

PREFACE

Nickel-zinc ferrites are extensively used in electronic components such as IF transformers, inductors, wide band transformers, antenna cores, HF transformers etc.

The subject matter of the thesis is presented in six chapters. The first chapter is of introductory nature in which historical background, theories of ferrimagnetism, applications and orientation of work is described. In the second chapter preparation methods of ferrites are described along with the details of oxalate precipitation technique. In third chapter, X-ray diffraction and infrared absorption studies are reported. The dc electrical resistivity study is reported in fourth chapter. In chapter five, studies on magnetization, Curie temperature and ac susceptibility are described. Summary and conclusions are reported in sixth chapter. A list of references is given at the end of each chapter.