ACKNOWLEDGEMENTS

I wish to sincerely thank my supervisor Prof. S. Chatterjee for his encouragement, guidance, supervision and keen interest taken during the conduct and completion of this study.

I am thankful to Prof. P.C. Kesavan, Dean, School of Life Sciences, for making possible this work by providing the necessary facilities.

I wish to acknowledge Prof. Robert Kay, University of Cambridge, U.K., for providing us with the Ax2 strain of Dictyostelium discoideum. My sincere thanks to Prof. P.K. Ray, Director, I.T.R.C., Lucknow for providing a free gift of Benzenehexachloride.

I am thankful to Dr. Gangopadhyay and Dr. R. Mishra for helping me in autoradiography and fluorimeter studies. I would also like to acknowledge the help and cooperation received from the staff of Regional electron microscope facility, A.I.I.M.S.

I would like to thank the cooperation extended to me by Mr. Alexander, Mr. Khan, Mr. Ahmed and Mr. Sharma for their help in technical assistance. I shall not fail to extend my greatfulness to Mr. R.N. Saini who generously helped me in photography work.

I value greatly the patience and cooperation of my parents and my sister. I am deeply indebted to Dr. Sampati Mukhopadhyay and Anu Gupta for their invaluable suggestions and arguments. I am happy to express my sincere thanks to my friends Deepinder, Sudha, Saran, Shehla, Meena, Seema, Reena and Upasana for their enthusiastic company and moral support.

Finally, I would like to thank Mr. Saji C.G. for typing the manuscript. It is with deep gratitude I acknowledge the help received from Ms. Usha Joshi and other staff members of the "Institute for Studies in Industrial Development" in making of this thesis.

The financial assistance provided by C.S.I.R. in the form of research fellowship is highly acknowledged.

R. GAYATRI