

### IR (0h30)

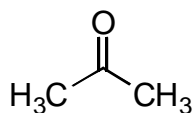
1- Discuter de la fréquence de vibration d'élongation de la liaison



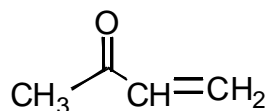
$$\bar{\nu} = \frac{1}{2\pi C} \sqrt{\frac{k}{m}}$$

$k = 5 \cdot 10^2$  simple  
 $k = 10 \cdot 10^2$  double  
 $k = 15 \cdot 10^2$  triple  
 $m = \frac{m_1 m_2}{m_1 + m_2}$  masse réduite du vibreur

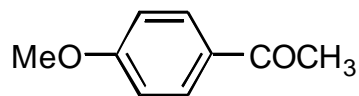
2- commenter



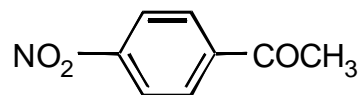
$$\bar{\nu} = 1720\text{ cm}^{-1}$$



$$\bar{\nu} = 1690\text{ cm}^{-1}$$

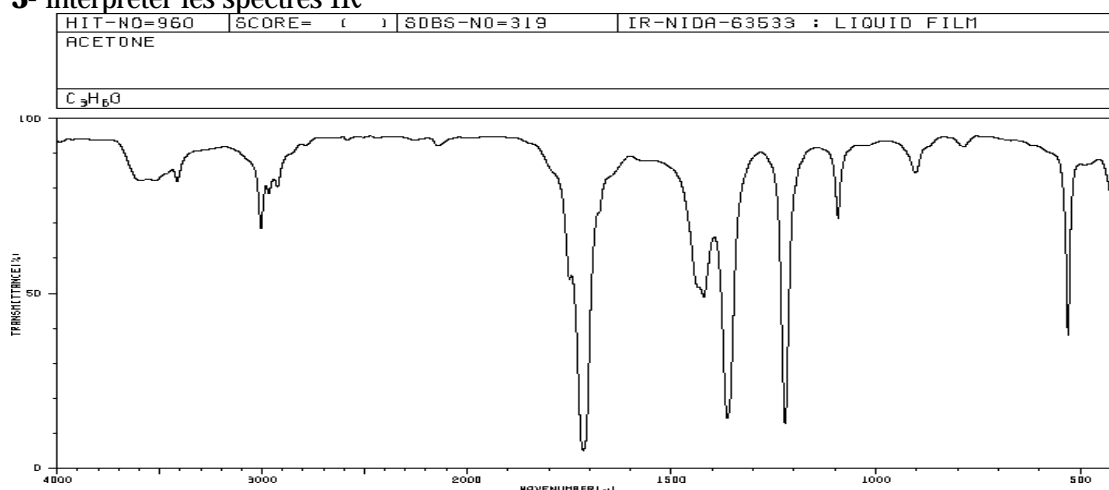


$$\bar{\nu} = 1685\text{ cm}^{-1}$$

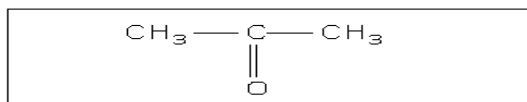


$$\bar{\nu} = 1710\text{ cm}^{-1}$$

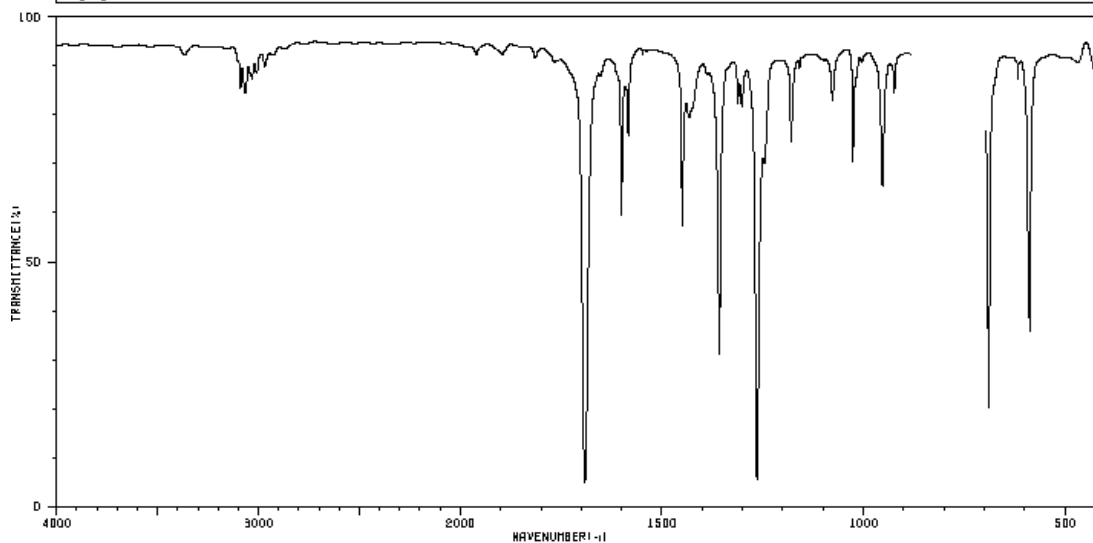
3- interpréter les spectres IR



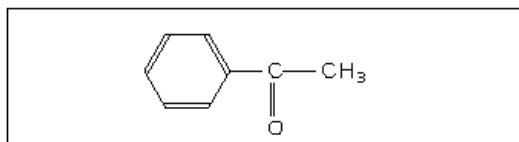
3414	79	1421	47
3005	86	1363	15
2966	74	1223	12
2926	77	1093	68
1749	52	903	81
1715	4	631	36
1434	49		



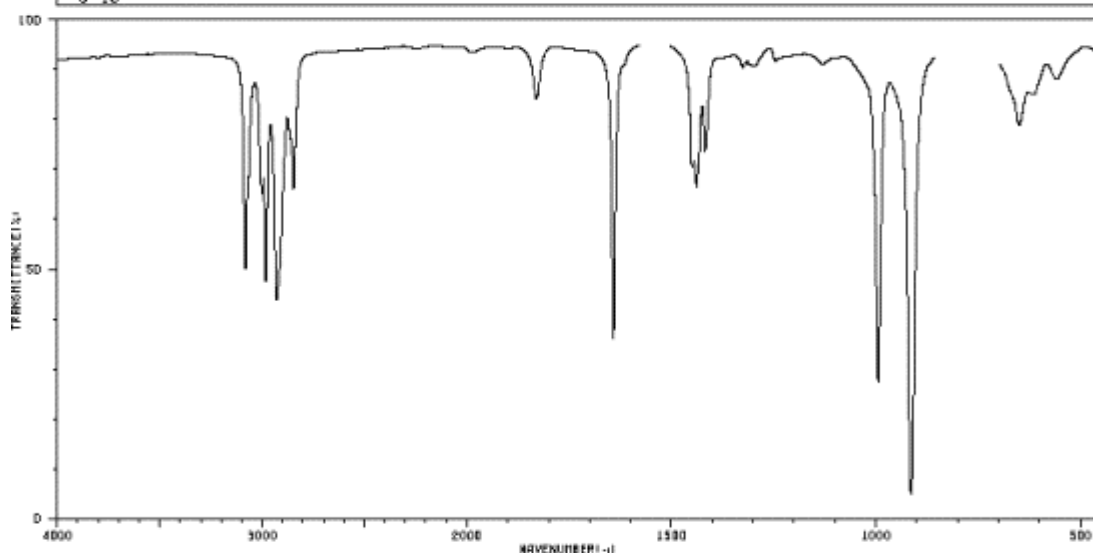
HIT-NO=1117 SCORE= ( ) SDBS-NO=722 IR-NIDA-08653 : CCL4 SOLUTION  
 ACETOPHENONE  
 $C_8H_8O$



3089	81	1684	72	1246	68	690	19
3066	81	1450	55	1180	72	618	84
3031	84	1433	77	1159	86	588	34
3008	84	1368	30	1077	79		
2969	86	1312	79	1026	68		
1691	4	1302	78	955	82		
1601	67	1266	6	924	81		



HIT-NO=995 SCORE= ( ) SDBS-NO=211 IR-NIDA-07507 : CCL4 SOLUTION  
 1,5-HEXADIENE  
 $C_6H_{10}$



3081	47	1460	68
3000	62	1438	64
2901	46	1410	70
2927	42	994	26
2846	64	914	4
1630	81	850	77
1642	34	668	84

