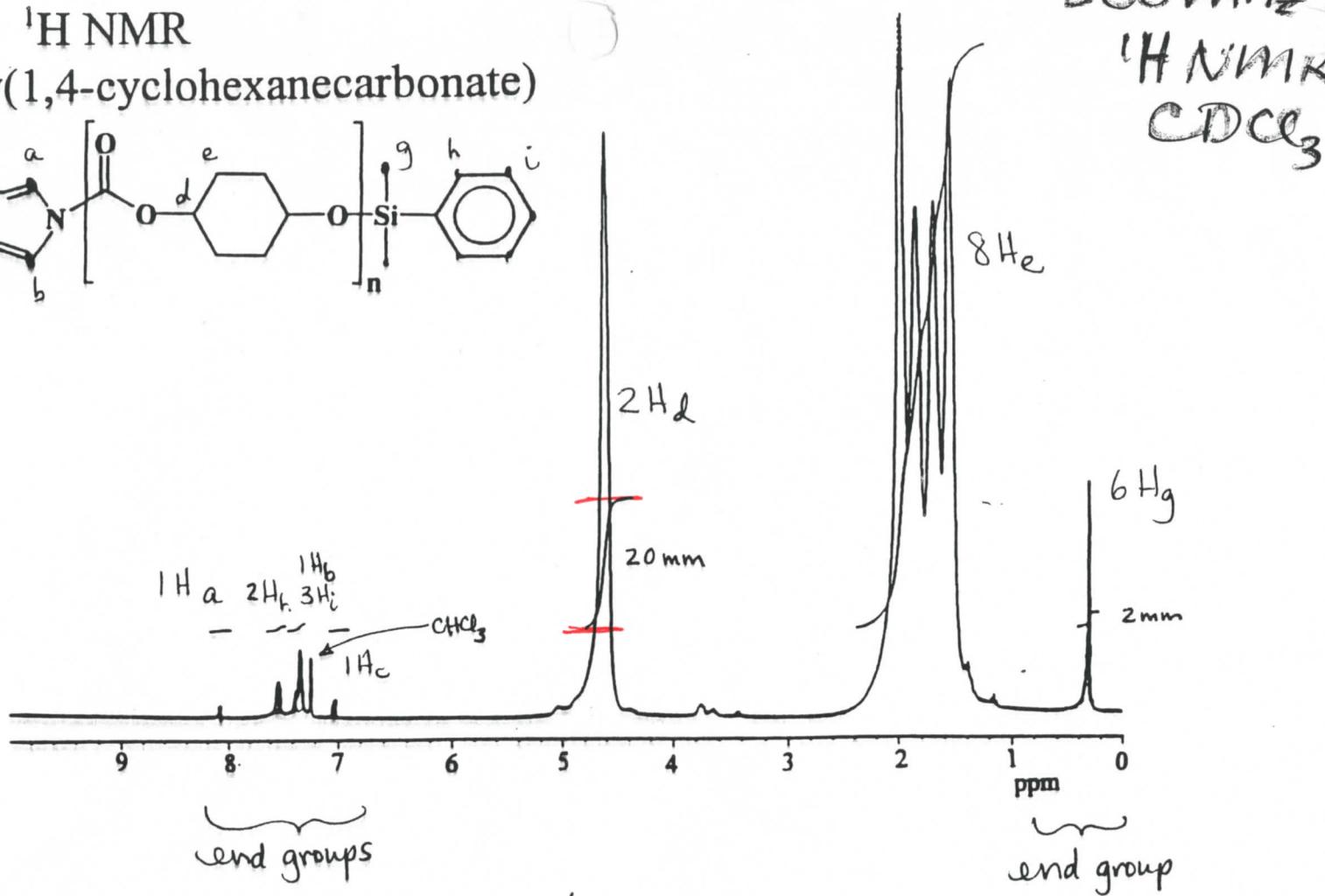
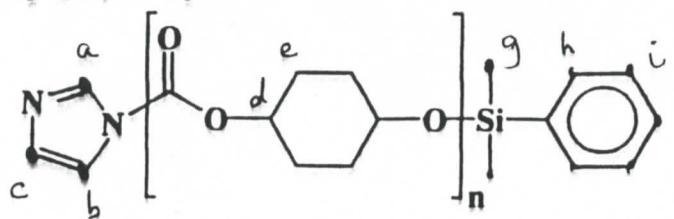


¹H NMR
Poly(1,4-cyclohexanecarbonate)



Calculation of M_n from end group analysis:

$$6 \text{H}_g = 2 \\ \text{H}_g = 0.33$$

$$2 \text{H}_d = 20 \\ \text{H}_d = 10$$

$$\Rightarrow \text{ratio of } \frac{\text{H}_d}{\text{H}_g} = \text{DP}_n = 30$$

$$\left. \begin{aligned} M_n &= 30(142) + 67 + 135 \\ &\Rightarrow M_n = 4500 \text{ Da} \end{aligned} \right\}$$

Repeat MW = 142 Da End group MW's = 67 Da and 135 Da
 $(\text{C}_7\text{H}_{10}\text{O}_3)$ $(\text{C}_3\text{H}_3\text{N}_2)$ $(\text{C}_8\text{H}_{11}\text{Si})$