PREFACE

This thesis comprises of five chapters and describes the experimental investigation of solid-state metathesis synthesis and characterisation of some ABO₃ and ABO₄ type mixed metal oxides.

A detailed description of the introduction to solid-state metathesis and its applications along with the description of crystal structures of some mixed metal oxides has been presented in CHAPTER ONE.

A review of literature on synthesis and characterisation of selective ABO₃ and ABO₄ type mixed metal oxides is presented in CHAPTER TWO. Research objectives of the present work are also enumerated in the same chapter.

CHAPTER THREE describes experimental techniques which include sample preparation and a brief description of techniques of XRD, SEM, EDS, TG-DTA, Raman and FTIR used for characterisation of materials synthesised.

Discussion of experimental results obtained from XRD, SEM, EDS, TG-DTA, Raman and FTIR of the investigated samples is presented in CHAPTER FOUR. The overall conclusions of the work performed are also enumerated in the same chapter.