Acknowledgement

It has been a great pleasure for me to have been associated with and worked under the able and inspiring guidance of Dr. P. D. Raut, Professor and Head, Department of Environmental Science, Shivaji University, Kolhapur, under whose keen supervision this thesis has been prepared in all stages by me. I take this opportunity of acknowledging my profound sense of gratitude and respect for his keen supervision, valuable guidance, strong motivation, constant encouragement and help throughout the present research work.

I am grateful to Dr. P. S. Patil, Reader, Department of Physics, Shivaji University, Kolhapur for his motivation and constant encouragement during my research work.

I deeply express my sincere thanks to Mrs. Aasawari S. Jadhav, Assistant Professor, Department of Environmental Science, Shivaji University, Kolhapur for valuable discussion, suggestion, constant encouragement and help for the present study.

I am thankful to Dr. Jadhav, Bharati Vidyapeeth Pharmacy college, Kolhapur, Dr. V. M. Bhuse, Head, Department of Chemistry, Rajaram College, Kolhapur and Dr. D. B. Nakade Assistant Professor, Department of Microbiology, Rajaram College Kolhapur for their valuable guidance, suggestions, constant encouragement and help during the present research work.

I am also thankful to Sigma Aldrich Company for providing Nylon 6 and Nylon 6, 6 materials for this research work and National Centre for Industrial Important Microorganisms (NCIM), National Chemical Laboratory, Pune for providing fungus culture for this study.

I express my sincere thanks to Mr. Kalash and Mr. Mohite, Department of CFC Shivaji University, Kolhapur for providing facilities to carry out work.

I thank all my colleagues Ms. Nilisha P. Desai, Pallavi Bhosale, Chandrashekar Chandgade, Vikas Jadhav, Sandeep Managlekar Yojana patil, Nilambari Pawar, Sarika Mohite, Priya Loni, Amruta Kurane, Rachana Ingawale, Bharati Wali, Vishvaheet patil, Rohan Lad, Anup Gargate and all other friends for their constant help.
I owe my thanks to non-teaching staff of the Department of Environmental Science, Shivaji University, Kolhapur for their help during the progress of this research work.

I am thankful to the Librarian and staff of Br. Khardekar Library, Shivaji University, Kolhapur for making me available the library facilities for this work.

Finally I would like to express my deep sense of gratitude to my father Dr. Goroba, mother Mrs. Vimal, Brother Dr. Sachin and Sister Meenal Chonde for their constant encouragement during my research work.

Ms. Sonal G. Chonde