

## ACKNOWLEDGEMENT

This work could not have been possible without the continued interest and stimulation provided by my guide Dr.A.Y.Khot. With deep sense of gratitude, I express my sincere thanks to him.

My sincere thanks are due to Prof.R.N.Patil, Head, Department of Physics, for allowing me to avail myself of the laboratory facilities and providing me the necessary encouragement.

I have been benefitted to a great extent for the valuable suggestions and thought provoking discussions with Dr.S.R.Savant, a colleague of my guide. I thank him sincerely.

The help and hand of cooperation extended by Dr.A.S. Waingankar, Dr.S.A.Patil, Shri V.R.Kulkarni, Shri N.B. Kakhandaki and Shri A.R.Pendharkar and others in this research work, in discussions, in reading the manuscripts etc. is very much useful. I express my sincere thanks to all of them.

I express my thanks to Shri Jadhav D.S. and his assistants, Shri Desai S.B. and USIC staff, Shri Mahadik G.D. and other staff of physics department for their help in the fabrication of experimental set up. I also thank Shri Gosavi for excellent typing and Shri Ravan for fine tracing work.

I thank the authorities of T.I.F.R.Bombay, for availing me the X ray diffraction facility and the facility of Hysteresis loop tracer for magnetisation studies.

I also thank U.G.C. authorities Delhi for providing me the Teacher Fellowship. I may mention Dr.P.H.S.Rao in this context who was sympathetic and kind enough to look after the official procedure for procuring the fellowship. I thank him. I thank Shivaji University authorities for admitting me for the M.Phil.Course. I thank Shri Chivate S.R. and his assistants of Stat.Section.

I thank Shri A.V.Walvekar, Principal, Devchand College, Arjunnagar for deputing me to the M.Phil.course and Shri V.R.Kulkarni, Registrar and his assistants in the college who helped me in this respect.

Kolhapur

Date: 4-4-1986



(G.K.Joshi)

