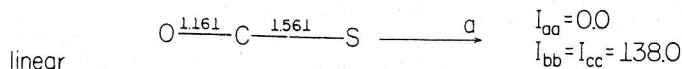


(2-25)

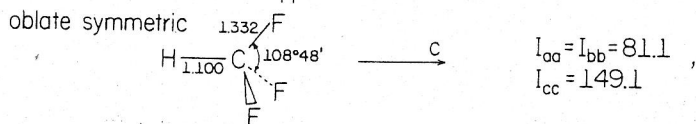
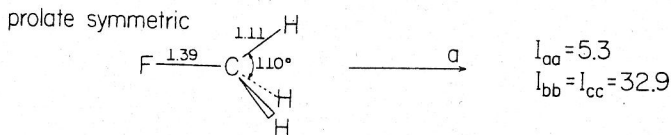
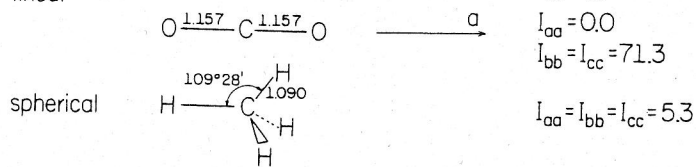


kinetic energy  
 kinetic energy in  
 Eq.(2-18) for

$\mathbf{L} \cdot \mathbf{J}$ , (2-26)

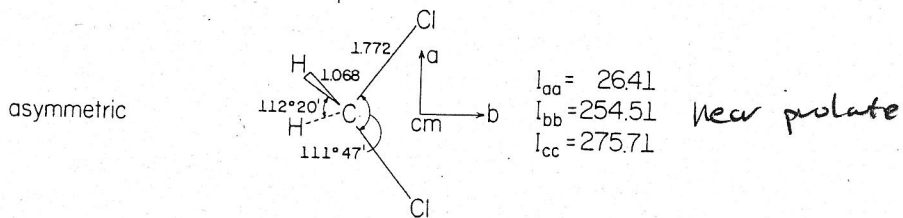
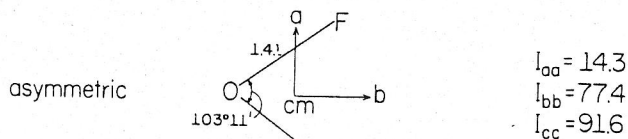
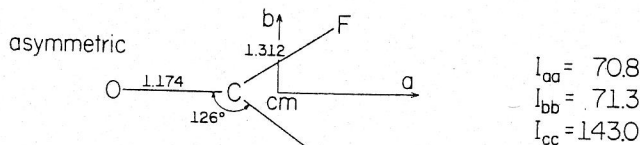
see Appendix

(2-27)

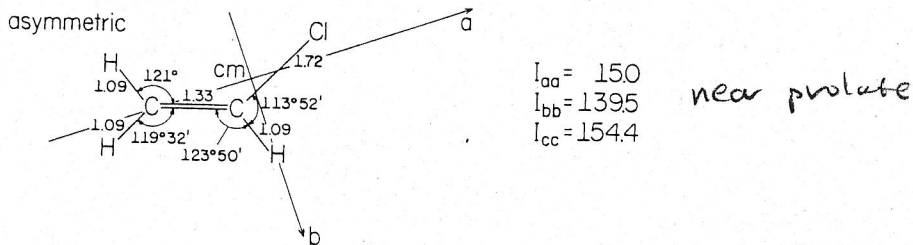


kinetic energy  
 by choosing  
 axes are used for  
 the electrons  
 on molecular  
 (A-5) centered  
 computed using  
 the molecule  
 is called the  
 the principal

(2-28)



(2-29)



(2-30)

(2-31)

Figure 2-2 Moments of inertia of several molecules in the principal inertial axis system (a, b, c) for the common isotopes ( $^{16}\text{O}$ ,  $^{12}\text{C}$ ,  $^{32}\text{S}$ ,  $^{19}\text{F}$ , and  $^{35}\text{Cl}$ ). The bond distances are in units of  $\text{\AA} = 10^{-8} \text{ cm}$ . The units of the moments are  $10^{-40} \text{ g} \cdot \text{cm}^2$ , or  $10^{-47} \text{ kg} \cdot \text{m}^2$ .