

ACKNOWLEDGEMENTS

I wish to express my sincere and honest gratitude to Dr.L.P. Deshmukh, my advisor and real researcher, Fellow of the "Semiconductor Society of India", "Member of the Institution of Electronics and Telecommunication Engineers" for his interest constructive criticism and spontaneous help received during the successive phases of these investigations and for his assistance in the preparation of this dissertation.

I would like to thank Prof. S.H. Pawar and Dr.P.P. Hankare, University Departments of Physics and Chemistry for their moral support and encouragements.

I will be failing in my duty if I do not acknowledge Dr.S.K. Date, Dr.P.P. Wadgaonkar, and Prof. G.N. Navneet for their active help in providing XRD and SEM analysis of the samples.

I am also thankful to Prof. P.B. Joshi Head, Department of Physics, Centre for P.G. Studies, Solapur and Dr. S.S. Suryavanshi for their moral encouragements. The help rendered by the departmental staff is highly appreciated.

I sincerely appreciate the help received from my colleagues Shri A.B. Paiwe, Shri S.G. Holikatti, Shri K.V. Zipre, Shri B.P. Rane, Shri B.M. More, and Shri D.S. Hulle for their active participation during the gradual development of this dissertation and for everenjoyable times that we have shared.

This work would not have been possible without the kind permission and support of Prin. Dr. M.K. Zambre, D.B.F. Dayanand College of Arts & Science, Solapur. It is my duty to acknowledge my senior and junior colleagues of D.B.F. Dayanand College of Arts & Science, Solapur, for alleviating my responsibilities at the department during the course of these investigations.

My deepest thanks and appreciations are reserved for my wife Sou. Indira, brother Shri Shankar, and my family members for their moral responsibilities and encouragements throughout these days.

Place : SOLAPUR

Date : May 27, 1993.


Mahadev Iranna Belle