

P R E F A C E

The thesis comprises of four chapters. Chapter I mainly deals with the hystorical development in ferrites, their crystal structures properties and applications. The Chapter II is devoted to the description of hexagonal ferrites: Beginning with an elementary theory on the requirements of permanent magnet materials, it ends with a brief review of the recent research work on these ferrites. The methods of preparing ferrites along with the experimental techniques used in the present work from the subject matter of the third chapter. The results on the electrical measurement of ferrites are discussed in Chapter IV. The synopsis of the thesis is added at the end with an intension that it might simultaneously serve the purpose of the last chapters viz. Summary and Conclusions.

The relavent theory and the experimental results are illustrated with appropriate figures and tables. A list of references is given at the end of each chapter. In the case of few references, unfortunately, it was not possible to refer to the original paper.