectives.

I would like to thank my family, my parents and my both younger sisters for supporting me spiritually throughout writing this thesis and my life in general.

A special thanks is dedicated to my elder sister who was with me for every single moment to provide me strength, support and right direction. I owe my deep gratitude to her for developing my skills as a true researcher. During the last three years, she taught me a lot and ensured quality work. I cannot not imagine if this thesis could be completed without her blessings. I solely dedicate this thesis to her.

Atul Kumar Agrawal