ACKNOWLEDGEMENTS

I would like to express my deep sense of profound gratitude and indebtedness towards my guide, Dr. Saly N. Thomas, Senior Scientist, Fishing Technology Division, Central Institute of Fisheries Technology (CIFT), Cochin, for her invaluable guidance, sustained encouragement and critical assessment of the work during the entire duration of my research work and preparation of this thesis.

I sincerely thank Dr. B. Meenakumari, Director, CIFT for her invaluable guidance, encouragement, timely assessment of research work and also for extending all the facilities at Central Institute of Fisheries Technology for my research work. My sincere thanks are due to Dr. K. Devadasan, former Director, CIFT for his valuable guidance throughout the work.

I sincerely thank Prof. (Dr.) B. Madhusoodana Kurup, Director, School of Industrial Fisheries for his wholehearted support and encouragement throughout the period of the study. I sincerely thank Prof. (Dr.) Saleena Mathew, former Director, School of Industrial Fisheries for her wholehearted encouragement and for being a member of the Doctoral Committee.

I express my sincere thanks to Prof. (Dr.) M. Shahul Hameed (Retd.), former Director, School of Industrial Fisheries for his help and encouragement.

My Sincere thanks are due to all Scientists of Fishing Technology Division of Central Institute of Fisheries Technology for their fruitful comments and help during the work.

I am grateful to Dr. Geetha Lakshmi V., and Dr. P. Muhamed Ashraf (Scientists, CIFT) for their valuable suggestions and help during the work. I would like to thank Shri. P.T. Sebastian, Smt. K.G. Sasikala, and Shri. N. Krishnan (Staff of Material Science and Marine Pollution Section) for their immense help. I am also indebted to the office staff of CIFT for their kind cooperation.

I sincerely thank all SRFs at Central Institute of Fisheries Technology, especially my friends in the Fishing Technology Division for their support, help and goodwill.

I would also like to thank the Indian Council of Agricultural Research (ICAR), New Delhi for funding this study.

I owe a lot to my family and friends especially to my parents, wife and sister without their encouragement, understanding and prayers it would have been impossible for me to finish this work.

(Gipson Edappazham)