ACKNOWLEDGEMENTS

I feel greatly exulted to express my gratitude towards my reverend, learned and eminent guide Dr. Manisha Agarwal whose genuine counsel, excellent guidance and constant encouragement has impelled me to stick on proper track throughout my Ph.D. Thesis. It was a great chance to work under such a benevolent personality.

My sincere thanks are due to Principal, Vice Principals and, Head Department of Zoology, Govt. Dungar College, Bikaner for providing me the necessary laboratory and other facilities in the department.

I am especially indebted to Dr.K.M.Bhartiya, Retd. Vice Principal, Govt. Dungar College, Bikaner for his guidance, sustained interest and invaluable suggestions.

I am thankful to Dr.R.K.Purohit and Dr.Aruna Chakrawarti Associate Professor of Zoology, Radiation Biology Laboratory, for helping me in various ways.

I can’t forget the blessings and affection bestowed upon me by all the faculty members of Department of Zoology, Govt. Dungar College, Bikaner.

It is my pleasant duty to express my thanks to Dr. H.S. Kumar Head Department of Radiotherapy, Director, Acharya Tulsi Cancer hospital and research centre, P.B.M.Hospital, Bikaner for providing irradiation facilities.

I am grateful to Dr. (Mrs.) Anila Purohit, Associate Professor, Dungar College, Bikaner for her affection and encouragement during the course of this research work.

With a profound sense of gratitude, I shall thank for the cooperation and help extended by my research colleagues Jayshree Banot, Nishat Parihar, Sangeeta Vyas, Indu Bala, Shefali Sobti, Arti,
Himani Bhati and Birbal Ram, for their continued help and support which enabled me to complete this work within the scheduled time.

I also convey my deep sense of gratitude to the Sh. Roop Singh Gahlot for his help in preparing the photographic plates in the thesis.

Perhaps the want of words may leave in a state abashment in paying my encompassing debt and sincere respect to my parents Sh. Ganga Ram Bana & Smt. Rukhama Devi, for their blessings and encouragement without which this venture would not have had taken the present shape.

I also appreciate the co-operation given by my brothers Om Prakash, Parmanand, Ashok Kumar and Munniram during the entire period of my research work without his support can’t do anything.

I am very thankful to my sisters Laxmi, Saroj, Savitri, Santosh and Suman for giving me moral support in my research work.

I also wish to express my deep heartfelt indebtedness to my friends Pooja Khatri and Shyam Sunder Chaudhary whose encouragement and cooperation enabled me to accomplish my goal.

Thanks are also due to Happy Computers for computerizing this script.

Above all, almighty God has been kind enough in showering his blessings and showing me the right path entirely.

(MANOJ KUMAR)