ACKNOWLEDGEMENT

I have the honour to offer my deep sense of gratitude and heartiest thanks to Prof.N.N.Maldar, Head, Department of Chemistry, Shivaji University, Centre for P.G. Studies, Solapur for his inspiring guidance, stimulating discussions and constant encouragement throughout the present work.

I am very much grateful to the Shivaji University authorities for making available all possible facilities of Laboratory and Library.

I wish to record my sincere thanks to Dr.S.V.Lonikar, Reader and Dr.P.G.More, Department of Chemistry, for their encouragement and kind co-operation. My special thanks are due to Dr.P.P.Wadgaonkar, NCL, Pune, for his help during the present investigation.

I am thankful to University Grants Commission, New-Delhi, (U.G.C.) for the award of a Teacher's Fellowship and the Management of Shri Shivaji Shikshan Prasarak Mandal, Barshi for allowing me to avail of this opportunity.

I am very grateful to Principal V.N.Ingale, Shri H.R. Patil, Head, Dept. of Chemistry, Shri Shivaji Mahavidyalaya, Barshi and Shri B.B.Ligade for their valuable suggestions, constant encouragement and keen interest throughout the progress of this investigation.

I am thankful to Shri Basutkar P.H., Shri Ubale V.P., Shri Joshi M.D., Shri Shaikh V.A.E., Shri Alli V.N., Shri Tulba J.S., Shri Kulkarni P.S. for their friendly help.

I also extend gratitude to Sanjay Patil, Anil Kore, Umesh Ligade and Shashikant Gaikwad for their valuable help from time to time.

I am indebted to my wife Uma, Parents and Ligade family for their patience and constant support in fulfiling this assignment.

Finally, I am very thankful to all those who have assisted directly and indirectly in the completion of this dissertation.

Solapur

Date : 22/12/95

Sunil S. Vibhute