ACKNOWLEDGEMENT

I wish to express my deep gratitude and indebtedness to the late Dr. George Philip, Professor of Biochemistry, School of Marine Sciences, Cochin University of Science & Technology who suggested this problem and guided me to a stage of completion.

I am expressing my sincere thanks and deep sense of gratitude to my Supervising Teacher, Dr. Babu Philip, student and colleague of the late Dr. George Philip, School of Marine Sciences for his keen interest, invaluable guidance and kind encouragement throughout the course of this work.

I am very much thankful to Dr. N.R. Menon, Director, School of Marine Sciences who provided me all facilities and encouragement.

I am grateful to the many well wishers of the scientific community who helped the work by way of generous gift of chemicals.

I am thankful to the staff of the School of Marine Sciences and my colleagues for their kind co-operation and help offered during the course of this work. It is my great pleasure to thank Mr. C.G. Rajendran, Dr. P.J. George and Dr. (Mrs.) E.K. Lalitha Bai for their help and encouragement in this work.

I am indebted to Msgr. Antony Maliekal whose invaluable prayer and financial assistance served me to present this work.

AUGUSTIN ANTONY