ACKNOWLEDGEMENTS

I would like to express my deep gratitude towards my supervisors Dr. R.K. Jain, IMTECH and Prof. R.C. Sobti, Panjab University for their relentless efforts in guiding me through their stimulating scientific suggestions, critical appreciation and hearted encouragement. Special thanks are due to them for the speediest evaluation of the thesis material.

I gratefully thank Dr. Tapan Chakarbarti, IMTECH for his valuable guidance and undivided attention during the absence of Dr. Jain on study leave. Affection and motivation provided by him has been highly inspiring.

Thanks are owed to Dr. C.M. Gupta, Director and Dr. Sandip K. Basu, Ex-Director for their inspiration and making available the facilities required for this study.

I am grateful to Mr. Mayil Raj for the help rendered in identification of organism RKJ4 and for the inspiration provided by him. I am also thankful to Dr. Ananth Padmanaban, Dr. Swaranjit Singh and Dr. G. Prasad for their help and encouragement.

I take pleasure in expressing my appreciation for my colleagues and friends, especially Suveena and Vinay V. Vyas, for their moral support and for providing a lively company during my stay at IMTECH. I also owe a lot to the technical staff of my laboratory who willingly provided the help needed.

A very special thanks is in order for Dhan Prakash, Sudip and Ashwani for their pleasant cooperation and for the help extended.

I take it as an opportunity to express my deep affection for my parents and brothers for giving me the best in life. The fondness, constant appreciation and encouragement of my in laws provided me with a sense of inspiration. Affectionate sense of love from nephew Eshan contributed a lot.

The constant moral support and patient understanding of my beloved husband,
Sanjeev, deserves a special mention. I humbly dedicate my thesis to him.

The painstaking efforts made by M/s Dual Soft System, in preparation of this manuscript, are highly appreciated.

The financial assistance conferred by the Council of Scientific and Industrial Research (CSIR) is duly acknowledged.

Last but not the least, I will like to express my sincere thanks to many other people, numerous to name, who made my stay pleasant in IMTECH.

(MAMTA RANI)