

P R E F A C E

The dissertation work comprises five chapters which an attempt has been made to present work carried out on the subject consistent with development of topics concerned.

The first chapter opens with the historical background on the subject. After this classification and types of ferrites are pointed out. This follows the discussion on electric and magnetic properties of ferrites. Also the meanings of ferrimagnetism and Neel's theory of ferrimagnetism is discussed. Orientation of problem is given at the end of chapter.

Method of preparation of ferrite, X-ray diffraction studies of the samples and for infrared spectra of samples have been reported in second chapter.

Study of electrical properties of samples such as d.c. and a.c. conductivity are reported in chapter third.

Studies on magnetisation, susceptibility and Curie temperature are reported in chapter four.

Summary and conclusions are reported in chapter five.

The theoretical as well as experimental results are illustrated with appropriate figures. A list of references is given at the end of each chapter. Only in the case of few references it was not possible to refer original work.
