

ACKNOWLEDGEMENT

It gives me a great pleasure to express deep sense of gratitude to my guide Dr. L.P.Deshmukh, Reader, Department of Physics, Shivaji University Centre for Post Graduate Studies, Solapur, Member of the "New York Academy of Sciences", Fellow of the "Semiconductor Society of India", Member of the "Institution of Electronics and Telecommunication engineers", Fellow of the "Society for Advancement of Electrochemical Science and Technology" for his able guidance and constant encouragements, discussion, understanding as well as moral support during the course of the research work.

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 staff of the department is highly appreciated.

I am also deeply indebted to Shri Madanlalji Biyani (Chairman, Dayanand Education Society, Latur), Shri Chandrashekhar Dada Bajpai (Secretary, Dayanand Education Society, Latur) and Shri R. H. Laddha (Principal, Dayanand Science College, Latur) for granting me the study leave as a Teacher Fellow underth U.G.C. plan and timely help.

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

I sincerely appreciate the help received from my colleagues Dr. S. G. Holikatti, Shri B. M. More, Shri C. B. Rotti, Shri K.

M. Garadkar, Shri G. S. Shahane, Shri D. S. Sutrave, Shri R. N. Mulik and Shri C. N. Chougule for their active participation during the gradual development of this dissertation and forever enjoyable times that we have shared.

I will be failing in my duty if I do not acknowledge Shri P. P. Bajaj (Lecturer, Dayanand Commerce College, Latur) for his generous help during this course.

My deepest thanks and appreciations are reserved for my wife Sou. Kiran, my Father-in-Law, Shri Adv. Vishnudasji Bhutada and my family members for their moral and household responsibilities and encouragements throughout these days.

A punctual and excellence of computer facility by Mrs. Alandkar, Tejas Computer, Solapur, is highly appreciated.

Place : Solapur

Date : 7/1/96



J. S. Dargad.