

: P R E F A C E :

The subject matter of this dissertation is divided into four chapters. The first chapter deals with the methods of preparation of ferrites and the crystal structure of spinel ferrite has been discussed in detail. The orientation of the dissertation problem is given at the end of this chapter. The second chapter is devoted to the experimental procedure. The standard ceramic method used in the preparation of the ferrite system ( $\text{Cu}_x\text{Fe}_{3-x}\text{O}_4$ ) is fully discussed giving details of each step followed. The principle of powder method and x-ray diffractometer is explained and the x-ray diffraction work of the system is presented. The third chapter deals with the electrical switching phenomenon in copper ferrites and the research work carried out in that direction. Some pages are spared to present the results on space charge limited currents in the system. The figures and photographs are given wherever relevant. The references are given at the end of each chapter.

UNIVERSITY OF CALicut  
LIBRARY