ACKNOWLEDGEMENT

My heartfelt gratitude goes to my guide Dr. Kantha D. Arunachalam who introduced me in to the field of Medical biotechnology, constantly motivated and encouraged. My sincere thanks also goes to the management of SRM University for allowing me to carry out this work in their premises and to use their facilities. Support rendered by Dr.P.T.Kalaichelvan, Professor, CAS in Botany, University of Madras (Guindy campus) is mention worthy. The help and technical assistance provided during animal studies by Dr.Sekar, Veterinary Doctor, Mr. Prabhakaran, Technician, Mr.Patra, Lab technician, Mr.Jayaprakash, Lab assistant was invaluable. Special mention is required for Mr.S.Vijayaraghavan and Mr.Narayanan, Stores assistants, Dept of Biotechnology (E&T), SRM University who were always kind hearted to help with the required chemicals, reagents and glass wares. My heartfelt thanks also goes to Dr. Maria John, Assistant Professor, Dept of Biotechnology, Shool of Bioengineering, SRM University who helped me with immunofluoresence assay deserves a credit. The support given by various 3rd year B.Tech (Biotech) students of SRM University such as R.Balaji, Abin Biswas, Akanksha Singh, and Chetna Sharma was of paramount importance.

The role of Dr. Mary Mohan Kumar, Mr. Anbumani, IGCAR, Kalpakkam, Mr. Jayakrishna Kuruva, CIDR and Mr. D. Ashok Kumar, Research scholar, VIT University, Vellore whom put in their hard work for anti-genotoxic studies was
critical for the work. A special thanks goes to my sister Ms. R. Archana, who helped me with the graphs. This work would have been impossible without support of my family members who were the pillars of moral support and motivation throughout. I am highly indebted to all my well wishers and friends who chipped in with whatever help was required at that moment of time without whom the work would not have shaped to its present form. Last but not the least I would like to thank god almighty whose presence and guidance has always helped me throughout the work.