LIST OF TABLES

Table 2-1 : Literature survey of rare-earth materials reports

Table 3-1 : Coding for samples synthesized by Solid State Method

Table 3-2 : Coding for samples synthesized by Precipitation Method

Table 4-1 : XRD Peaks Matching with JCPDS Data for Ce_2S_3 [CeU-SS]

Table 4-2 : XRD Peaks Matching with JCPDS Data for Gd_2S_3 [GdU-SS]

Table 4-3 : XRD Peaks Matching with JCPDS Data for La_2S_3 [LaU-SS]

Table 4-4 : XRD Peaks Matching with JCPDS Data for Y_2S_3 [YU-SS]

Table 4-5 : XRD Peaks Matching with JCPDS Data for Ce_2S_3 [CeU-P]

Table 4-6 : XRD Peaks Matching with JCPDS Data for Gd_2S_3 [GdU-P]

Table 4-7 : XRD Peaks Matching with JCPDS Data for La_2S_3 [LaU-P]

Table 4-8 : XRD Peaks Matching with JCPDS Data for Y_2S_3 [YU-P]

Table 4-9 : Crystallite Size for undoped samples synthesized by Solid State Method

Table 4-10 : Crystallite Size for undoped samples synthesized by Precipitation Method

Table 4-11 : Crystallite Size for Solid State samples doped with Mn/Eu/Tb

Table 4-12 : Comparative study of Excitation and Emission Characteristics of Eu^{+3} ions in samples X_2S_3 [X = Ce, Gd, La, Y] prepared by both the methods

Table 4-13 : Comparative study of Excitation and Emission Characteristics of Tb^{+3} ions in samples X_2S_3 [X = Ce, Gd, La, Y] prepared by both the methods

Table 4-14 : Temperature Coefficient of Resistance Calculated for synthesized samples

Table 4-15 : Percentage Decrease in Resistance with Temperature in the range 308°K to 378°K (35°C to 105 °C) for synthesized samples