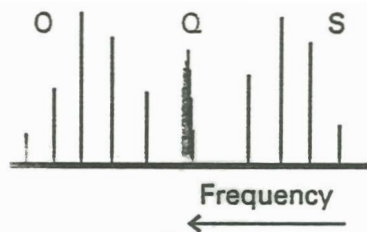
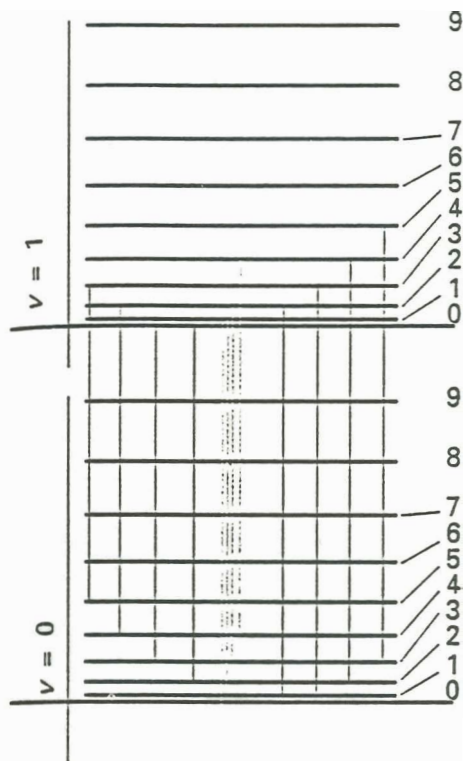
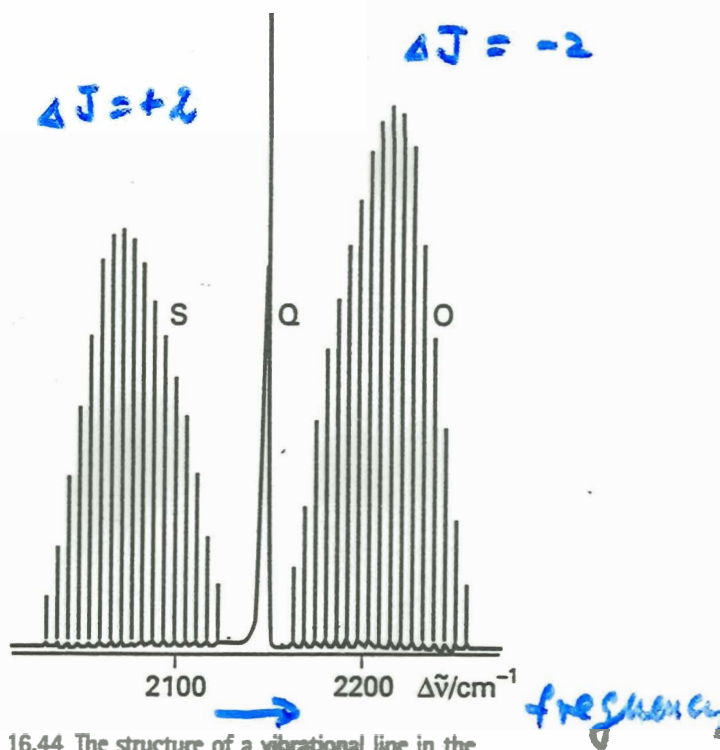


Vib-rot Raman



16.43 The formation of O, Q, and S branches in a vibration-rotation Raman spectrum of a linear rotor. Note that the frequency scale runs in the opposite direction to that in Fig. 16.41, because the higher energy transitions (on the right) extract more energy from the incident beam and leave it at lower frequency.

$\Delta V = +1$
 $\Delta J = 0$, allowed



16.44 The structure of a vibrational line in the vibrational Raman spectrum of carbon monoxide, showing the O, Q, and S branches.

frequency