This work would not have been possible without constant encouragement and inspiring guidance provided by my research guide Dr. S. N. Deshmukh, Lecturer in Chemistry, Shivaji University. To him, I offer my deep gratitude and sincere thanks. I am also thankful to Dr. D. S. Ambardekar, Head, Department of Chemistry, Shivaji University for making me availability of laboratory facilities and continuous encouragement and hearty co-operation.

I consider its my solemn duty to thank ex-Principal K.M. Agashe, Willingdon College, Sangli, for his encouragement for joining M.Phil. course. Further I wish to express my deep sense of gratitude to Dr. B.A. Patil, Principal, Willingdon College, Sangli and Dr.P.L. Kulkarni, Head, Department of Chemistry, Willingdon College, Sangli, for their encouragement and inspiration during the period of my research work.

I wish to express my sence of gratitude to Dr. A. M. Chavan, Section Head, Physical Chemistry Department, Dr. S.K. Hailatti, Dr. V.S.Kulklarni, Dr. M.D. Bhand for their continuous encouragement and hearty co-operation. I am thankful to members of teaching and non-teaching staff of chemistry department for their kind co-operation.

I am indelted to my brother Prof. V.R. Damle, Jaysingpur p
College, Jaysingpur, without whose love and suport this dissertation would not have seen the light of the day.

Lastly but not the least, I would like to express my thanks to Shri. Ashok Kulkarni for his neat and clean typing and xeroxing work.

Kolhapur Date 3rdJan.1989 (M. R. Damle)