## -: ACKNOWLEDGEMENT :-

I wish to express my most sincere sense of gratitude to my guide Dr.(Mrs.) N.P. Hilage and Dr.M.M. Salunkhe. Professor, Indian Institute of Science, Bombay, for their valuable guidance, stimulating discussions and constant encouragement during the course of this investigation. It was really a pleasure and privilege to work under their guidance.

I have honour to offer my the thanks Dr.R.B. Mane. Prof. and Head. Dpeartment of Chemistry. Shivaji University, Kolhapur, Dr. J.B. Patil and Dr.M.B. Deshmukh for their continuous encouragement and hearty cooperation. I am thankful to members of the teaching and non-teaching staff of this Department for their kind co-operation.

My sincere thanks are due to Dr. P.P.

Wadgaonkar, N.C.L. Poona for his interest and guidance.

I am thankful to Prin. Abhaykumar Salunkhe, Secretary,

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur, for having granted me a study leave for a period of one year.

I would offer my heartiest thanks to Principal Dr. A.N. Jagtap, Prin. P.B. Chavan, Prin. V.Y. Ingle, Raje Ramrao College, Jath, for their kind help and constant encouragement.

Last, but not least, I must be very greatful to my wife Mrs. Vaishali, Son Varum, Brothers Vijaykumar and Vilasrao, Narendra, Jayant and Miss. Manisha, whose for bearance, constant encouragement and inspiration made this work possible.

I am thankful to Mr. R.V. Mohite for neat and clean typing of this thesis.

Mr. V.D. Suryavanshi)