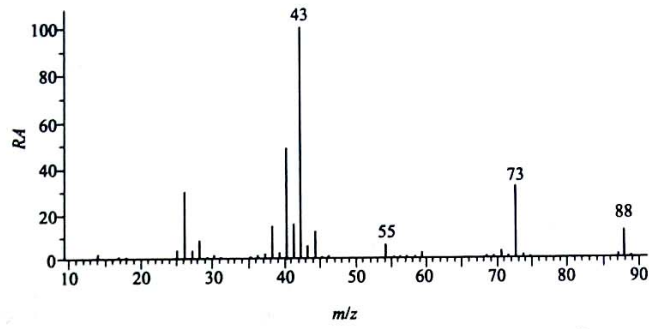
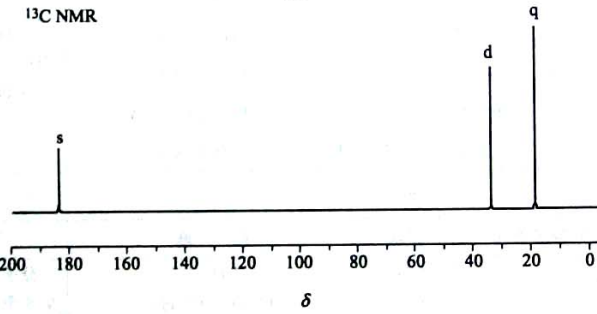


# 波谱综合解析

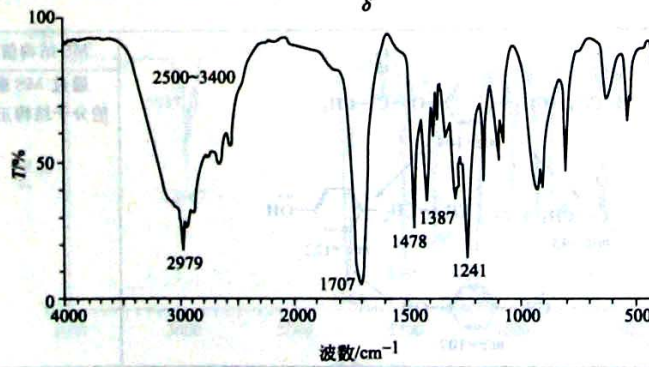
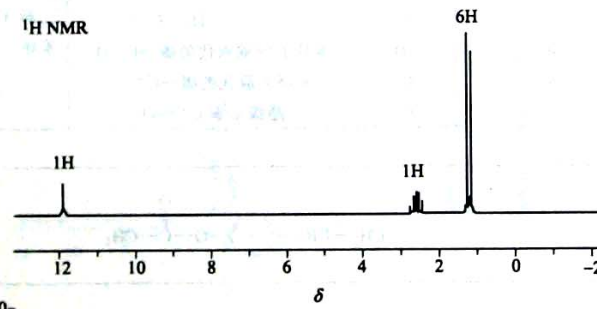
1. 根据如下谱图确定化合物 (M=88) 结构, 并说明依据。



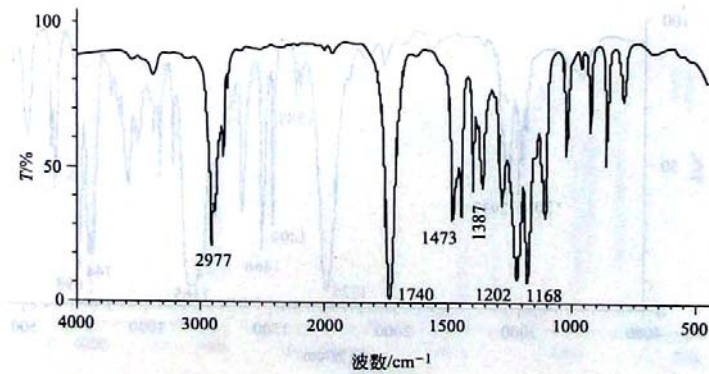
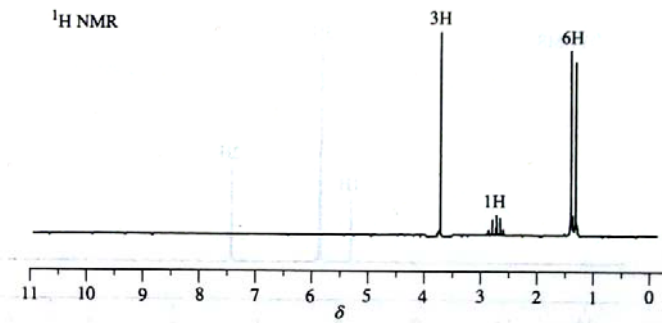
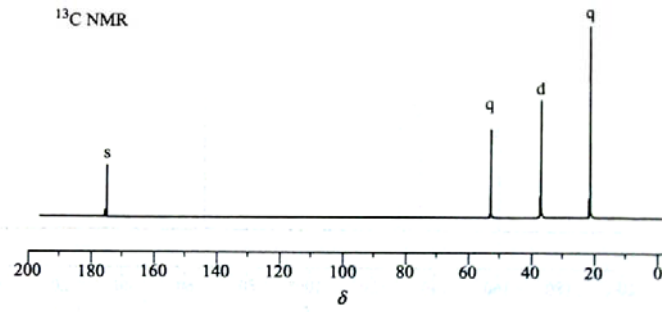
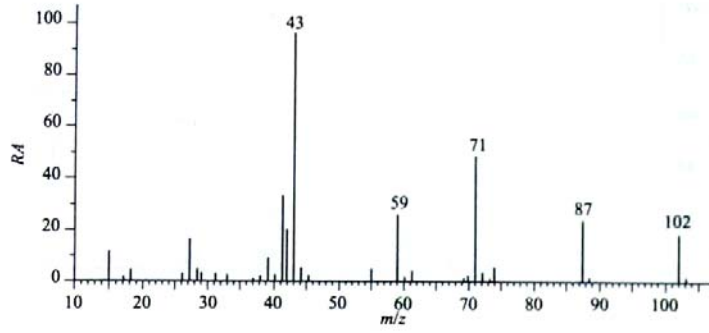
$^{13}\text{C}$  NMR



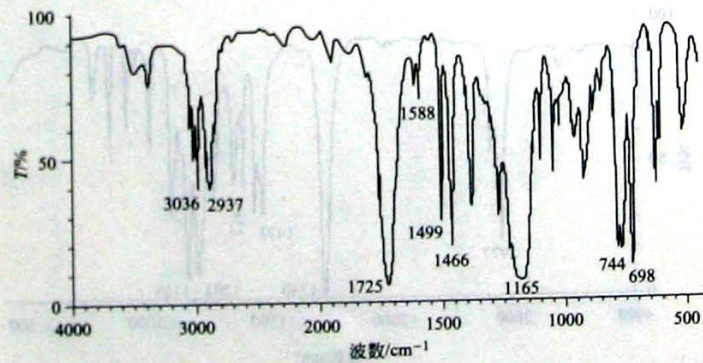
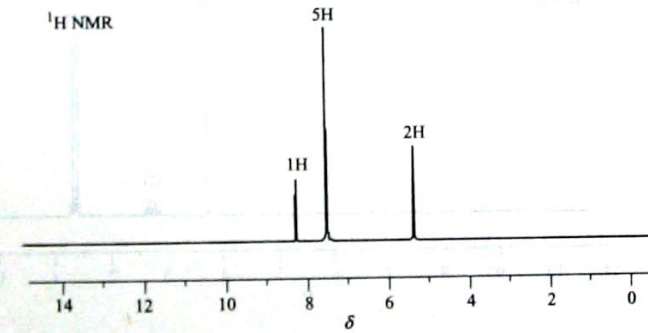
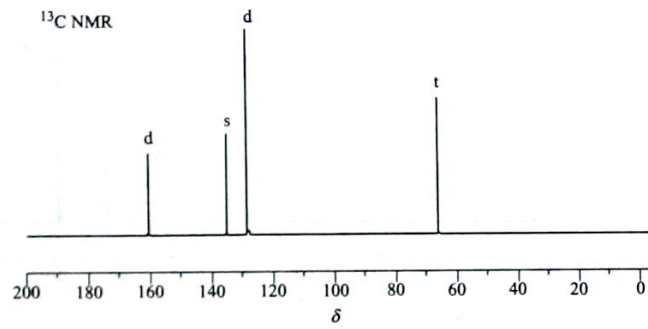
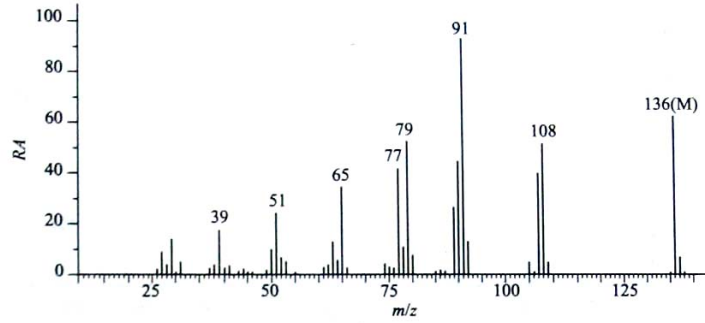
$^1\text{H}$  NMR



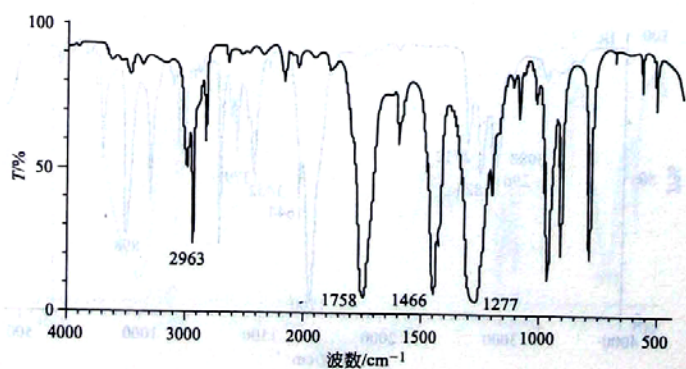
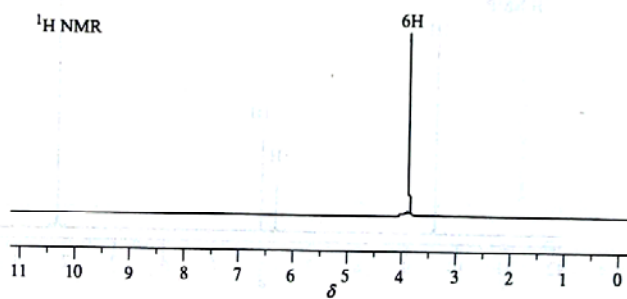
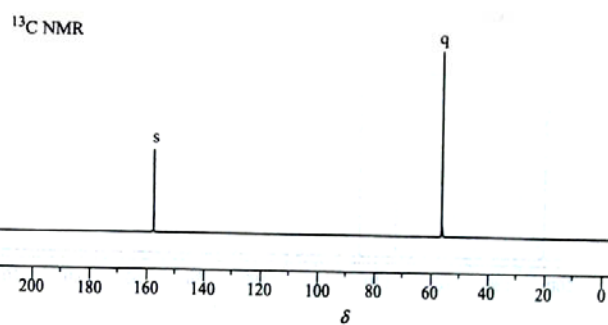
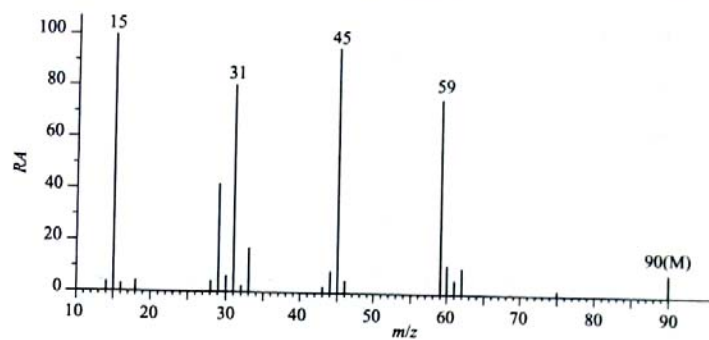
2. 根据如下谱图确定化合物 (M=102) 结构, 并说明依据。



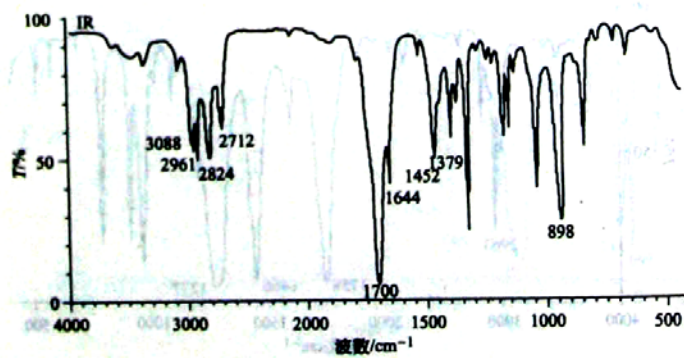
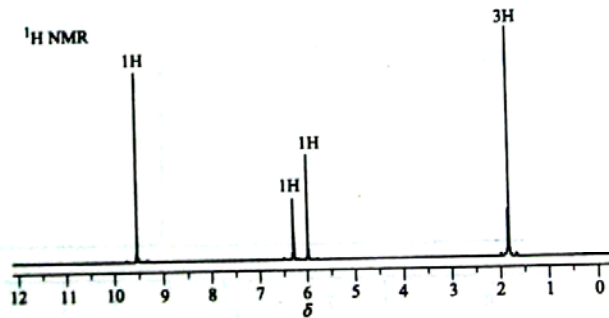
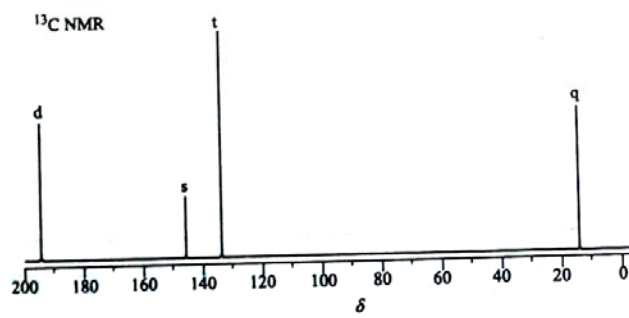
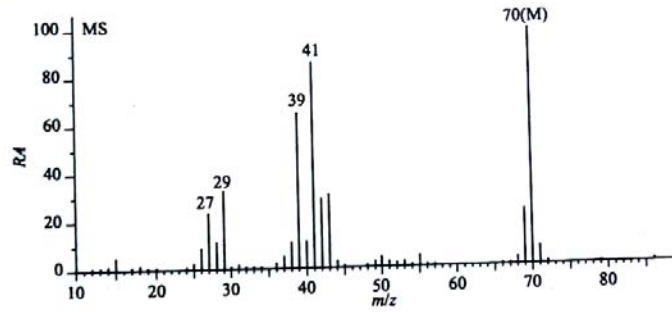
3. 根据如下谱图确定化合物 (M=136) 结构, 并说明依据。



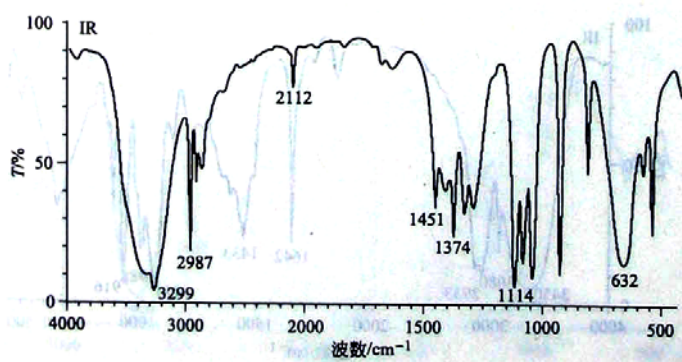
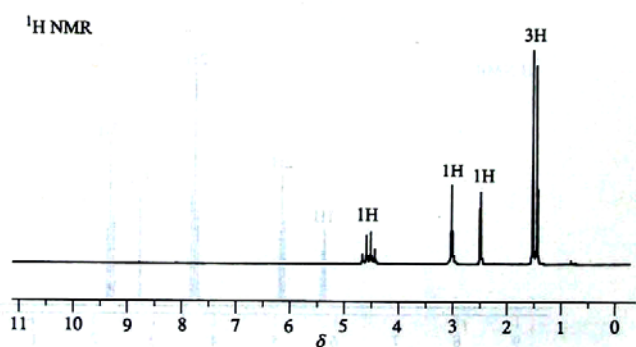
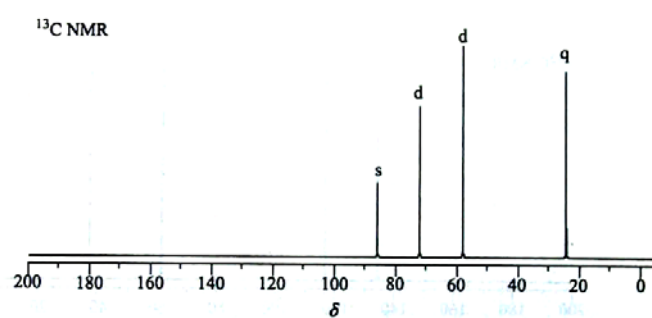
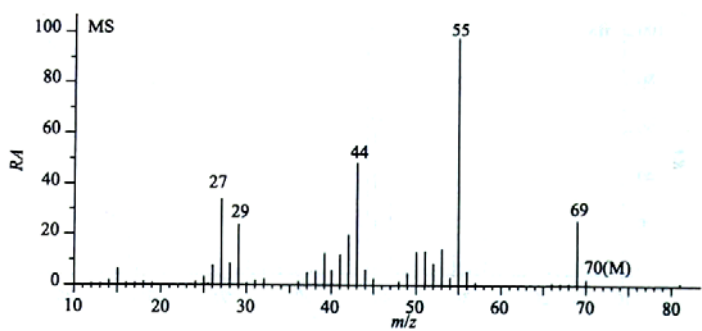
4. 根据如下谱图确定化合物 (M=90) 结构, 并说明依据。



5. 根据如下谱图确定化合物 ( $M=70$ ) 结构, 并说明依据。

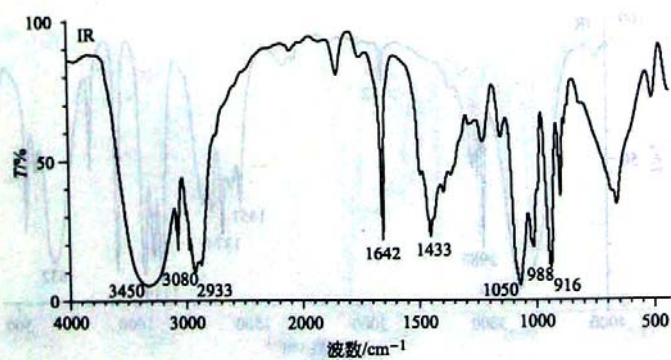
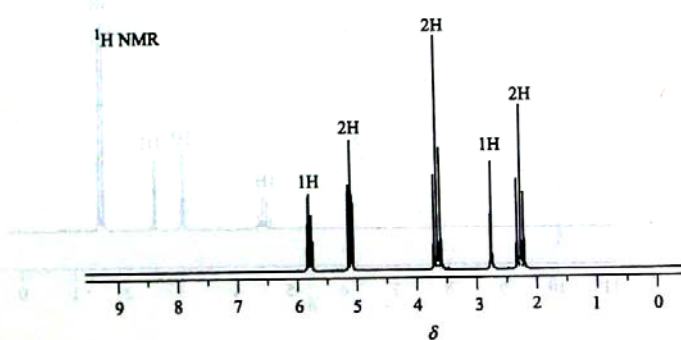
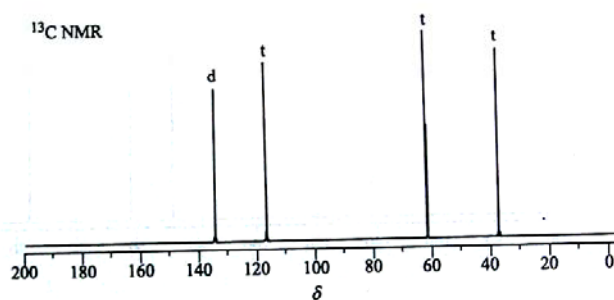
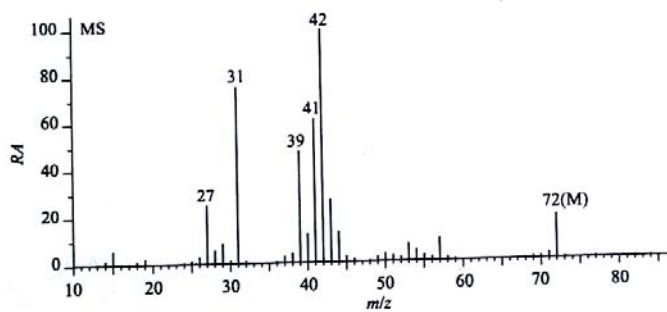


6. 根据如下谱图确定化合物 (M=70) 结构, 并说明依据。

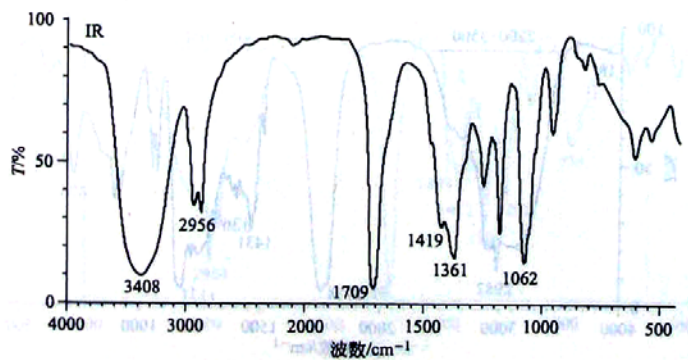
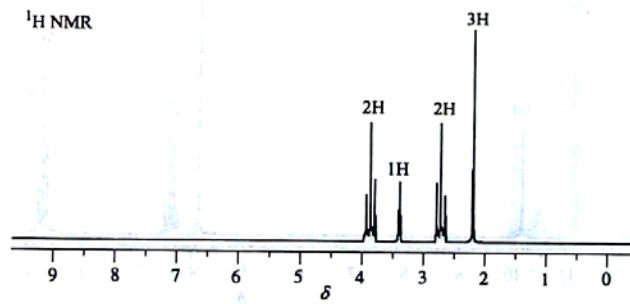
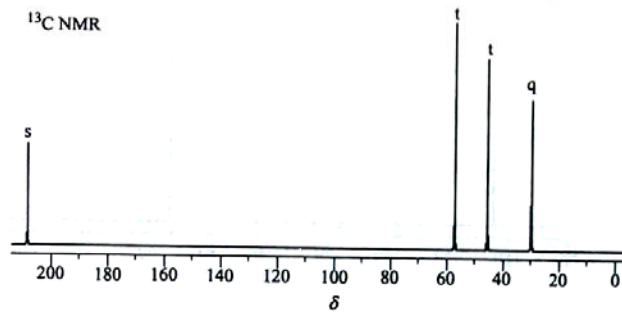
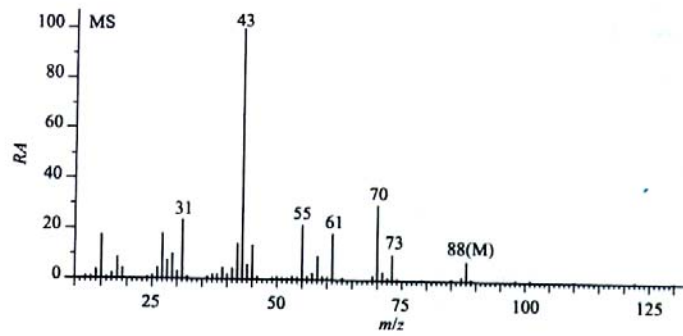




7. 根据如下谱图确定化合物 (M=72) 结构, 并说明依据。

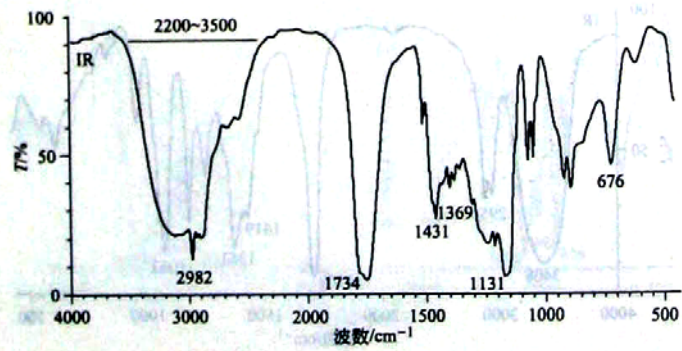
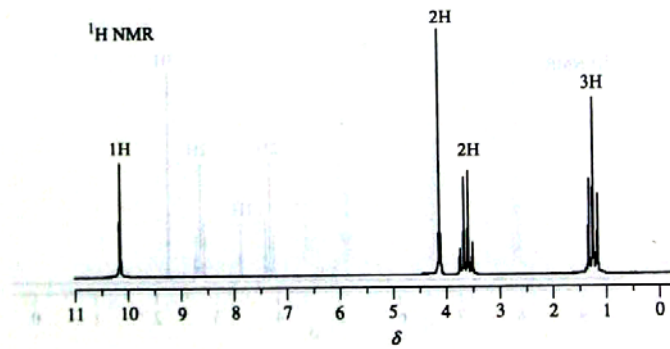
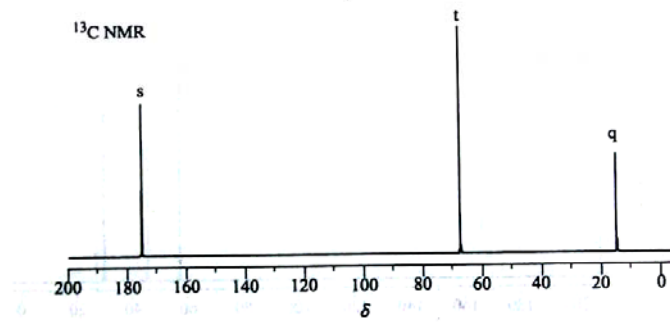
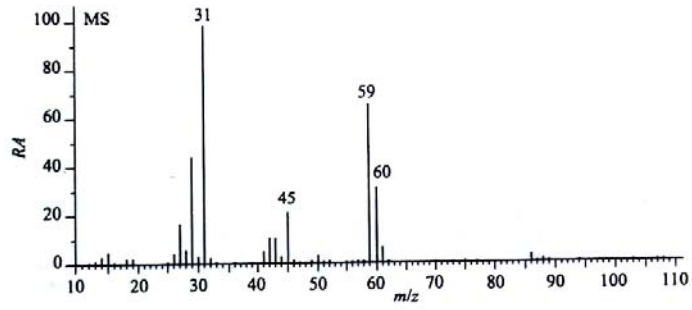


8. 根据如下谱图确定化合物 (M=88) 结构, 并说明依据。

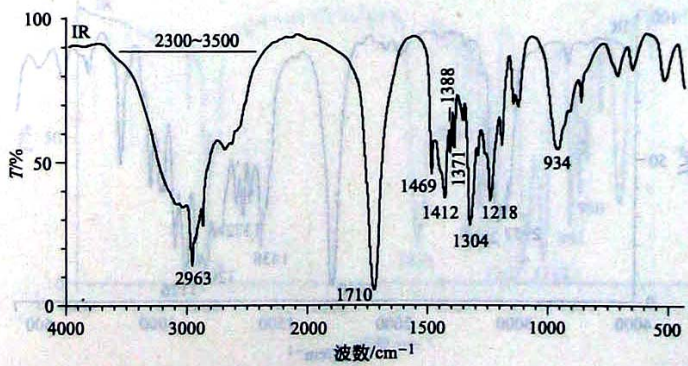
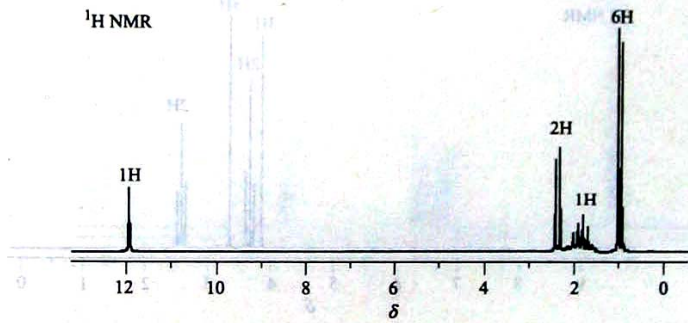
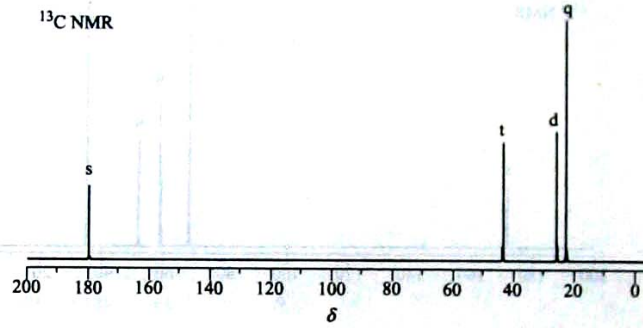
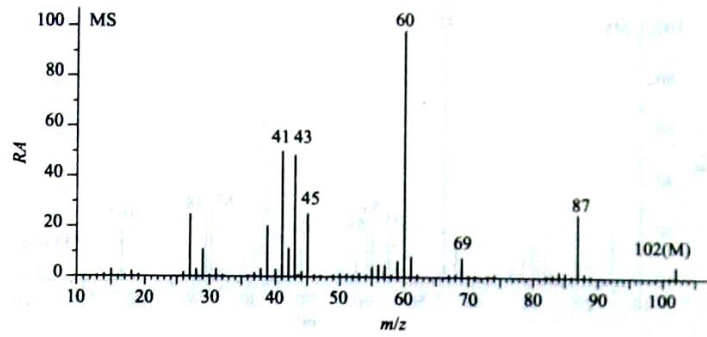




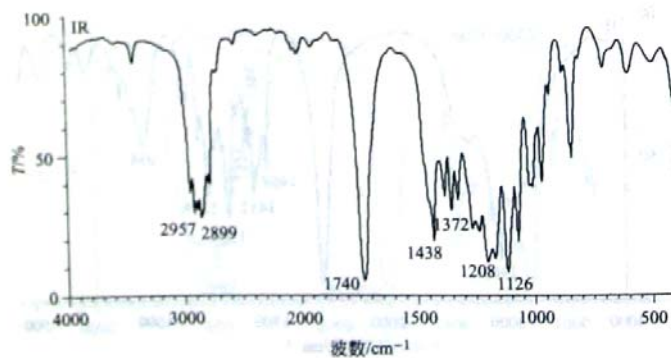
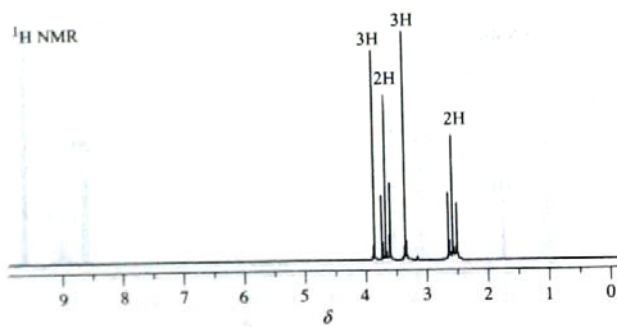
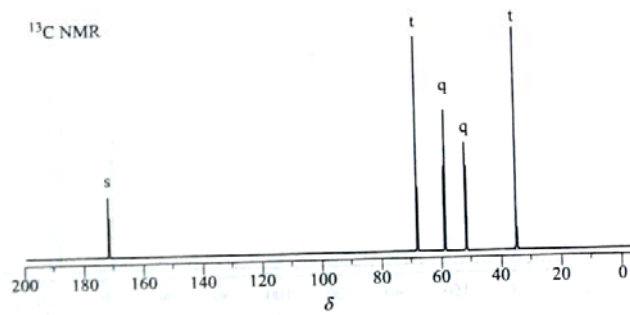
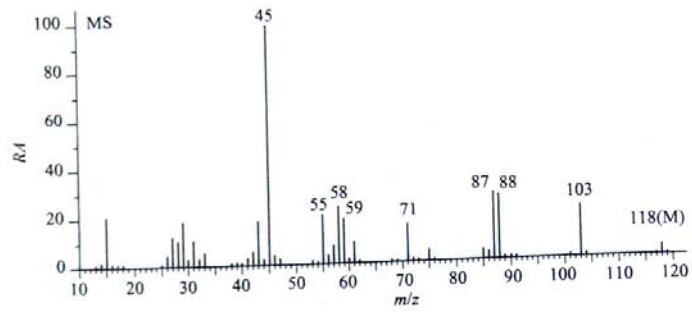
9. 根据如下谱图确定化合物 ( $M=104$ ) 结构, 并说明依据。



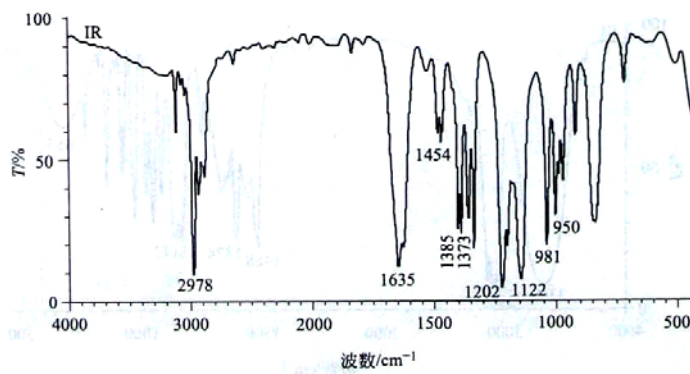
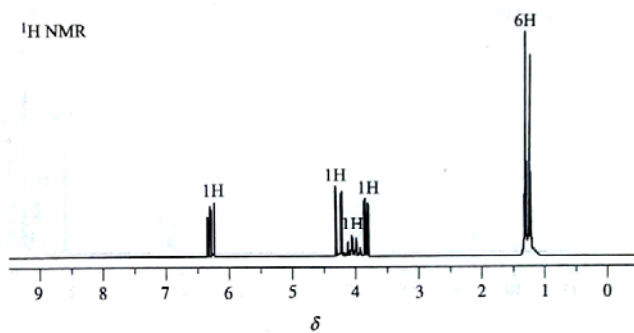
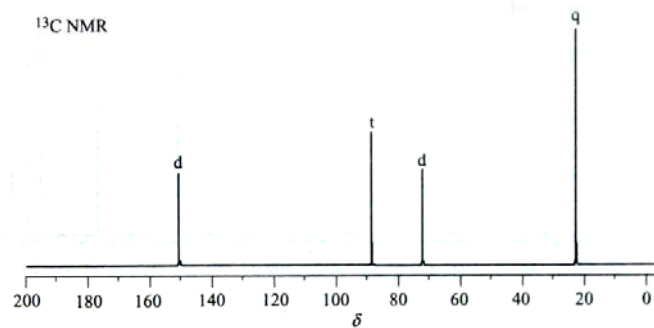
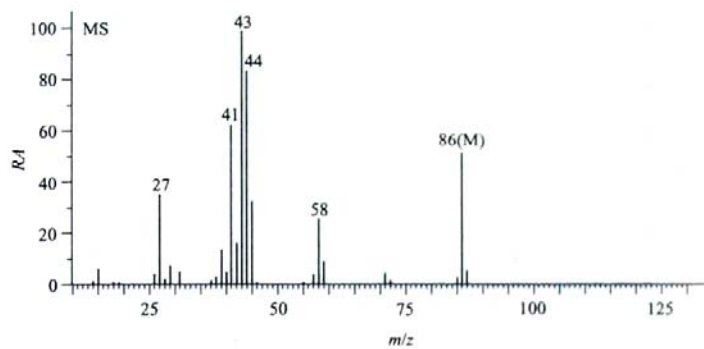
10. 根据如下谱图确定化合物 (M=102) 结构, 并说明依据。



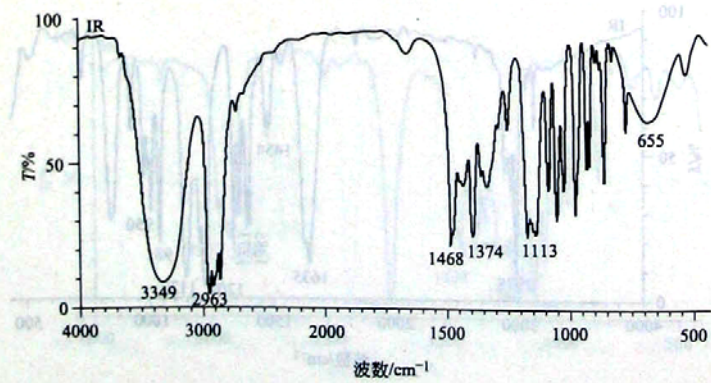
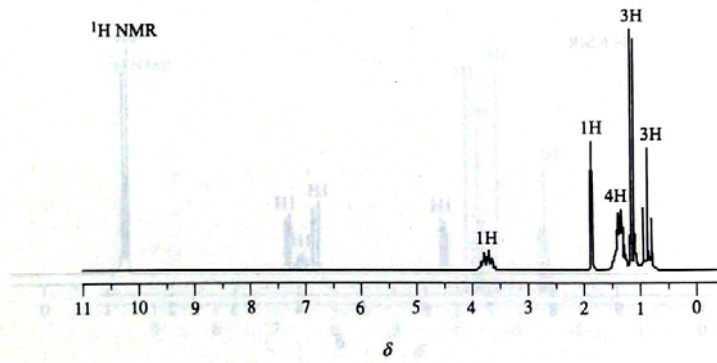
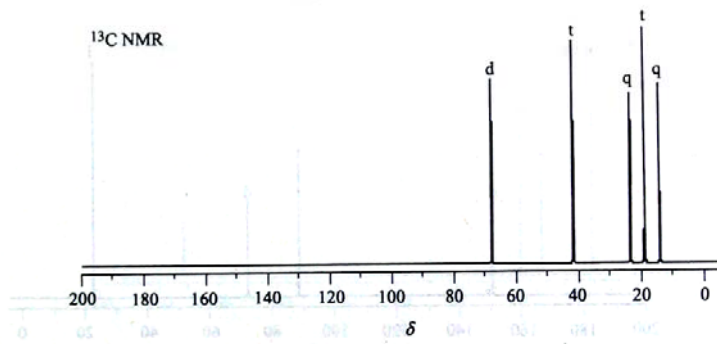
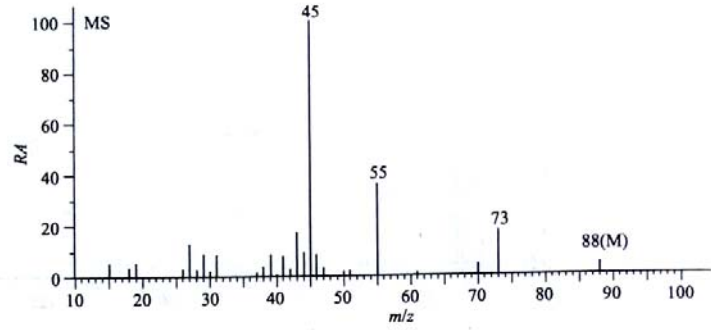
11. 根据如下谱图确定化合物 (M=118) 结构, 并说明依据。



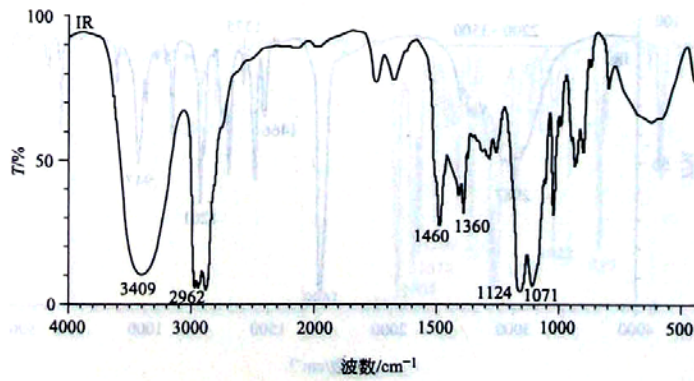
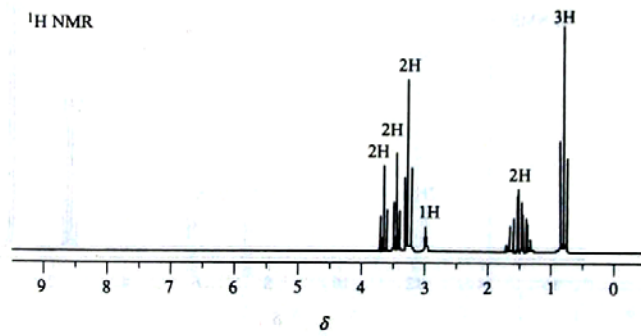
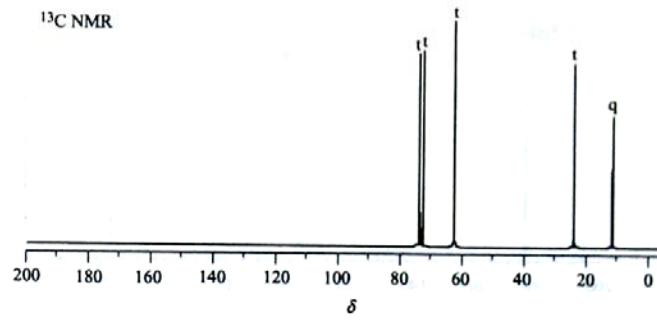
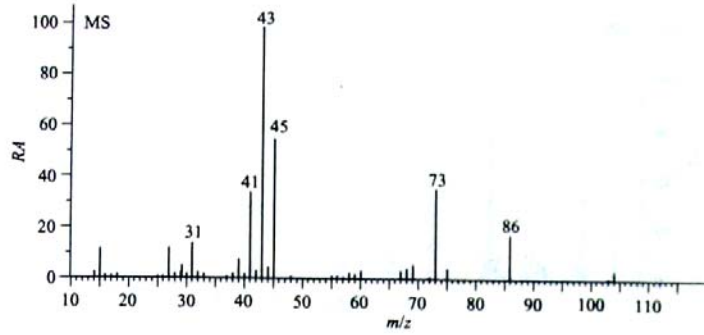
12. 根据如下谱图确定化合物 (M=86) 结构, 并说明依据。



13. 根据如下谱图确定化合物 (M=88) 结构, 并说明依据。

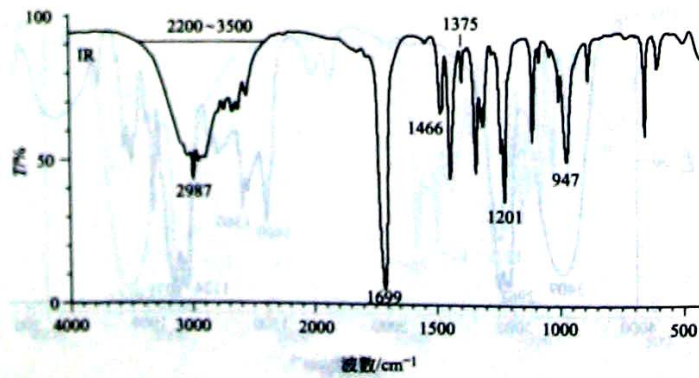
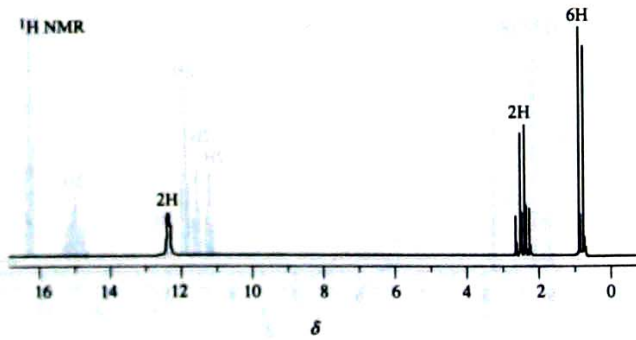
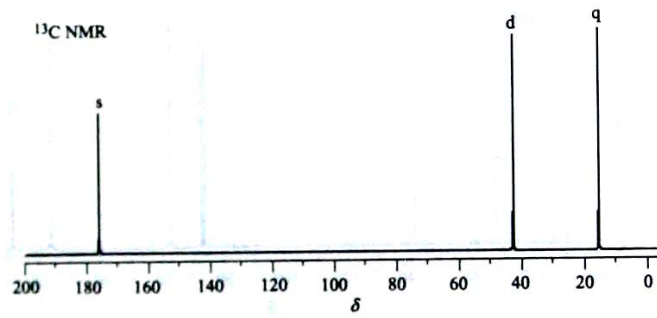
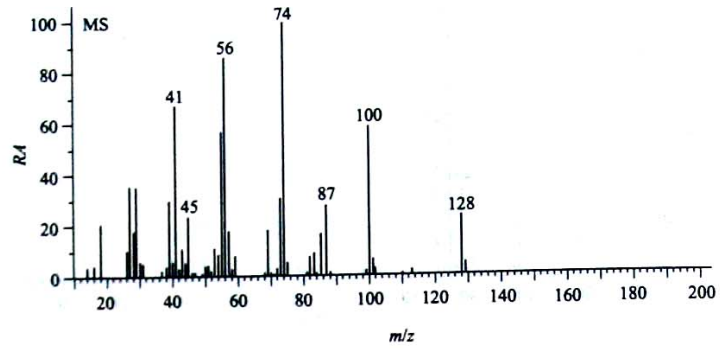


14. 根据如下谱图确定化合物 (M=104) 结构, 并说明依据。

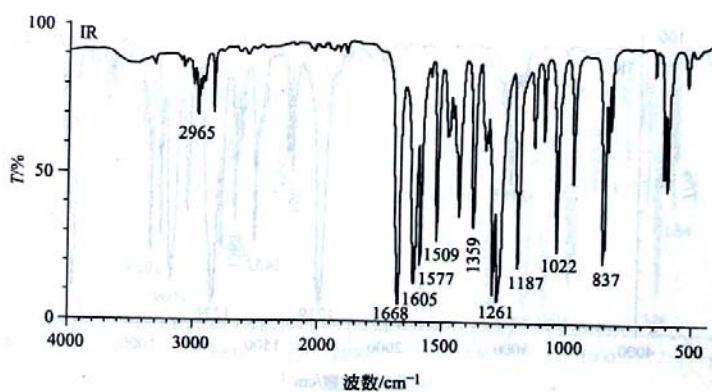
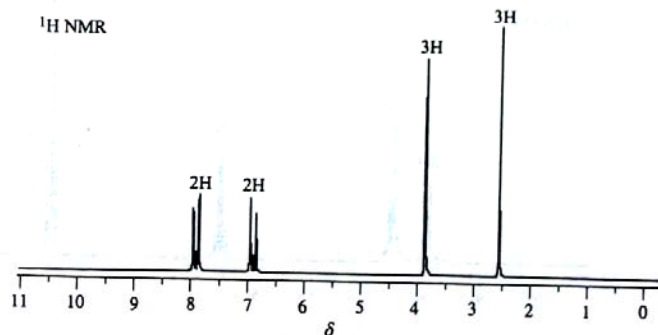
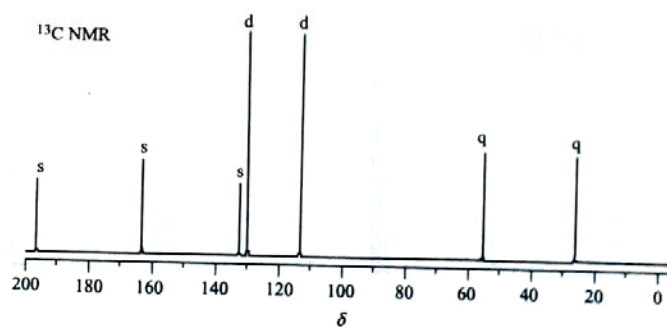
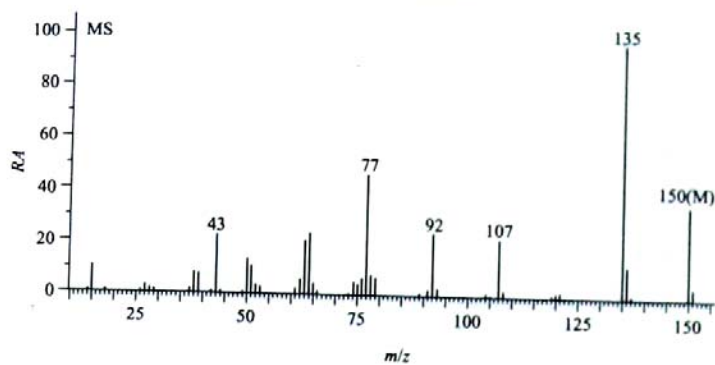




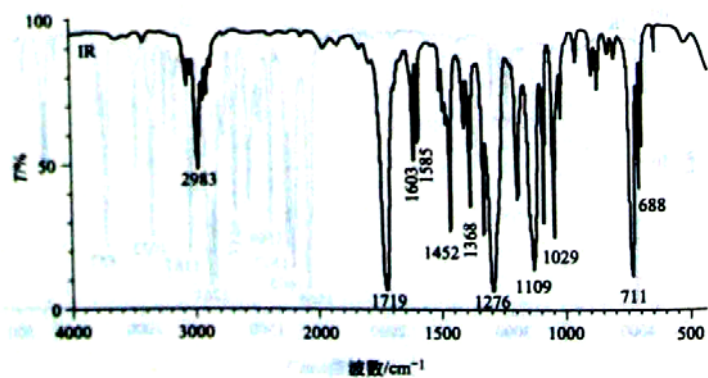
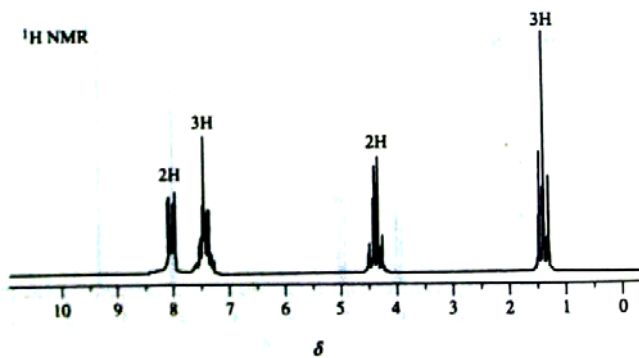
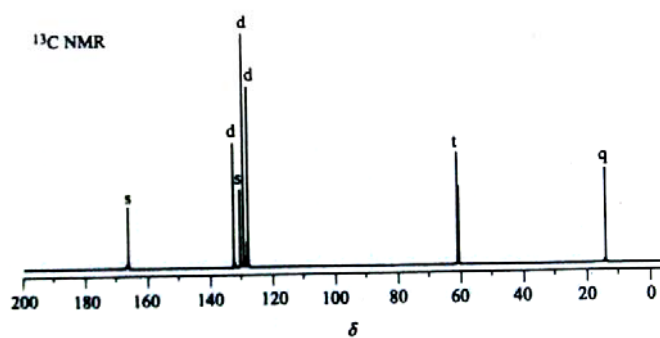
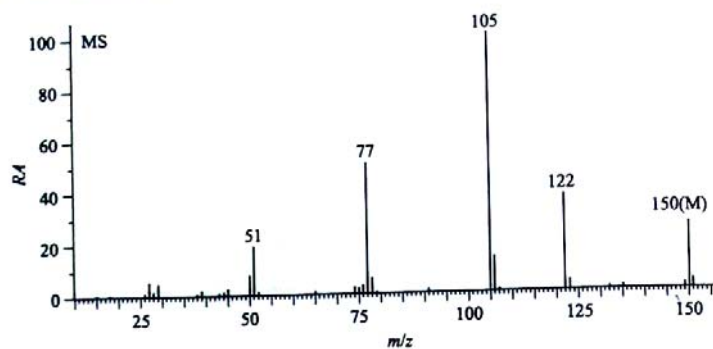
15. 根据如下谱图确定化合物 (M=146) 结构, 并说明依据。



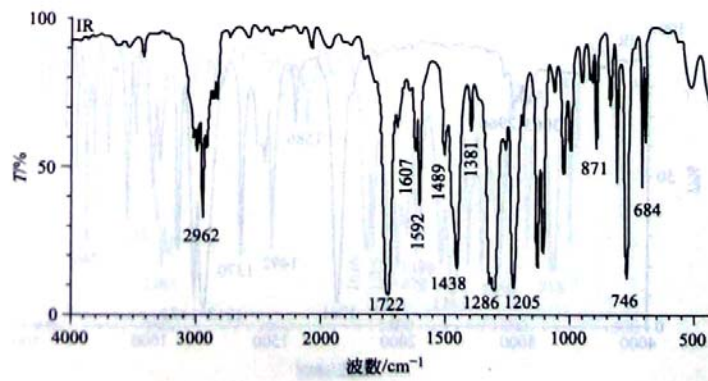
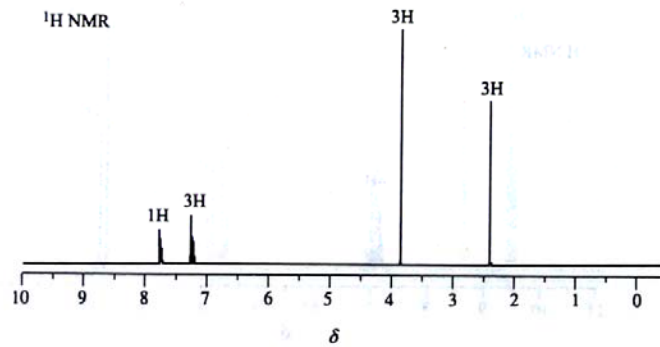
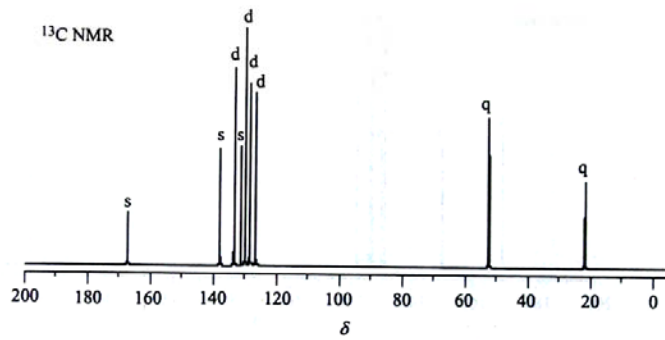
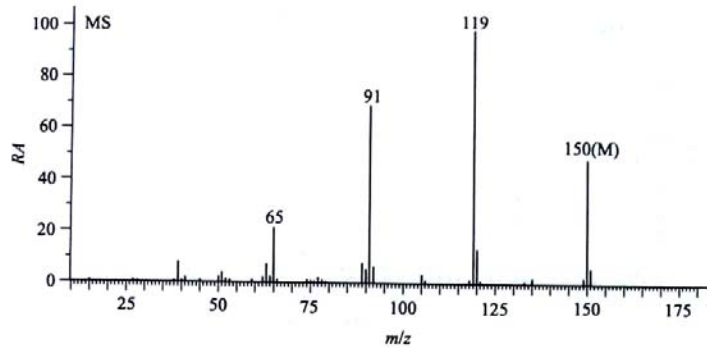
16. 根据如下谱图确定化合物 (M=150) 结构, 并说明依据。



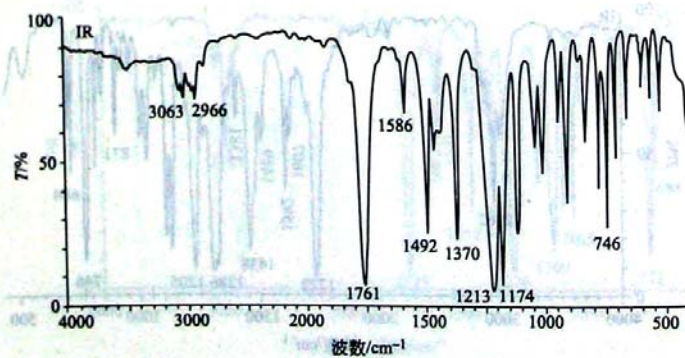
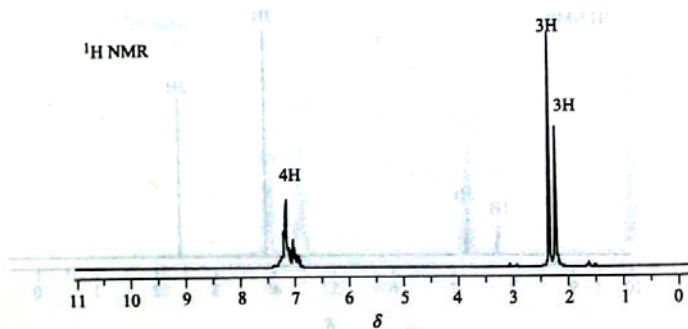
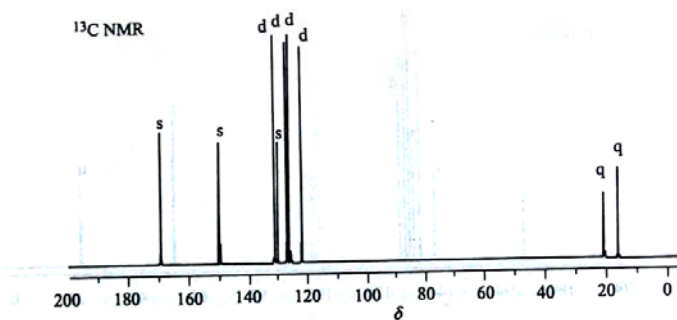
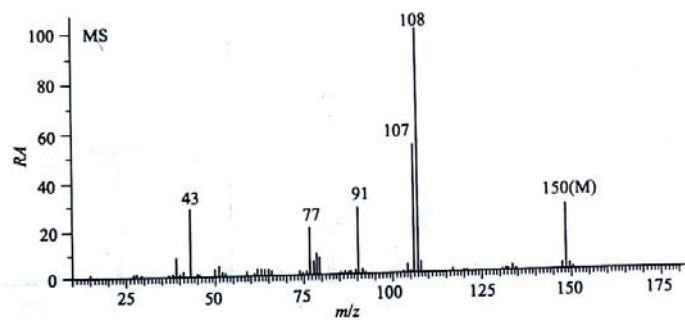
17. 根据如下谱图确定化合物 (M=150) 结构, 并说明依据。



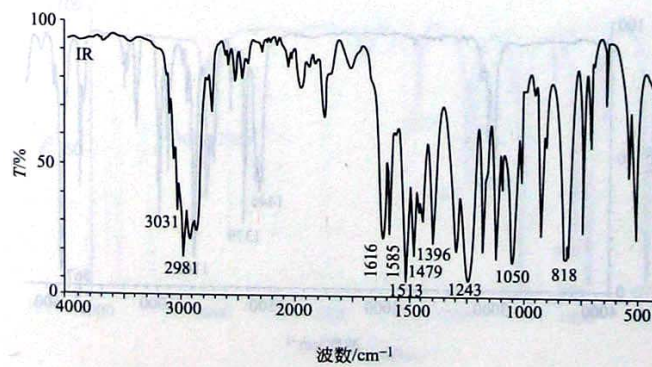
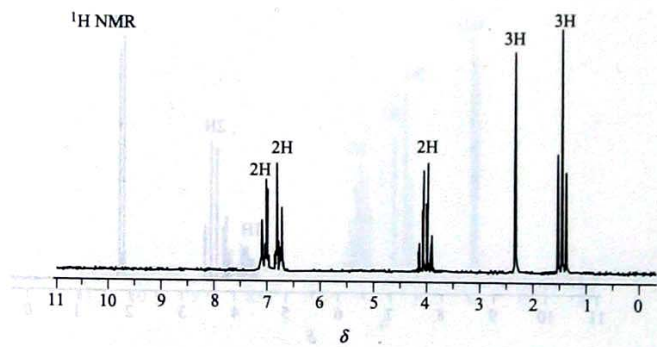
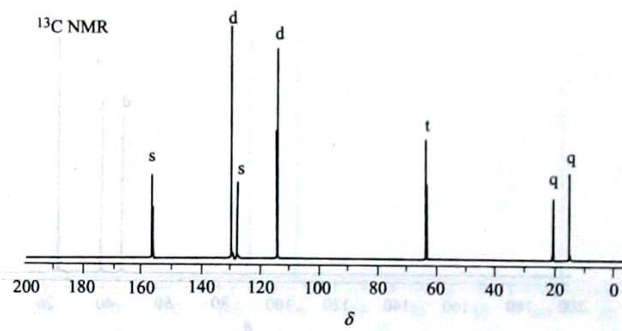
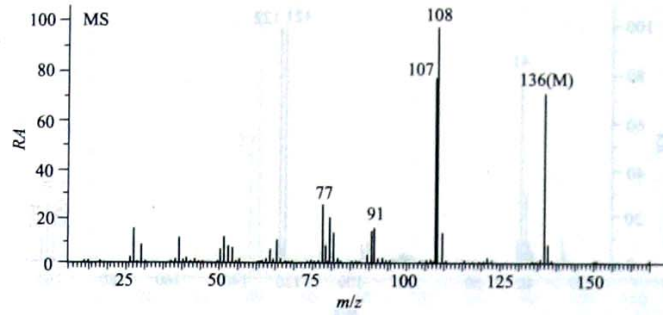
18. 根据如下谱图确定化合物 (M=150) 结构, 并说明依据。



19. 根据如下谱图确定化合物 (M=150) 结构, 并说明依据。

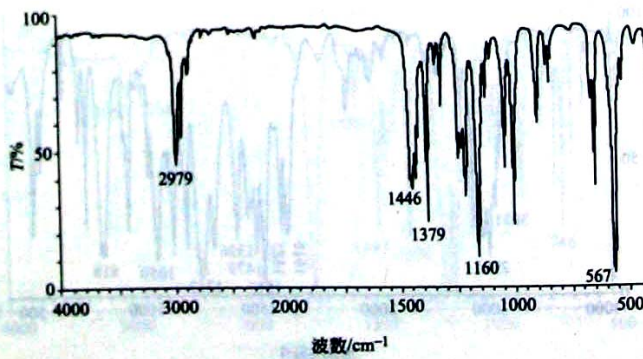
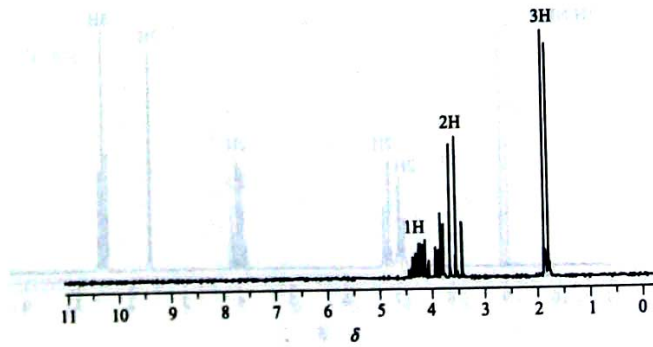
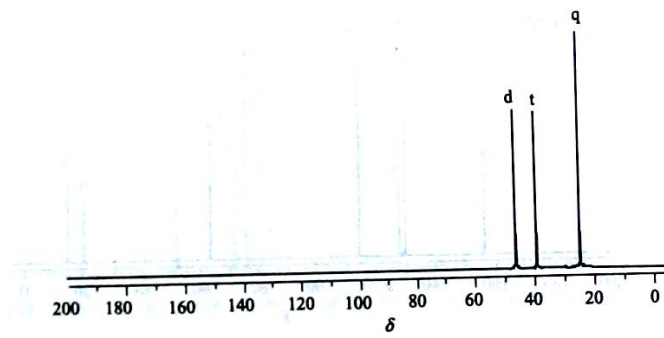
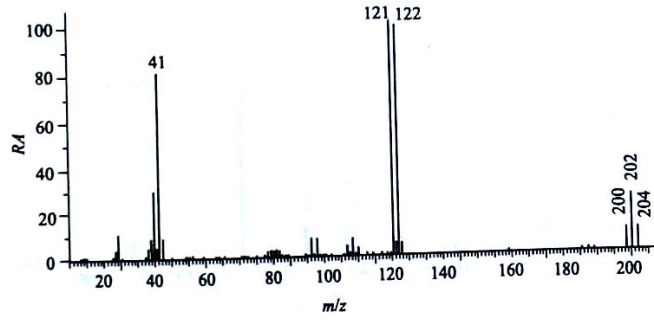


20. 根据如下谱图确定化合物 (M=136) 结构, 并说明依据。

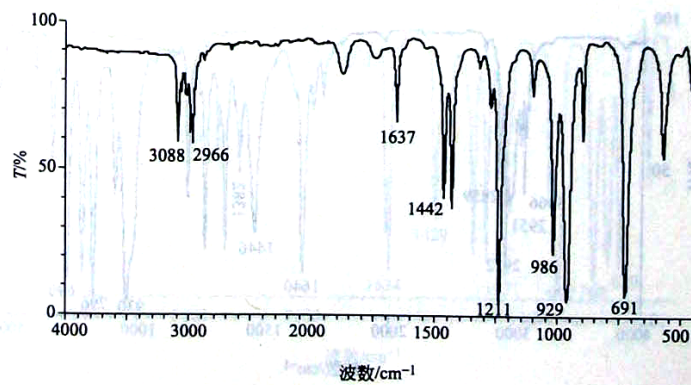
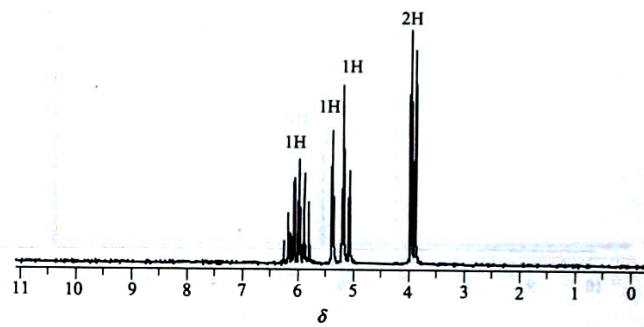
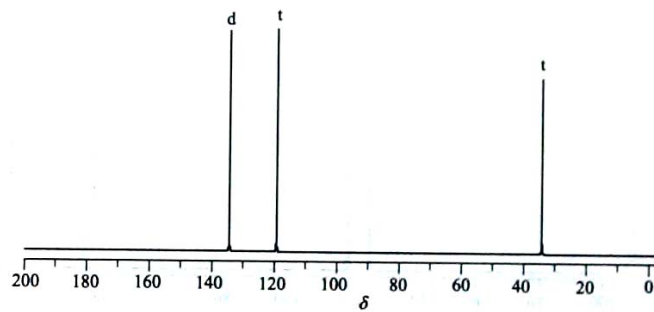
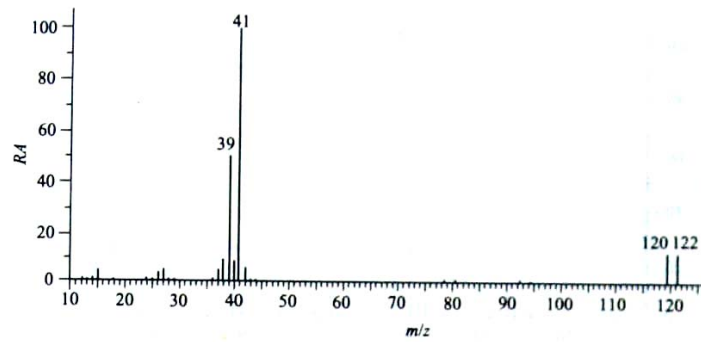




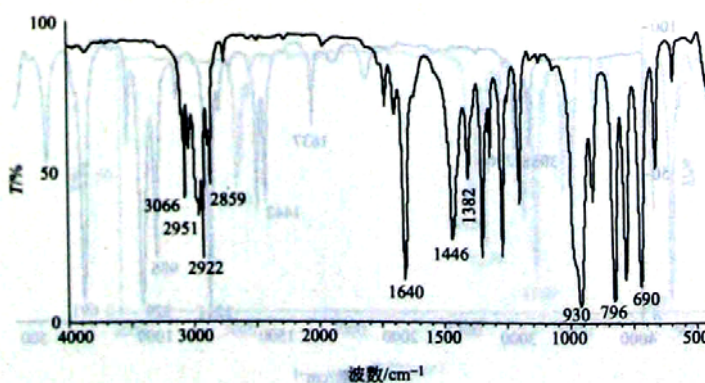
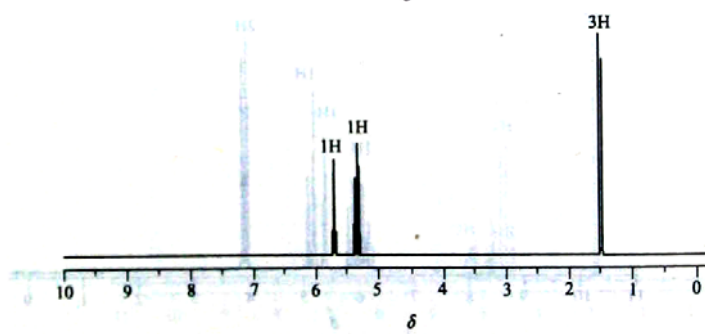
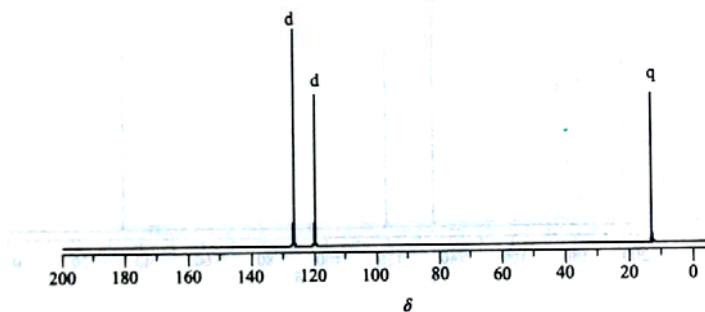
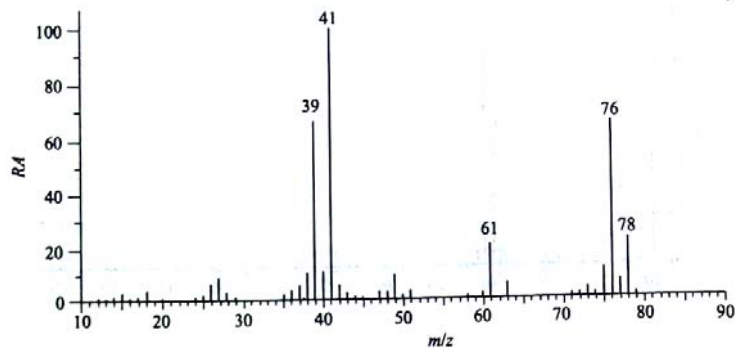
21. 根据如下谱图确定化合物 (M=200) 结构, 并说明依据。



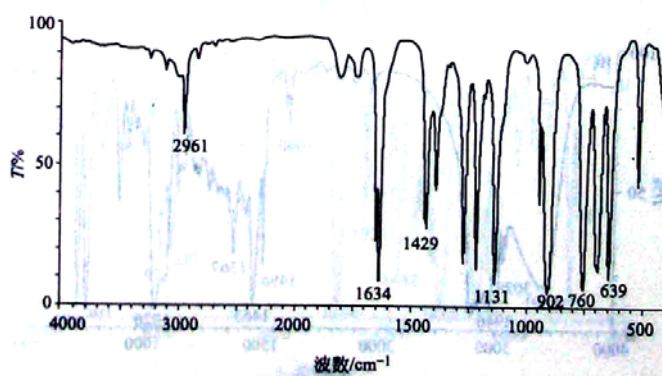
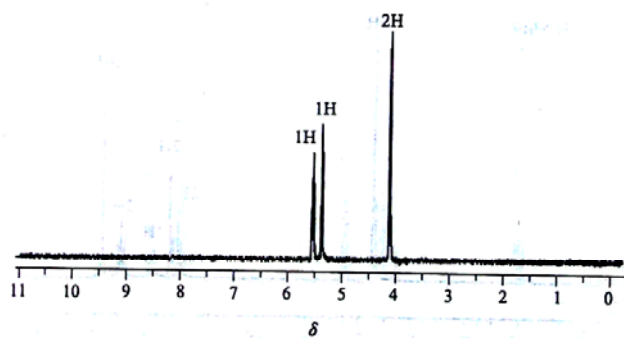
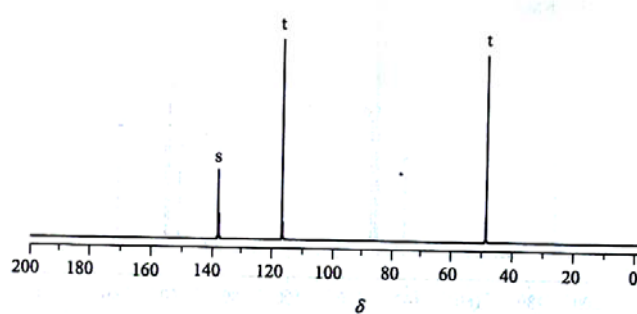
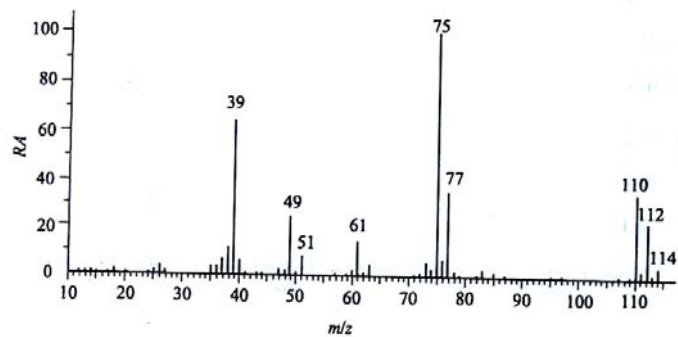
22. 根据如下谱图确定化合物 (M=120) 结构, 并说明依据。



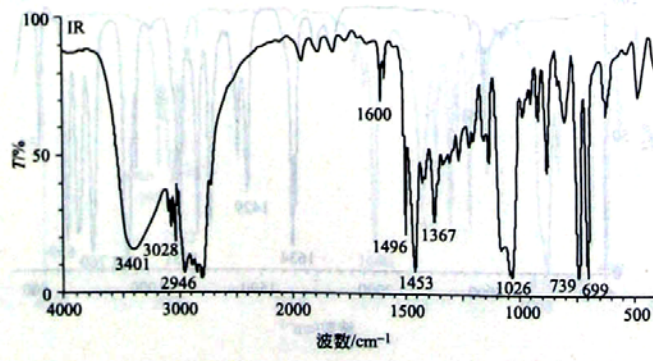
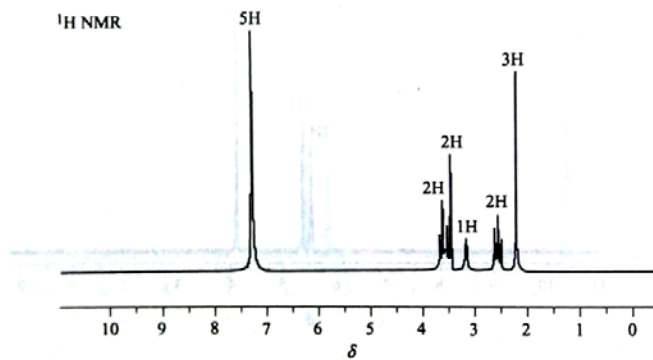
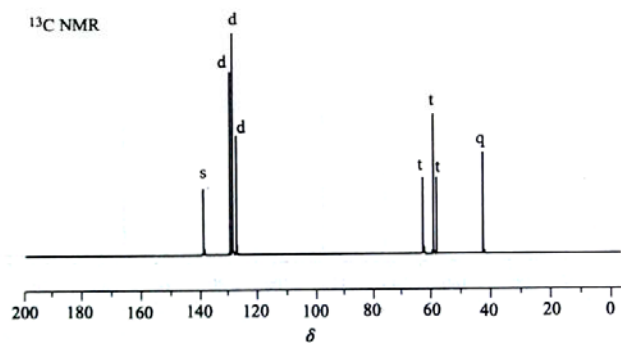
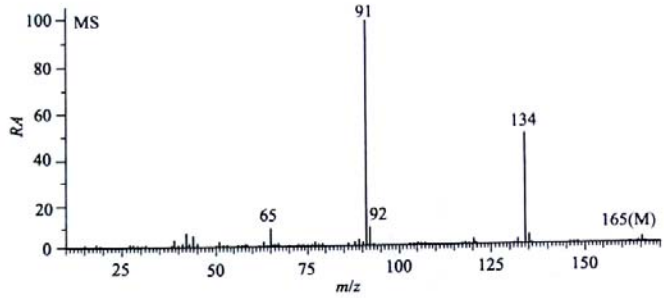
23. 根据如下谱图确定化合物 (M=76) 结构, 并说明依据。



24. 根据如下谱图确定化合物 (M=110) 结构, 并说明依据。

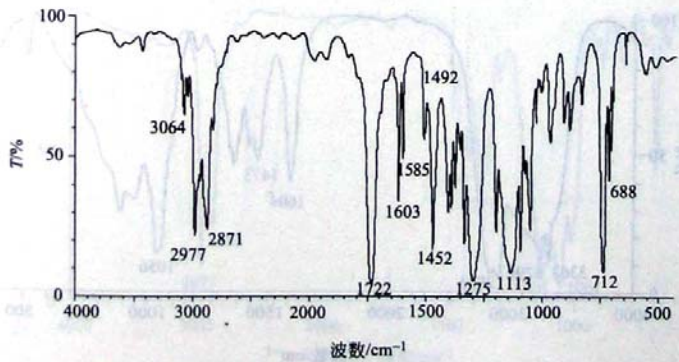
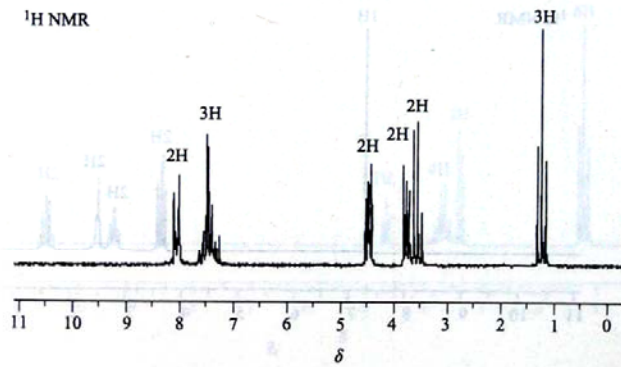
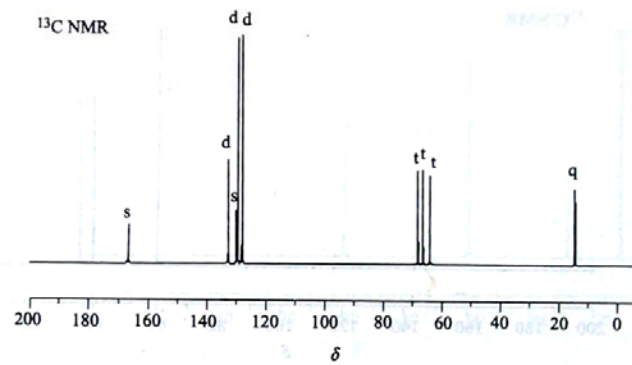
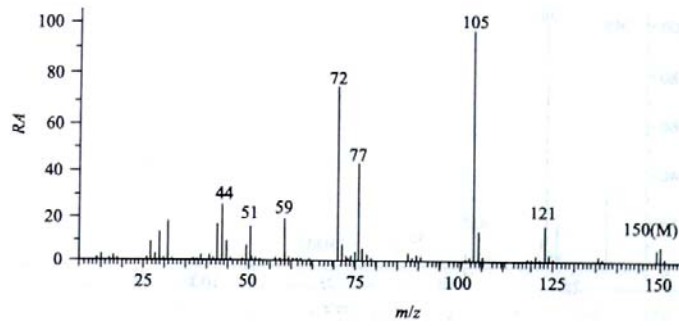


25. 某化合物分子式为  $C_{10}H_{15}NO$ 。根据谱图确定其结构，并说明依据。



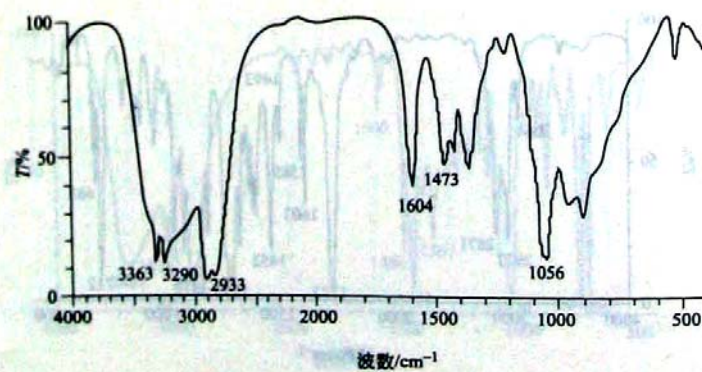
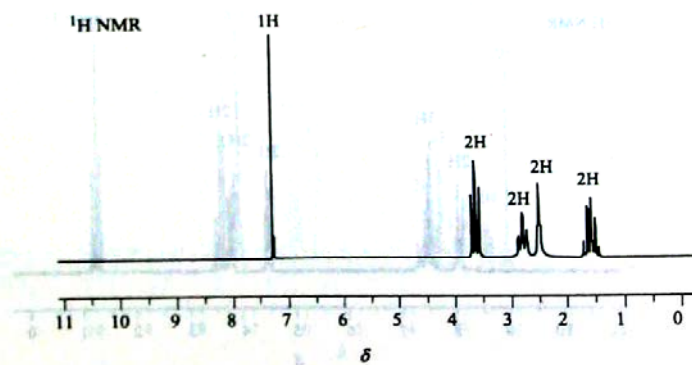
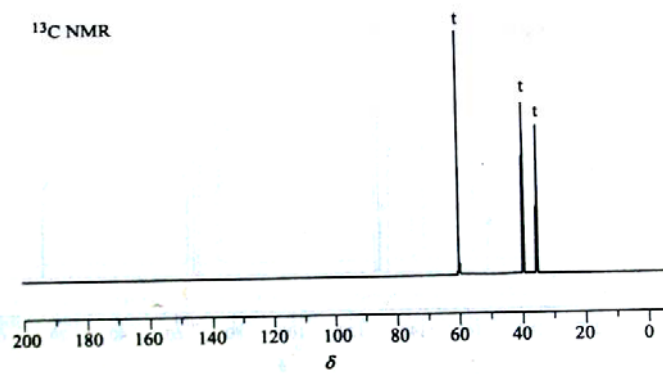
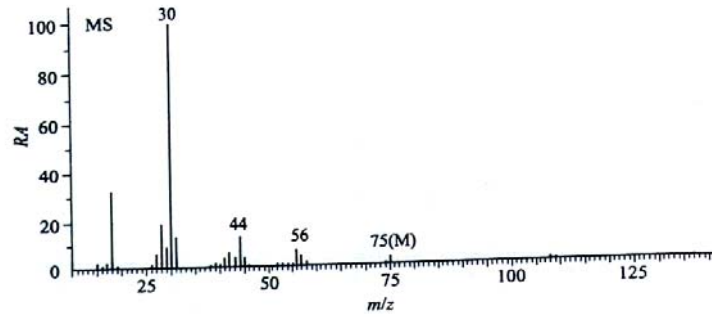


26. 某化合物分子式为  $C_{11}H_{14}O_3$ ，根据谱图确定其结构，并说明依据。

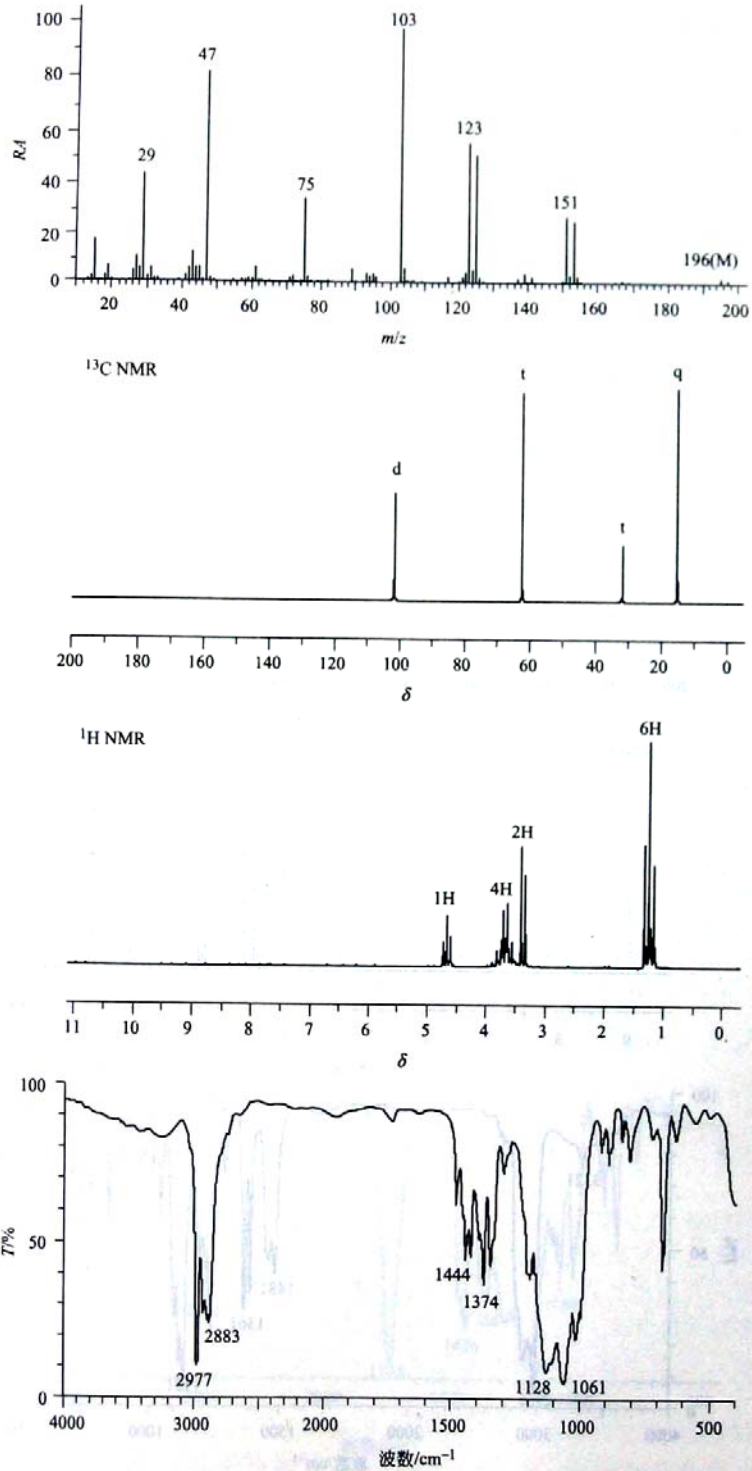




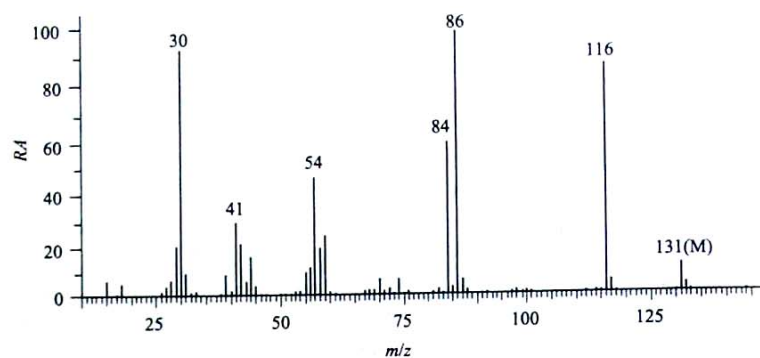
27. 某化合物分子式为  $C_3H_9NO$ ，根据谱图确定其结构，并说明依据。



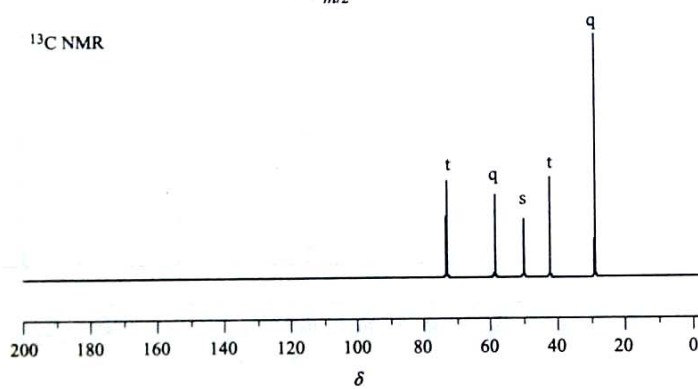
28. 某化合物分子式为  $C_6H_{13}BrO_2$ ，根据谱图确定其结构，并说明依据。



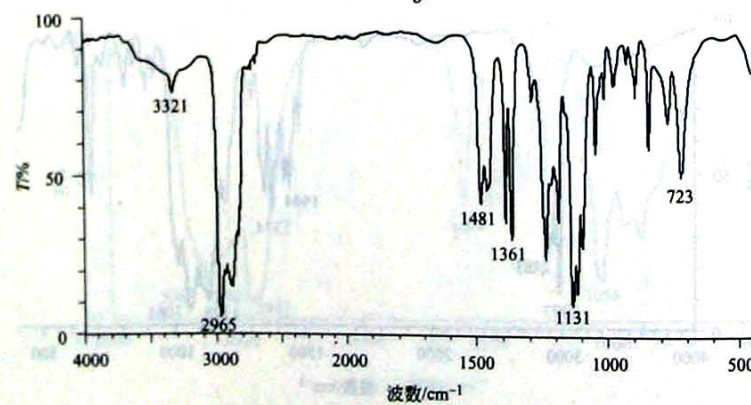
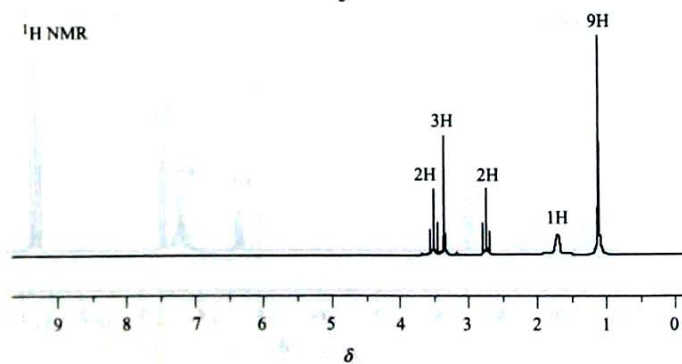
29. 某化合物分子式为  $C_7H_{17}NO$ ，根据谱图确定其结构，并说明依据。



$^{13}C$  NMR



$^1H$  NMR



30. 某化合物分子式为  $C_7H_{12}O_4$ ，根据谱图确定其结构，并说明依据。

