ACKNOWLEDGEMENT

I wish to place my immense sense of gratitude to my guide, Dr. I. K. Pai, Senior Faculty member, Department of Zoology, Goa University, Goa, for his invaluable guidance during the course of my investigation. I am deeply indebted to him, for his genuine interest, valuable suggestions, and every possible help and encouragement in this endeavour.

I am grateful to the Head of the Department of Zoology, Goa University, Prof. Dr. P. V. Desai, for making the facilities available to me to work in the department.

I express my gratitude to Mr. N. M. Gandhi, Bhabha Atomic Research Centre (BARC), Trombay, for helping me in every possible way, throughout the investigation. I am also thankful to Dr. Sulochana Adiga, U.S.A., for her continuous moral support.

I am profoundly indebted to Dr. (Mrs). Chitra Dhume, Assoc. Prof., Drs. Manisha Audi and Sudeep Lokapure, Faculty members and Dr. (Mrs). Asha Naik, Head, Department of Biochemistry; Drs. Sushma Bhonsule, Pereira, Ratabuli and Sunita D'Sa, Faculty members and Dr. (Mrs). P. N. Bhandari, Head, Department of Pharmacology, Goa Medical College, for their help, constant support and encouragement. I also thank the former librarian of Goa Medical College, Mr. P. L. Dongade, for permitting me to use their library facilities.
I thank Prof. Dr. D. J. Bhat, Former Dean, Faculty of Life Sciences and Environment and Head, Department of Botany, Goa University, for allowing me to use the instruments in that Department.

It is my pleasure to thank Dr. K. S. Rane, Head, Department of Chemistry, Dr. M. K. Janarthanam, Reader, Department of Botany, Dr. B. R. Srinivasan, Lecturer, Department of Chemistry, Goa University, for helping me in various ways, during the course of my research work.

I express my sincere gratitude to the former Heads of the Department of Microbiology, Dr. S. Mavinkurve and Dr. Joe D’Souza for providing me with chemicals and allowing me to use the instruments in their Department. I also thank the laboratory staff of that Department for their help.

I am indebted to Dr. Y. S. Valaulikar, Department of Mathematics, Goa University and Mr. M. S. Kulkarni, Department of Public Health and Social Studies, Goa Medical College, for their help with Statistics.

I extend my sincere thanks to Mr. S. J. Godse, Senior Lecturer, Dhempe College of Arts and Science, Miramar, Panjim, Goa, for his timely help. I thank Dr. (Mrs). Yasmin Modassir, Head, Department of Zoology, Dhempe College of Arts and Science, Miramar, Panjim, Goa, for her encouragement.

I would like to express my gratitude to Dr. Shekhar Salkar, Oncologist and Dr. Vithal Mardolkar, for their help during the initial stages of my investigation.
Thanks are also due, to my colleague and friend, Mr. Vikrant Berde, for his constant support, throughout the course. I also wish to thank Ms. Asha Nadermath and Dr. Shanti Desai, for their help and assistance during the investigation.

I owe my thanks to my peers, Nandini, Navin, Upal, Chanda, Keshav, Aureen, Raghu, Minal and Sonali for their support during the course of my research. I am also thankful to Prateek and Nagma, from the Department of Management studies, for their moral support.

The help and support, extended to me from time to time, by the office and laboratory staff, of my department, is duly acknowledged.

I owe a lot to my parents and brother, Shridhar and words are not enough to express my deep sense of gratitude, due to them, for their inspiration, encouragement and moral support extended to me, which helped me in overcoming the ordeals faced by me, during the course of my investigation.

If it had not been for all these people, and a few others, whose names might have missed mention here, but have touched my life in one way or the other, this endeavour would have proved a Herculean task.

T. K. GEETHA