

P R E F A C E

The subject matter of this dissertation is divided into five chapters. The first chapter deals with introduction and general aspects of ferrites. The historical development, theory of ferrimagnetism along with applications of ferrites. The orientation of the problem is given at the end of this chapter.

Chapter II deals with the methods of preparation - standard ceramic method is given in detail. The crystal structure of ferrites is confirmed by XRD studies. In addition to this details of studies on infrared absorption is included in this chapter.

Magnetic properties are included in chapter III in which results on a.c. susceptibility, Hysteresis, curie temperature are presented with necessary theoretical background.

The results on d.c. electrical resistivity measurement is included in chapter IV. Overall summary and conclusions of the work is presented in the fifth chapter.

A list of reference is given at the end of each chapter. In case of few references, it was not possible to refer to the original papers.

R.D. Jakati.