ACKNOWLEDGEMENTS

I offer my obeisance to the almighty of Lord Siddi Vinayaka for completing my studies successfully and present this piece of work for which I am extremely indebted.

It gives me immense pleasure to express my deep sense of reverence, respect and gratitude to my research supervisor Prof. C. Rambabu, Coordinator, Department of Biochemistry for his cool headed, well-balanced heraldic advocacy, constant co-operation, careful observation, unfailing commitment, and valuable suggestions in finalizing this research work to a successful one. I consider myself very fortunate in that, it would have been impossible to achieve this goal without his support.

I owe a great debt of gratitude to Prof. N. Veeriah, Special Officer, Head Dept. of Physics, A.N.U.N.C, for his timely advice, constant encouragement and kind cooperation.

I pay rich tributes to Dr. D. Ramachandran, Asst. Professor, Dept. of Chemistry for his kind helpful discussions and constant encouragement during my research work with respectful regards and immense pleasure. His humane as well as humanitarian treatment in the stormy situations upgraded me a lot for the fulfillment of the target.
It gives me immense pleasure to express my sincere gratitude and respect to Dr. M. Subba Rao, Asst. Professor, Dept. of Chemistry and Dr. B. Satyanaryana, Asst. Professor, Dept. of Applied Mathematics and other staff members for their encouragement and kind cooperation.

I express a special word of thanks to my co-scholars Dr. P. B. S. Lakshmi, M. Jaya Prakash, G. Kishore, Kumar Vyas and Ravindra for their support throughout the research work.

I convey my heartful thanks to Mrs. J. Sitakumari, Junior Assistant; Mr. M. Rajagopal, Junior Asst. and Mr. K. Venkateswara Rao, Helper, Department of Biochemistry and Ministerial Staff, Dept. of Chemistry, A.N.U.N.C for their help whenever necessary.

I owe more than myself to my mother S. V. Laksmi, and my brother; Capt. B. V. N. Kumar and vadhina; S. A. Jyothi who always dreamt that I reach golden heights. I am deeply grateful to my uncles; K. Chinnaih and K. Srinivas Kumar for their affectionate encouragement and support from time to time.