Acknowledgements

It is with a deep sense of gratitude that I would like to thank Prof. D. Balasubramanian. Prof. Balasubramanian has been an example to me in many ways. It is an honour for me to have been associated with him ever since I joined CCMB in 1985. During these 12 years, there were several occasions wherein he gave me tremendous support both on the academic front as well as on a personal level. In fact, I consider him the best of all those who taught me science. More important, he taught me to realize and deal with the intricacies of life properly. I thank him with utmost respect for being a role model in my life. I thank him for allowing me to register for my Ph.D and encouraging me throughout this endeavour.

Dr. Mohan Rao is another person working with whom is a real pleasure. He taught me several scientific techniques in a most simple and comprehensive fashion. He has always been helpful and gave me the right advice whenever I approached him with a problem of any nature. I thank him profusely for all the help he has rendered to me.

It would be unfair on my part if I forget to acknowledge Shri Kranti Kumar, who has helped me with various correct suggestions on several occasions during my tenure in CCMB. He has always allowed me to use his laser printer and xerox machine during the preparation of the thesis. I thank him for all his help.

I would like to take this opportunity to sincerely thank Sivakami, Raman, Dr. Ramakrishna Murti, Susheel Chandani, Debi Ghosh, Siddharth, Ritu, Trivedi and Rajaram for encouraging me in general and helping me in achieving various tasks during the course of the thesis work. Help rendered by Syeed, Venu and Ehsan is gratefully acknowledged.

Thanks are due to my old time friends Chenchal, Sridevi, Purnanand, Manni and Padma who really stood by me and gave me the moral support whenever required. Uma and Khitish
Mazumdar have always been my well wishers and I thank them for their general help at all times.

It would be difficult to list all the names here, but there are several people in CCMB with whom I had personal interaction and their help and friendship are gratefully acknowledged.

I would like acknowledge Mr. Giridharan for his drawings, Mr. Bhaskar and Mr. Prakash for doing a wonderful job of xeroxing the thesis.

I would like to thank my parents, especially my mother, for being a constant source of inspiration. I also thank my brother Seshu and sister-in-law Durga who looked after me during my college education. My parents-in-law have always been extra nice to me and have always treated me as their own son. I gratefully acknowledge their love and affection. My wife has always been an emotional anchor throughout and her constant encouragement and support is greatly appreciated. Finally it is my daughter Shradha who always puts me in high spirits with her smile and naughtiness, which augment rather than sap my energies and I thank her for that.