Acknowledgements

I wish to place on record my profound sense of indebtedness to my worthy supervisor, Dr. D.K. Dhawan, for his superb guidance, stimulating discussions, constructive criticism and sustained encouragement. His dynamism inspired me to efforts that I would have otherwise been incapable of.

I also owe a debt of gratitude to my supervisor, Dr. Akhtar Mahmood, Professor, Department of Biochemistry who has been a great source of inspiration, encouragement and help to me during the entire period of my research work.

My sincere thanks are due to Dr. Bimla Nehru, Chairperson, Department of Biophysics, and Dr. F.S. Nandel, former Chairman, Department of Biophysics for their kind support in providing the necessary facilities.

Thanks are due to Dr. C.M. Pathak, Department of Biophysics, PGIMER, and Dr. M.P. Bansal, Department of Biophysics, Panjab University, for their timely help, valuable suggestions and encouragement.

I am also grateful to the technical staff of the department for providing me lab facilities which played a key role in executing the study.

I am equally beholden to all my friends especially Dr. Neena Singla, Dr. Manjinder, Geetanjali and Parminder, for their constructive scientific discussions, valuable suggestions and for their untiring cooperation. I would also like to acknowledge Dr. Rajinder Thakur for providing piles of relevant latest references.

Words are falling short to express my appreciation to my little loving daughter, Sakshi, who besides missing me, showed extreme patience all the time and had been a constant source of inspiration for me. I must not forget to mention the moral support and cooperation rendered by my husband, Rajiv, whose constructive criticism has enabled me to design, execute and give final shape to this research project.
Credit of this achievement goes to my parents, especially to my loving mother, who has always been a constant source of inspiration to me even when I was not in best of my moods. My parents have always been there for a passionate encouragement and inspiration throughout my academic career. A special vote of thanks to Ankur, Diksha and little Ishu for making life easier and more lively. I record sincere thanks to my father-in-law, Dr. R.M. Pathak, for his much needed affection and good wishes throughout this study.

The fellowship offered by University Grants Commission, New Delhi is greatly acknowledged.

I extend my thanks to the staff of M/s. Kaizen Graphics for their new ideas in making pleasant, the processing of this manuscript.

No choice of words will suffice to adequately register my gratitude to THE ALMIGHTY who is both the cause and effect of the whole endeavour.

Ashima Vasishta