

## VI

LIST OF FIGURES

FIGURE NO.	T I T L E	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 Klick's model.	1. 26
1.6	William and Prener's model.	.. 27
2.1	Photograph of experimental set-up used for decay measurements.	.. 42
2.2	Schematic diagram of experimental set-up used for decay measurements.	.. 43
2.3	Plot of temperature versus time.	.. 44
2.4	Schematic diagram of experimental set-up used for thermoluminescence studies.	.. 45
2.5	Photograph of experimental arrangement used for thermoluminescence studies.	46 ..
3.1 to 3.3	Decay curves.	..68 to 70
3.4 to 3.6	Plots of Log I versus Log t.	..71 to 73
3.7	Plot showing variation of decay constant with concentration of Pb.	.. 74
3.5 to 3.10	"Peeling off" of decay curves.	..75 to 77
3.11	Plots showing variation of trap depth with concentration of Pb.	.. 78
3.12	Plots of I.t versus log t.	.. 79

VII

FIGURE NO.	T I T L E	PAGE NO.
4.1 to 4.6	Glow curves.	.. 113 to 118
4.7	An isolated glow peak.	.. 119
4.8 to 4.9	Plots of log I versus $1/T$ for 1st glow peak.	.. 120 to 121
4.10	Plots of log I versus $1/T$ for 2nd glow peak.	.. 122
4.11	Plot showing variation of activation energy, with conc. <sup>n</sup> of Pb	.. 123
4.12	Plot of log $\frac{I(T)}{[S(T)]^k}$ versus $\frac{I}{T}$	.. 124