Figure No). Title	Page No.
1.1	The General Shape of Potential Energy Curve	19
1.2	The Conventional Form of the Potential Energy Curve	20
1.3	Potential Energy Curve with one maximum lying above dissociation limit	21
1.4	Maximum lies below dissociation limit	22
2.1	A Plot of k versus $(e_1 e_2)^{\frac{1}{2}}/r_e$ for halides	65
2.2	A Plot of k_e versus $(e_1 e_2)^{\frac{1}{2}}/r_e$ for deuteroids	66
2.3	A plot of k versus (Ne ₁ e ₂) ^{1/2} /r for other molecules	67
2.4	A plot of logk versus $(e_1e_2)^{\frac{1}{2}}/r_e$ for halides	68
2.5	A plot of logk versus $(e_1e_2)^{\frac{1}{2}}/r_e$ for deuteroids	69
2.6	A plot of logk versus (Ne ₁ e ₂) ¹ / ₂ /r _e for other molecules.	70
2.7a	A plot of bond length versus bond order for hydrides	71
2.7b	A plot of bond length versus bond order for halides	72
3.1	A plot of $\log[\omega_e \pm (4\omega_e x_e U)^{\frac{1}{2}}]$ versus r for XeF	122
3.2	A plot of $\log[\omega_e^{\pm}(4\omega_e^{\times}e^{U})^{\frac{1}{2}}]$ versus r for YbF	123
3.3	A plot of $\log[\omega_e^{\pm}(4\omega_e^{\times}e^{U})^{\frac{1}{2}}]$ versus r for HoF	124
3.4	A plot of $\log[\omega_e^{\pm}(4\omega_e^x e^U)^{\frac{1}{2}}]$ versus r for LuF	125
3.5	A plot of $\log[\omega_e^{\pm}(4\omega_e^x e^U)^{\frac{1}{2}}]$ versus r for SiTe	126
3.6	A plot of $\log[\omega_e^{\pm}(4\omega_e^{}x_e^{}U)^{\frac{1}{2}}]$ versus r for PtD	127
3.7	A plot of $\log[\omega_e^{\pm}(4\omega_e^x_e^U)^{\frac{1}{2}}]$ versus r for PtH	128
3.8	A plot of $\log[\omega_e^{\pm}(4\omega_e^{\times}e^{U})^{\frac{1}{2}}]$ versus r for InBr	129

.

LIST OF FIGURES

contd. on next page

List of Figures (contd.)

Figure	No. Title	Page No.
4.1	Variation of $\overline{r}_{v'v''}$ with $\lambda_{v'v''}$ in the A'I-X' Σ system of CuF	181
4.2	Variation of $\bar{r}_{V'V''}$ with $\lambda_{V'V''}$ in the B' Σ^+ -X' Σ^+ system of CuF	182
4.3	Variation of $\overline{r}_{V^{\dagger}V^{\dagger}}$ with $\lambda_{V^{\dagger}V^{\dagger}}$ in $A^{2\Sigma^{+}}-X^{2\Pi}$ i system of CuSe	183
4.4	Variation of $\bar{r}_{v'v''}$ with $\lambda_{v'v''}$ in A-X system of CuTe.	184

. .