

LIST OF TABLES

Table No.	Title	Page No.
2.1	X-ray diffraction data of $Mg_{0.2}Cd_{0.7}Si_{0.05}Fe_2O_4$	52
2.2	X-ray diffraction data of $Mg_{0.4}Cd_{0.5}Si_{0.05}Fe_2O_4$	52
2.3	X-ray diffraction data of $Mg_{0.6}Cd_{0.3}Si_{0.05}Fe_2O_4$	53
2.4	X-ray diffraction data of $Mg_{0.8}Cd_{0.1}Si_{0.05}Fe_2O_4$	53
2.5	X-ray diffraction data of $Mg_{0.9}Cd_{0.1}Si_{0.05}Fe_2O_4$	54
2.6	X-ray diffraction data of $Mg_{0.1}Cd_{0.7}Si_{0.1}Fe_2O_4$	54
2.7	X-ray diffraction data of $Mg_{0.3}Cd_{0.5}Si_{0.1}Fe_2O_4$	55
2.8	X-ray diffraction data of $Mg_{0.5}Cd_{0.3}Si_{0.1}Fe_2O_4$	55
2.9	X-ray diffraction data of $Mg_{0.7}Cd_{0.1}Si_{0.1}Fe_2O_4$	56
2.10	X-ray diffraction data of $Mg_{0.8}Cd_{0.1}Si_{0.1}Fe_2O_4$	56
2.11	Crystallographic data of $Mg_{x-2y}Cd_{1-x}Si_yFe_2O_4$ system	59
2.12	The values of x-ray density, physical density and porosity	60
2.13	Band frequency and force constant for $Mg_{x-2y}Cd_{1-x}Si_yFe_2O_4$ system	70
3.1	Activation energy and Curie temperature for the system $Mg_{x-2y}Cd_{1-x}Si_yFe_2O_4$	86
4.1	Compositional variation of n_B and M_S for $Mg_{x-2y}Cd_{1-x}Si_yFe_2O_4$ system	105
4.2	Cation distribution for the system $Mg_{x-2y}Cd_{1-x}Si_yFe_2O_4$	106
4.3	Curie temperature obtained in °K by three methods for $Mg_{x-2y}Cd_{1-x}Si_yFe_2O_4$ samples	122