

Assignment #5Recommended Problems (not to be handed in)

All of these problems are from McQuarrie & Simon: 8-23, 8-26, 8-36, 8-37, 11-26

Required Problems (Due April 20th by end of seminar)

1. Write out the Z matrix for formaldehyde. Use 121.7 pm for the C-O bond, 110.0 pm for the C-H bonds, and a bond angle (H-C-H) of 114.5° .
2. From McQuarrie & Simon: 8-4 (Hint: See Eqs 1-16 and 1-17), 8-5 (Hint: relates to 8-4), 8-15 (Hint: See Example 8-3 in text), 8-16, 8-17, 8-18, 8-29 (Hint: See Example 8-7), 8-30, 8-33, 8-34, 8-39, 8-40.