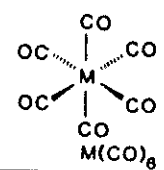
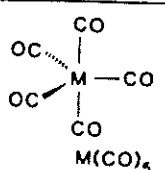
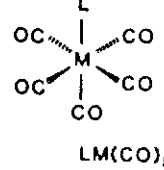
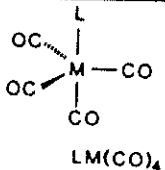
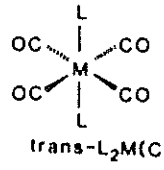
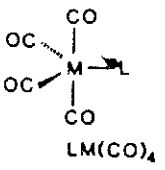
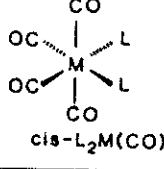
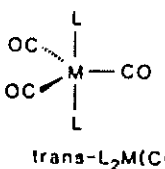
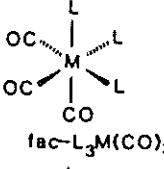
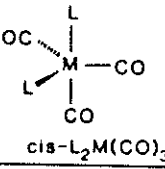
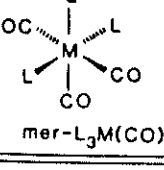
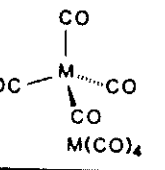
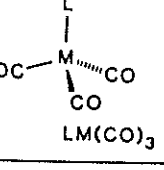
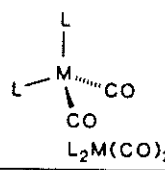


Number and Modes of IR-active bands (ν_{CO}) in carbonyl complexes, depending on the local symmetry of $M(CO)_n$.

Complex	Number and Modes of IR-active Bands ν_{CO}	Point Group	Complex	Number and Modes of IR-active Bands ν_{CO}	Point Group
	1 T_{1u}	O_h		2 $A_2' + E'$	D_{3h}
	3 $2A_1 + E$	C_{4v}		3 $2A_1 + E$	C_{3v}
	1 E_u	D_{4h}		4 $2A_1 + B_1 + B_2$	C_{2v}
	4 $2A_1 + B_1 + B_2$	C_{2v}		1 E'	D_{3h}
	2 $A_1 + E$	C_{3v}		3 $2A' + A''$	C_s
	3 $2A_1 + B_2$	C_{2v}		1 T_2	T_d
	2 $A_1 + E$	C_{3v}		2 $A_1 + B_1$	C_{2v}