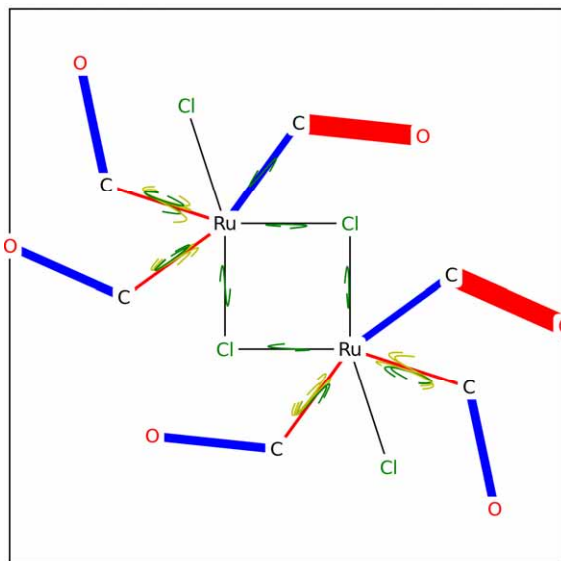
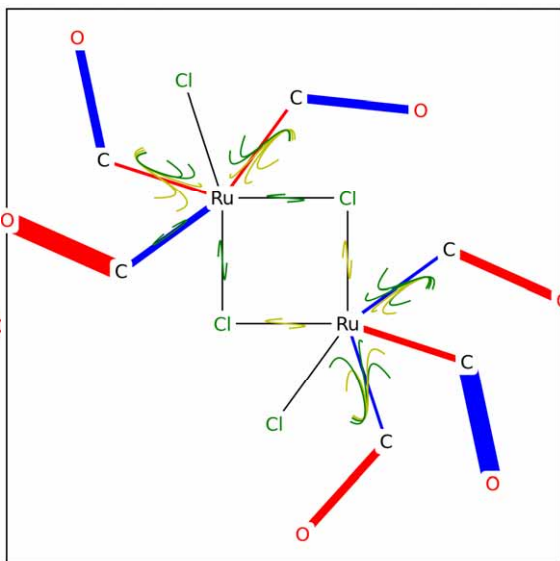


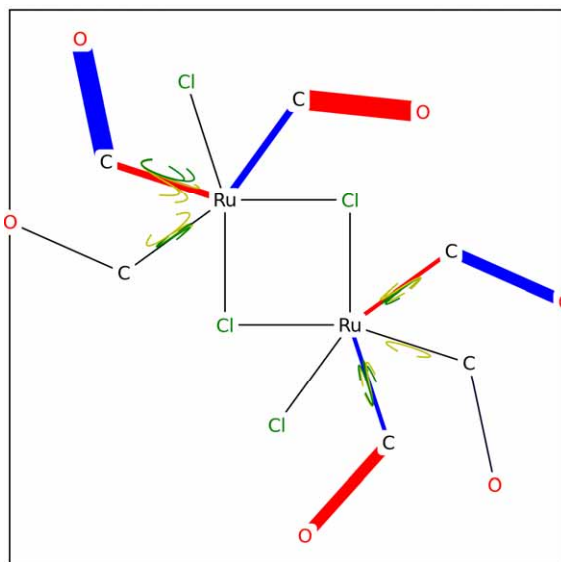
Supporting information



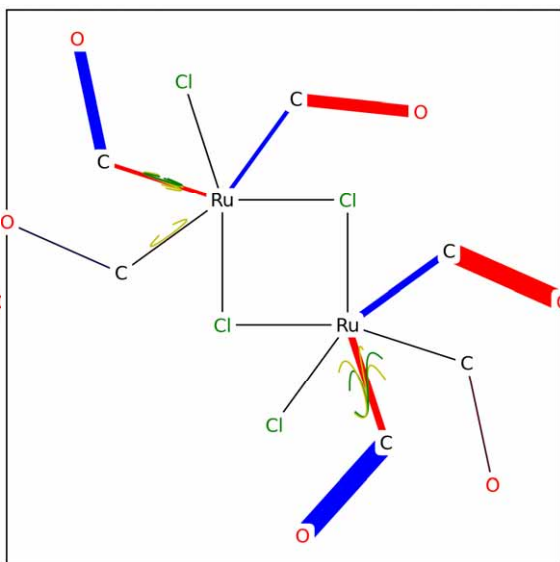
Mode No.: 49 (2039.5 cm^{-1} , I=0.014)



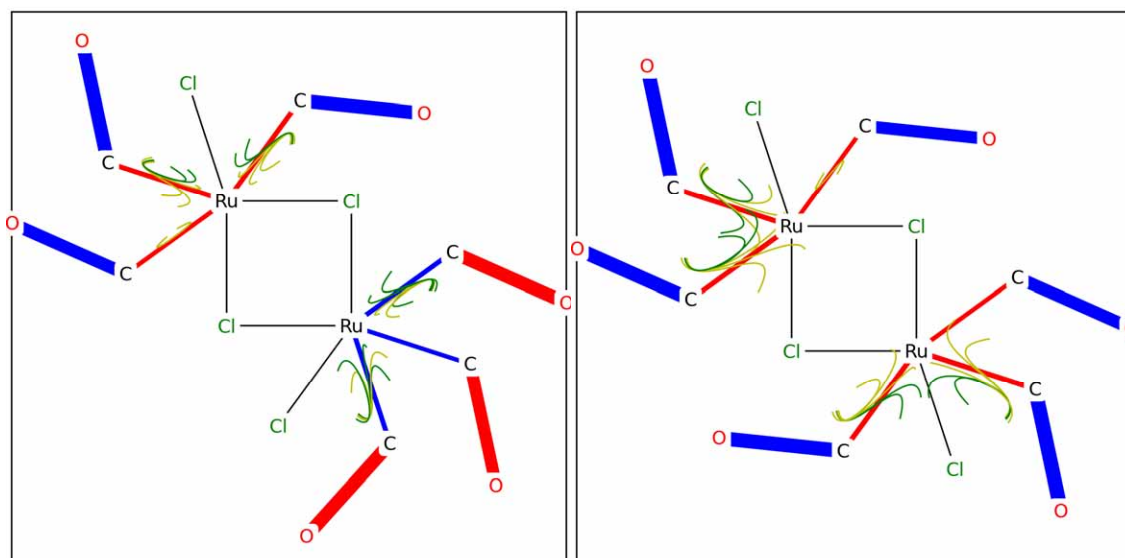
Mode No.: 50 (2041.41 cm^{-1} , I=1306.5)



Mode No.: 51 (2044.9 cm^{-1} , I=86.94)



Mode No.: 52 (2045.0 cm^{-1} , I=1299.2)



Mode No.: 53 (2115.28 cm^{-1} , I=1172.0)

Mode No.: 54 (2121.86 cm^{-1} , I=0.136)

Figure SI1: Raw graphical output from the program Vibeplo^t* for CO stretching modes of a-*trans* isomer of $[\text{Ru}(\text{CO})_3\text{Cl}_2]_2$.

* Mathias Laurin *Vibeplo*t 0.11, <http://sourceforge.net/projects/vibeplo/t/> 2011.