## LIST OF THE FIGURES

Fig. No.	Ţitle	Page No.
1.1	Fluorescence and phosphorescence phenomena	22
1.2	Configuration co-ordinate model	23
1.3	Energy band model	24
1.4	Schon and Klasens' model	25
1.5	Lambe and Klicks model	26
1.6	William and Prener's model	27
3.1 a)	Photograph of photoluminescence set up	49
b)	Photograph of Thermoluminescence set up	50
3.2	Block diagram of PL set up	51
3.3	PM housing assembly	52
3.4 a)	Drawer Assembly	53
b)	Eanthal Strip	53
3.5	Amplification and Sensitivity of PM tube	53
3.6	Spectral responance of PM tube	54
3.7	Block diagram of TL set up	55
4.1 to 4.4	Decay curves	77 - 80
4.5 to 4.8	Log I - Log t plots	81 - 84
4.9	Plot of decay constant with concentration variation of Mg	85
4.10 to 4.15	"Peeling Off" of decay curves	86 - 91
4.16	Plot of I.t versus log t.	92
5.1 to 5.7	Glow curves of gamma irradiated samples	134 to 141
5.8 to 5.12	Glow curvew of ultraviolet irradiated samples	142 to 146

Fig.no.	Title	Page No.
5.13 to	Plot of peak intesnity versus concentration (Gamma irradiation).	147
5.14	Plot of peak intensity versus concentration (UV irradiation)	148
5.15	Plot of log I Vs. 1/T	149
5.16	Plot of temperature Vs. time of Linear temp. programmer	150
5.17	Plot of Intensity Vs. temperature for different excitation periods.	: 151
5.18	Plot of excitation time Vs. Peak intensity	152
5.19	Plot of Peak intensity Vs. Peak temperature	153
5.20	Plot of activation energy Vs. variation of coactivator	154
5.21	Plot of activation energy Versus variation of activator	155

=- =- = -=