ACKNOWLEDGEMENT

I express my sincere thanks and gratitude to my research guide Dr.B.K.Chougule for his keen interest, valuable guidance and continual cooperation during the tenure of this work. It is a pleasure to thank Dr.R.N.Patil, Proffessor and Head of the Department of Physics, Shivaji University Kolhapur, for valuable discussions.

I am highly indebted to Regional Sophisticated Instrumentation centre, Nagpur University, Nagpur, for making available XRD fascilities. I am also thankful to T.I.F.R. Bombay for hysteresis measurements.

The help extended by Mr.G.D.Mahadik and Mr.M.M.Chougule of Materials Science laboratory is greatfully acknowledged. I also thank Shri.R.B.Pujar, S.R.Patil, D.I.Jadhav, T.B.Medikeri and other research workers of the group for their constant help during my work.

My thanks are due to Profs.Dr.J.K.Zope, V.T.Gonnagar, R.D.Bhosale, and M.R.Raje Bhonsale for their encouragement. I reserve my thanks to Shivaji University authorities for making available to me the necessary fascillities to carry out this work.

Finally, my thanks are due to Shri.P.V.Ravan for preparing fine tracings of the diagrams and Mrs.Ratna Prasad for her neat and accurate typing.

Kolhapur, Date: 261/0/88

Miss. L.D.Kulkarni

Kulkan's