ACKNOWLEDGEMENT

First of all thanks to Lord Mahavira who gave me knowledge and blessings to the Holy saying (live and let live).

I am very pleased that I have finished my thesis, and also I feel a little bit relieved. I know that life is not always rosy. Without the following people’s help, my life would have been tougher.

First on the list is my guide Dr K.Srinivasa Manja M.Sc.,Ph.D., Reader Raman School of Physics, Pondicherry University. If I say I am going to express my thanks in these few words, I am only lying. Every work in this thesis was greatly influenced by his scientific curiosity, encouragement, and guidance. Being prompt has always been his asset, be it a paper correction or arranging for measurements, the word “delay” never finds an appointment with him.

I am grateful from the core of my heart to Prof Dr P.SambasivaRao Whose guidance devotion and perpetual encouragement, till the completion of this work. He as a chairman always facilitated me for this giant work.

Prof Dr N.Satyanarayana his enthusiastic and enlightening discussions have been framed into words and have found a place in this thesis.

My research career is not devoid of dull moments Prof Dr T.K.Nambinarayan has invariably come out with his encouraging words and support to pep up my spirits. His constant encouragement needs special mention.

I am also thankful to Prof Dr K.Porsezian, Head of the Department, Department of physics, Pondicherry University, for encouraging me and extending all facilities.
Dr G.Govindraj, Department of Physics, Pondicherry University, has done a great share of instrumental support to the work. He has rendered a great help for electrical conductivity measurements.

See it to believe it. All my interpretation has been proved in black and white with the beautiful SEM pictures, magnetic measurements on VSM. Mr Ramaswamy, CIF department, Pondicherry University who have made it possible. Their efforts have made my job a lot easier and I think I will fail in my duty if only I don't thank them.

I am very thankful to staff members Readers and Lecturers Dr. G. Chandrasekaran, Dr. Ravi Kant Kumar, Dr. S.Sivapragasam, Mr. Ramesh Naidu Annavarpu, Dr. S.V.M Satyanarayana, Dr Alok Sharan, Dr. Rabindranath Bhowmik, Dr C. Venkateswaran, and Dr K. Sivaji of the Physics Department for their suggestions.

The only person to follow are the one, who made and make all the difference in my life, my husband. I think these few words will not do any justification but the only way to express my gratitude will be to make a difference in his life from this point of my life.

(S.MAHALAKSHMI)