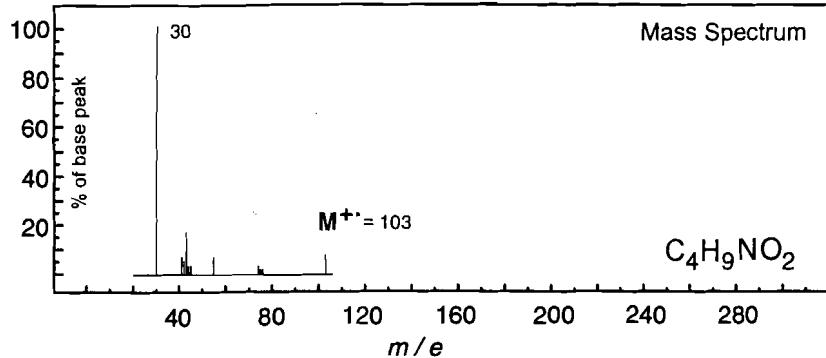
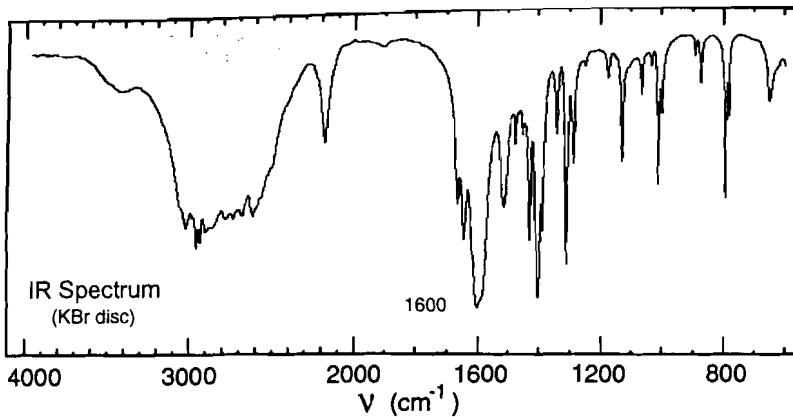
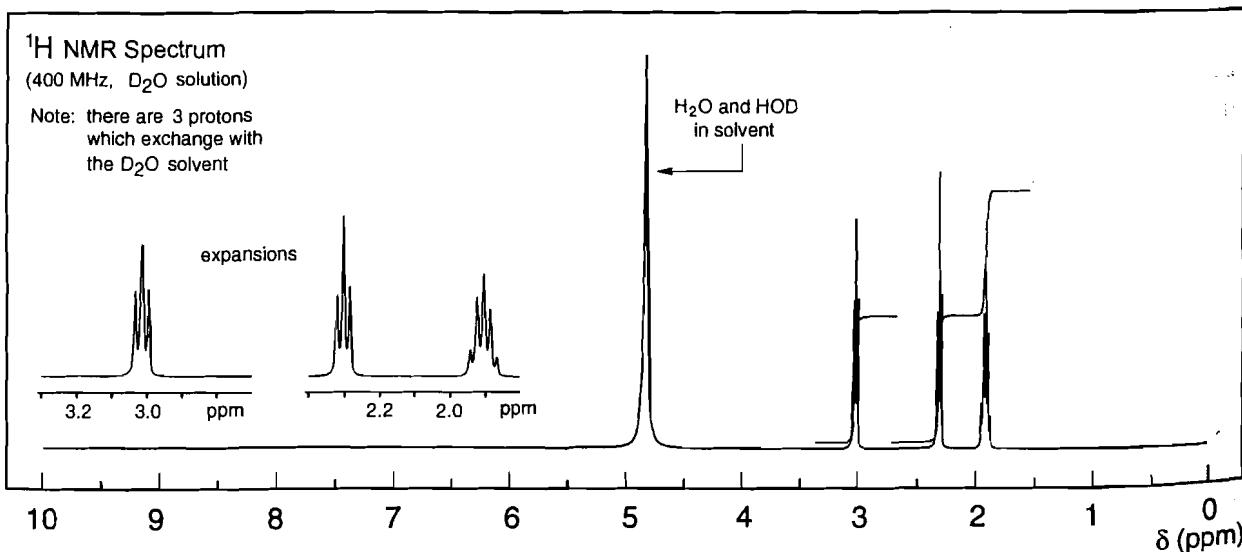
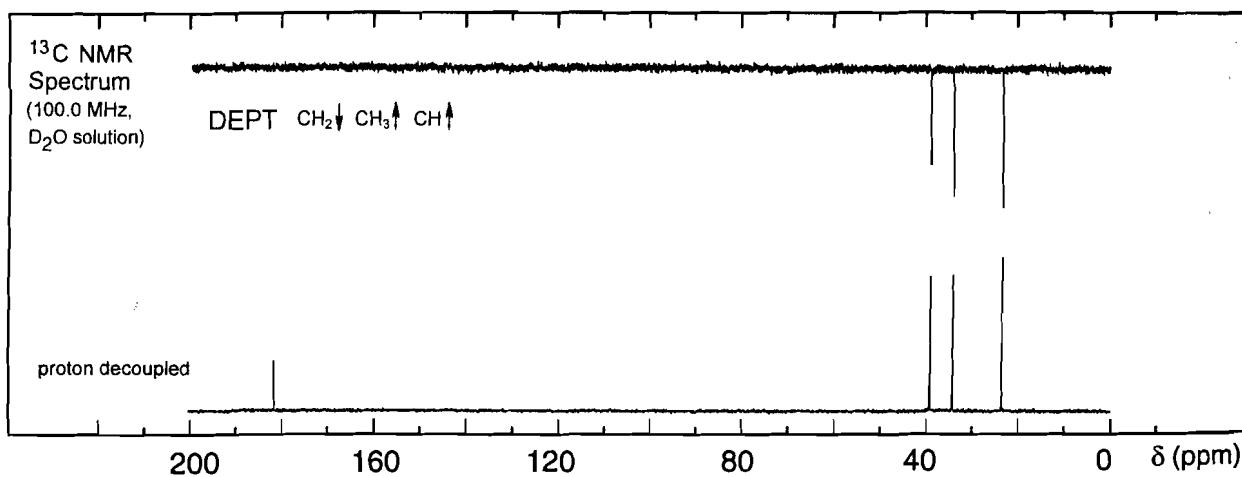


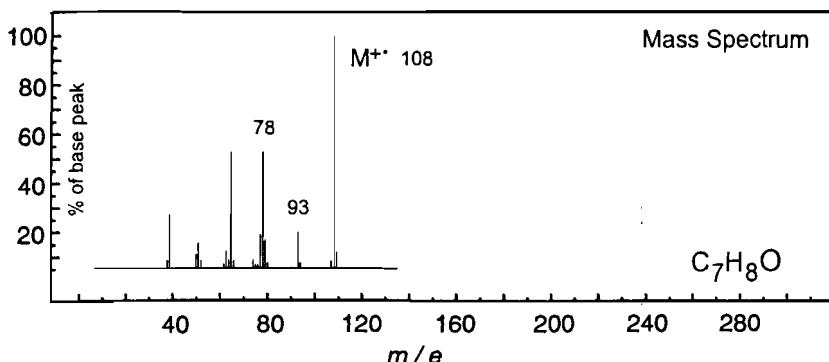
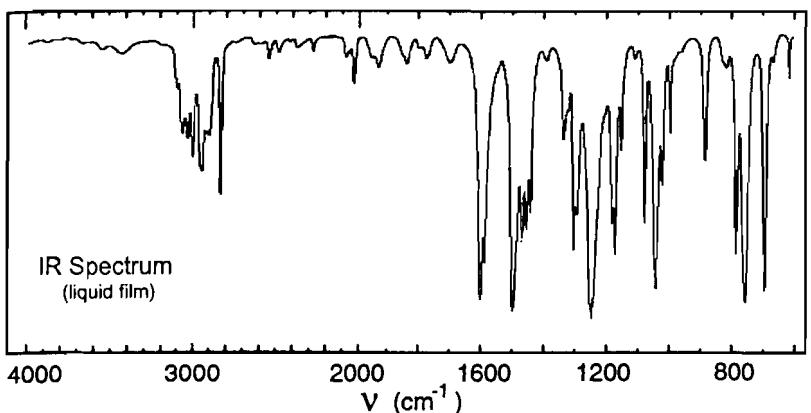
Problem 21



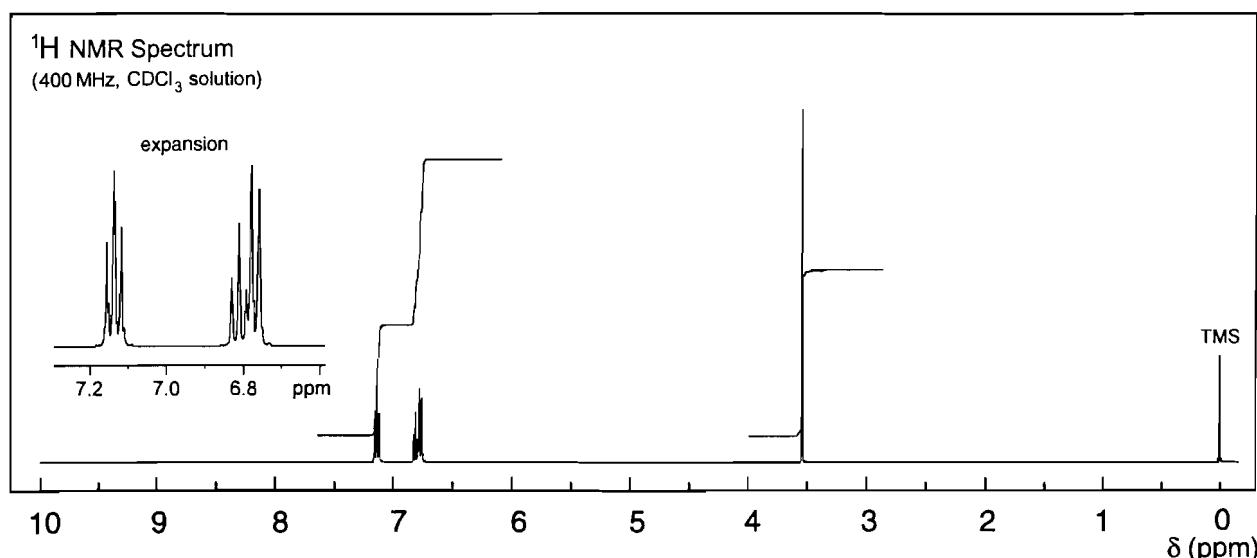
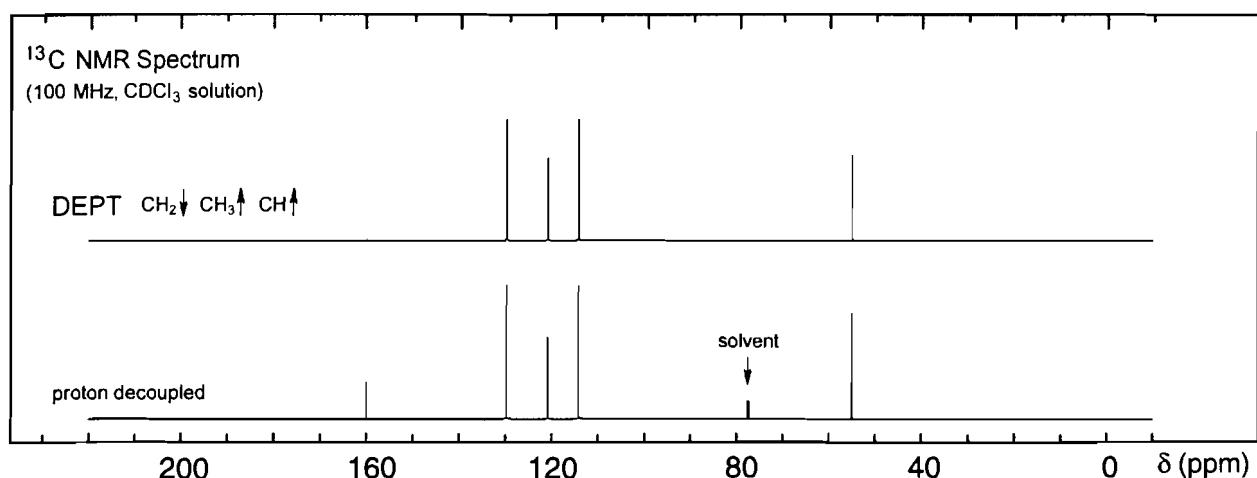
No significant UV absorption above 220 nm



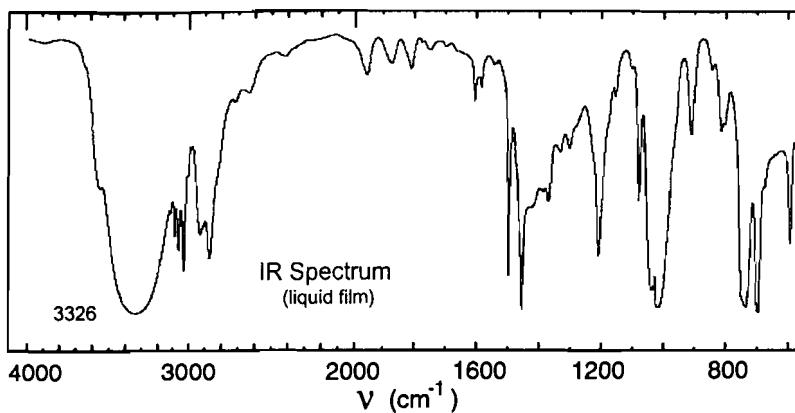
Problem 22



UV Spectrum
 λ_{\max} 269 nm ($\log_{10}\epsilon$ 3.2)
 solvent: methanol

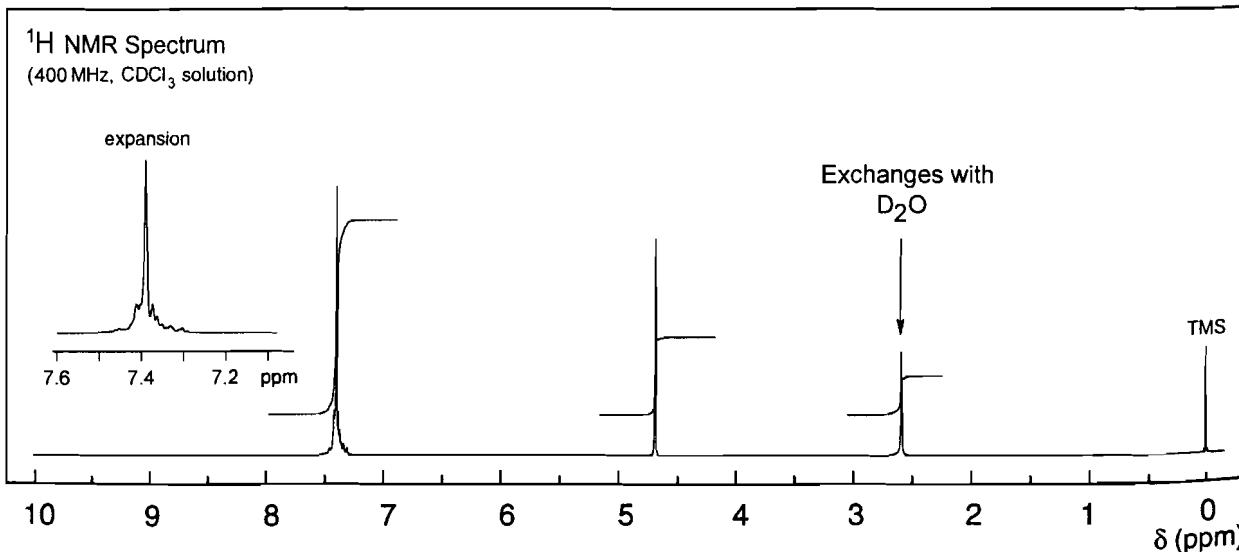
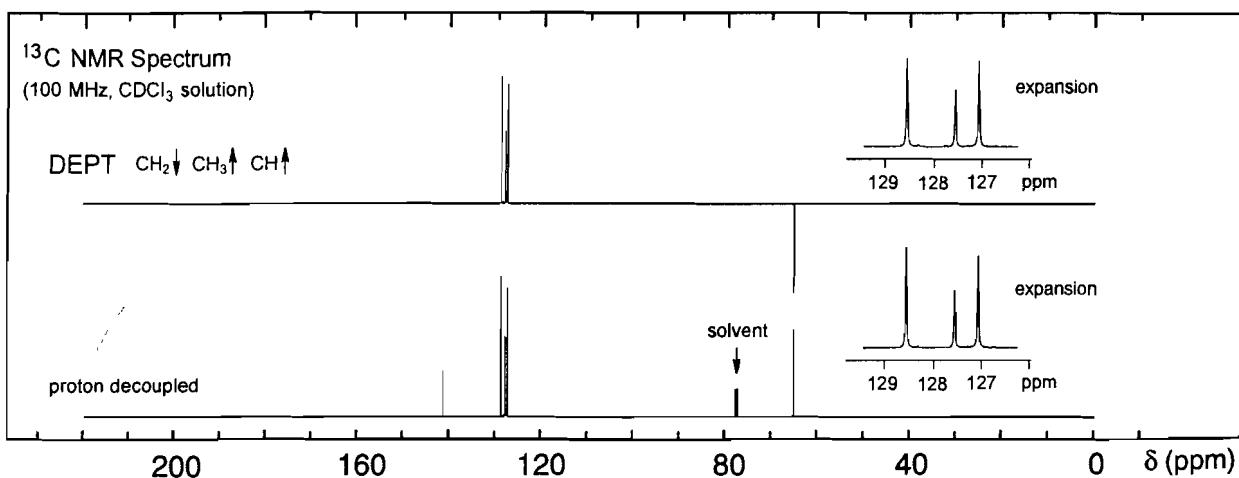
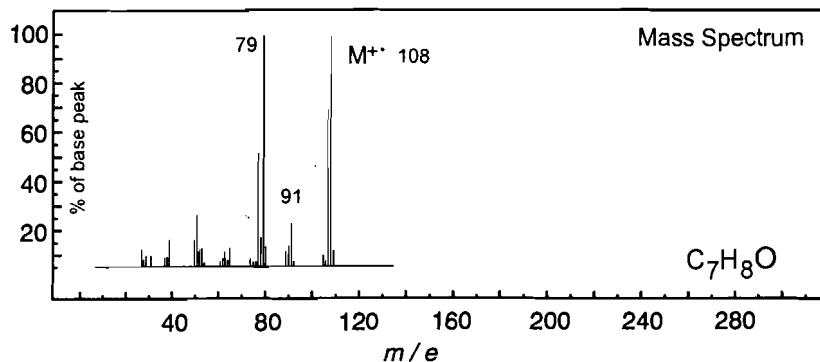


Problem 23

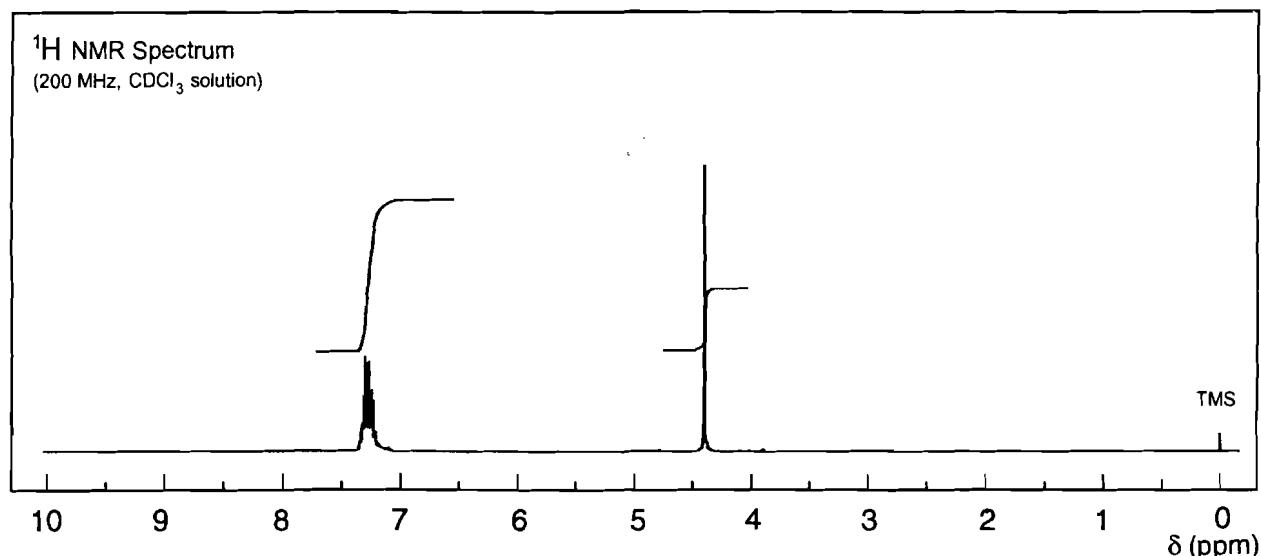
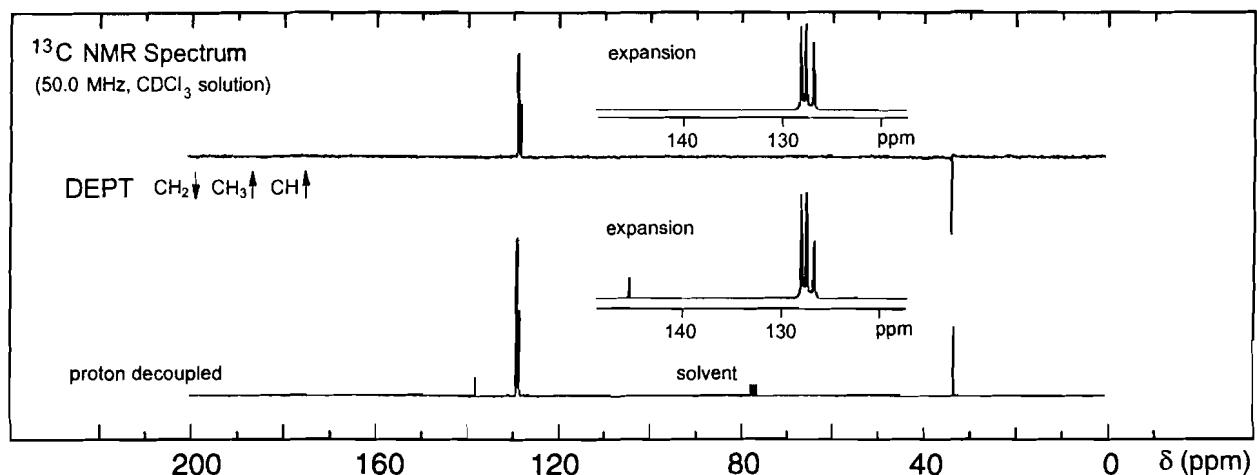
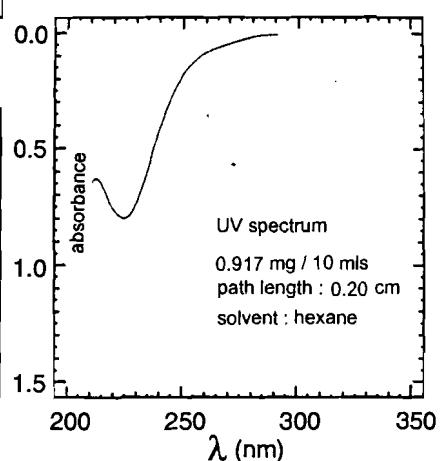
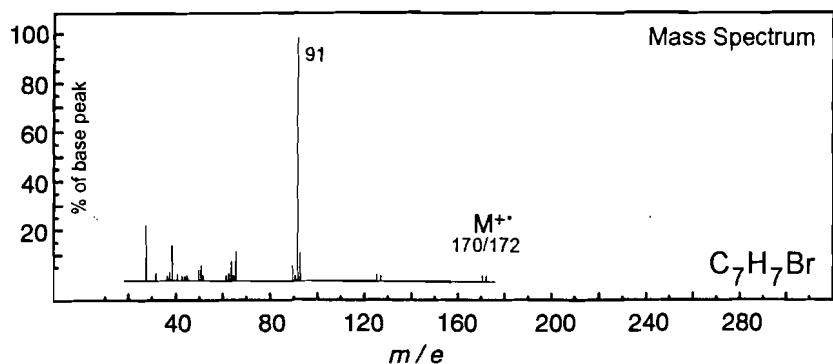
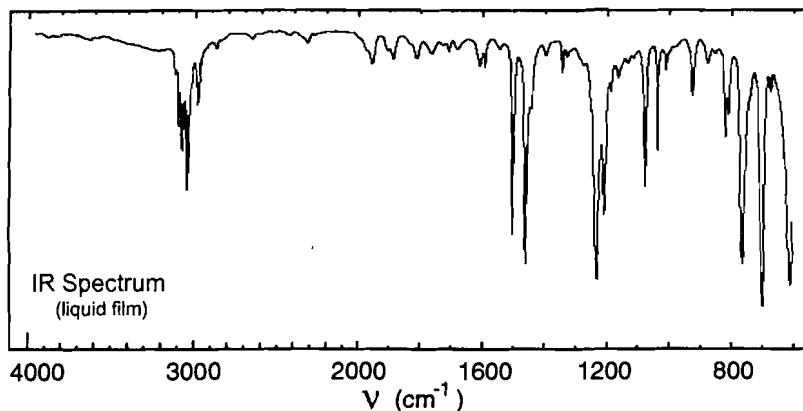


UV Spectrum

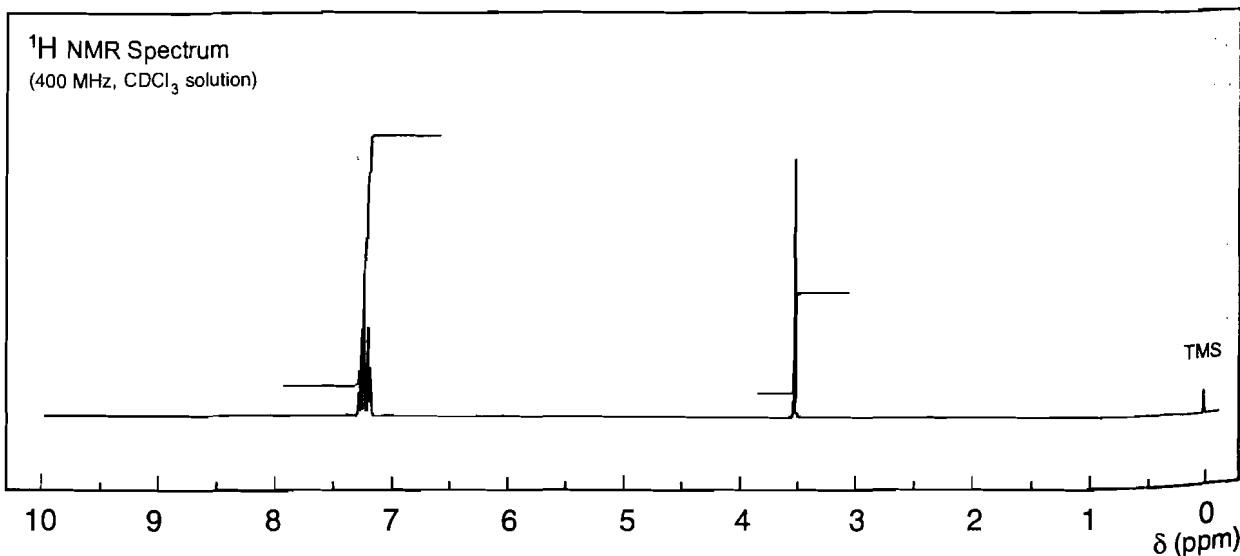
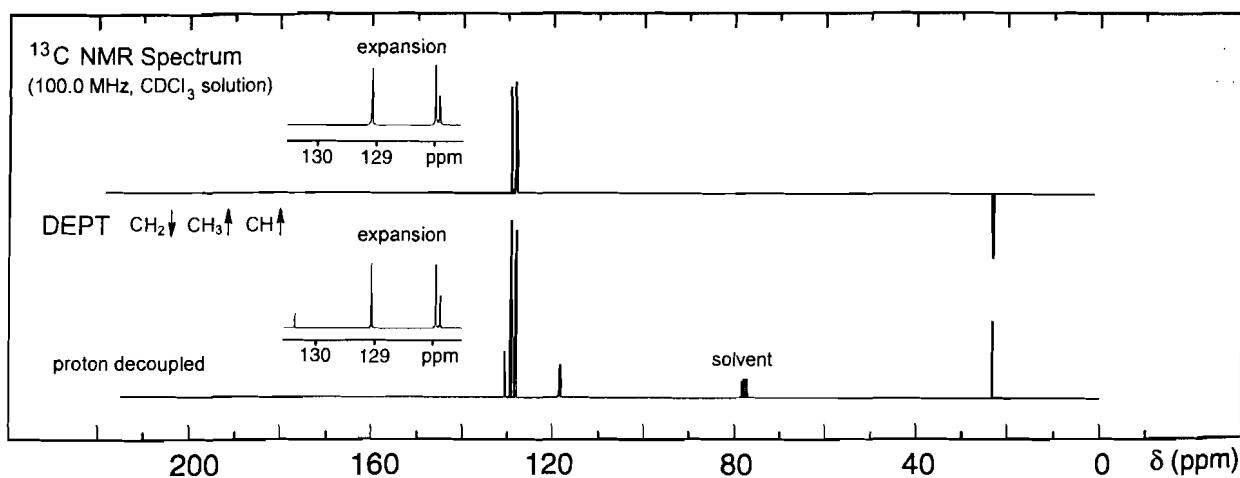
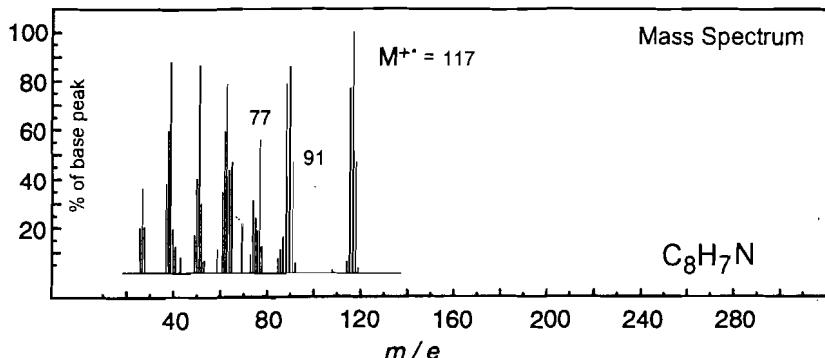
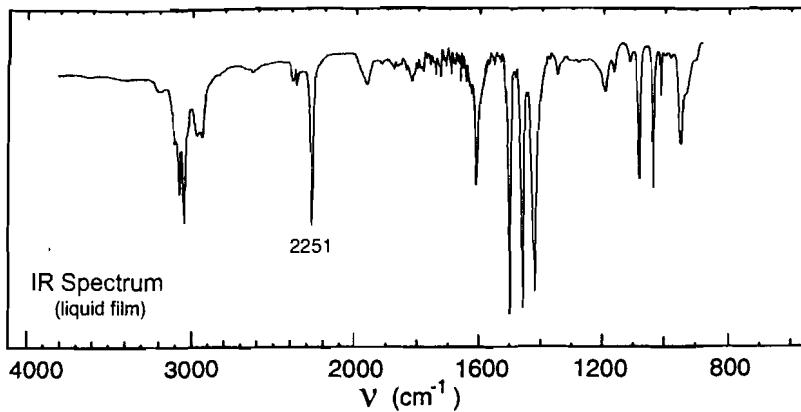
- λ_{max} 243 nm ($\log_{10}\epsilon$ 1.9)
 - λ_{max} 248 nm ($\log_{10}\epsilon$ 2.1)
 - λ_{max} 252 nm ($\log_{10}\epsilon$ 2.2)
 - λ_{max} 258 nm ($\log_{10}\epsilon$ 2.3)
 - λ_{max} 264 nm ($\log_{10}\epsilon$ 2.1)
 - λ_{max} 268 nm ($\log_{10}\epsilon$ 1.9)
- solvent : ethanol



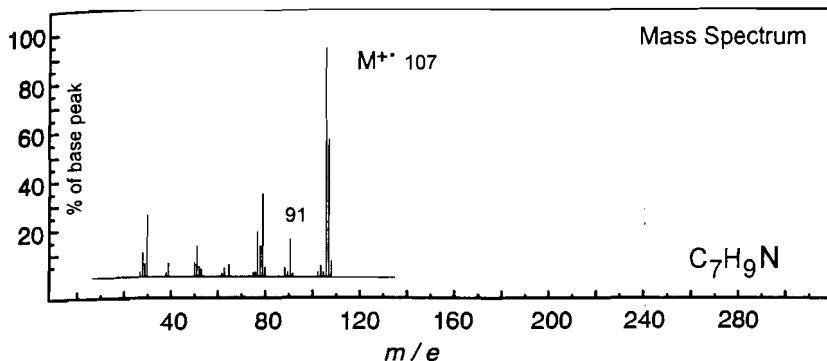
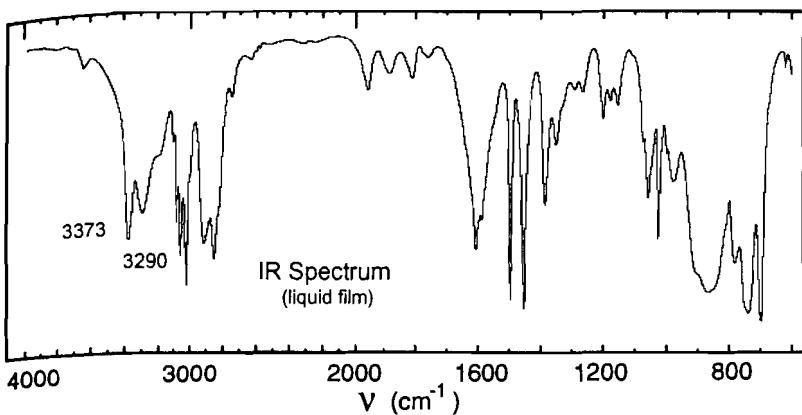
Problem 24



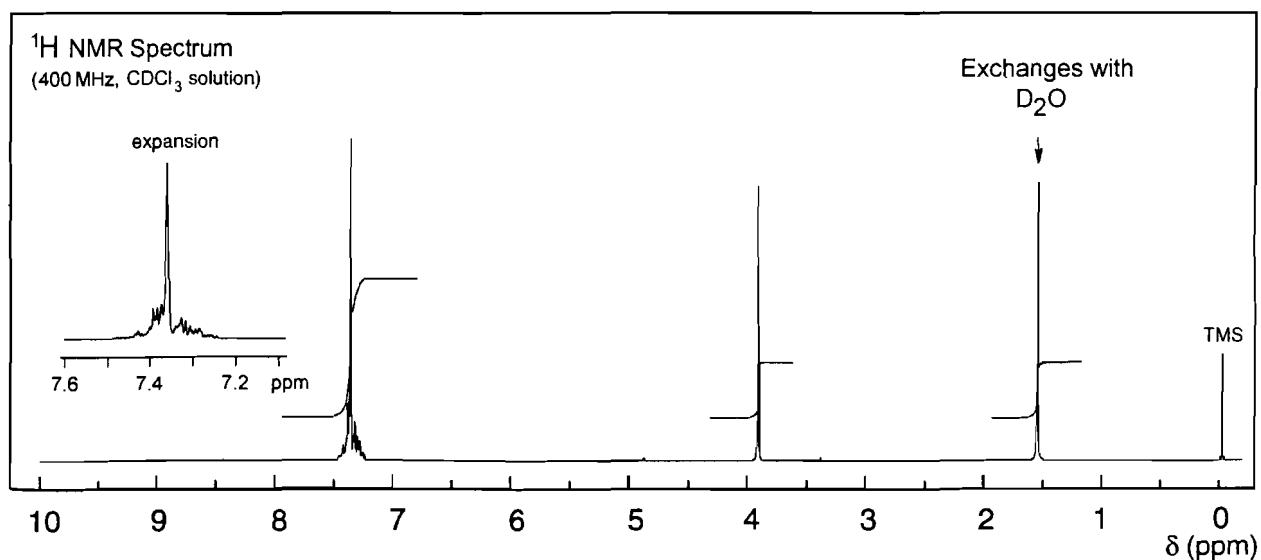
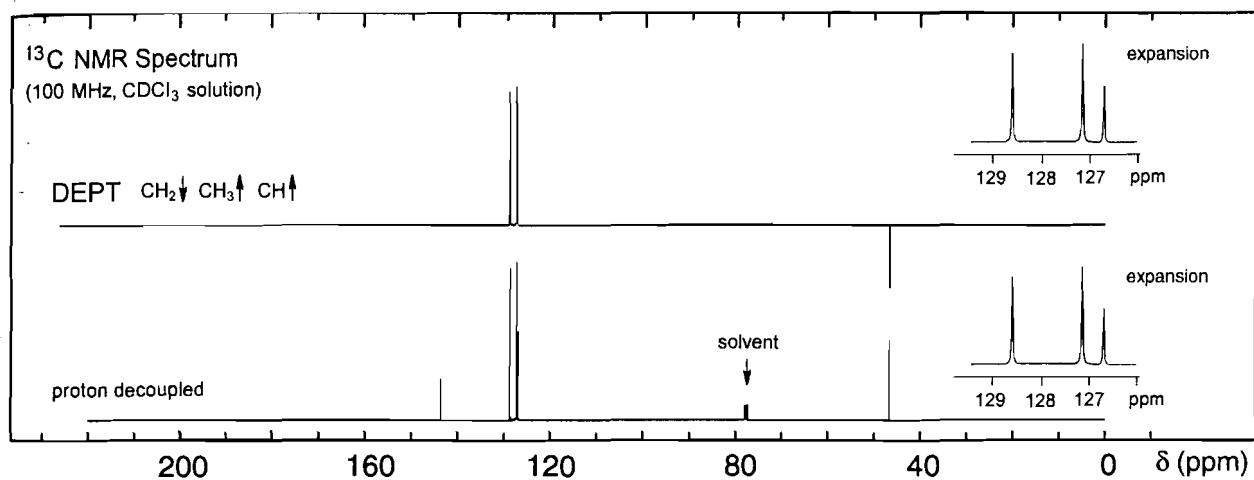
Problem 25



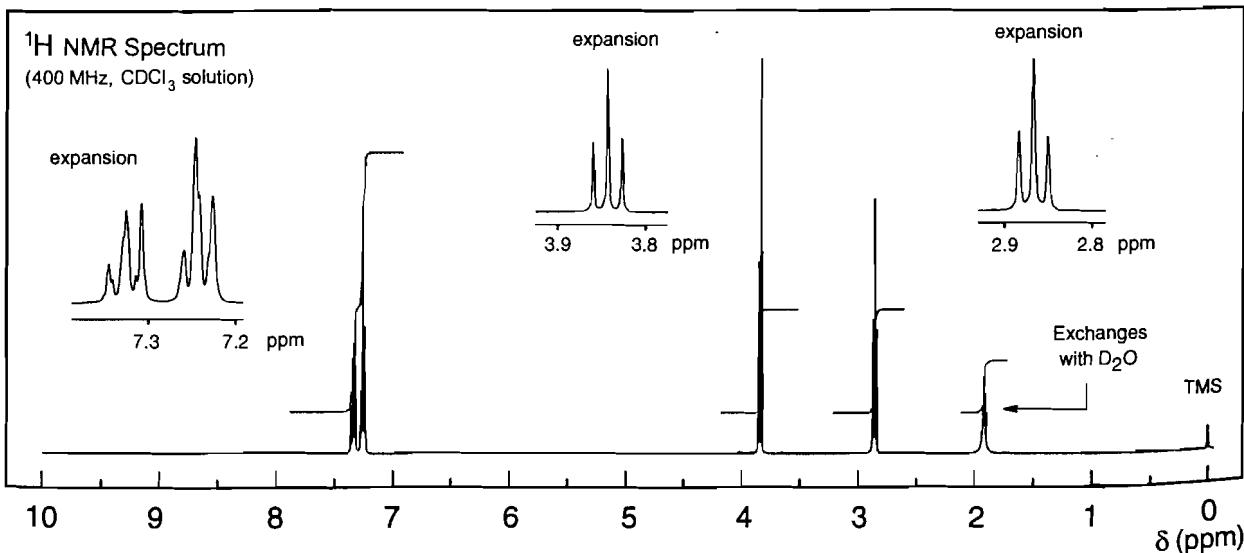
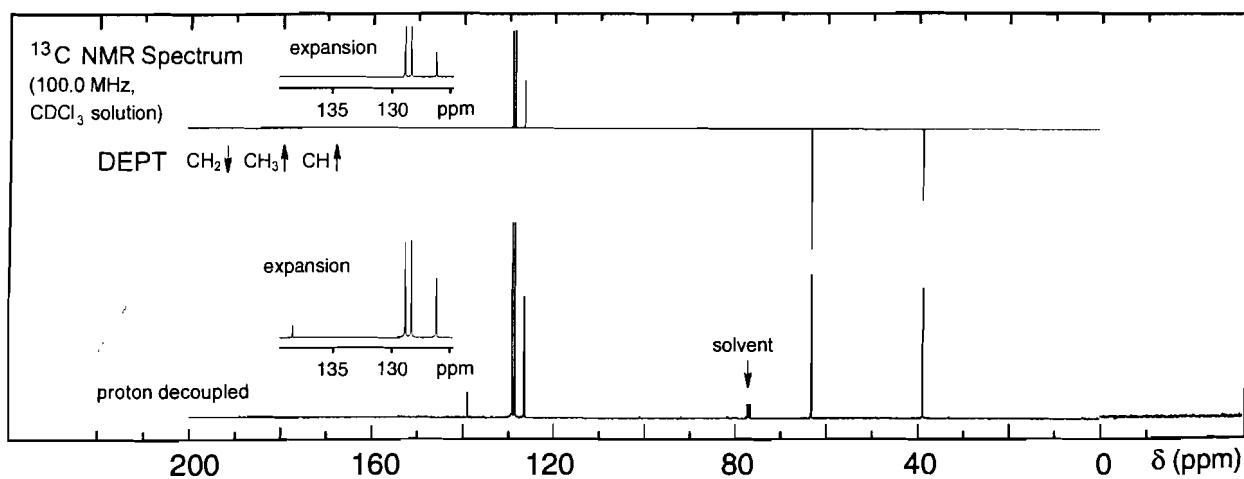
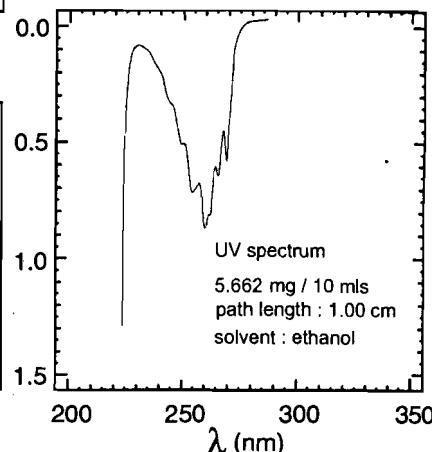
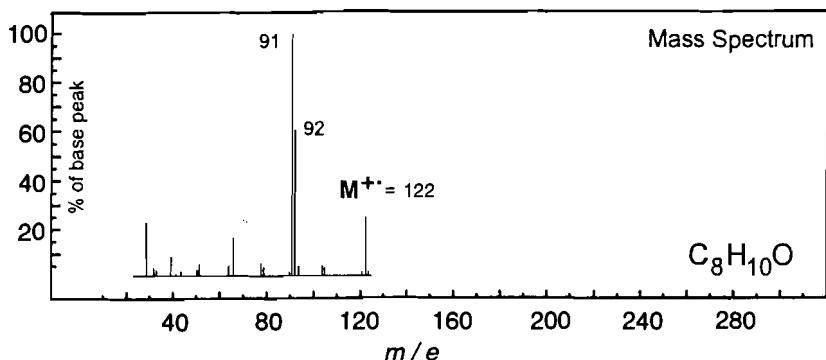
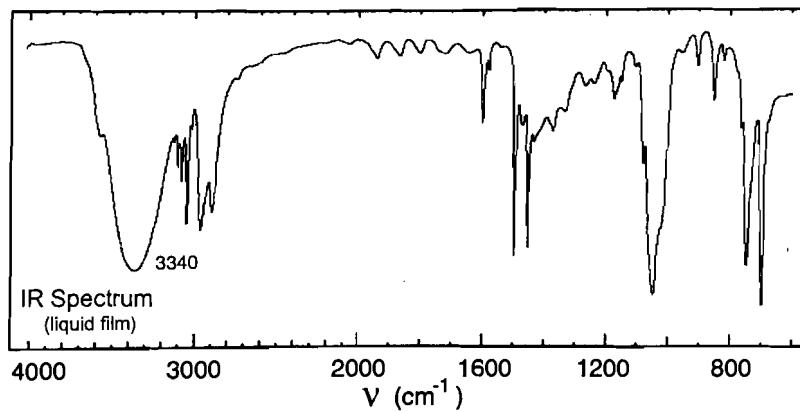
Problem 26



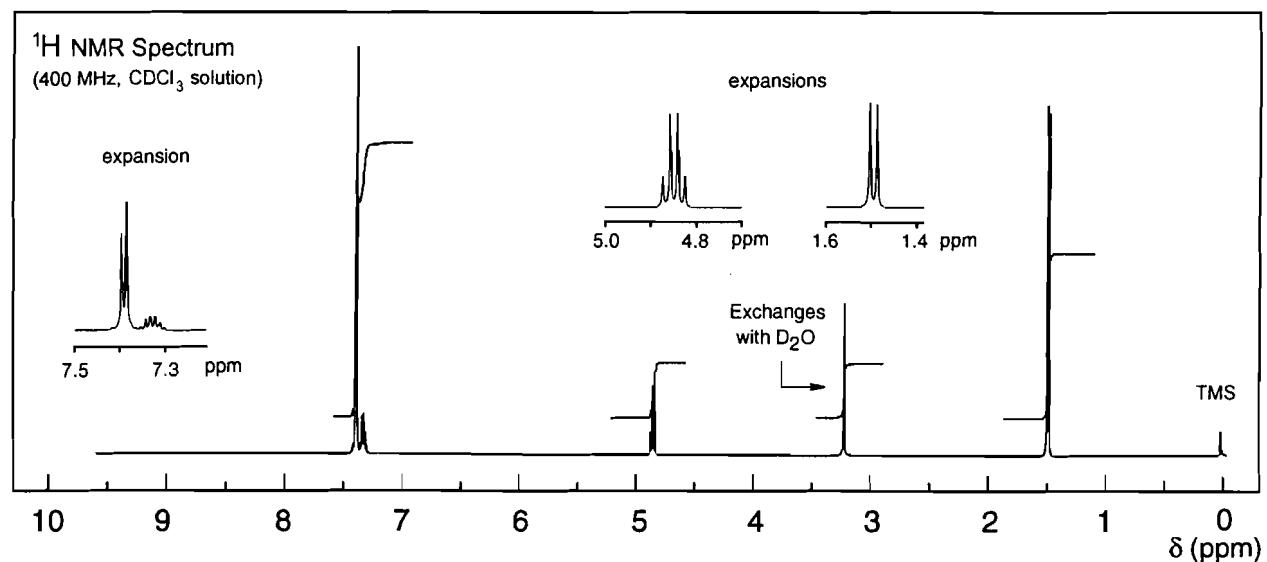
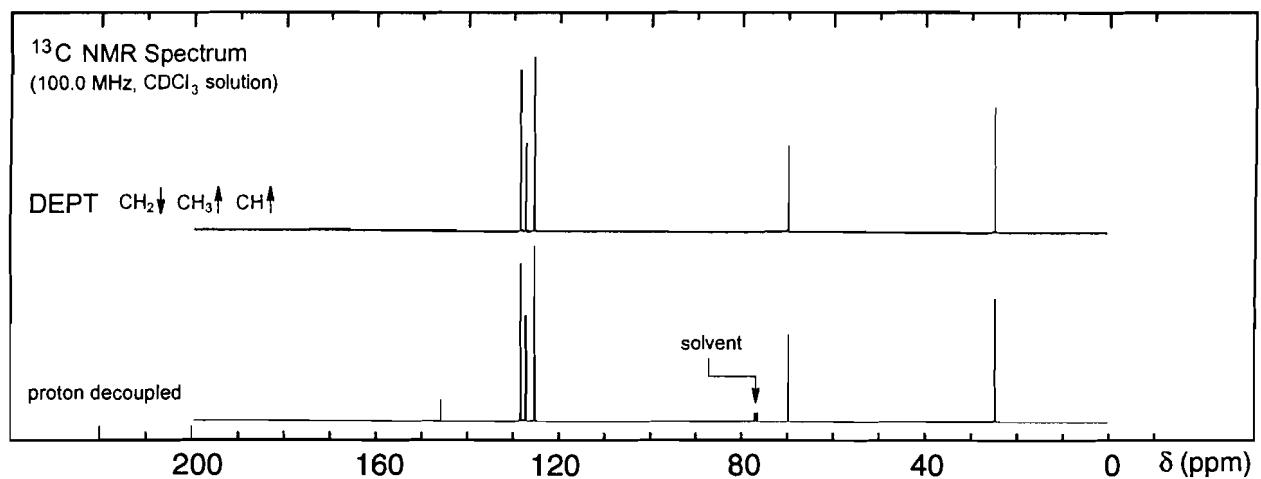
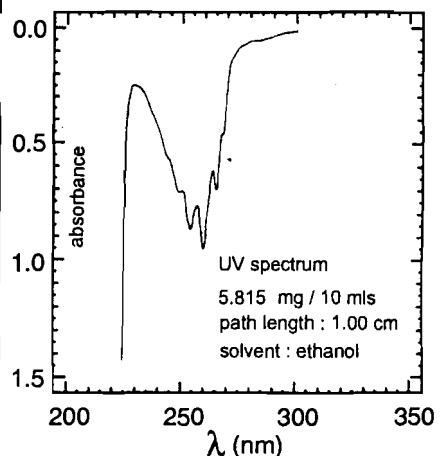
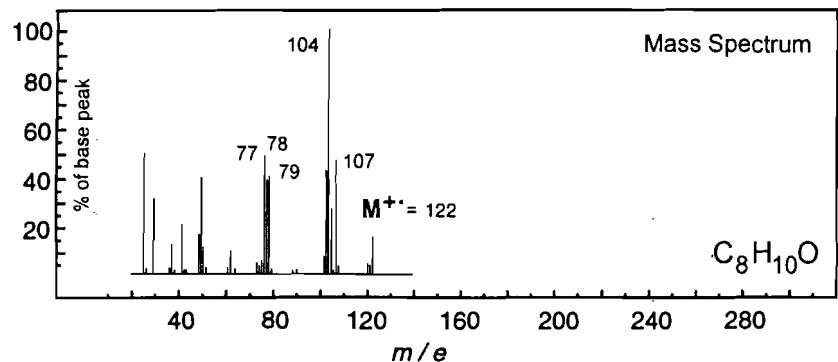
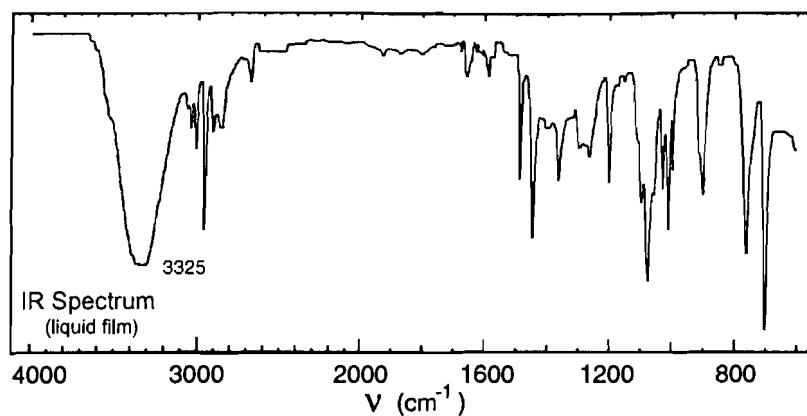
UV Spectrum
 λ_{max} 256 nm ($\log_{10} \epsilon$ 2.2)
 λ_{max} 264 nm ($\log_{10} \epsilon$ 2.1)
 solvent : ethanol



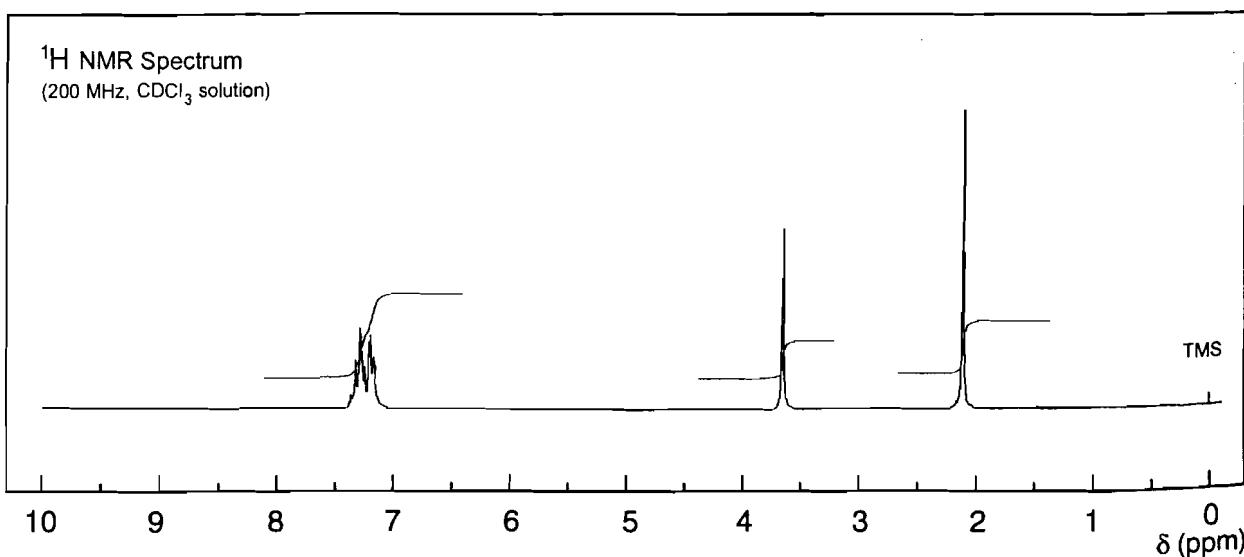
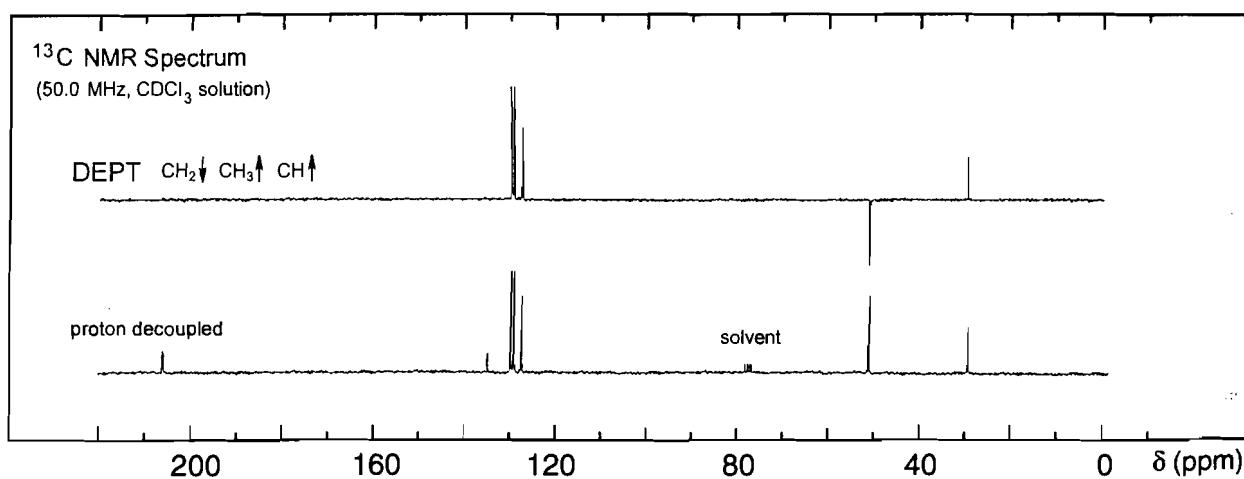
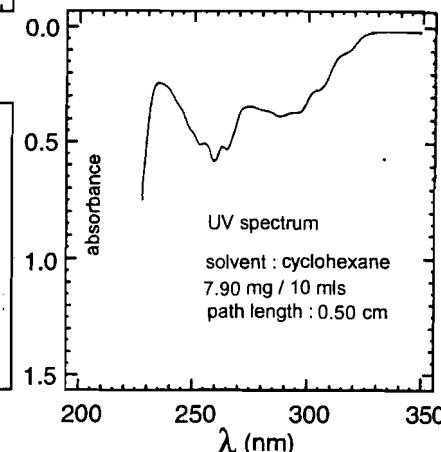
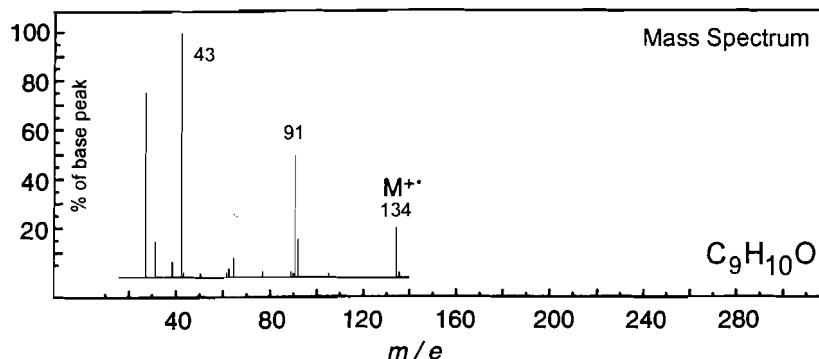
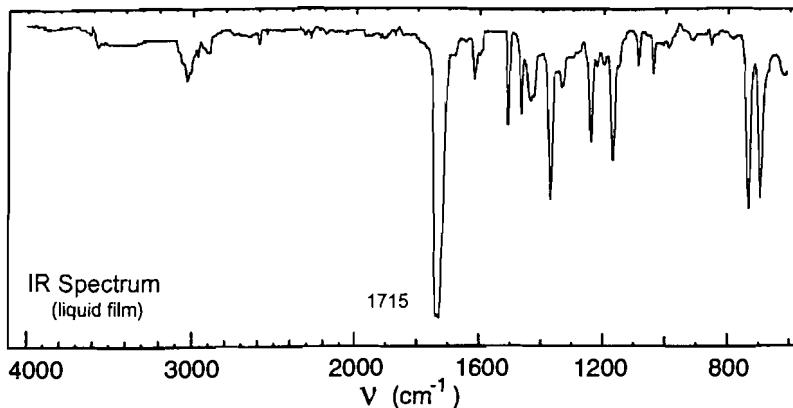
Problem 27



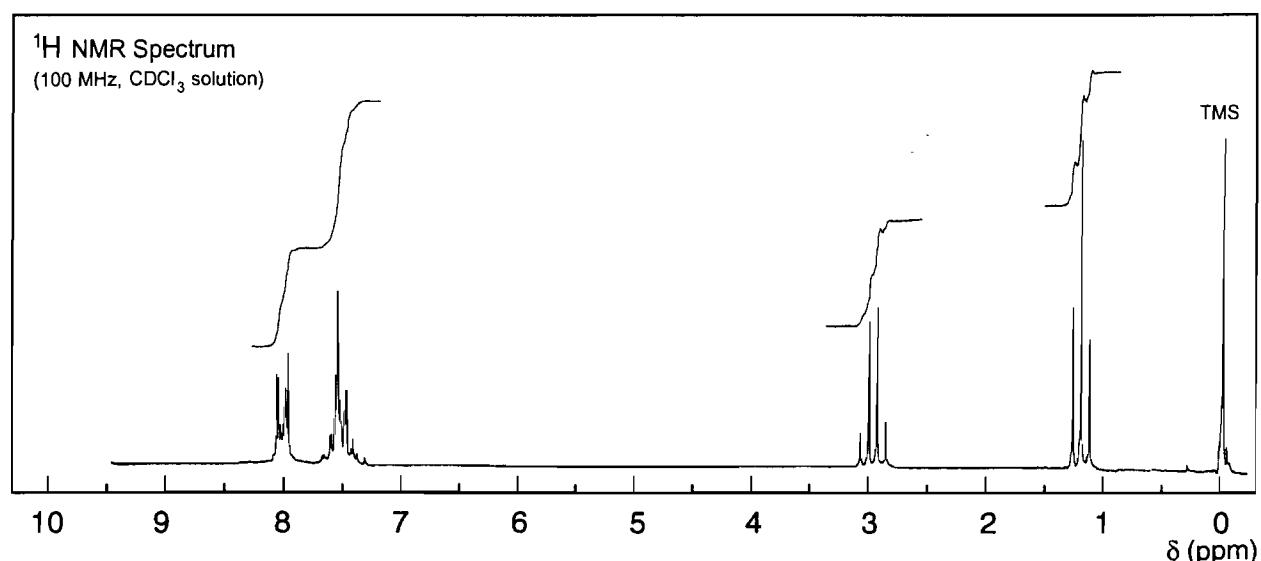
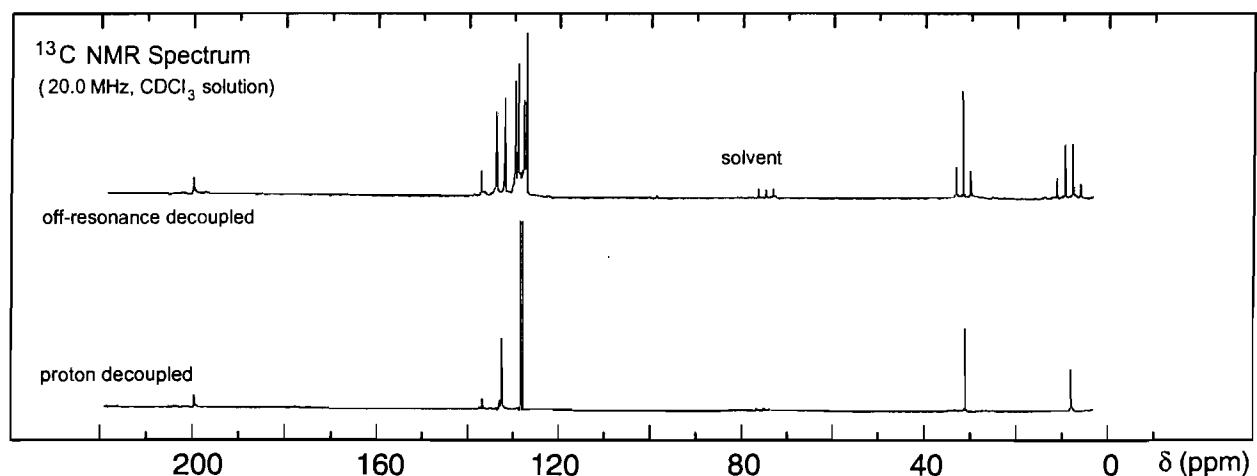
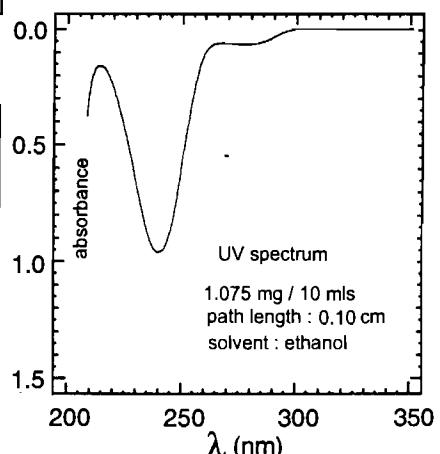
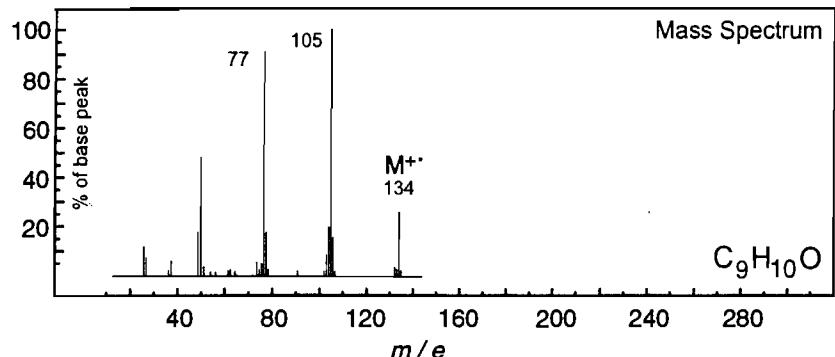
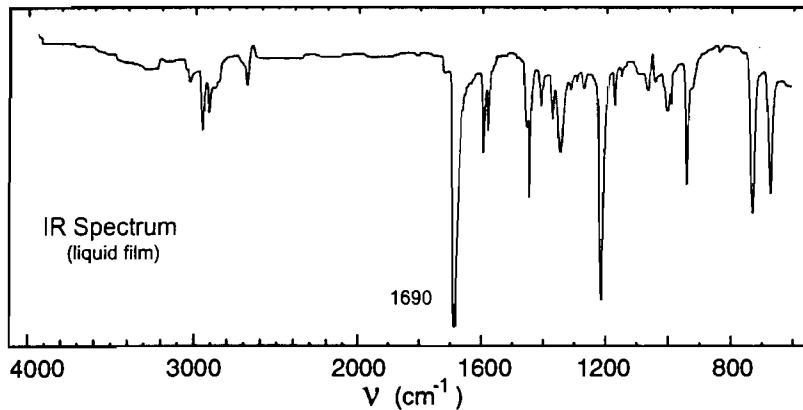
Problem 28



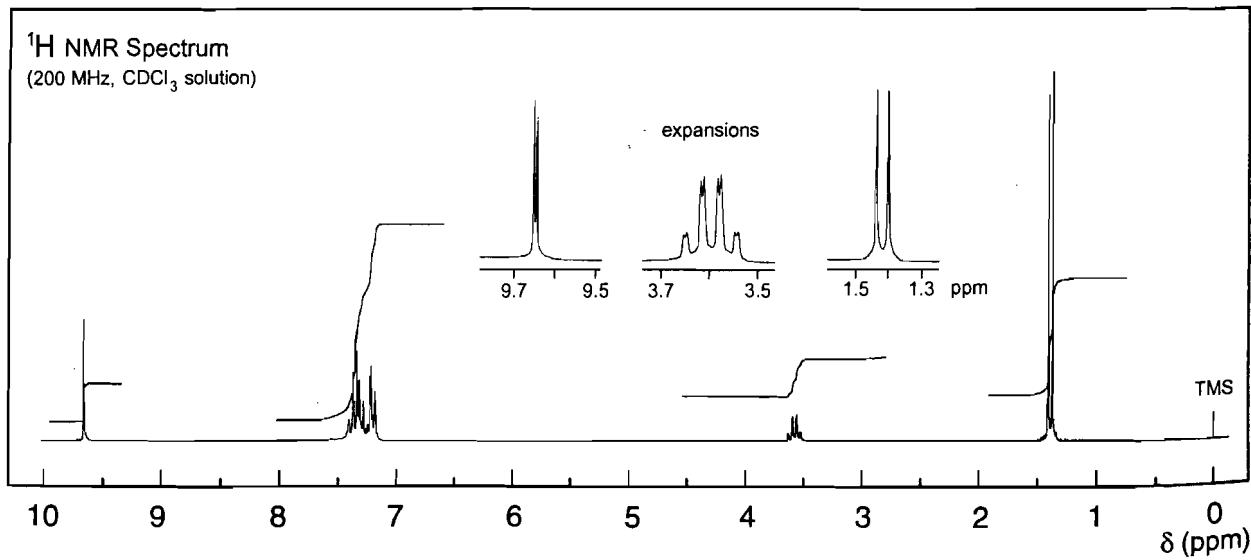
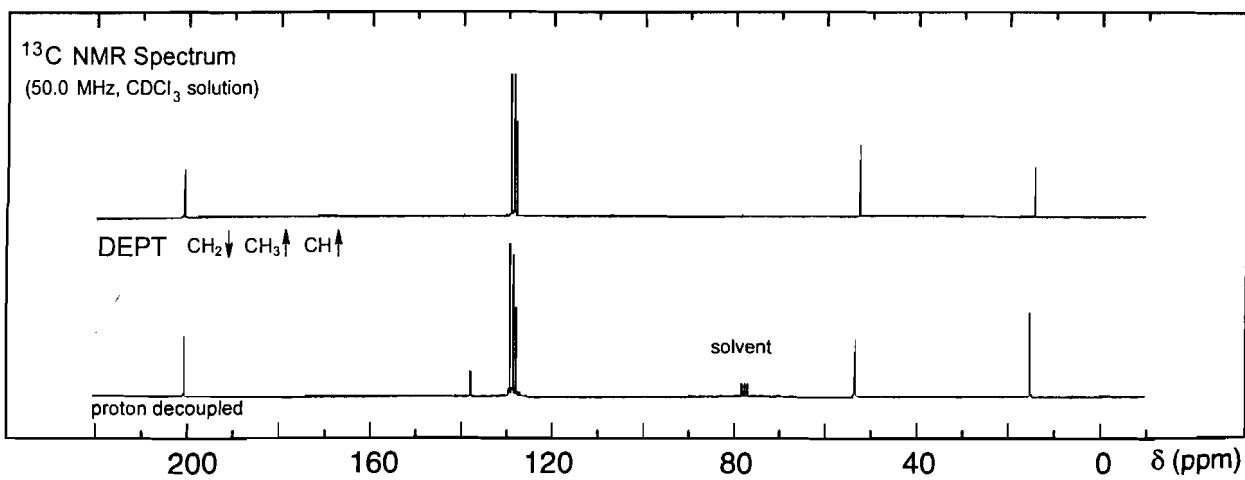
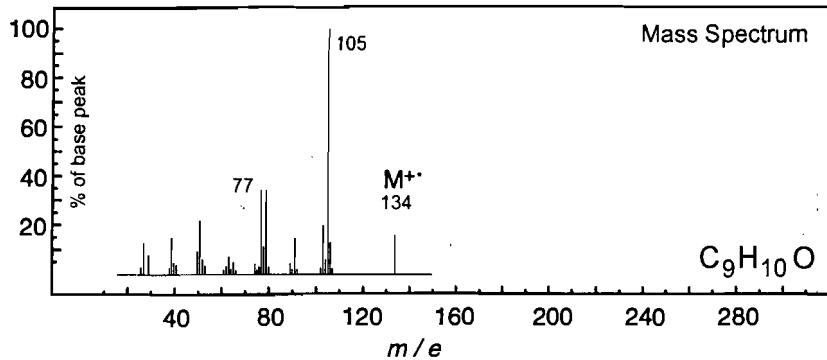
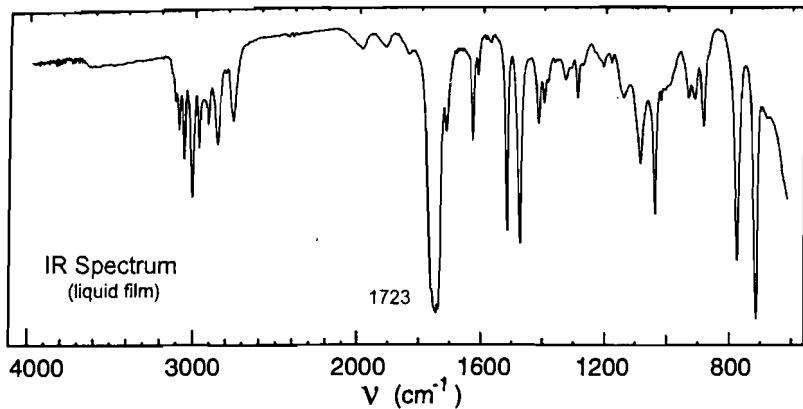
Problem 29



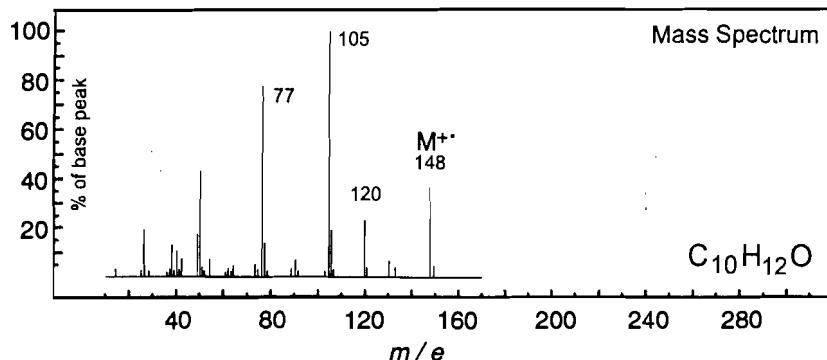
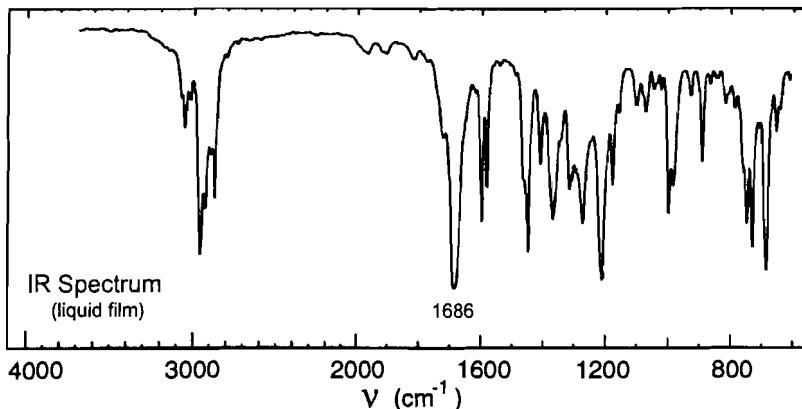
Problem 30



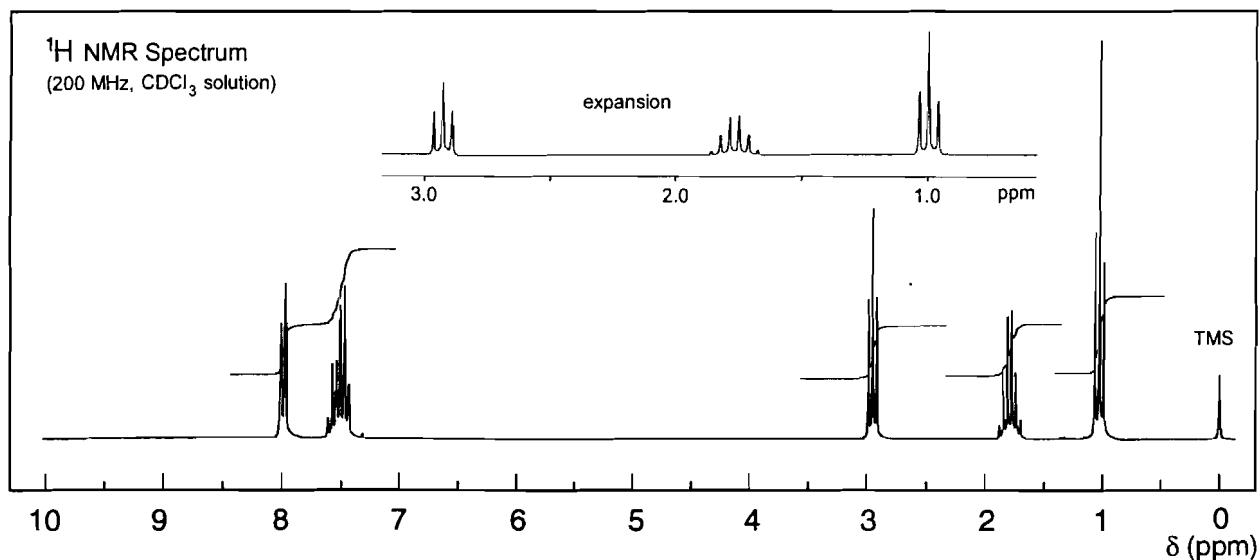
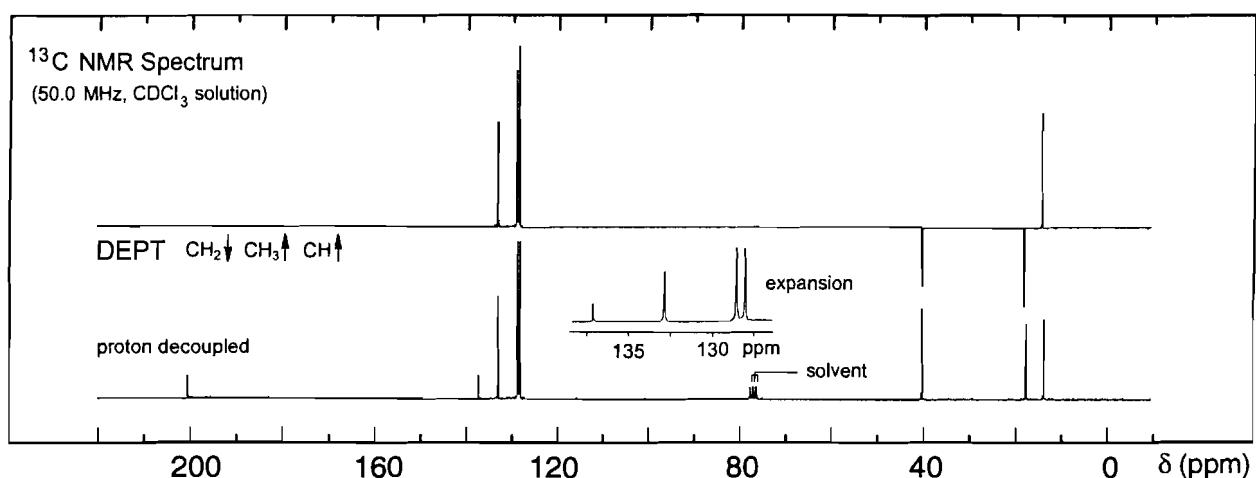
Problem 31



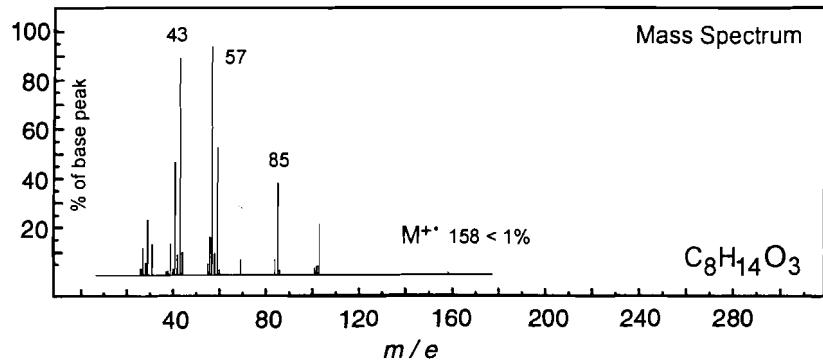
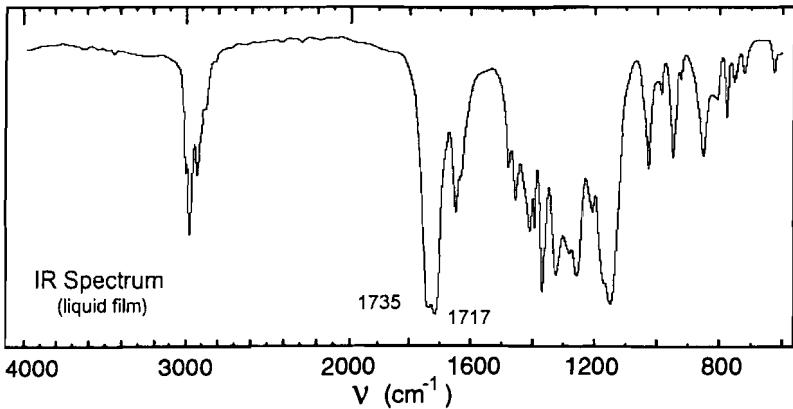
Problem 32



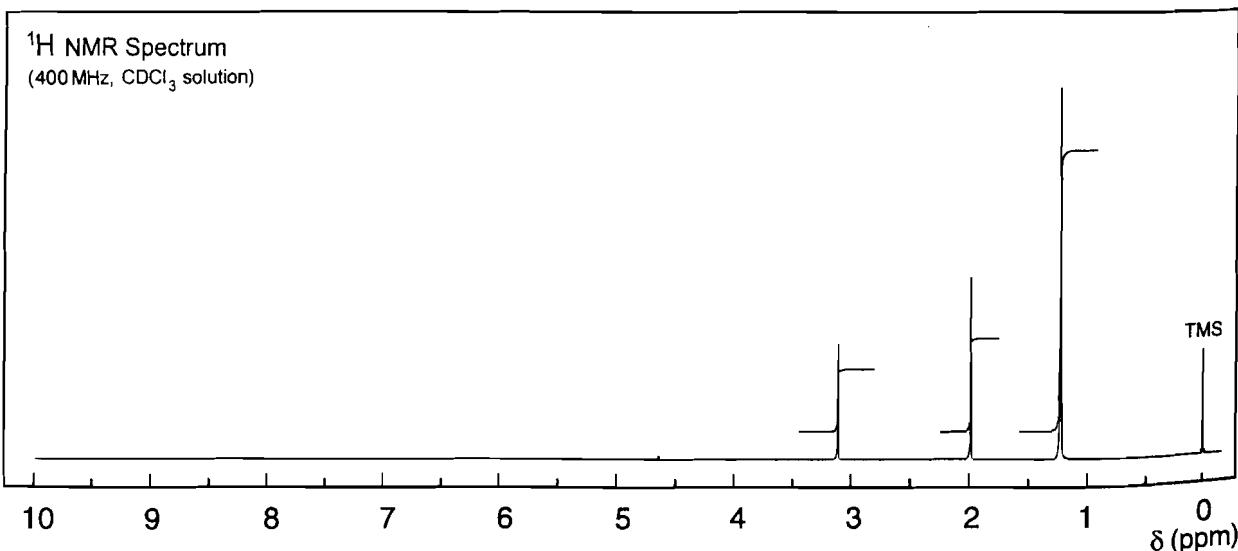
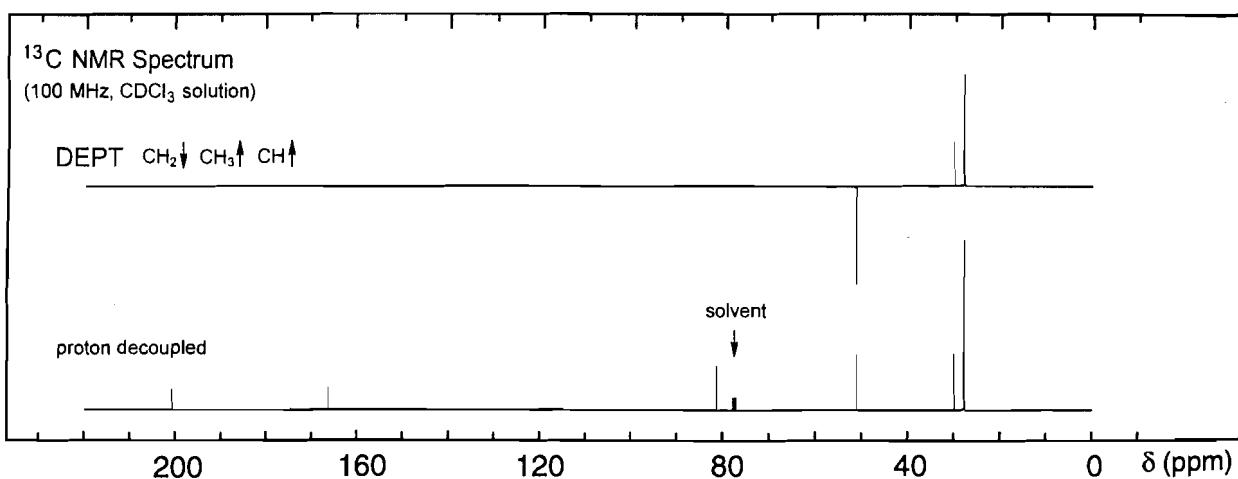
UV Spectrum
 $\lambda_{\text{max}} 241 \text{ nm}$ ($\log_{10} \epsilon 4.1$)
 solvent : methanol



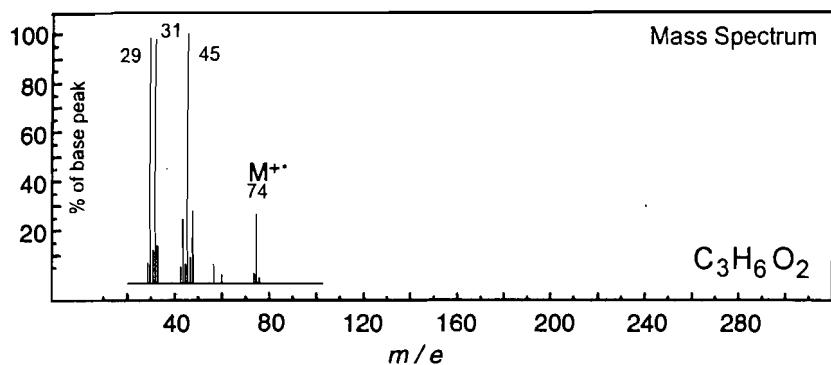
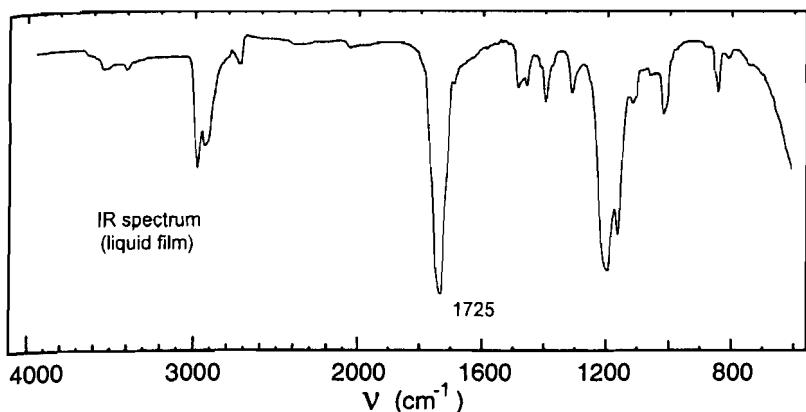
Problem 33



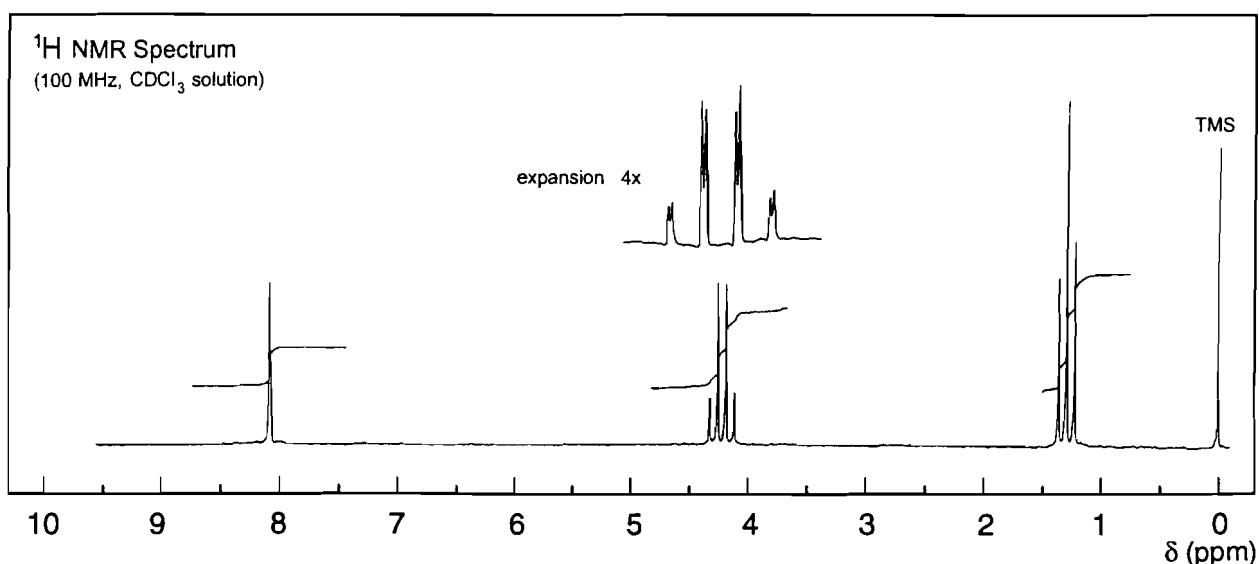
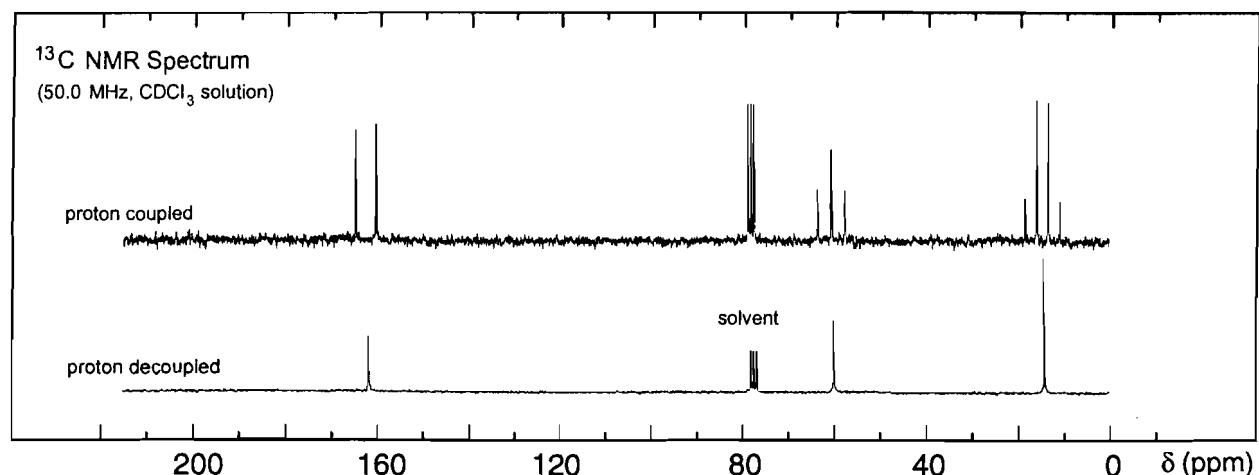
No significant UV absorption above 220 nm



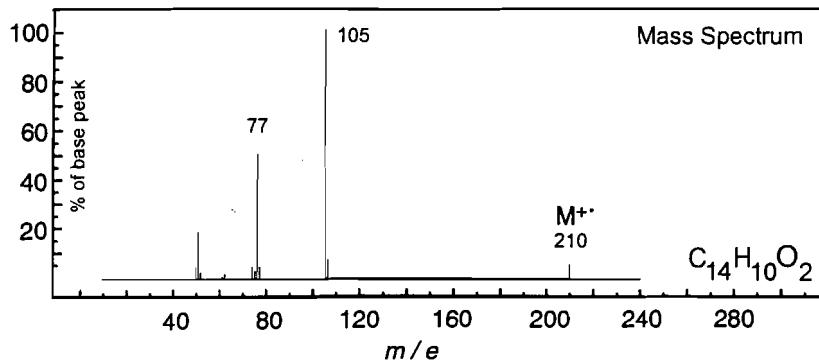
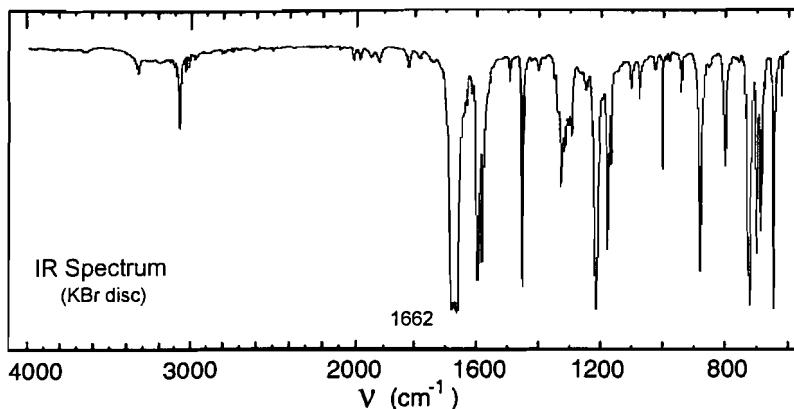
Problem 34



No significant UV absorption above 210 nm



Problem 35



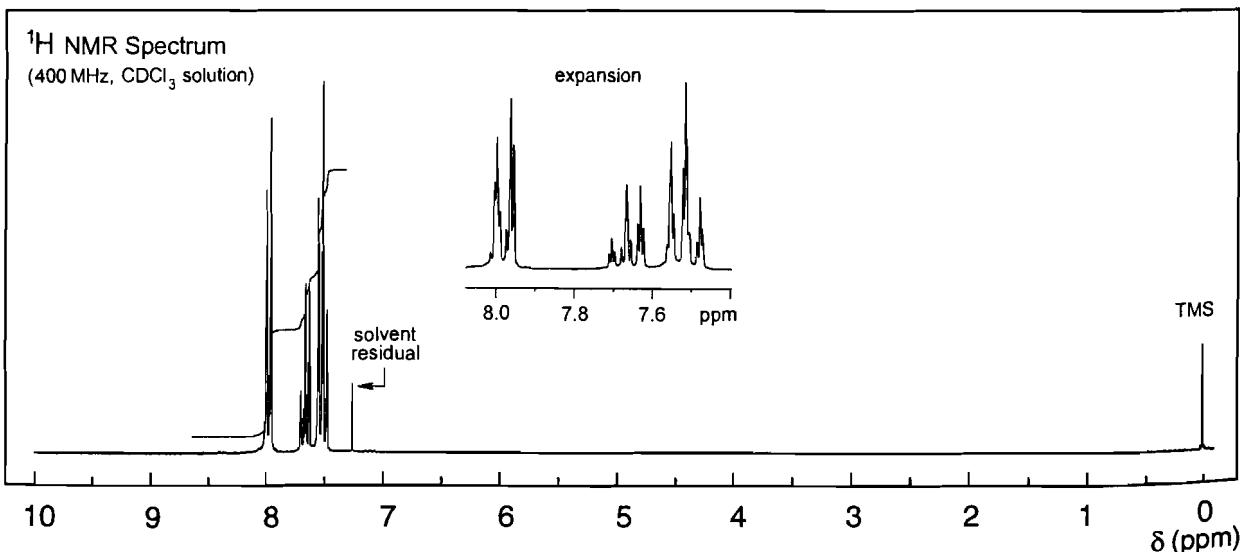
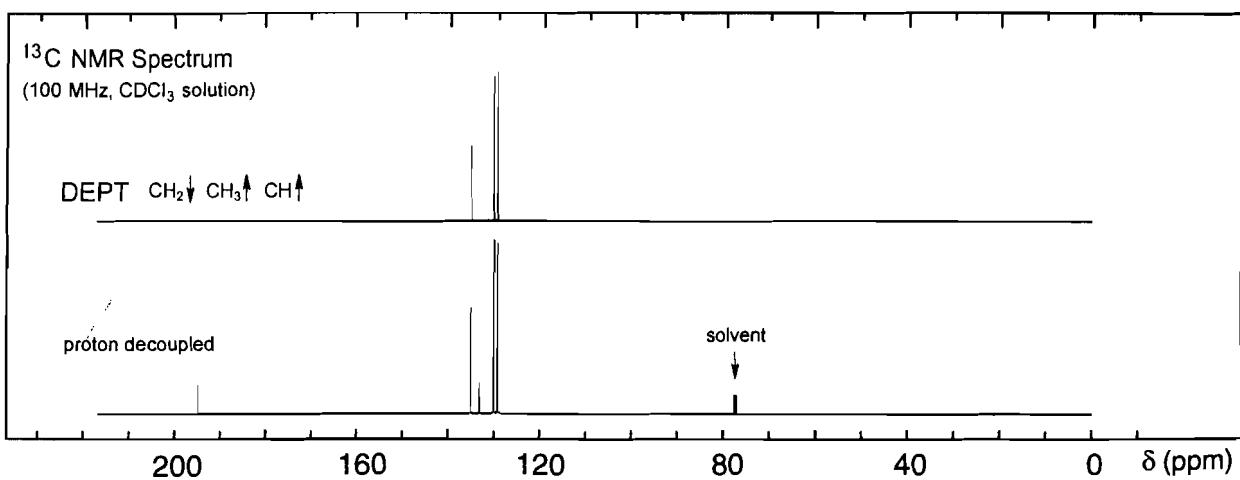
UV Spectrum

λ_{max} 258 nm ($\log_{10} \epsilon$ 4.2)

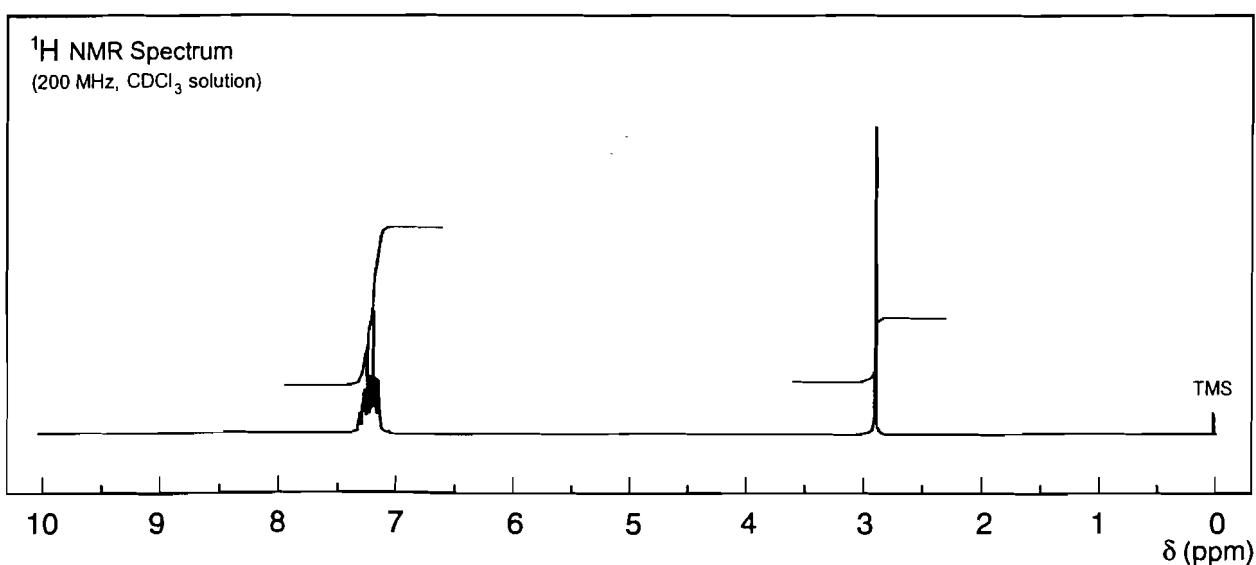
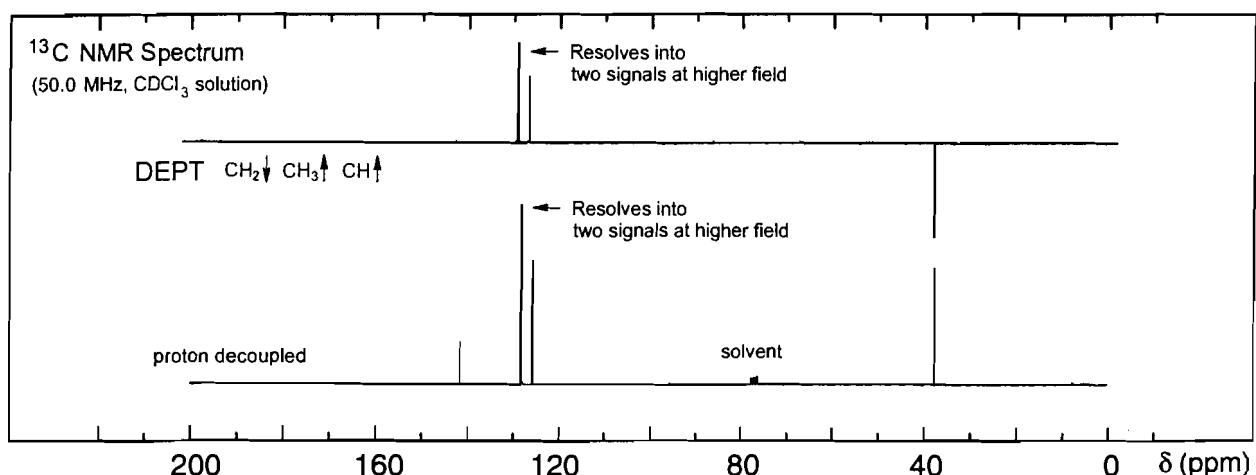
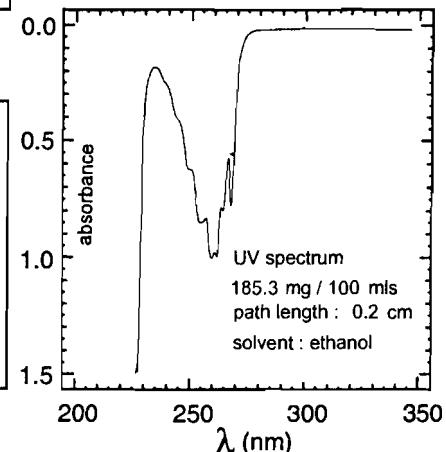
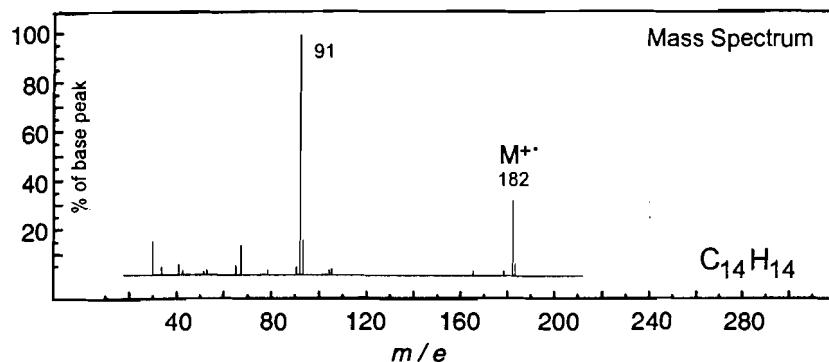
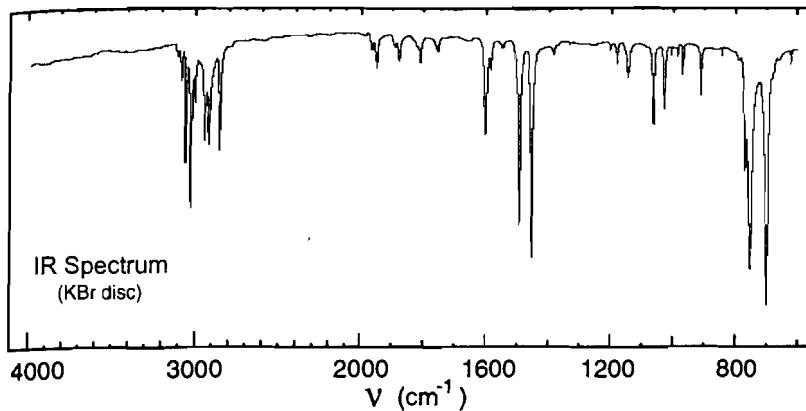
λ_{max} 330 nm ($\log_{10} \epsilon$ 2.8)

λ_{max} 388 nm ($\log_{10} \epsilon$ 2.2)

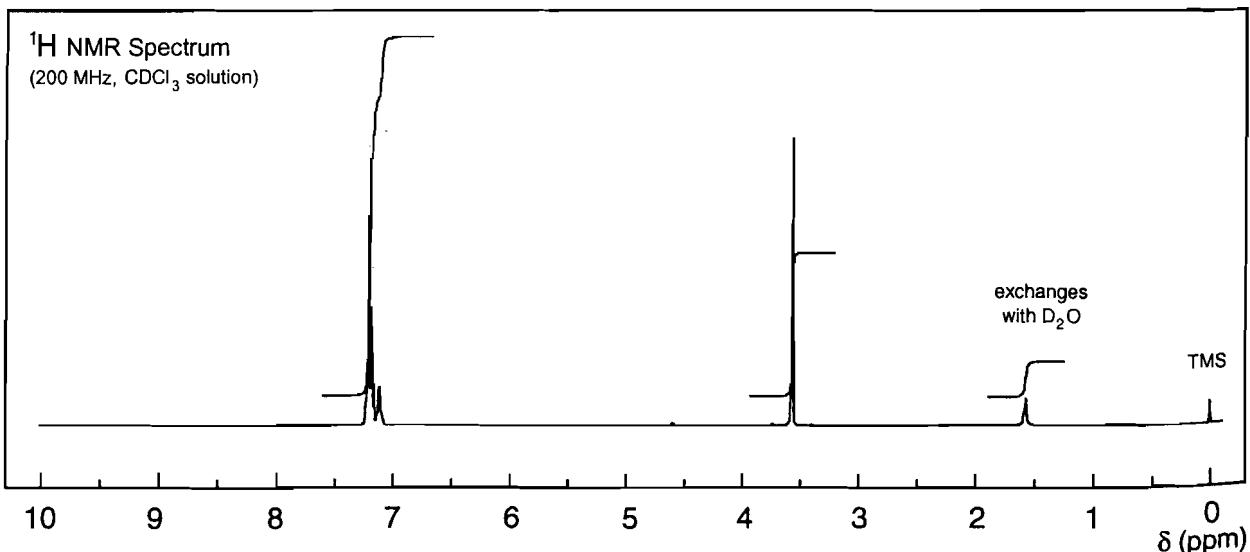
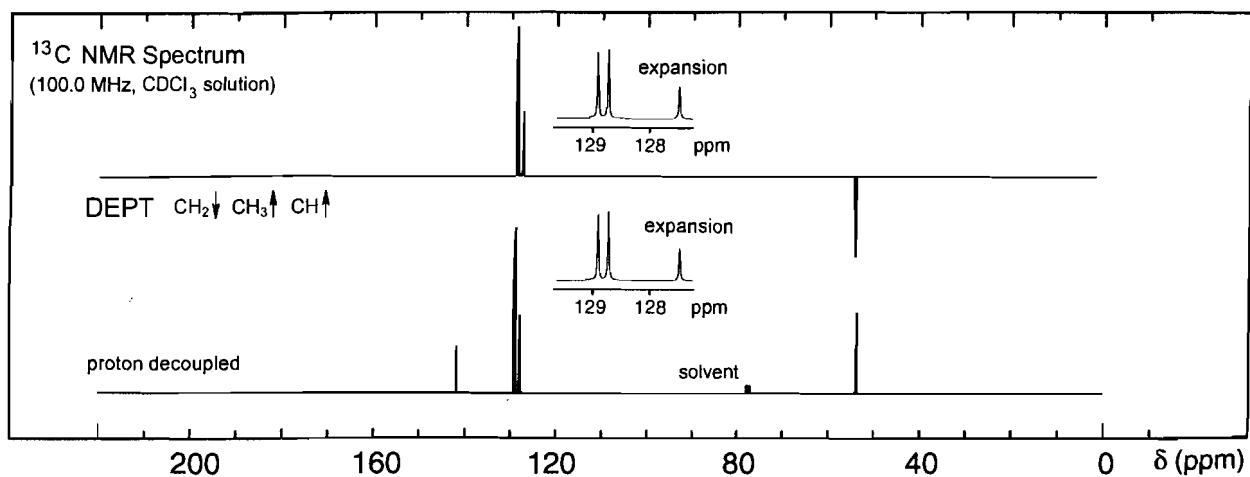
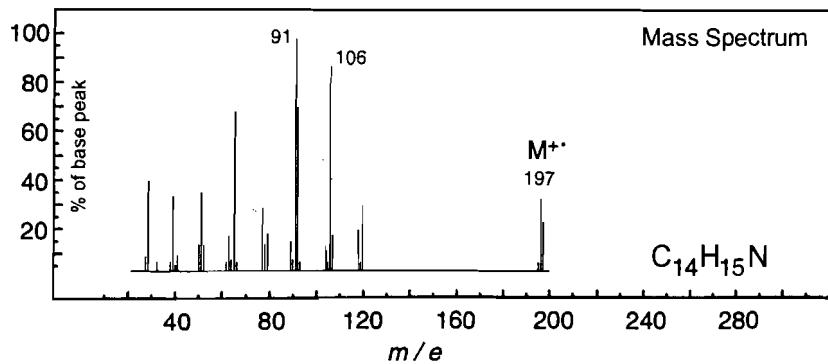
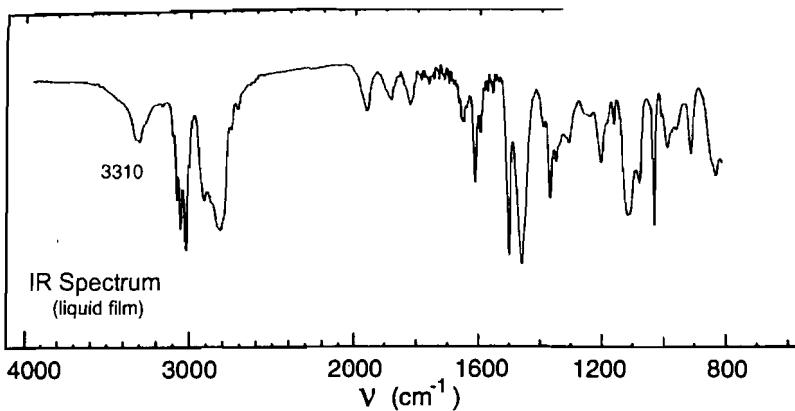
solvent: ethanol



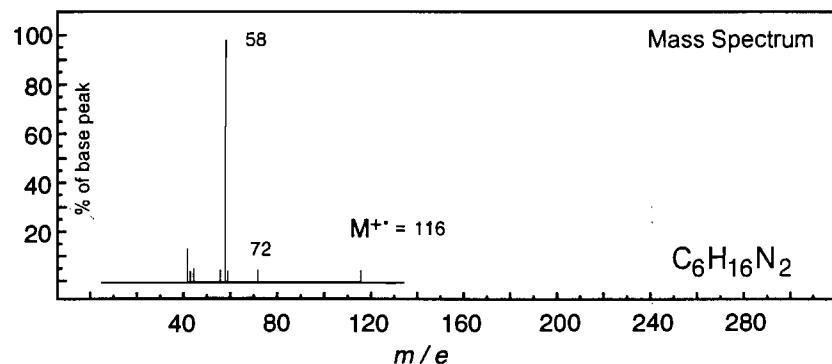
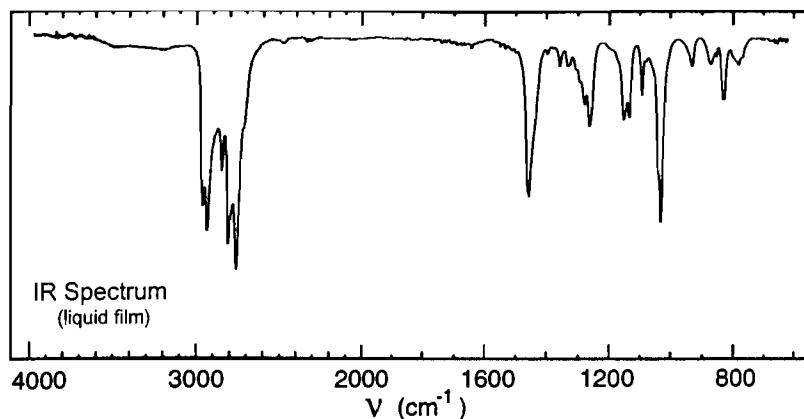
Problem 36



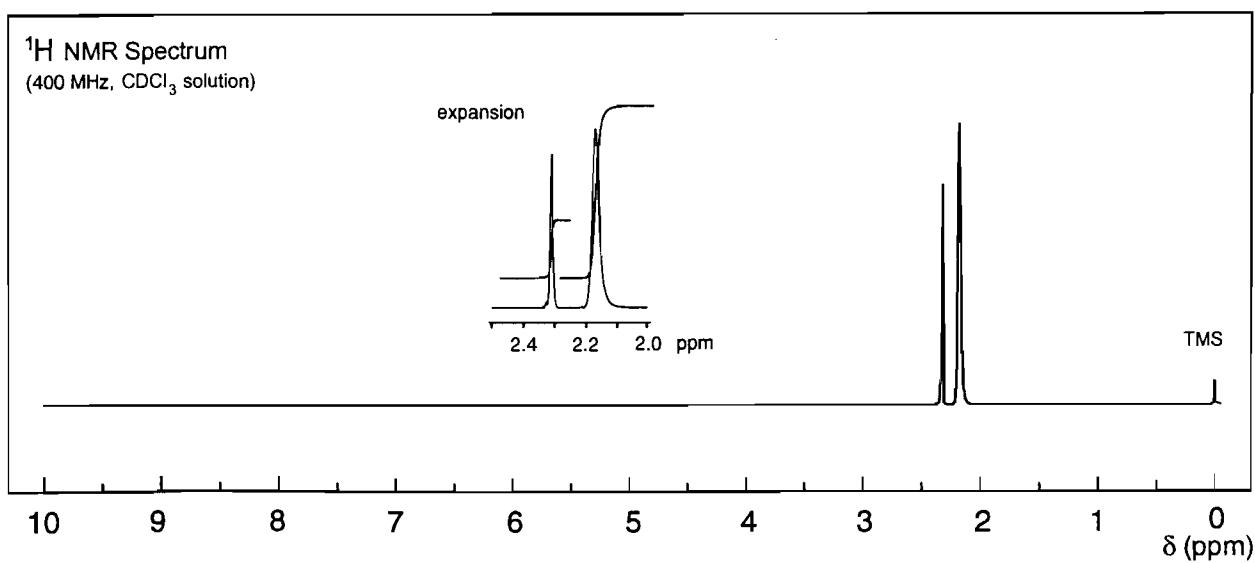
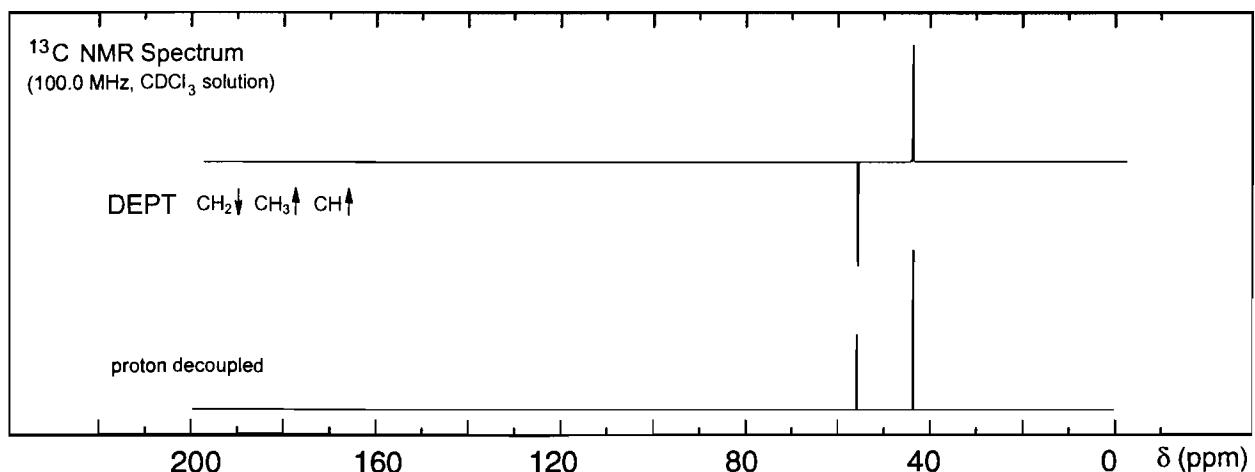
Problem 37



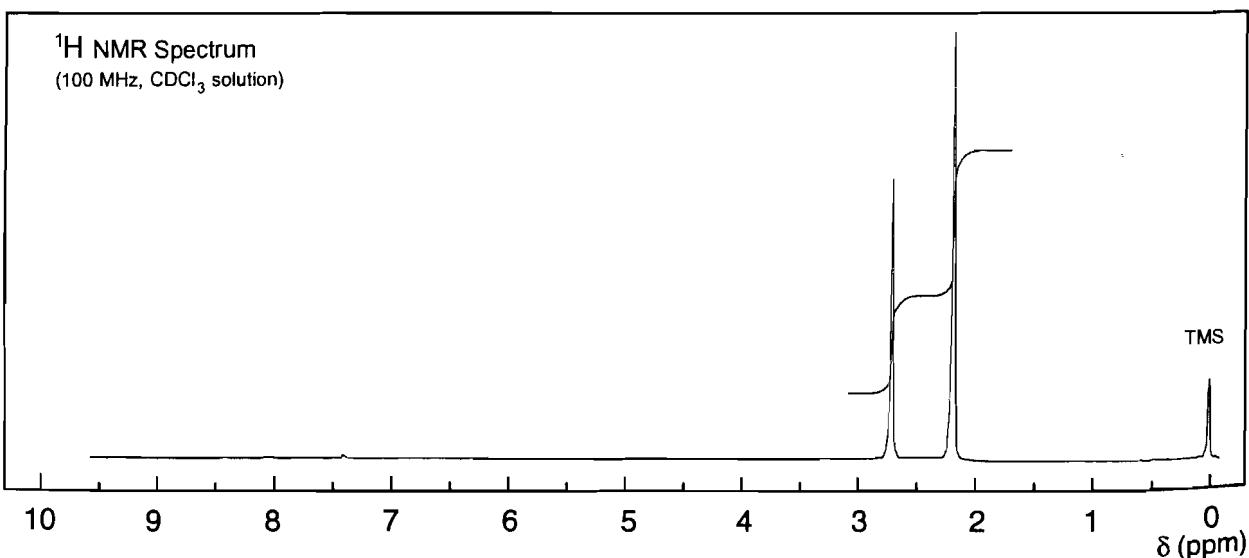
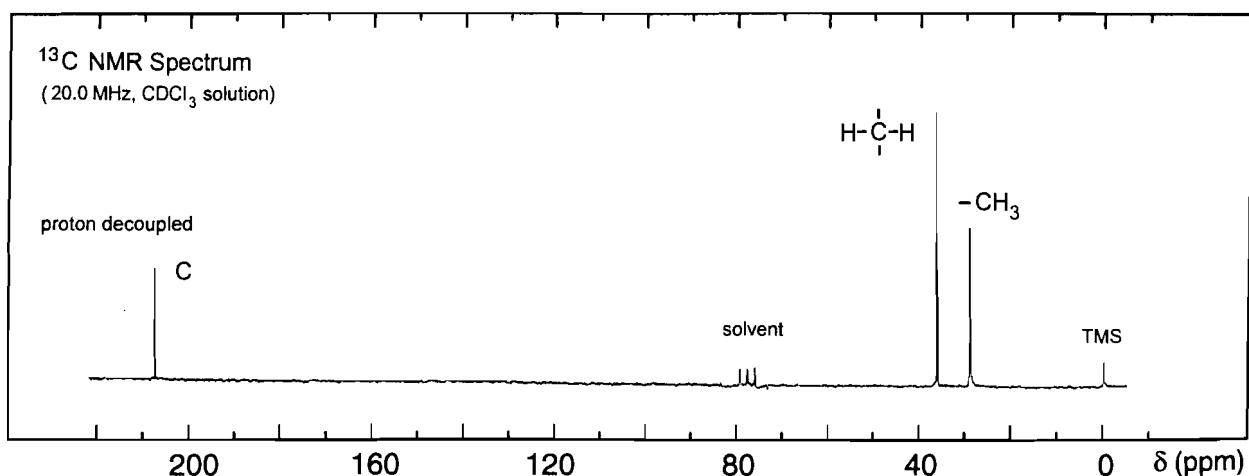
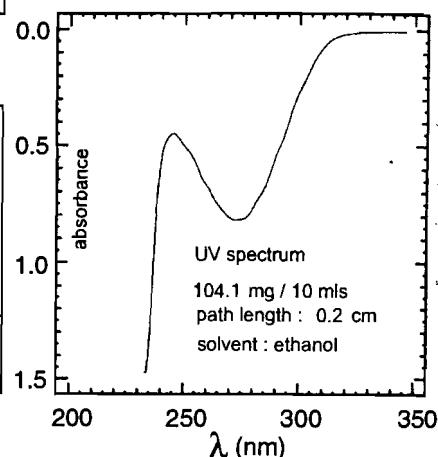
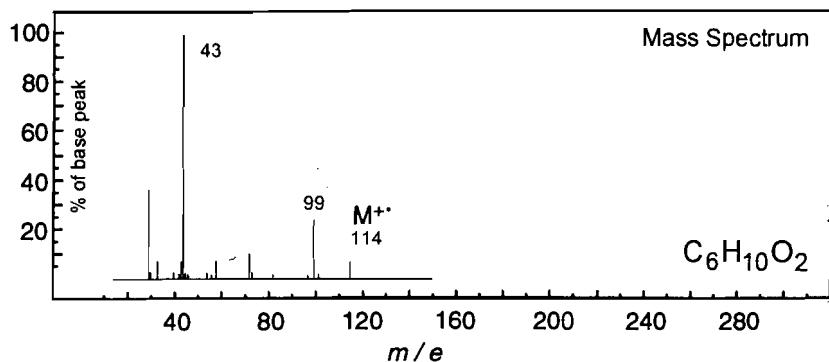
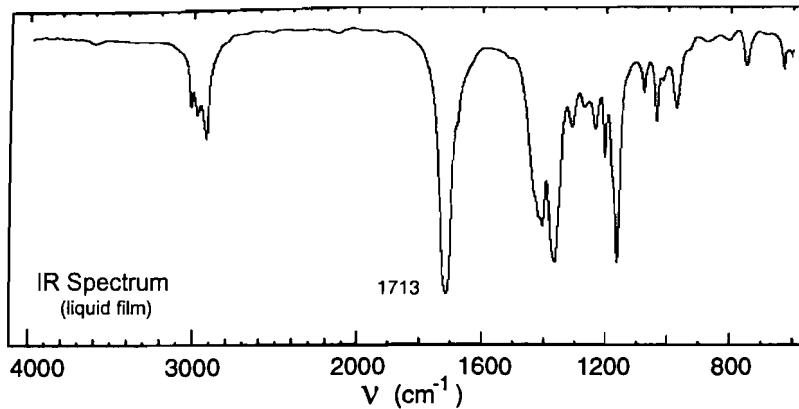
Problem 38



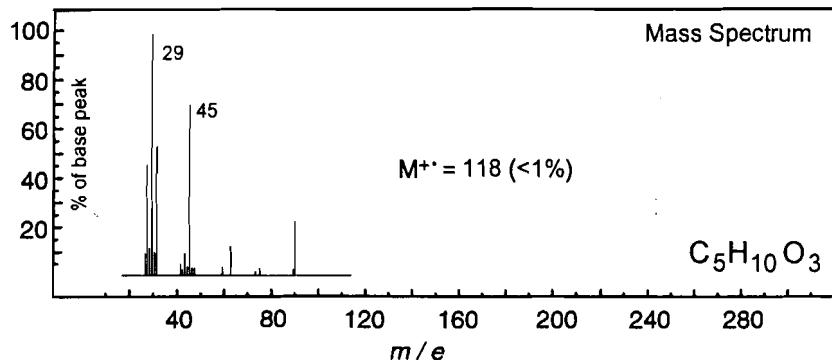
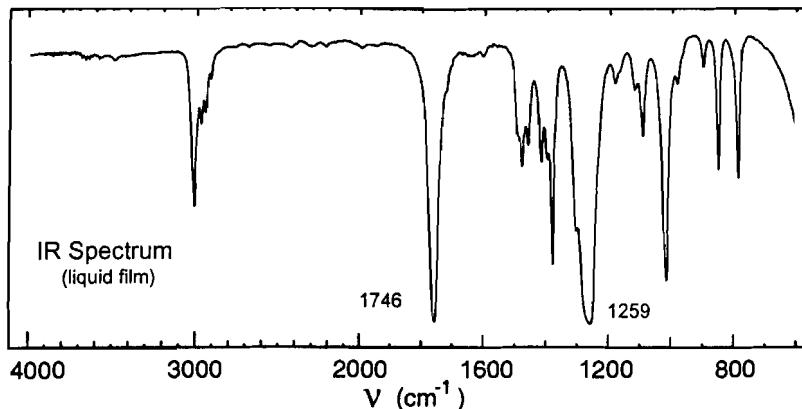
No significant UV absorption above 220 nm



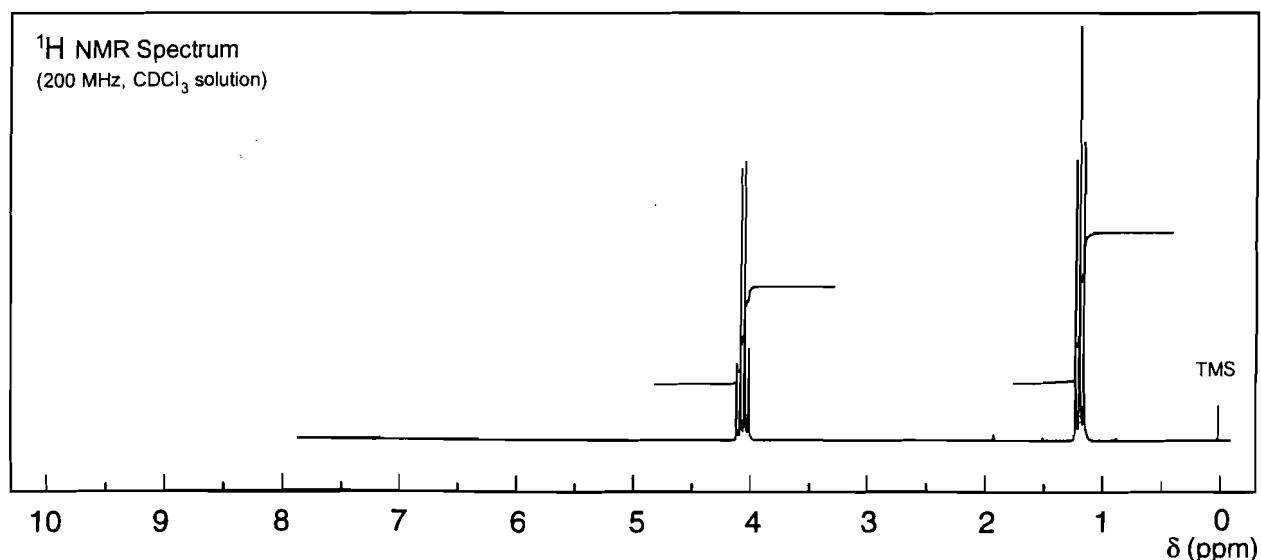
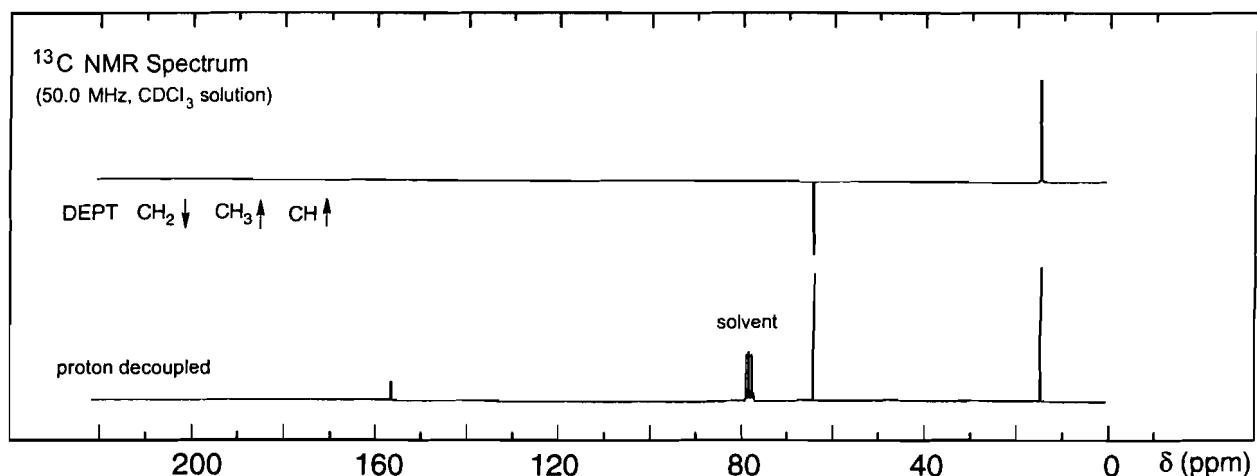
Problem 39



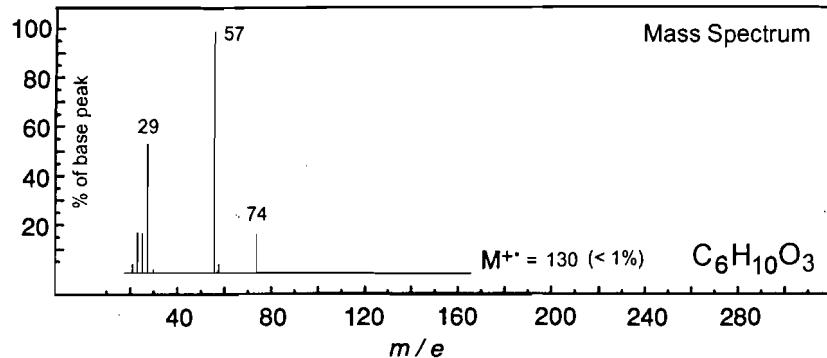
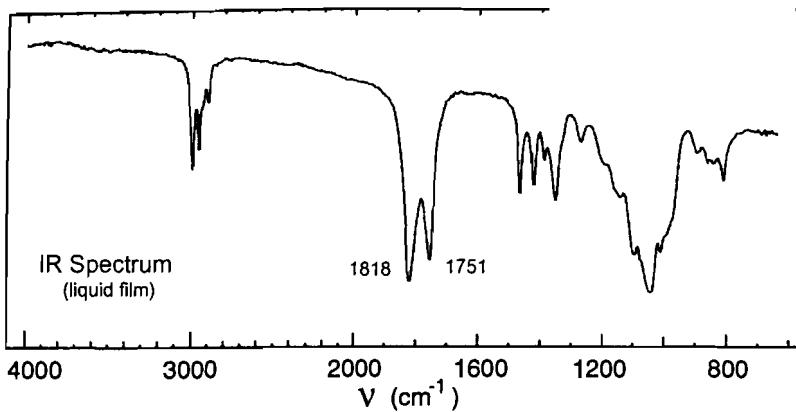
Problem 40



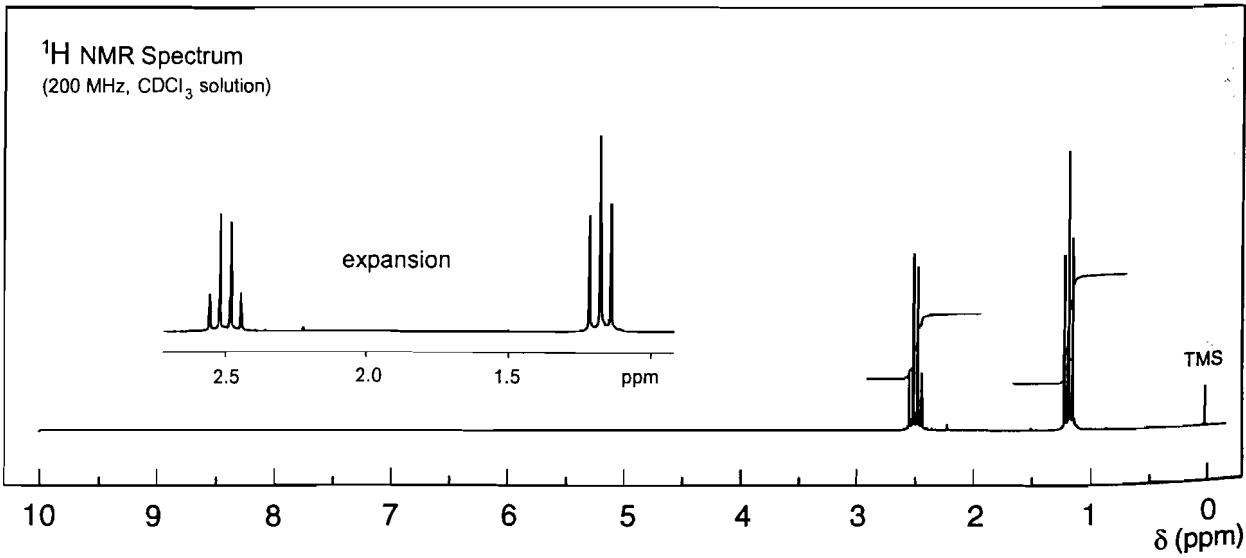
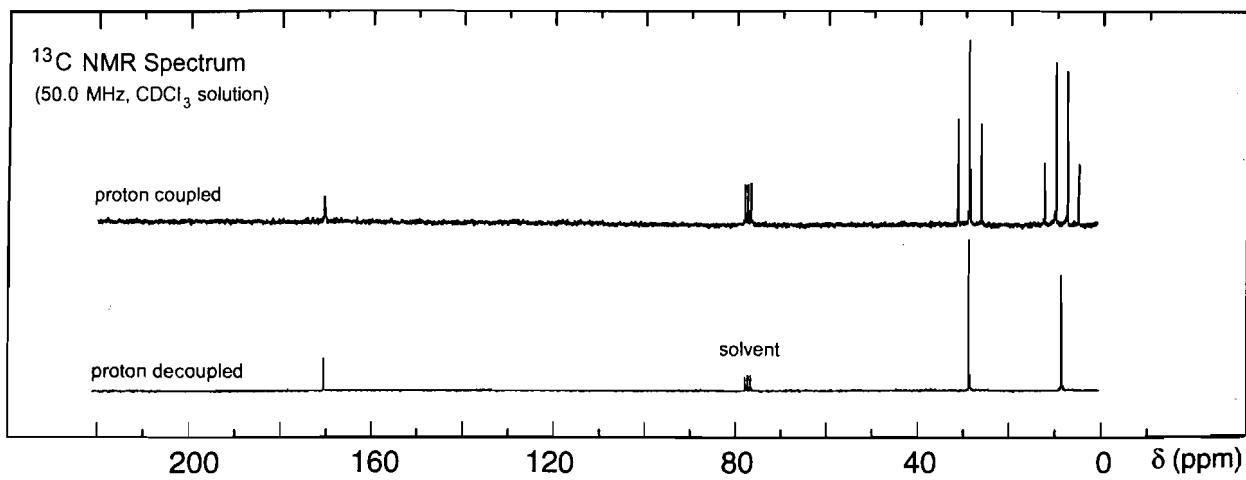
No significant UV absorption above 220 nm



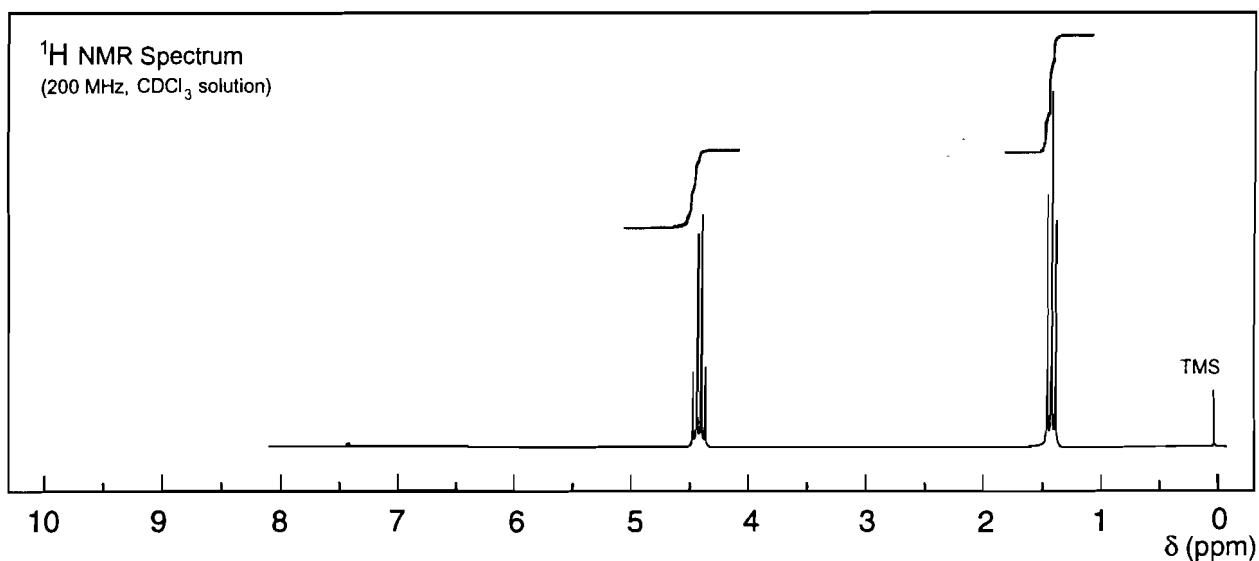
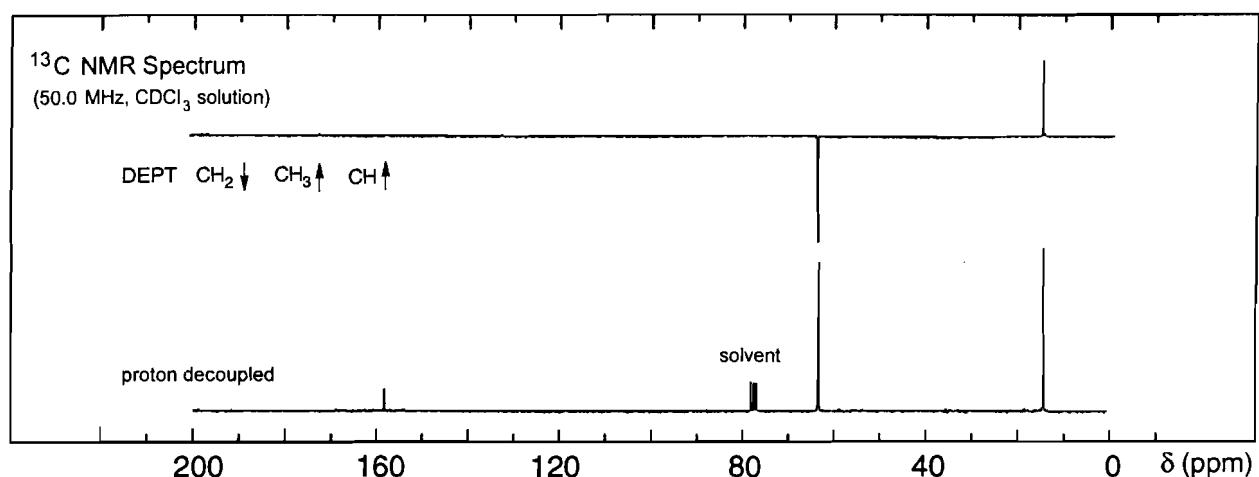
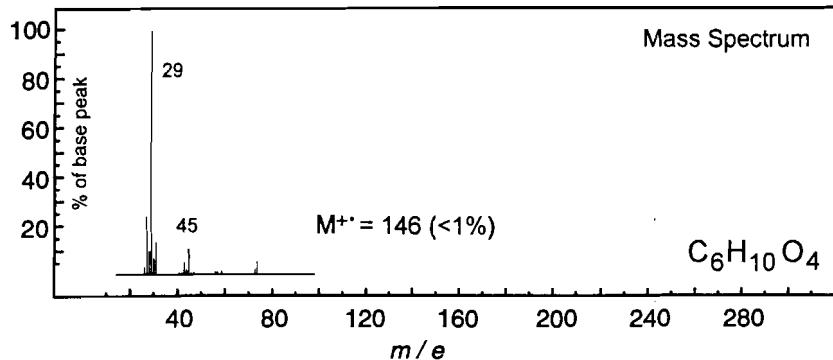
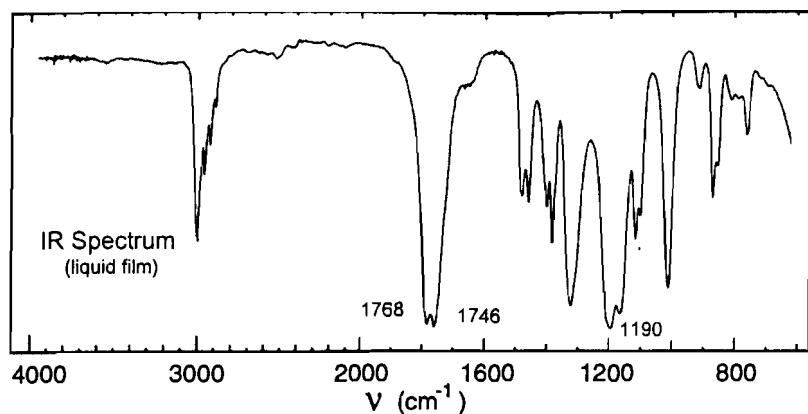
Problem 41



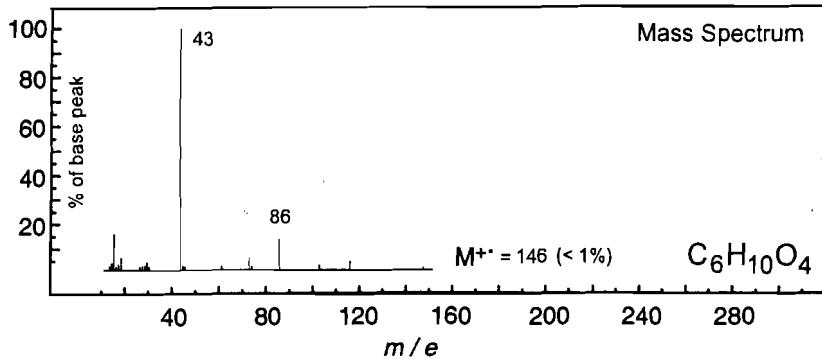
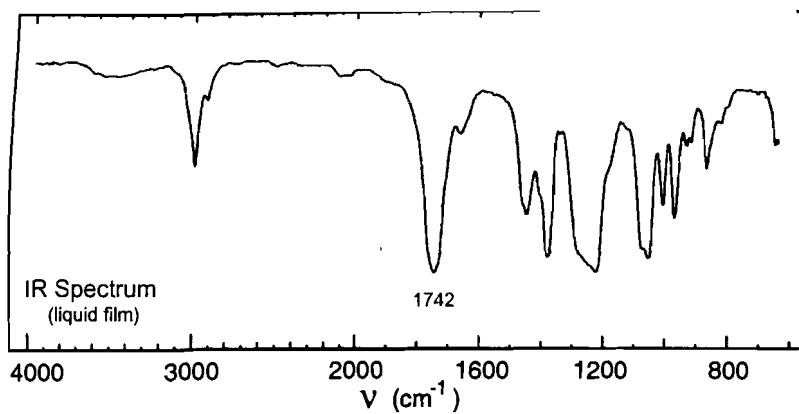
No significant UV absorption above 220 nm



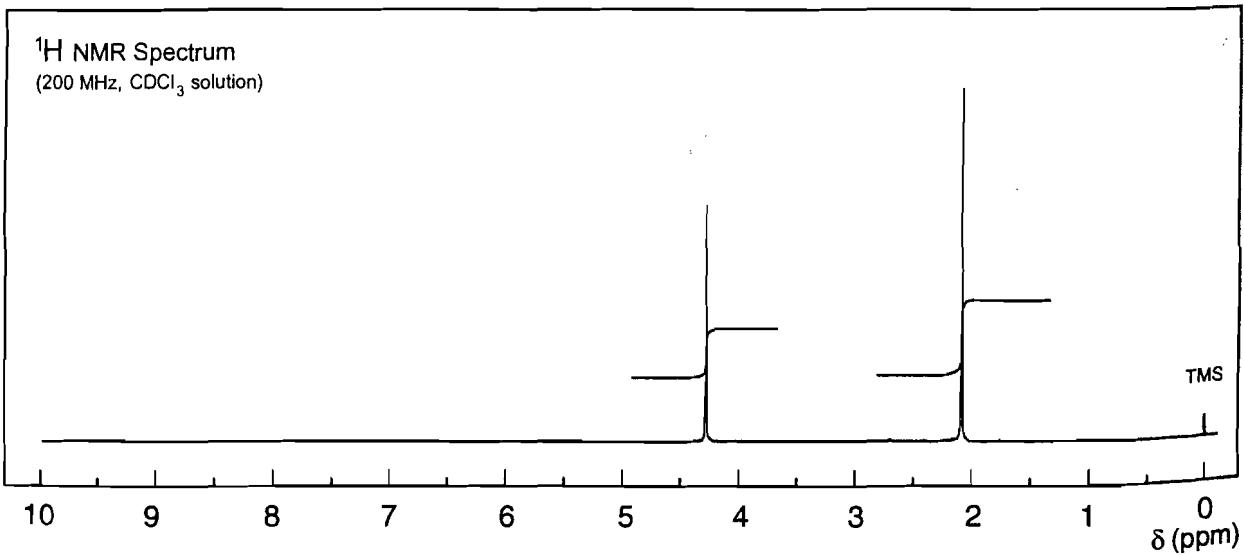
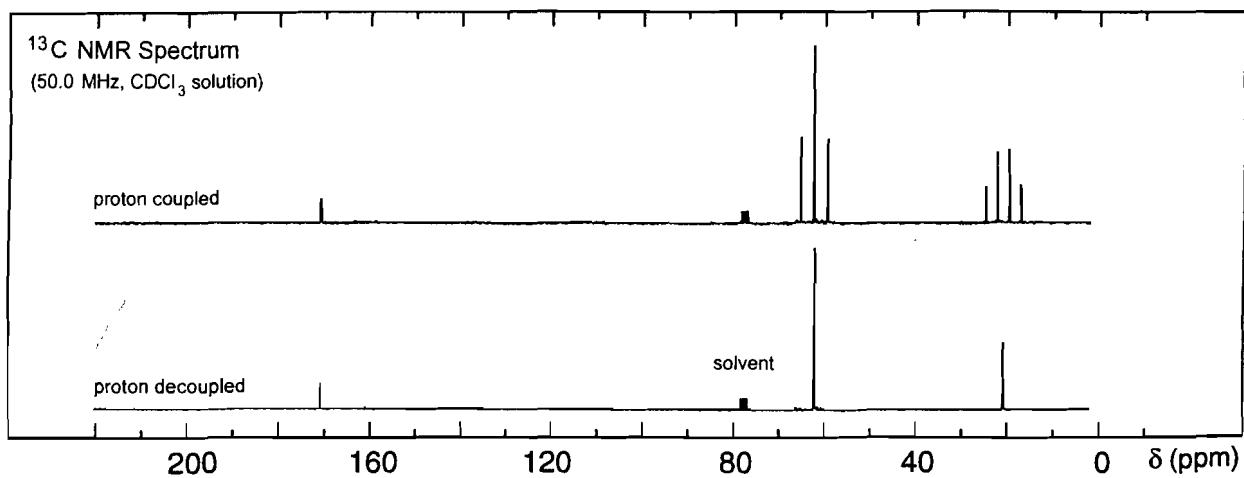
Problem 42



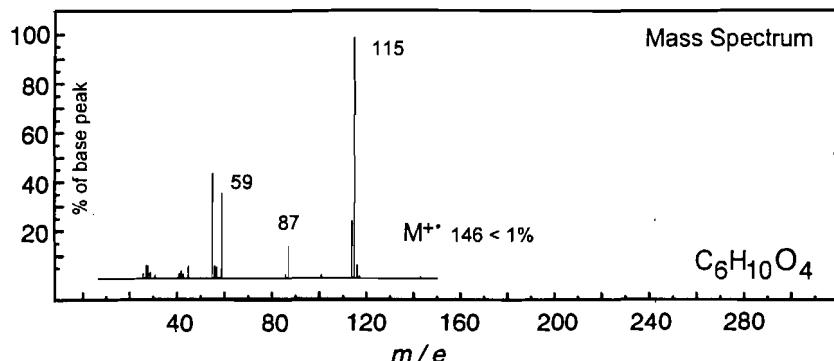
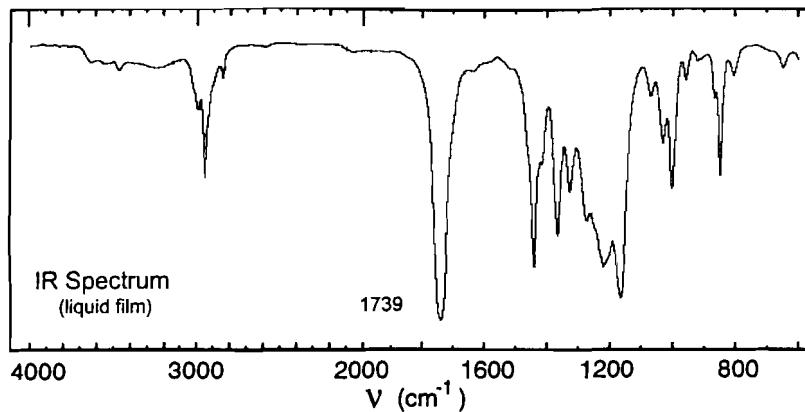
Problem 43



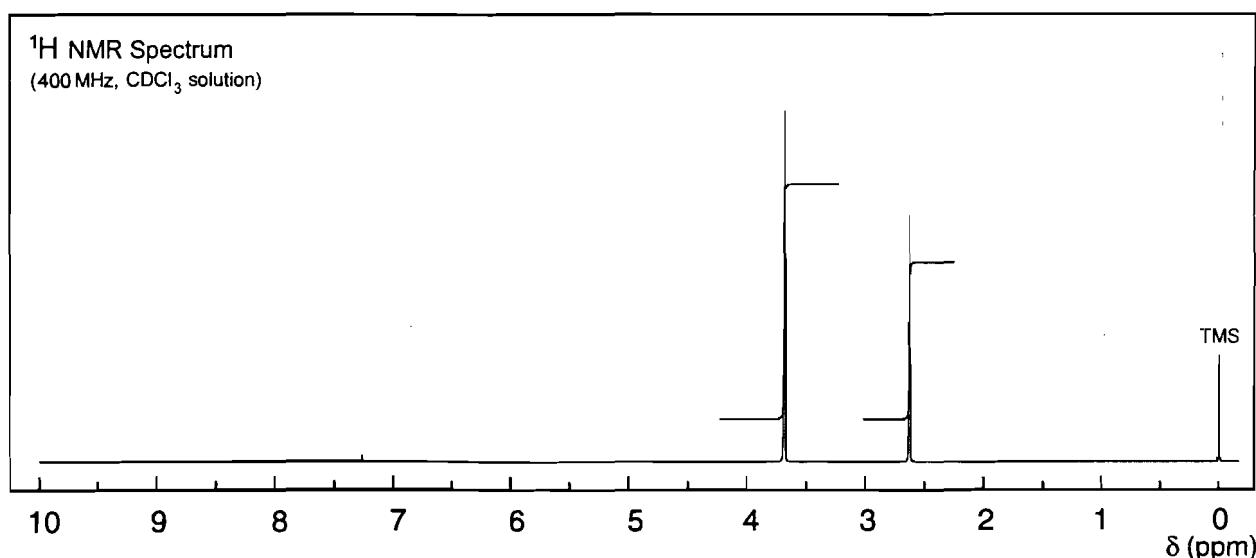
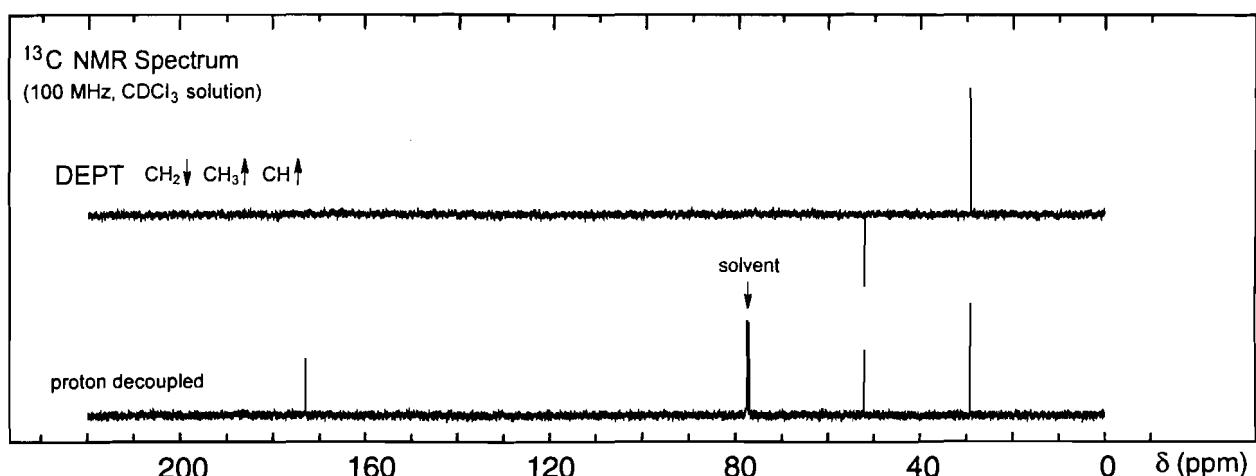
No significant UV absorption above 220 nm



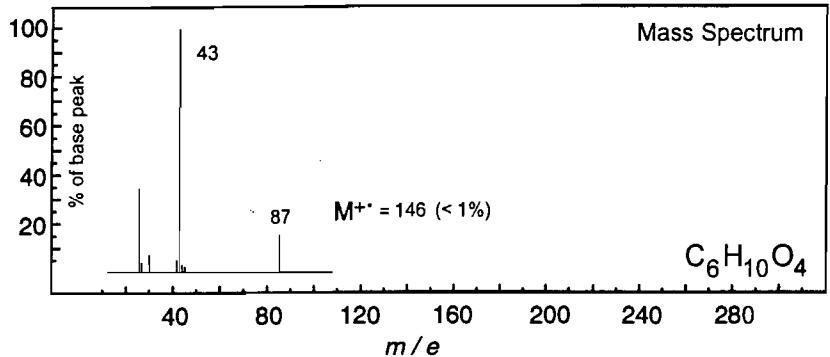
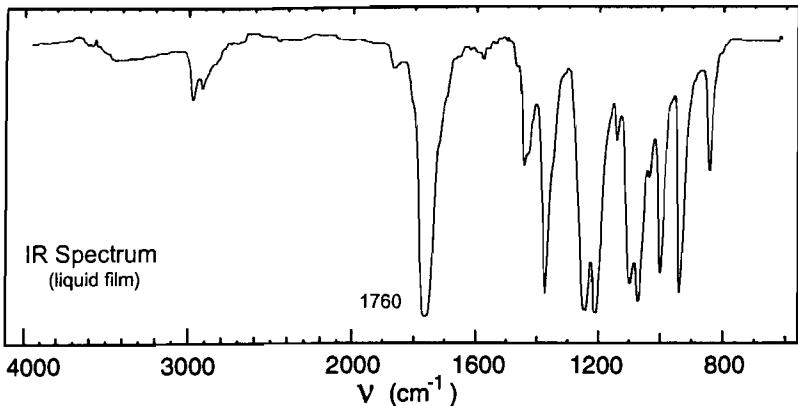
Problem 44



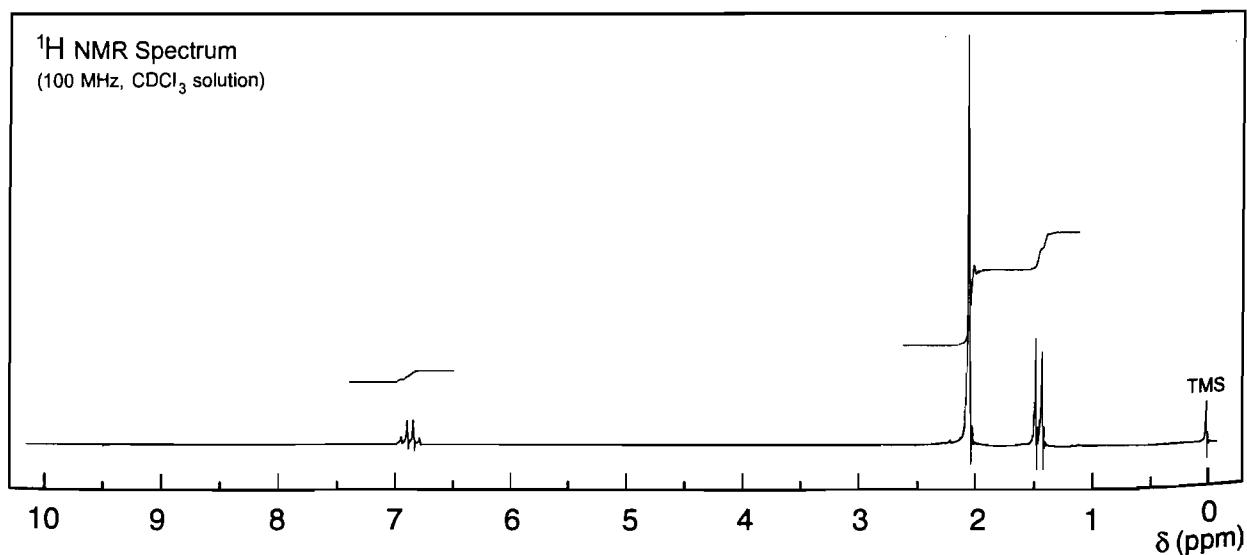
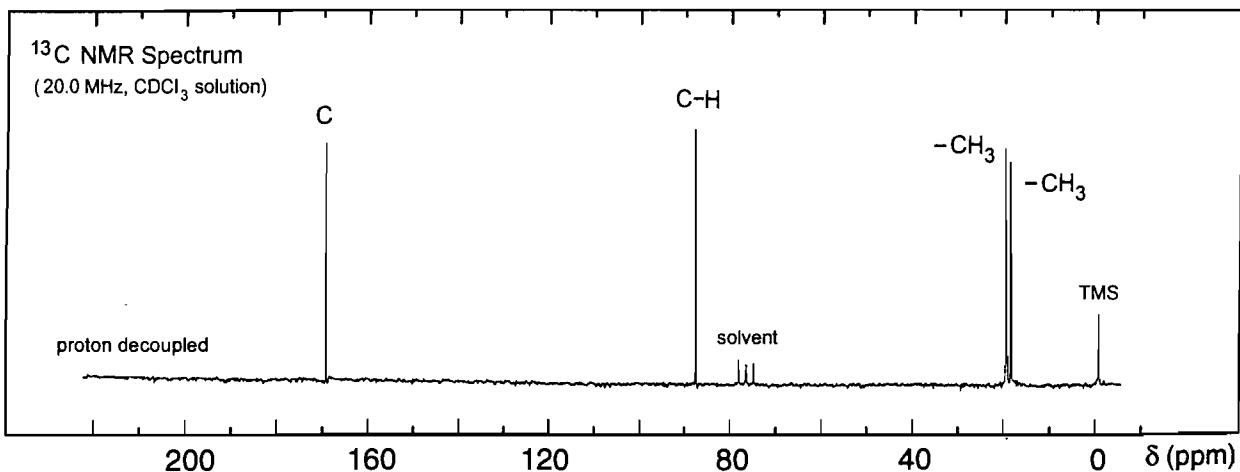
No significant UV absorption above 220 nm



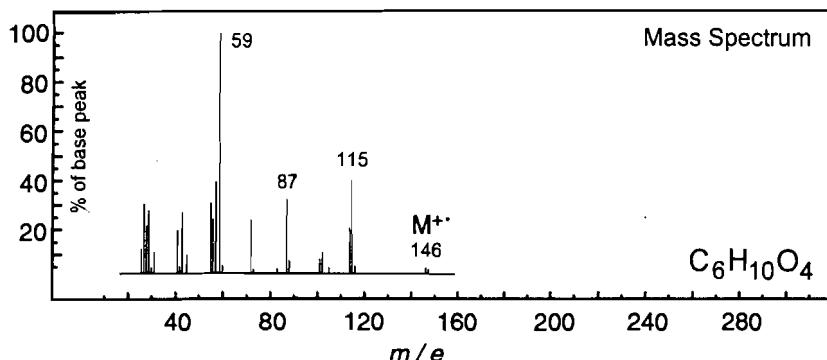
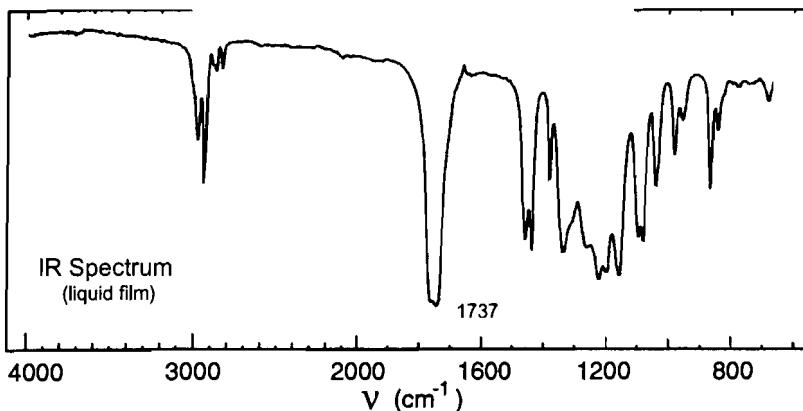
Problem 45



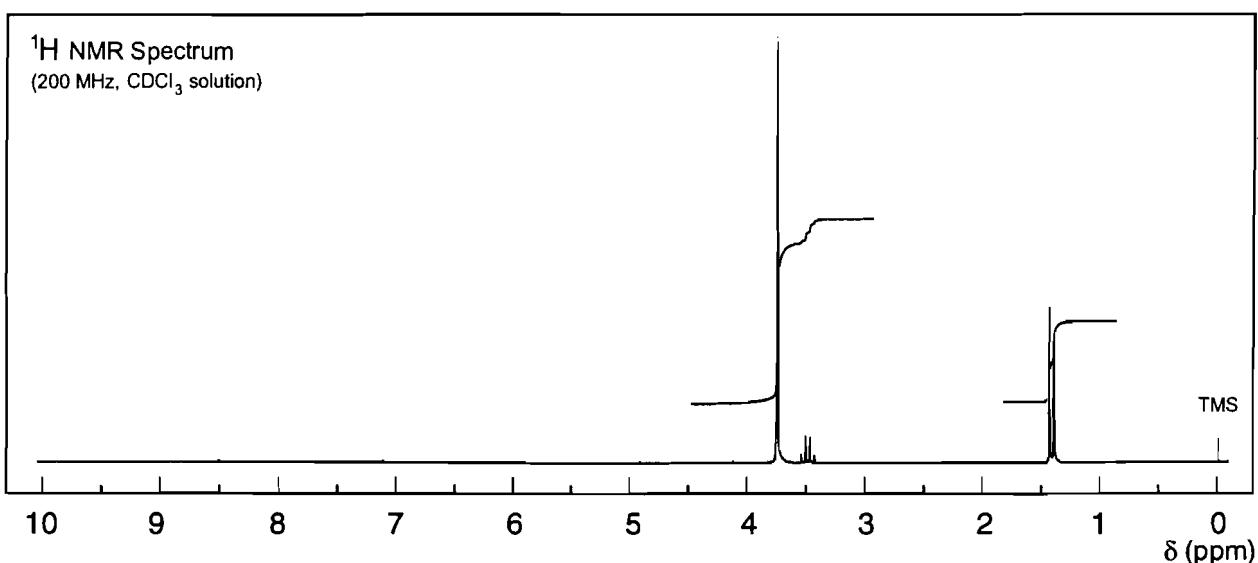
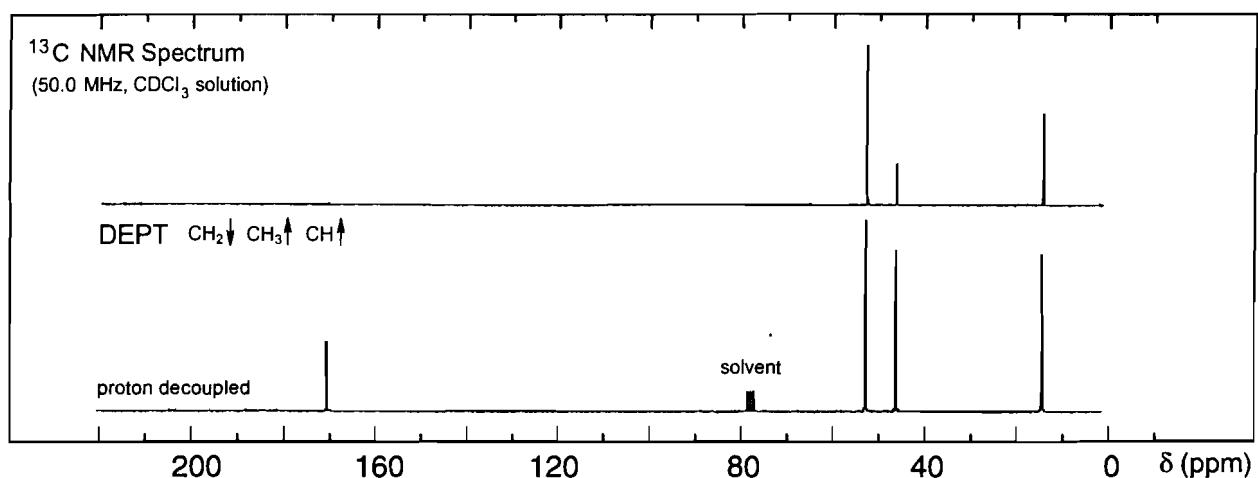
No significant UV absorption above 220 nm



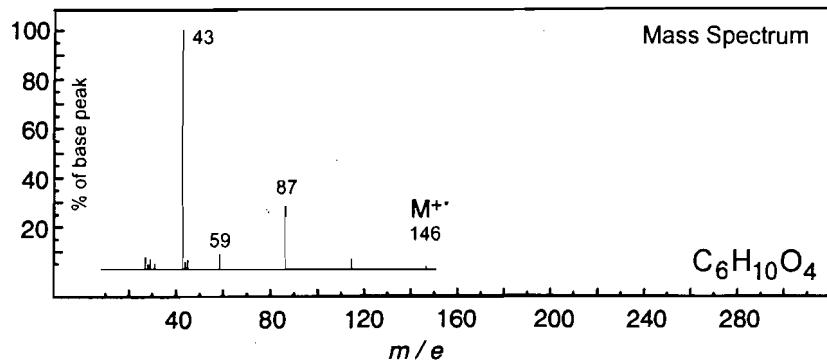
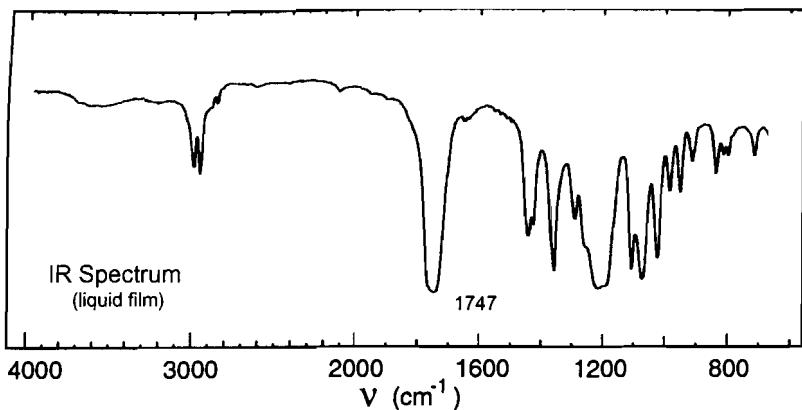
Problem 46



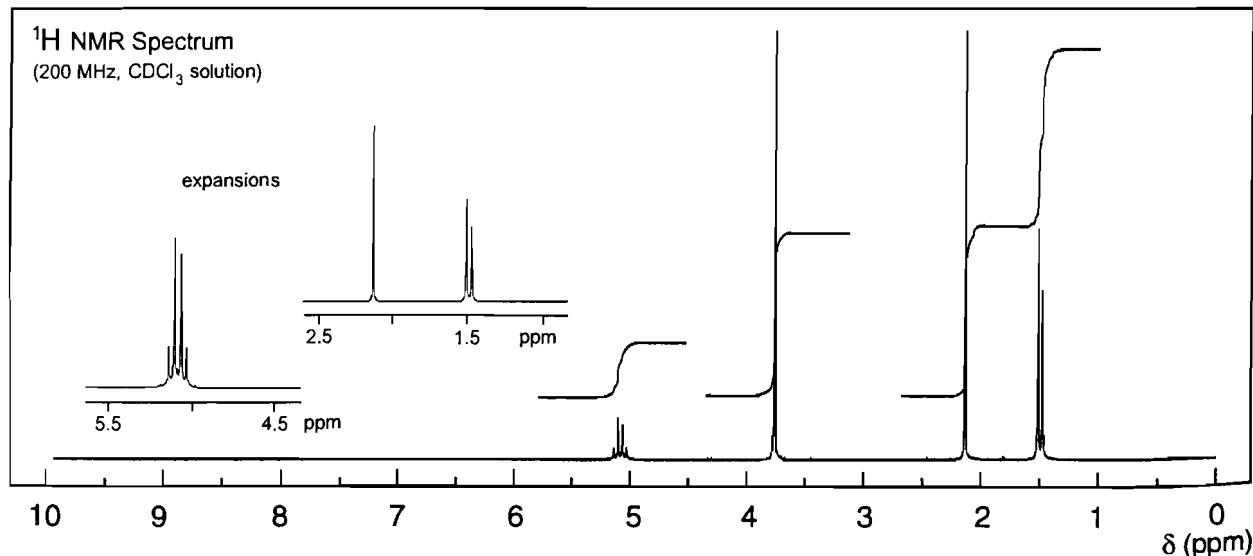
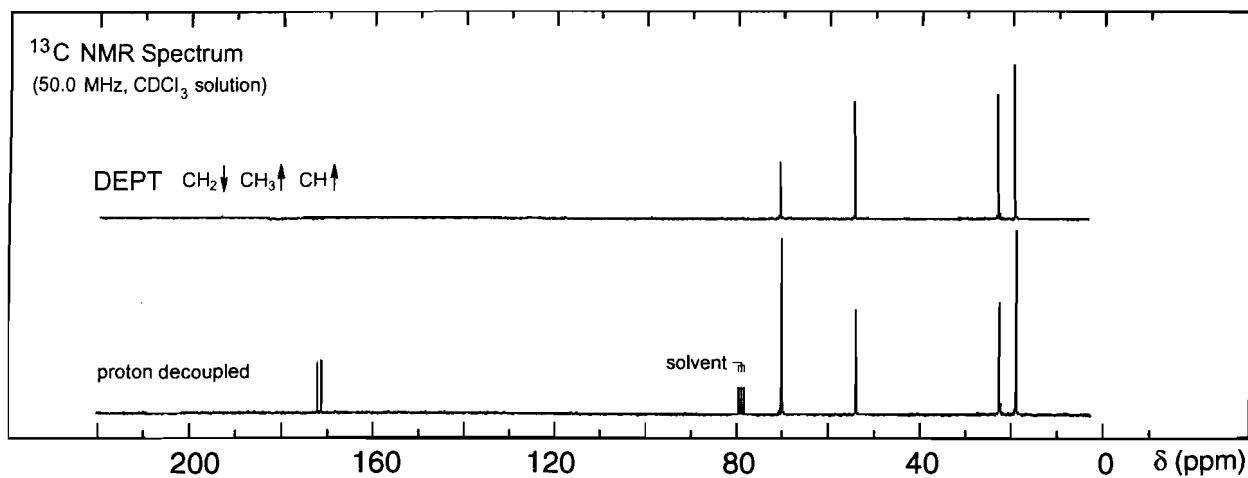
No significant UV absorption above 220 nm



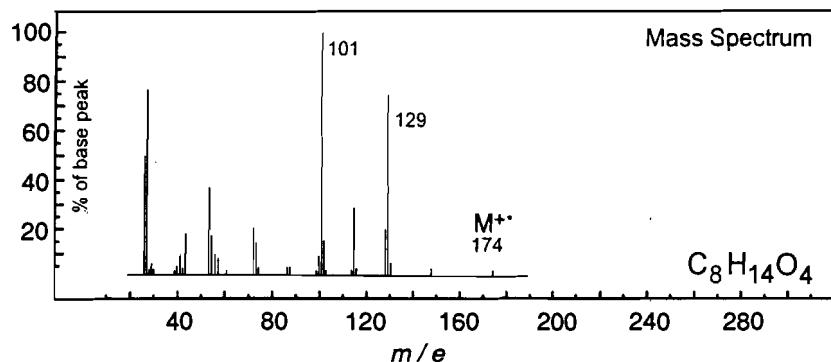
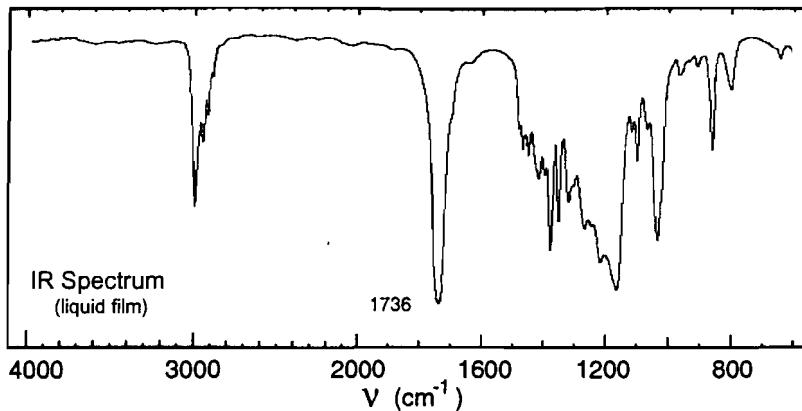
Problem 47



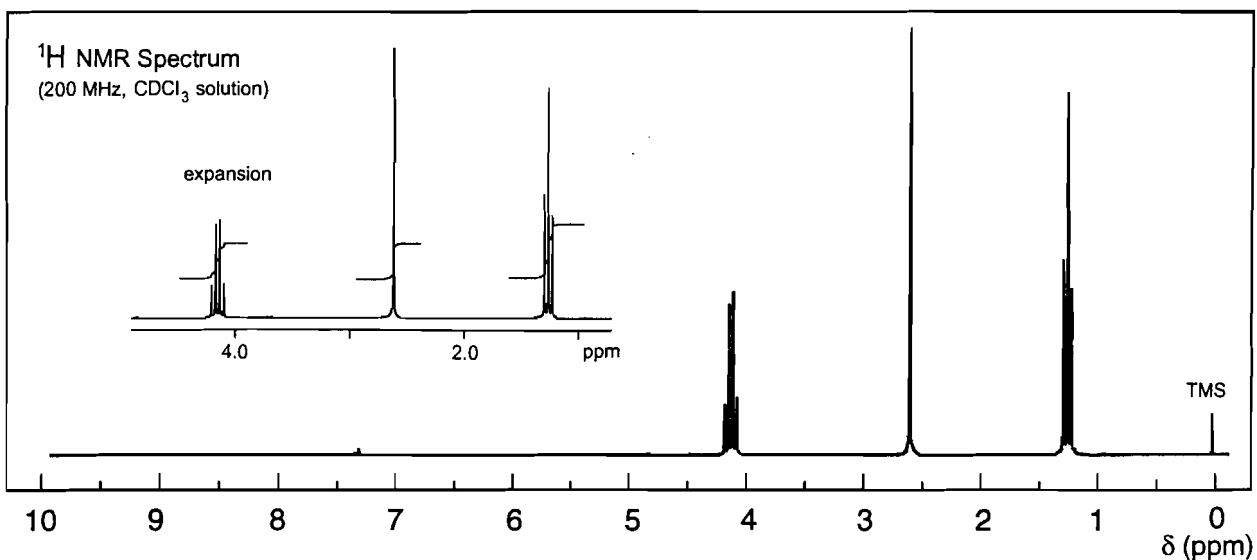
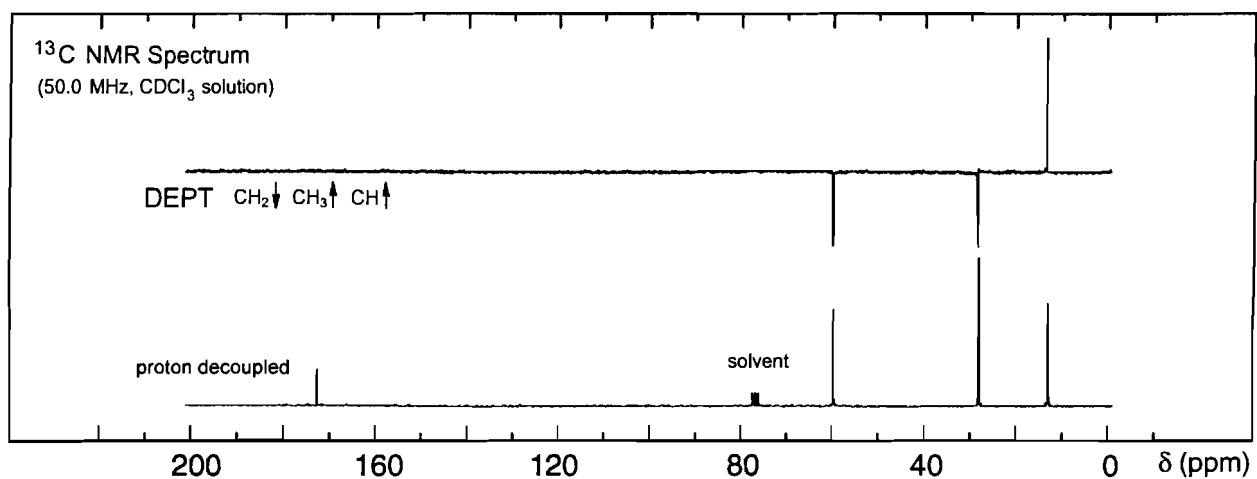
No significant UV absorption above 220 nm



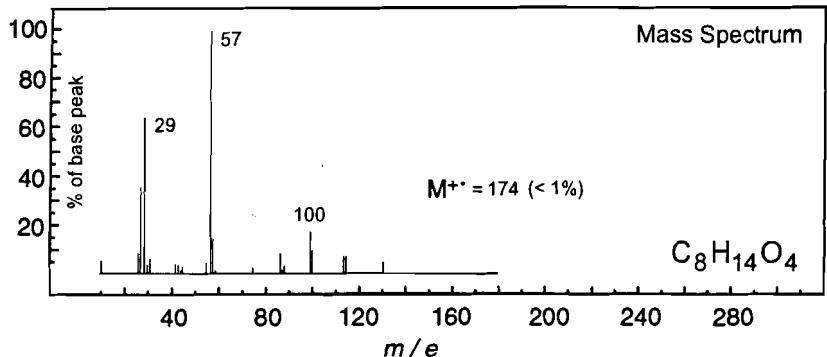
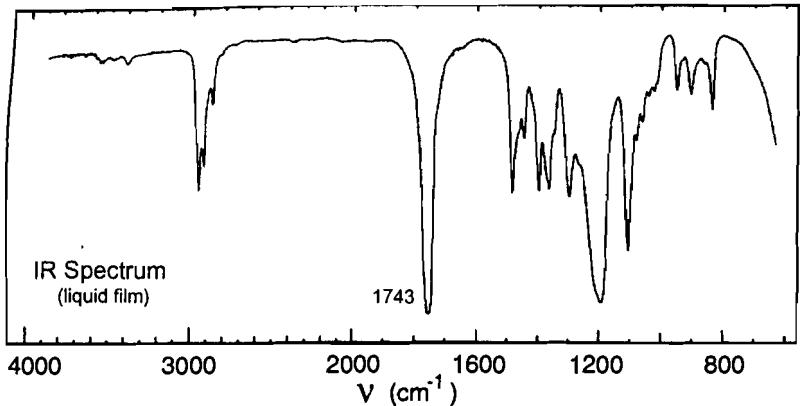
Problem 48



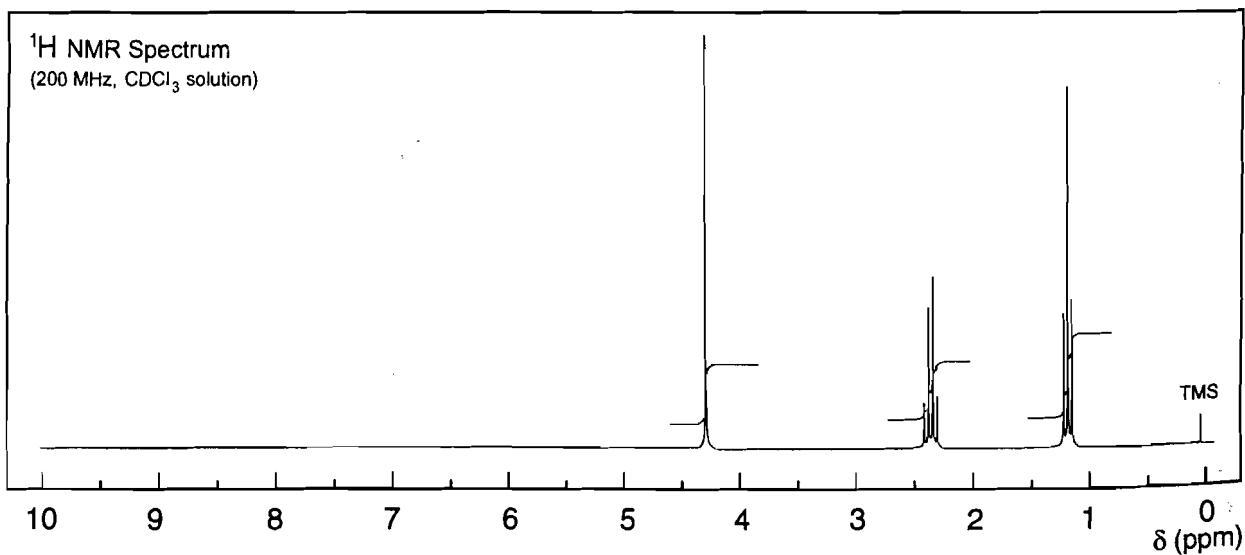
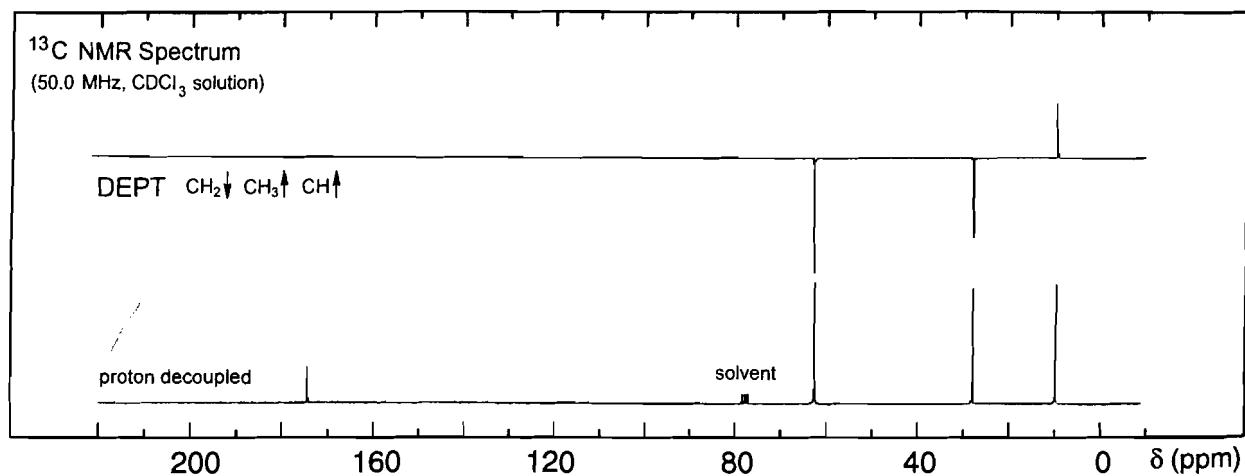
No significant UV absorption above 220 nm



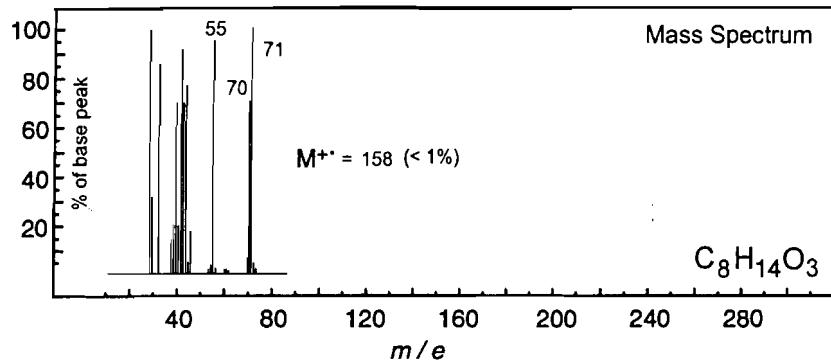
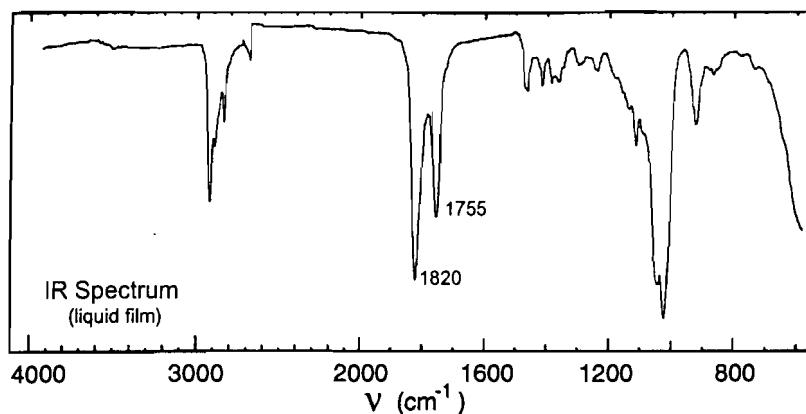
Problem 49



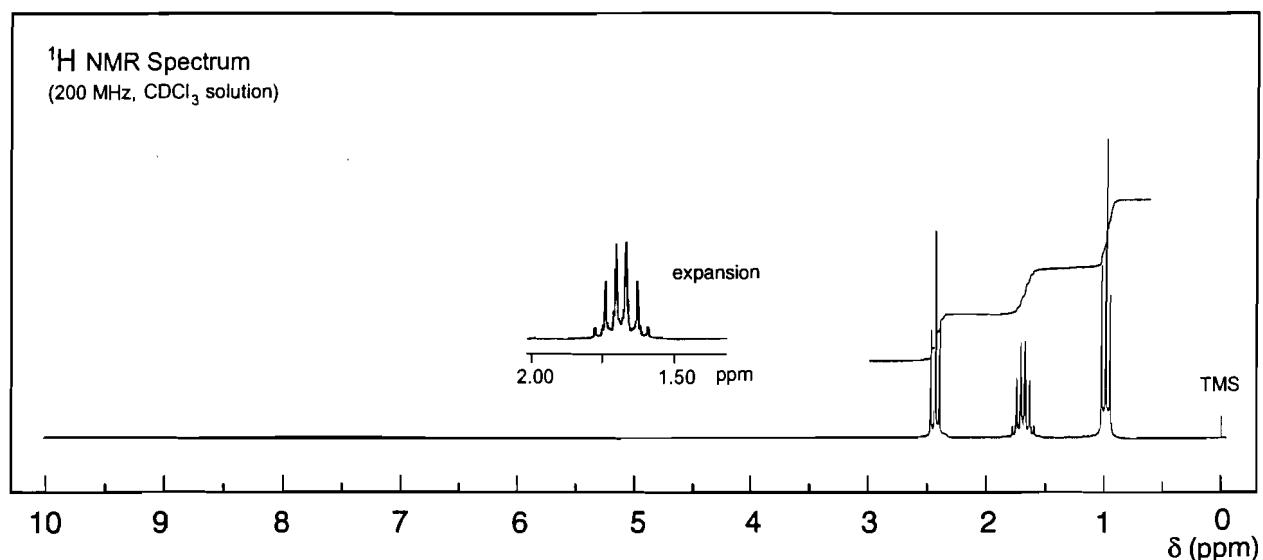
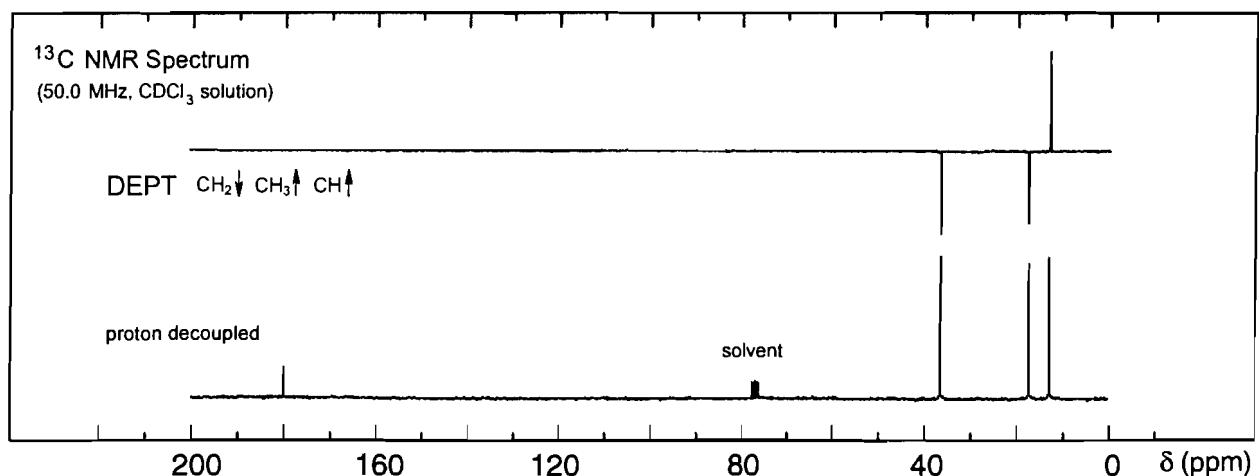
No significant UV absorption above 220 nm



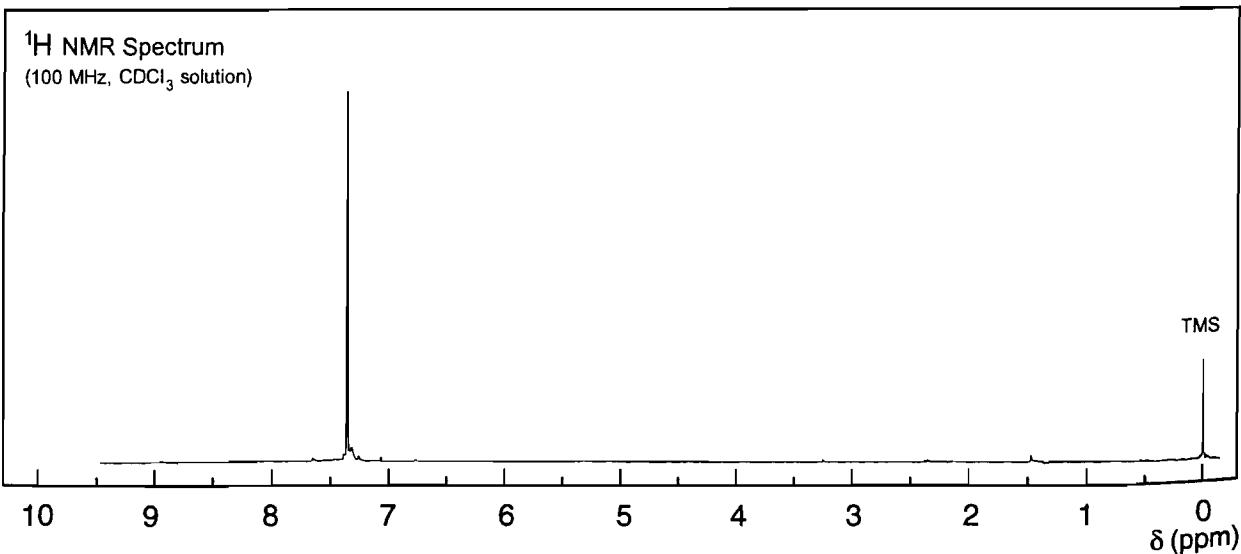
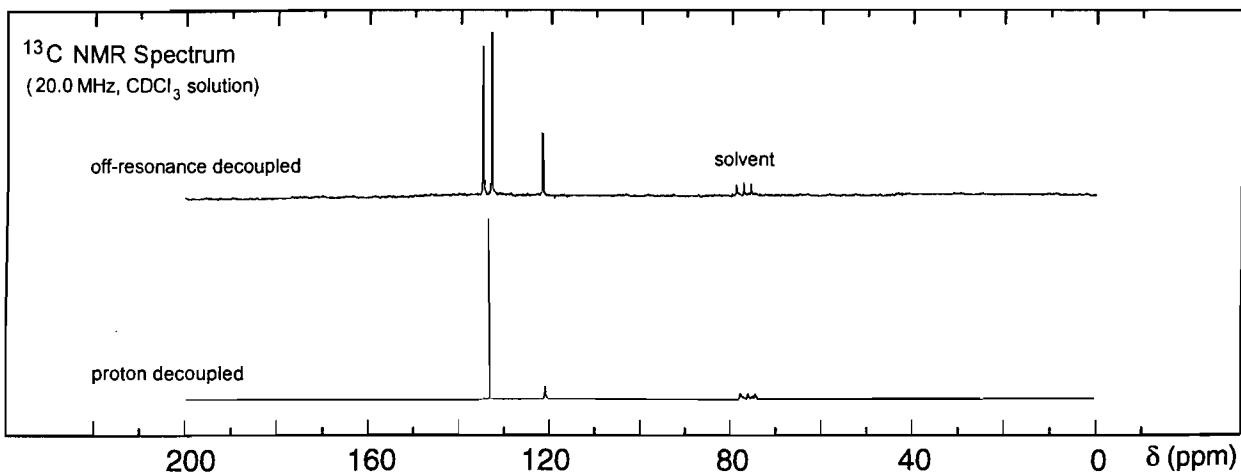
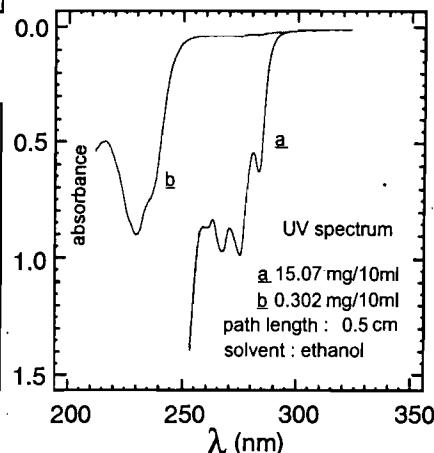
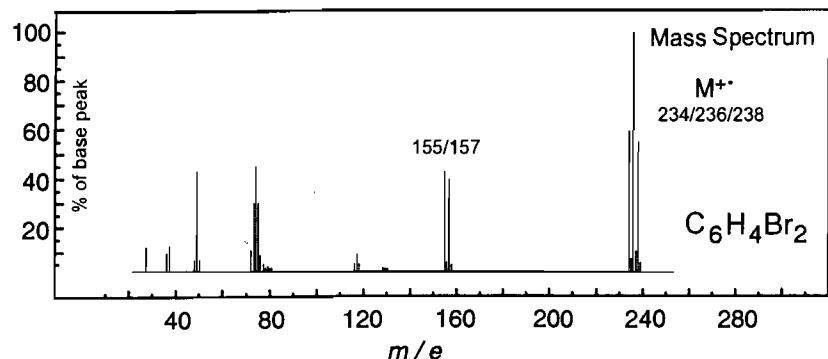
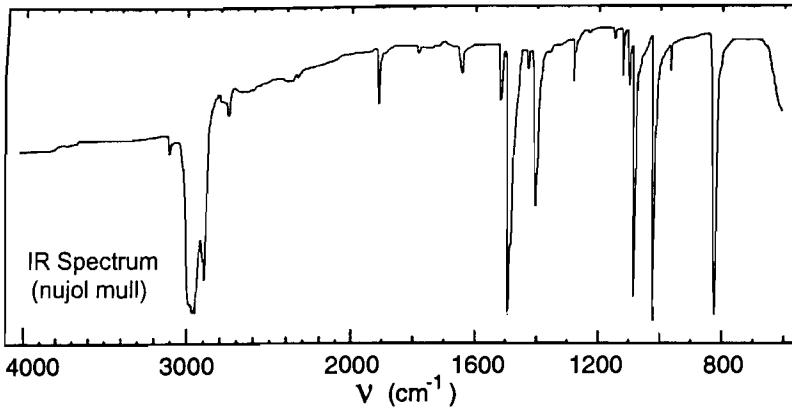
Problem 50



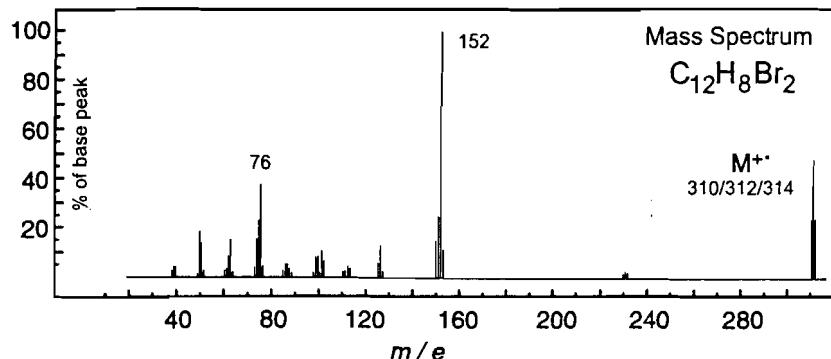
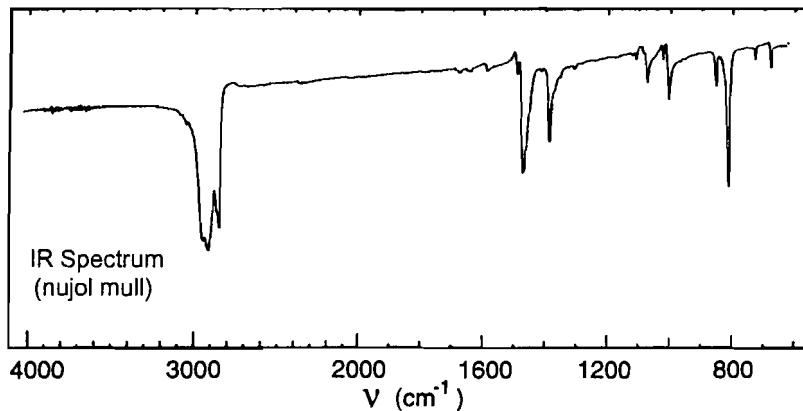
No significant UV absorption above 220 nm



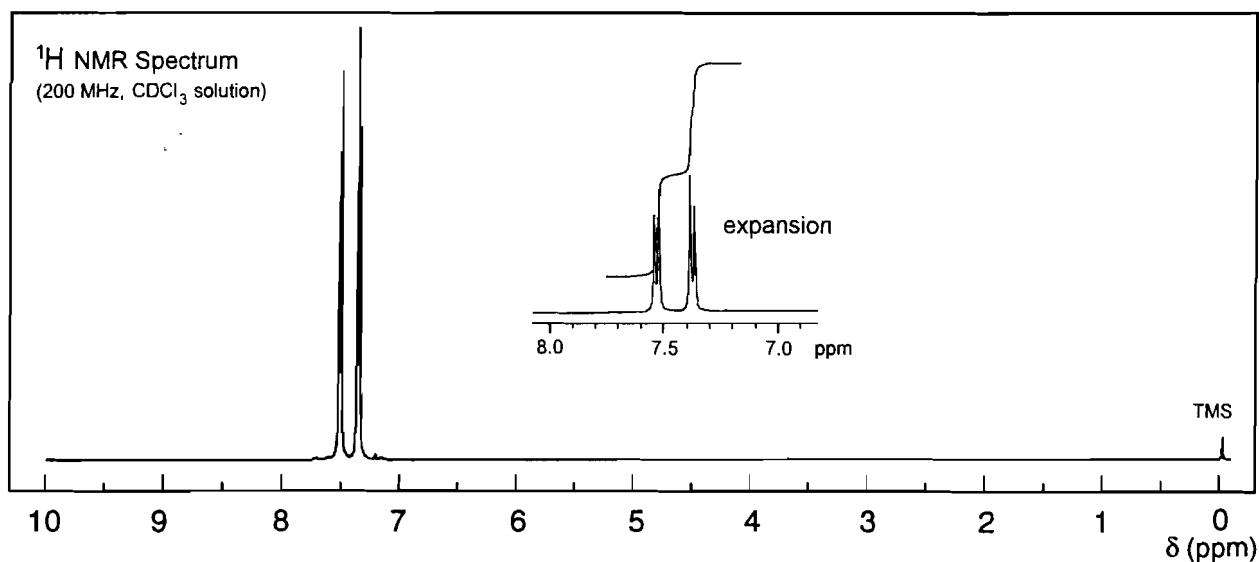
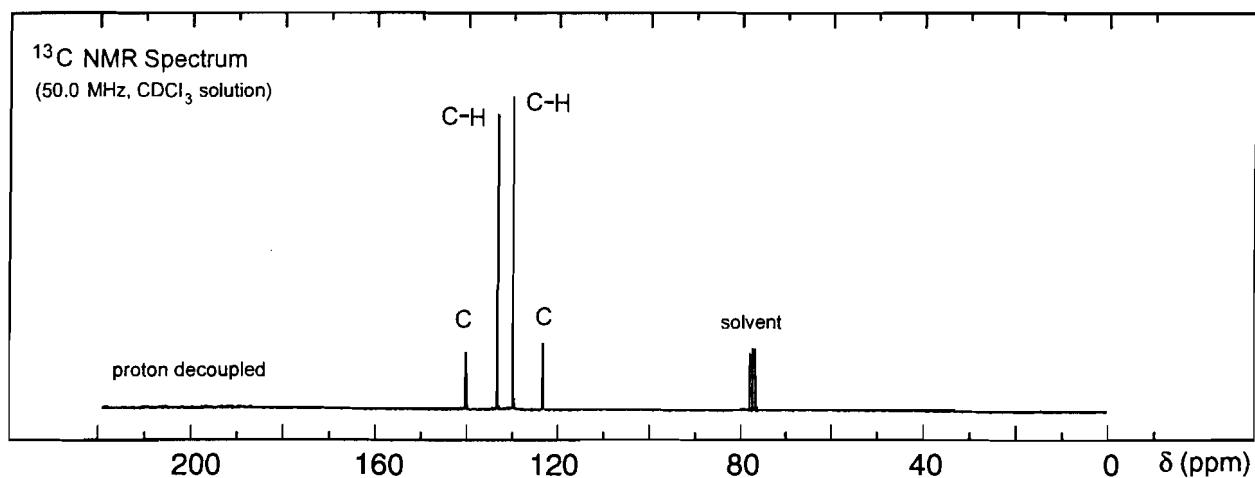
Problem 51



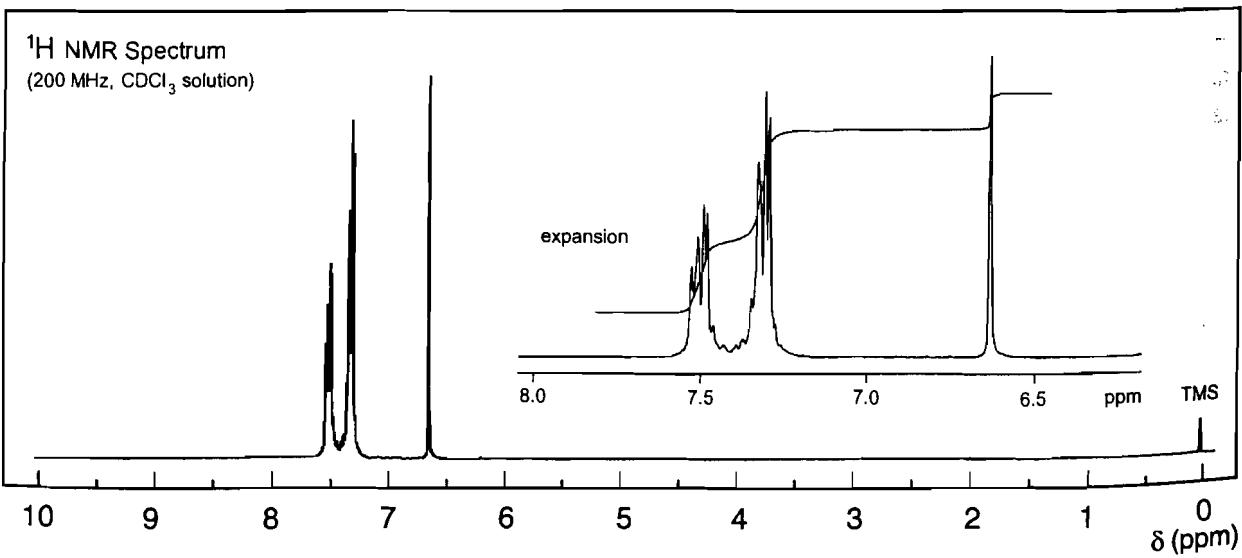
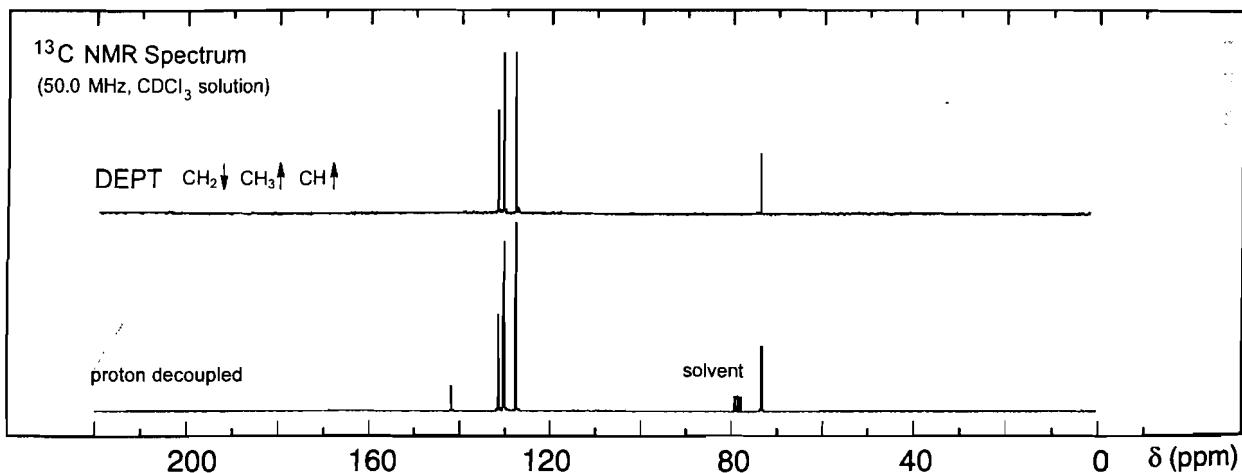
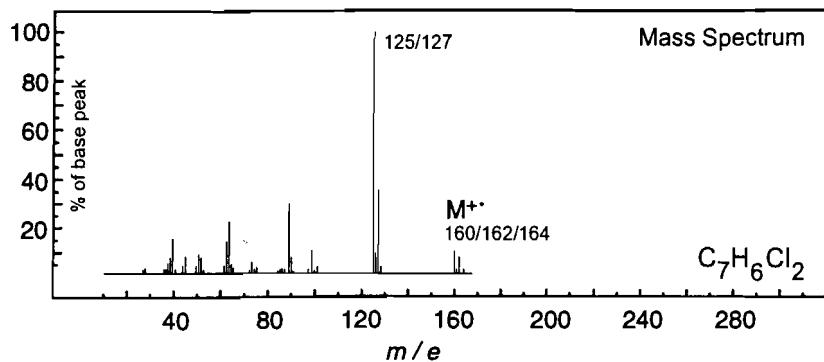
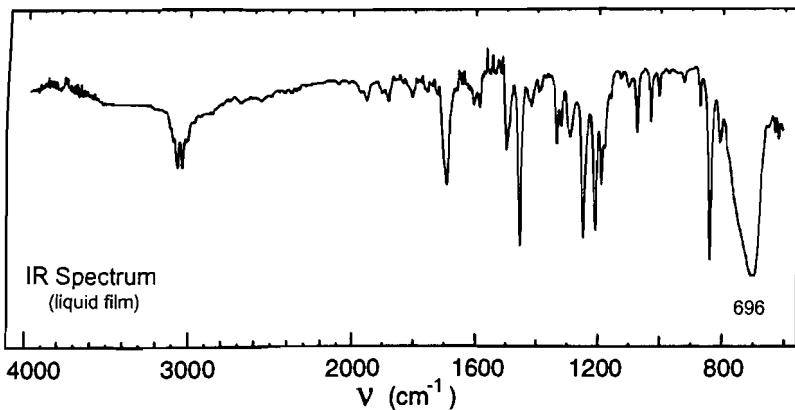
Problem 52



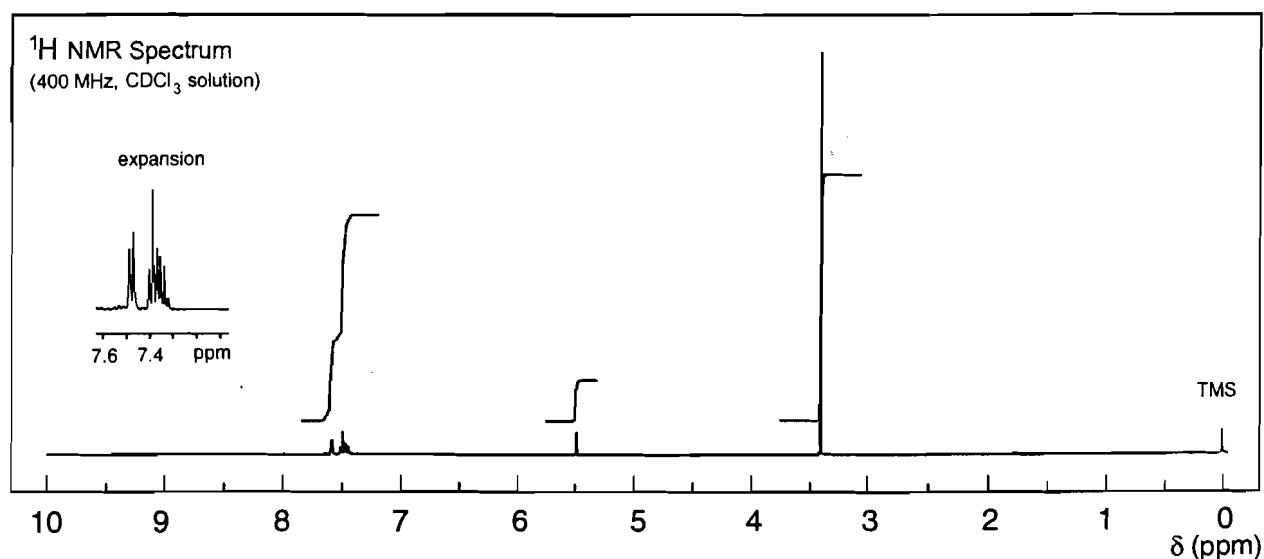
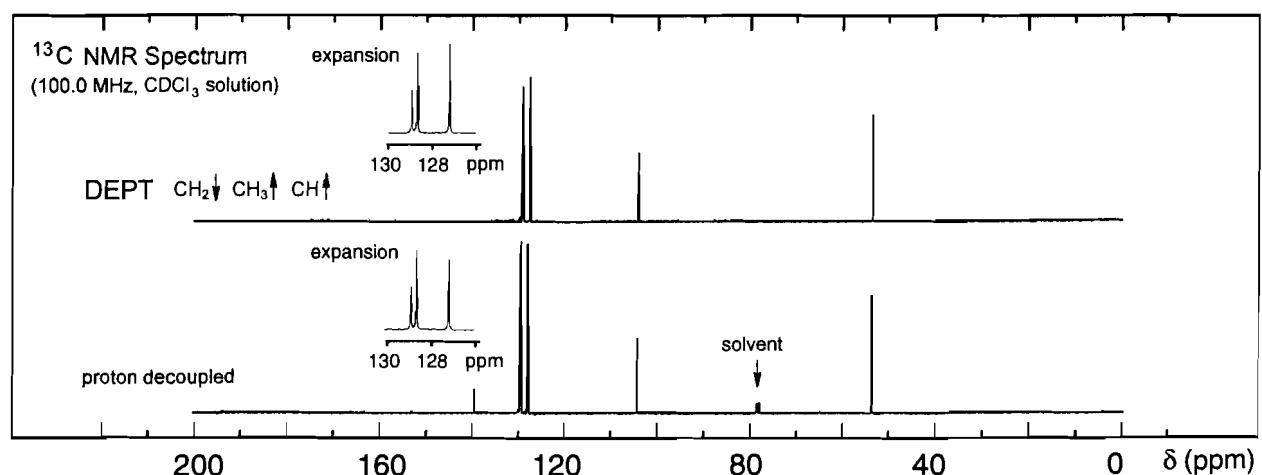
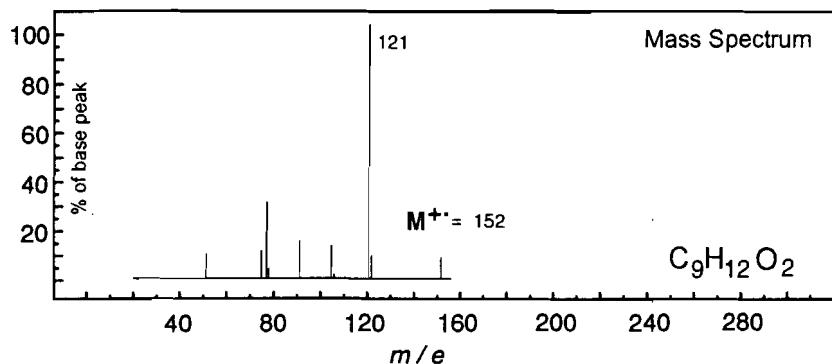
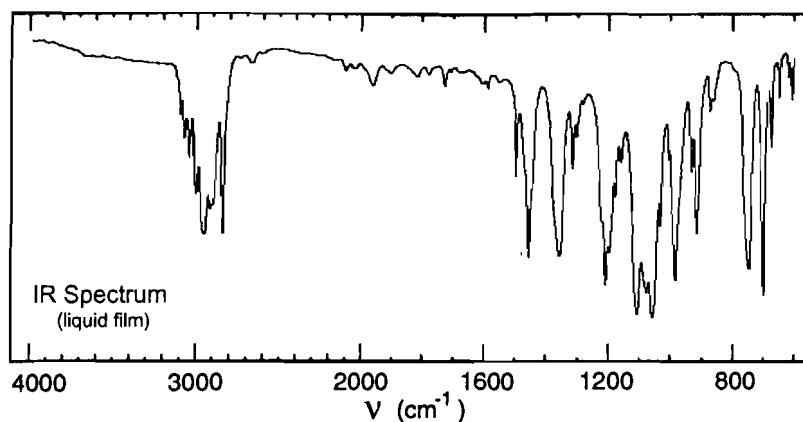
UV Spectrum
 λ_{max} 264 nm ($\log_{10}\epsilon$ 4.5)
solvent : methanol



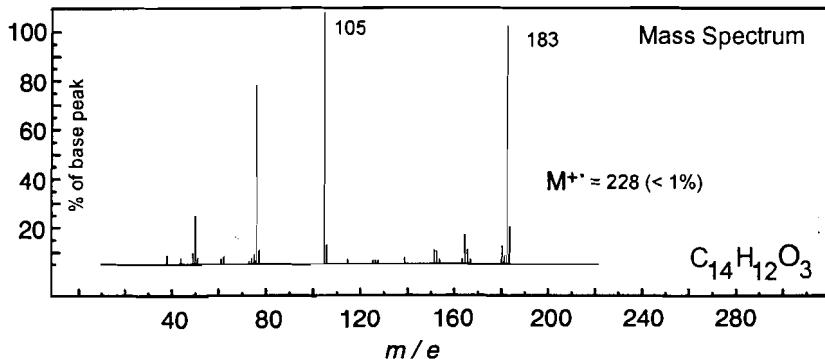
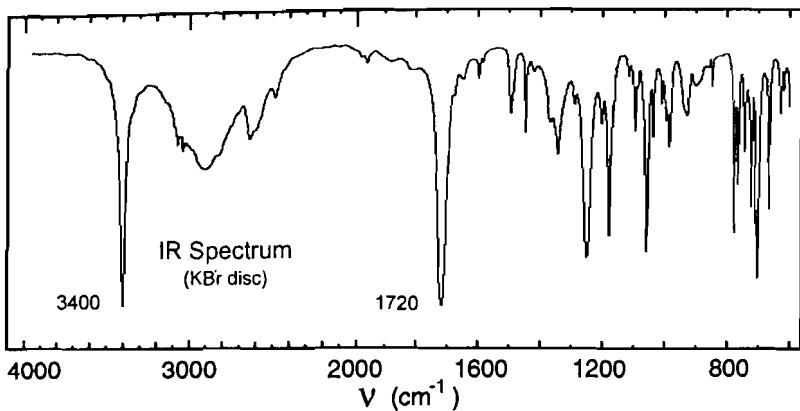
Problem 53



Problem 54



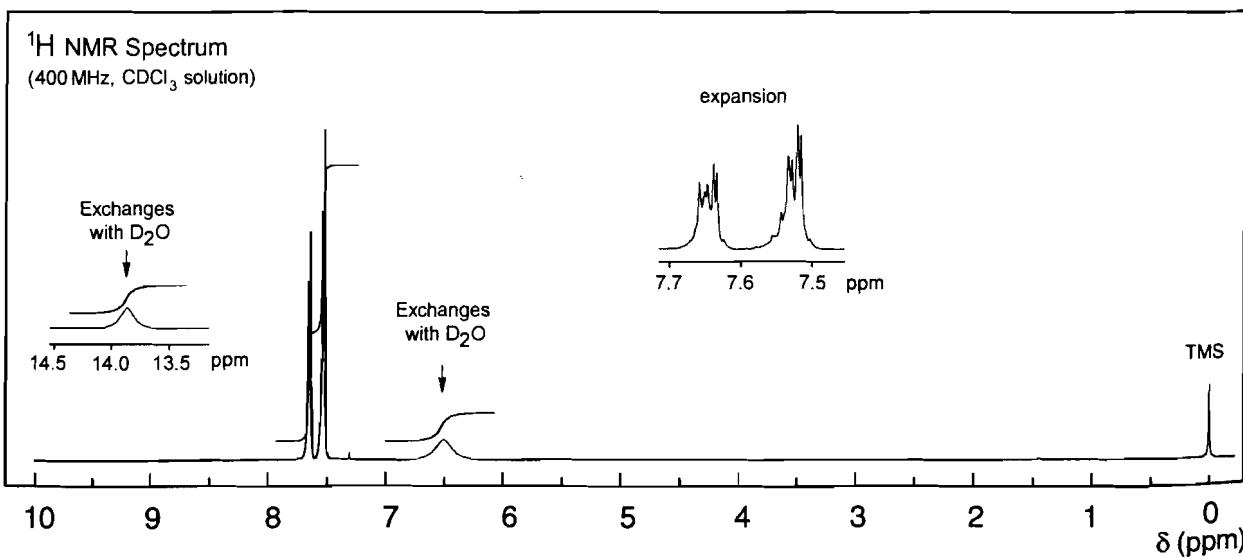
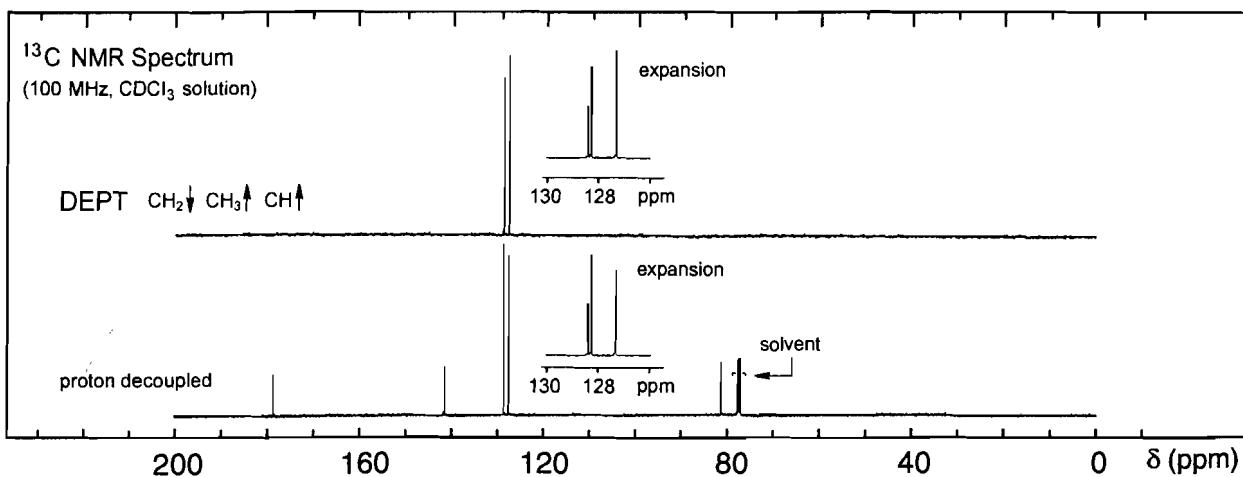
Problem 55



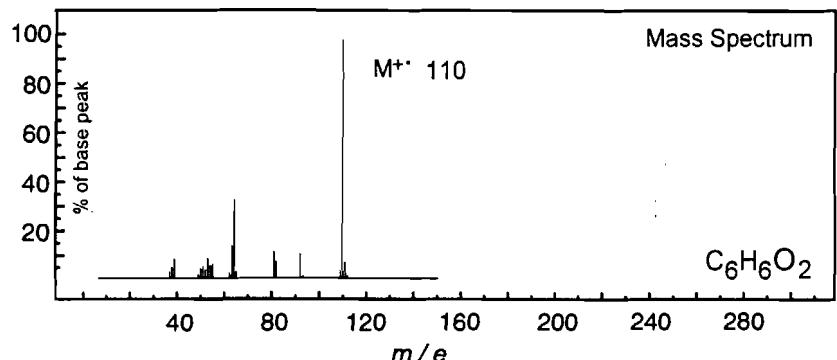
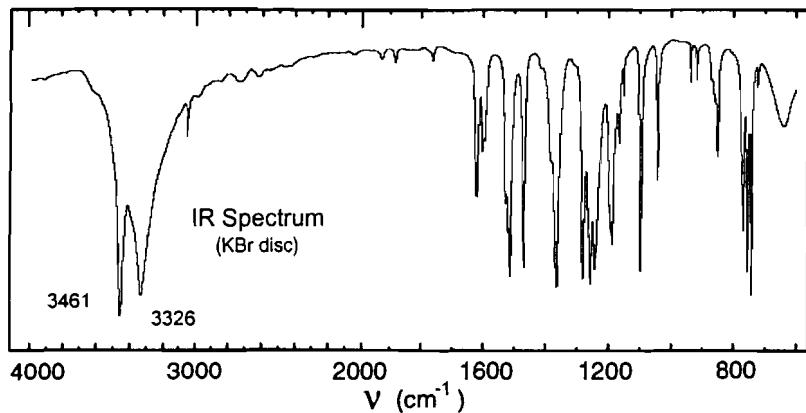
UV Spectrum

- $\lambda_{\text{max}} 253 \text{ nm } (\log_{10} \epsilon 2.6)$
- $\lambda_{\text{max}} 259 \text{ nm } (\log_{10} \epsilon 2.7)$
- $\lambda_{\text{max}} 264 \text{ nm } (\log_{10} \epsilon 2.5)$

solvent : ethanol



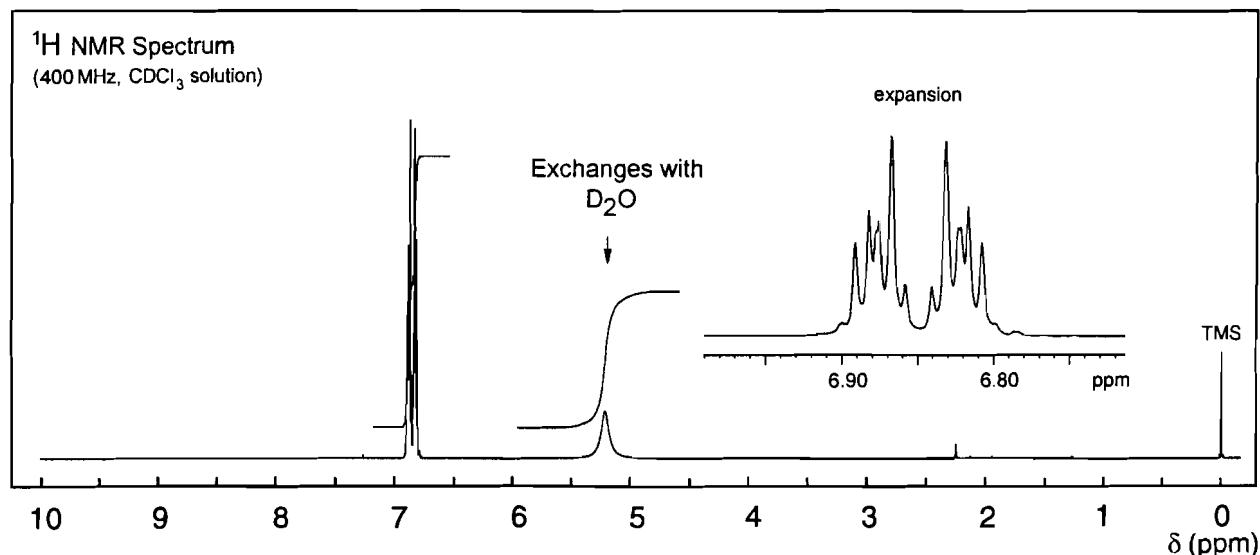
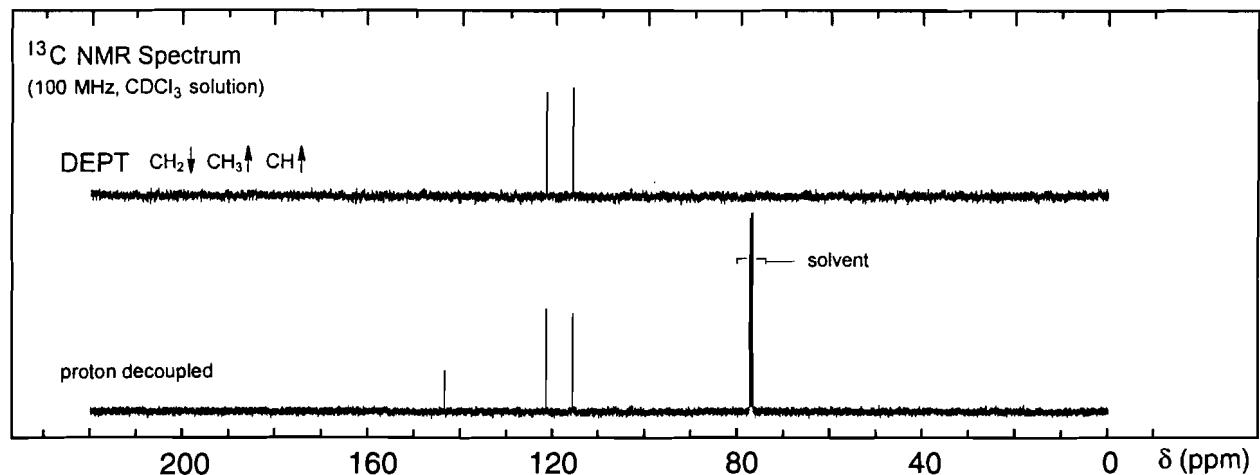
Problem 56



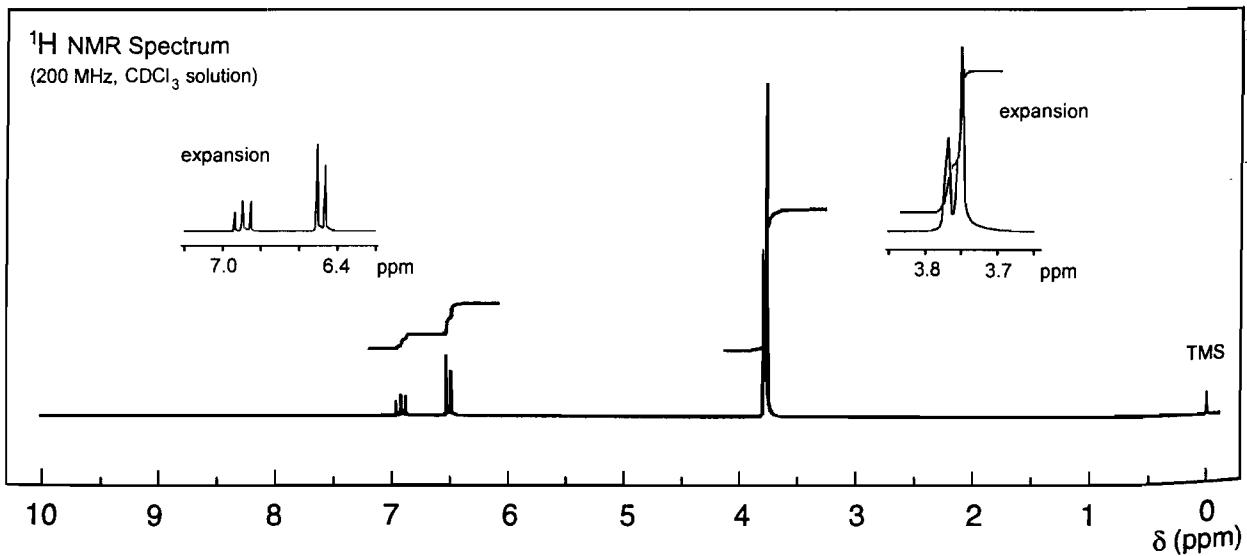
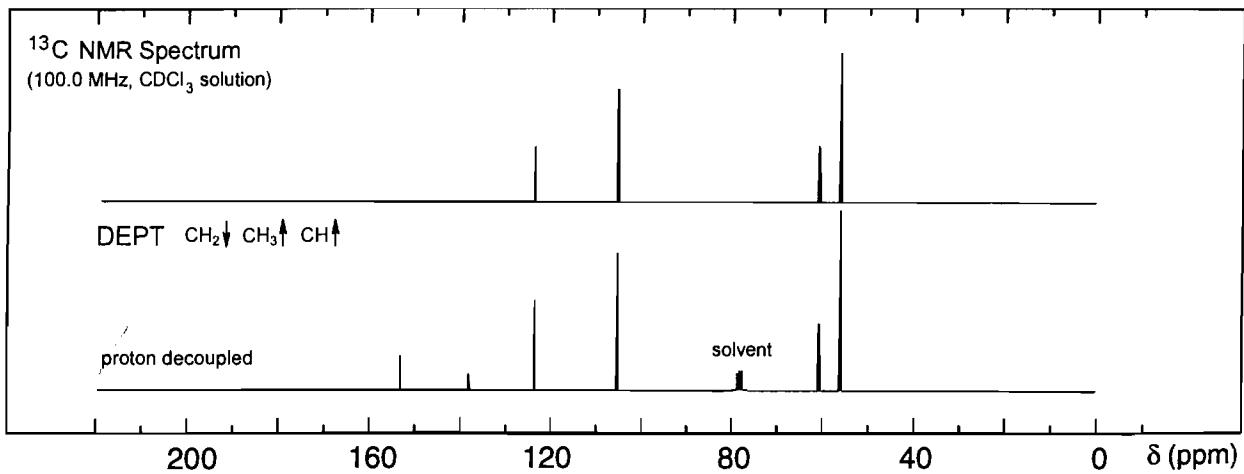
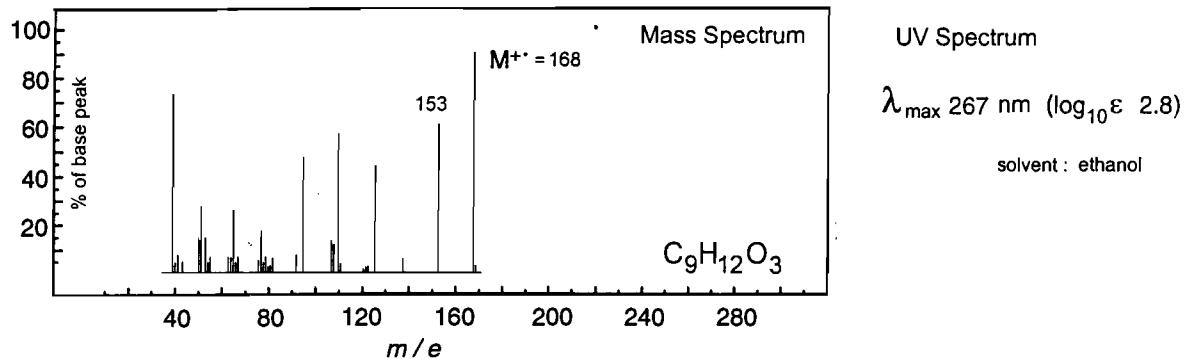
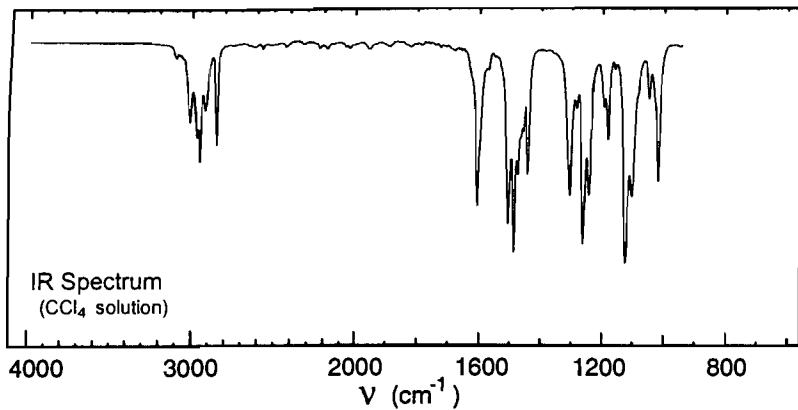
UV Spectrum

λ_{max} 225 nm ($\log_{10} \epsilon$ 3.5)
 λ_{max} 276 nm ($\log_{10} \epsilon$ 3.4)
 λ_{max} 283 nm ($\log_{10} \epsilon$ 3.3)

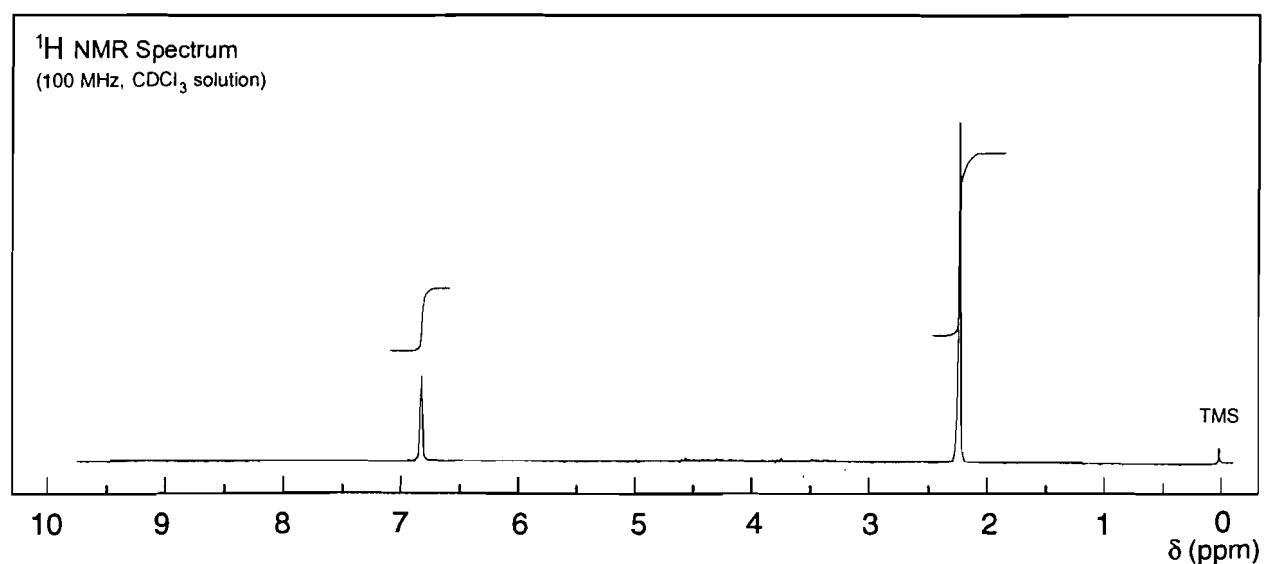
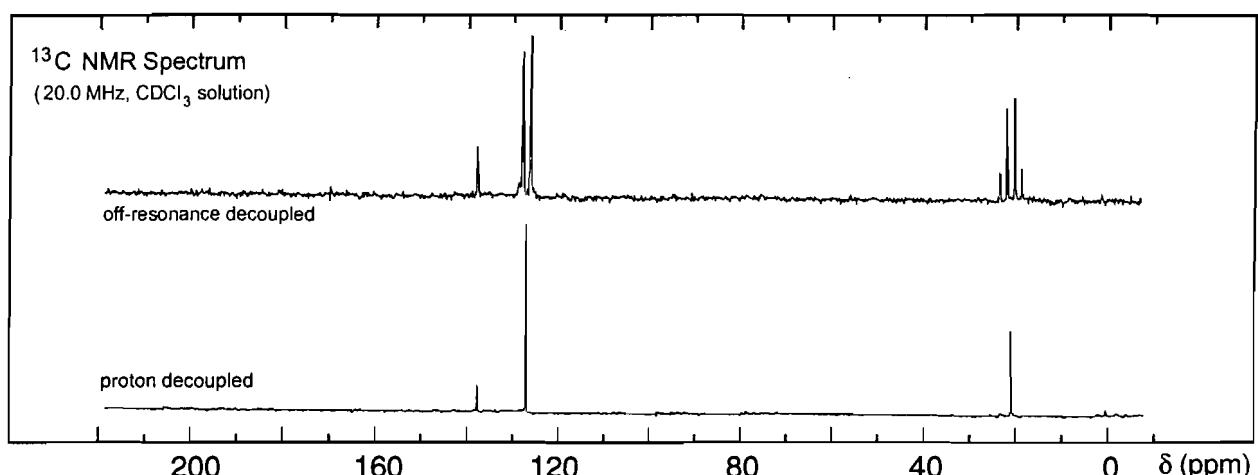
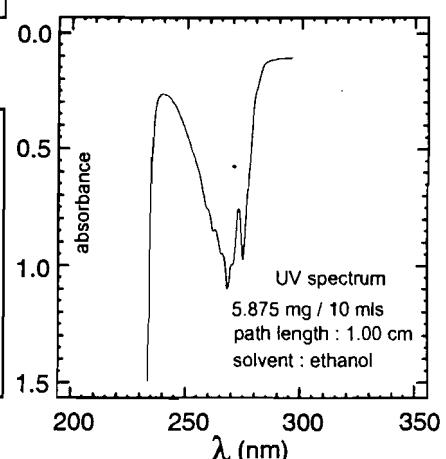
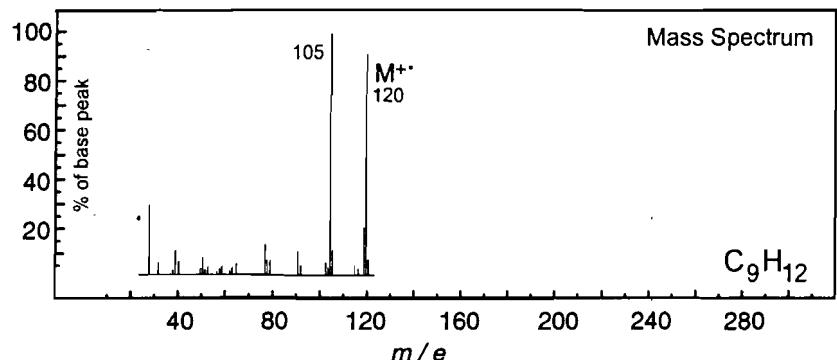
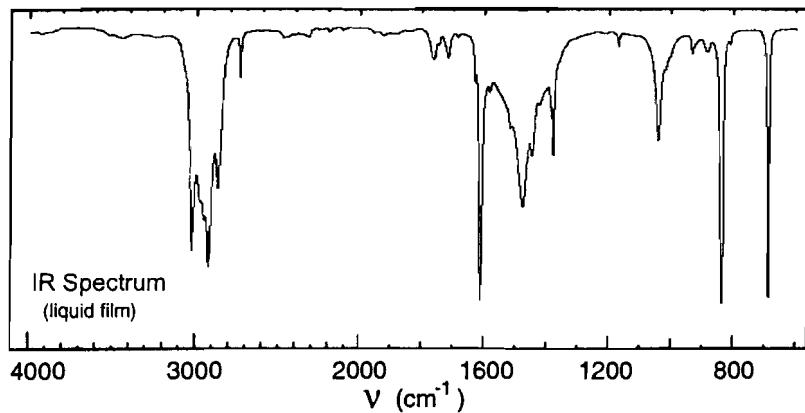
solvent : methanol



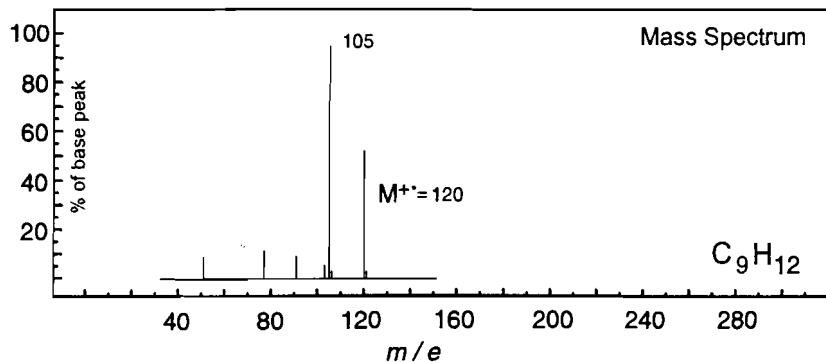
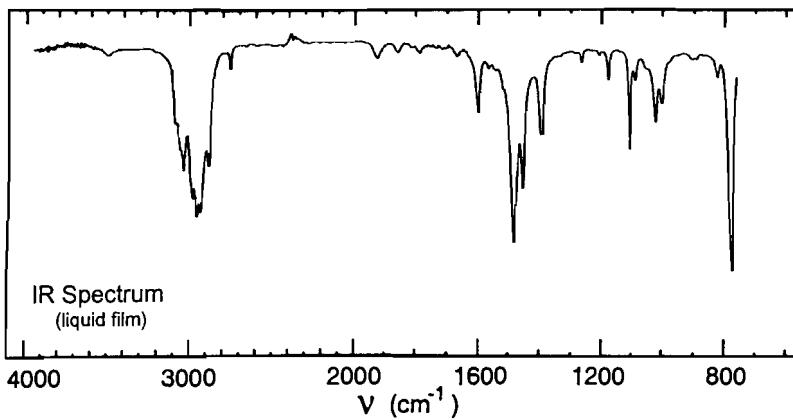
Problem 57



Problem 58



Problem 59

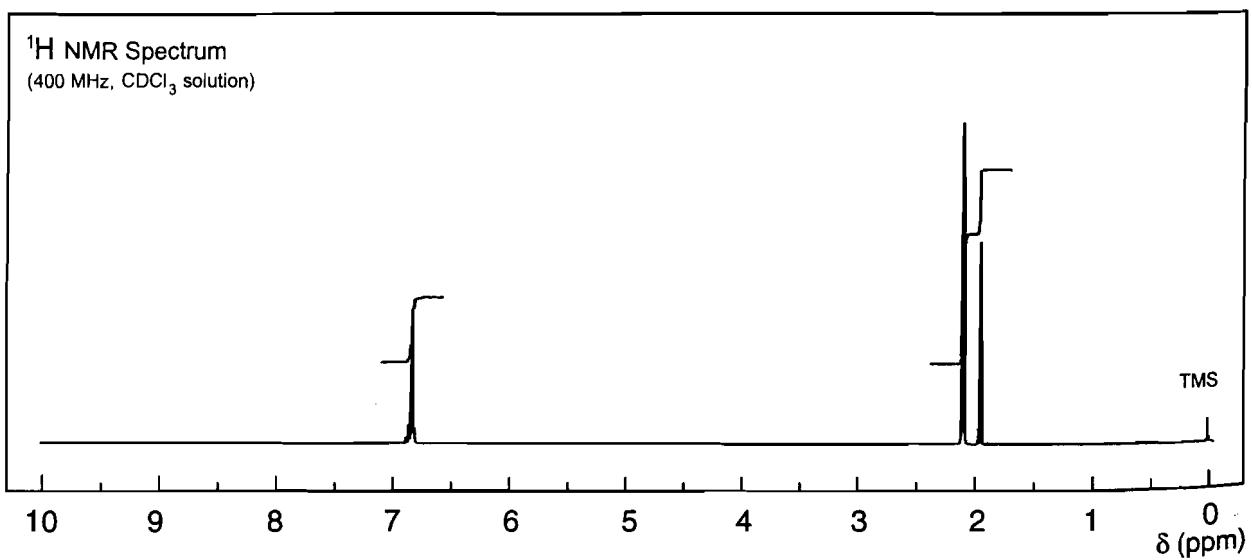
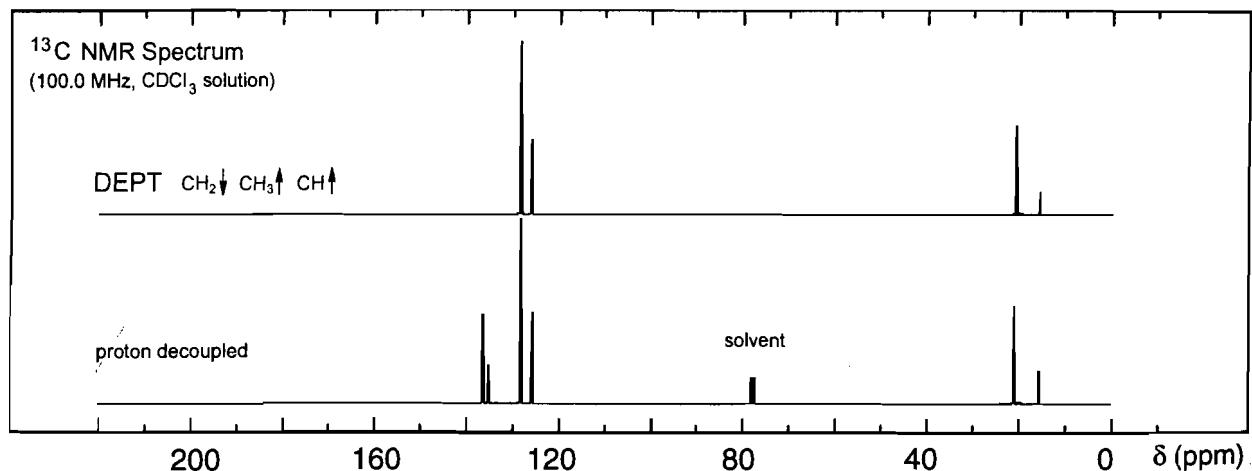


UV Spectrum

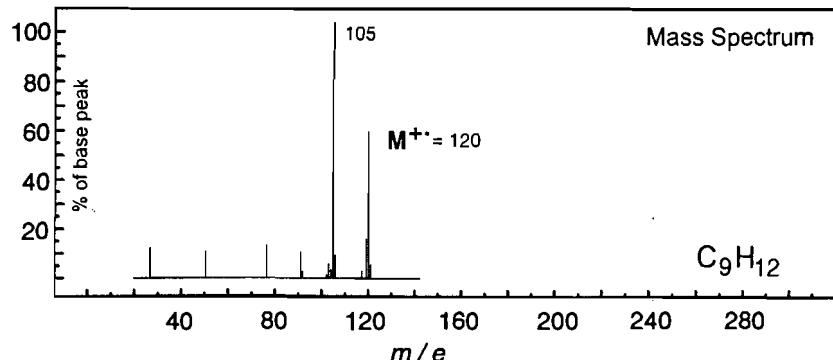
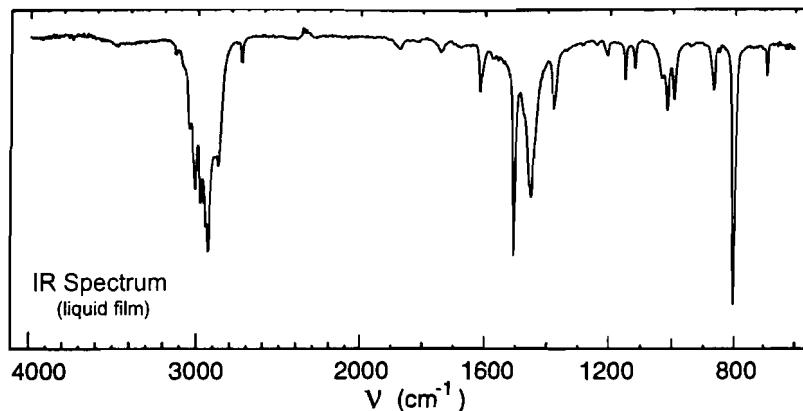
$\lambda_{\text{max}} 261 \text{ nm } (\log_{10} \epsilon 2.7)$

$\lambda_{\text{max}} 269 \text{ nm } (\log_{10} \epsilon 2.5)$

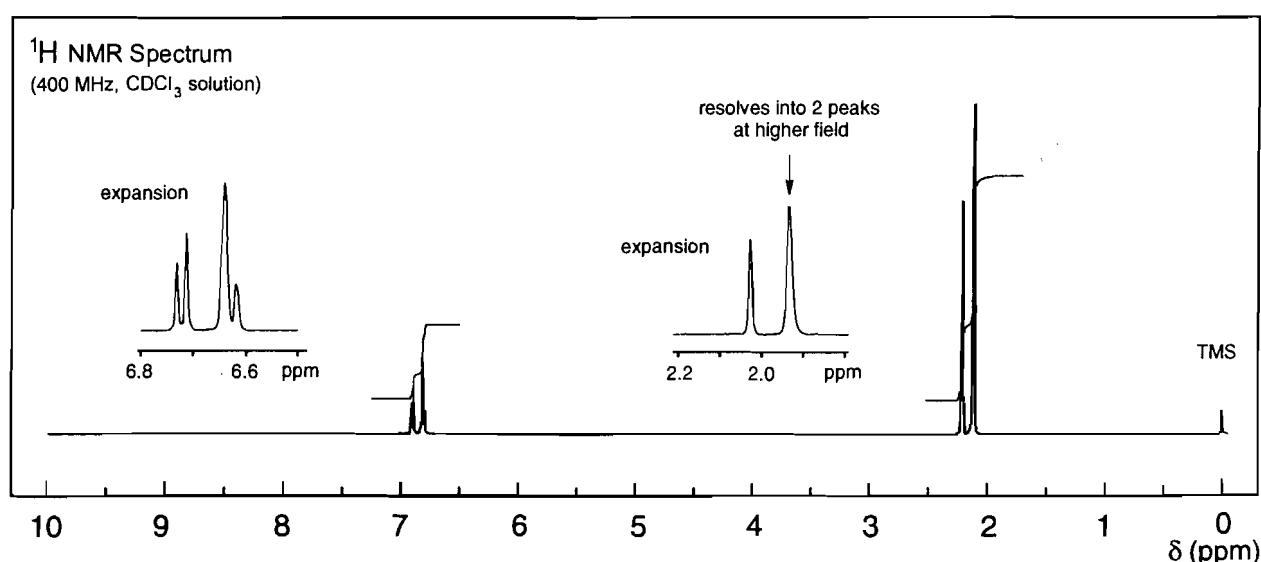
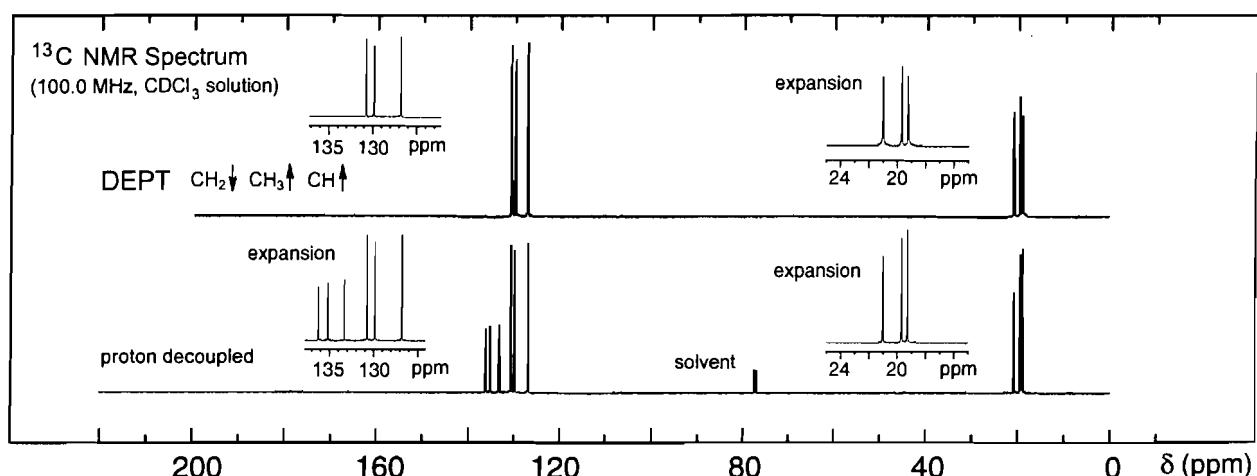
solvent: methanol.



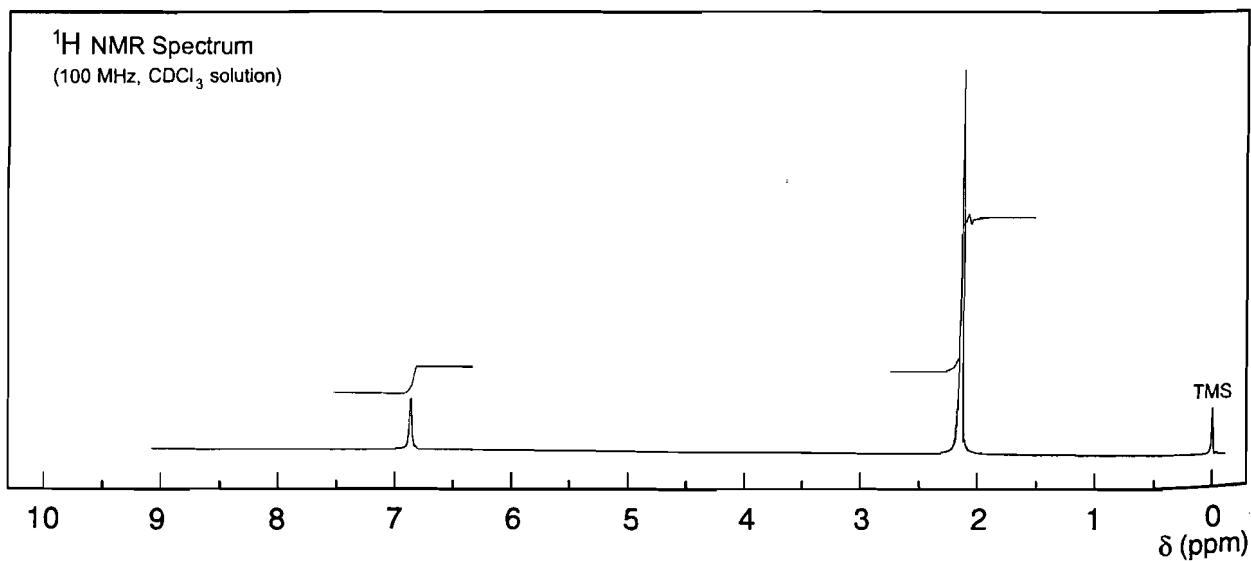
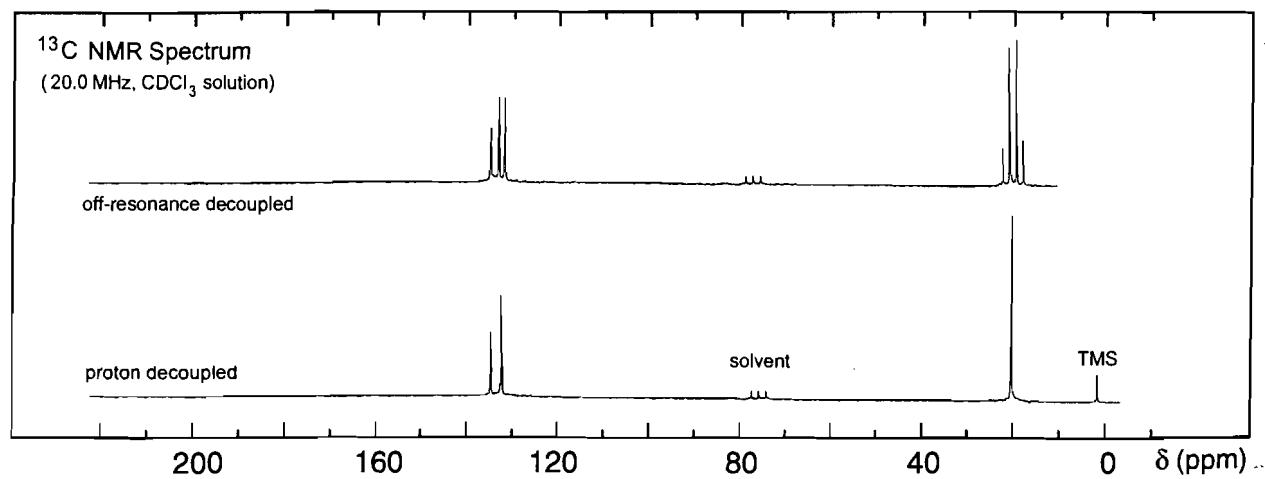
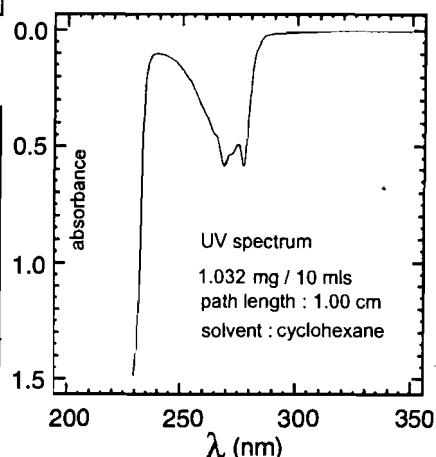
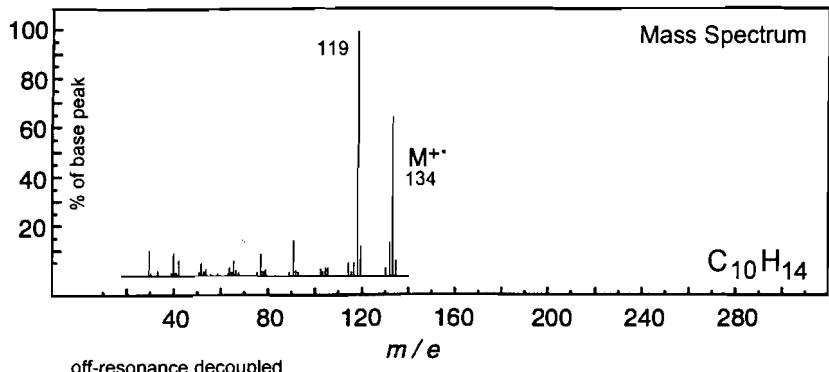
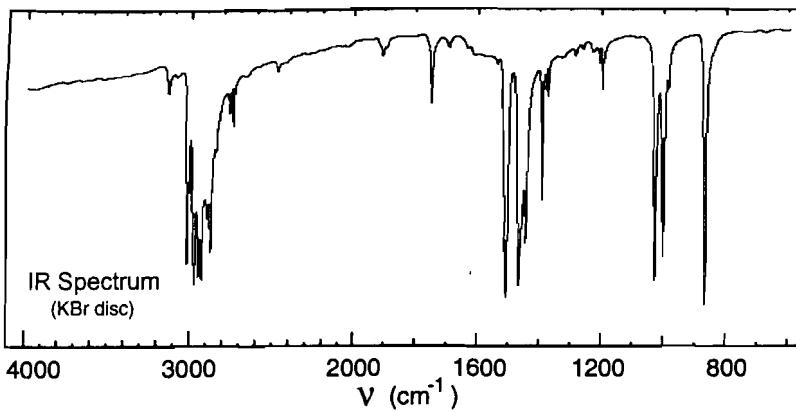
Problem 60



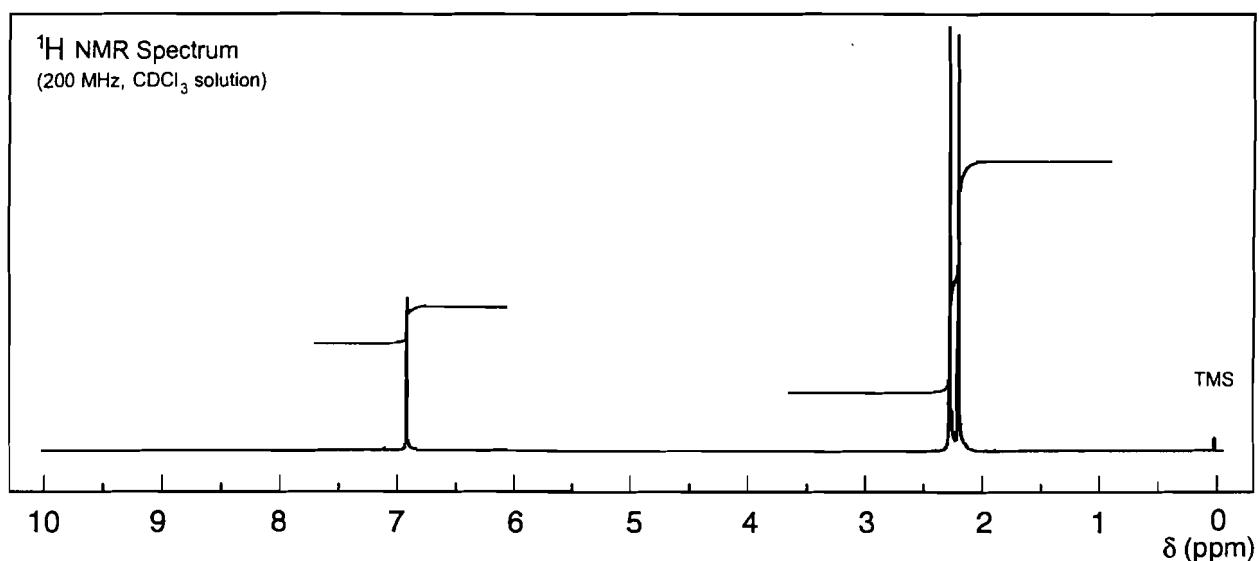
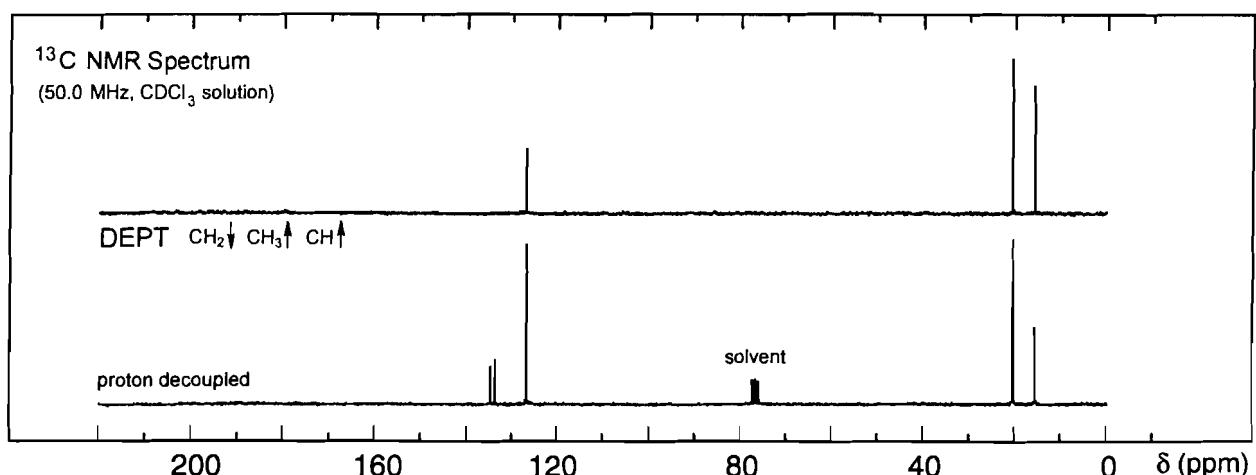
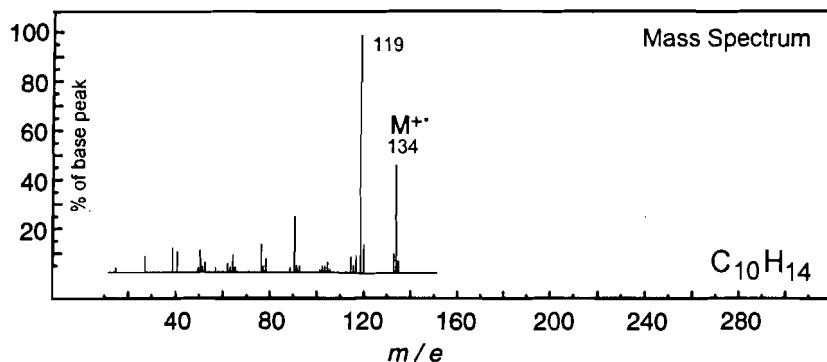
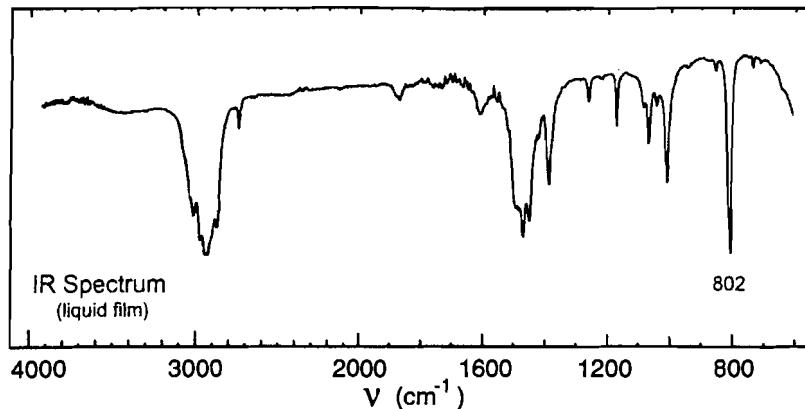
UV Spectrum
 $\lambda_{\text{max}} 270 \text{ nm } (\log_{10} \epsilon 2.6)$
solvent: methanol



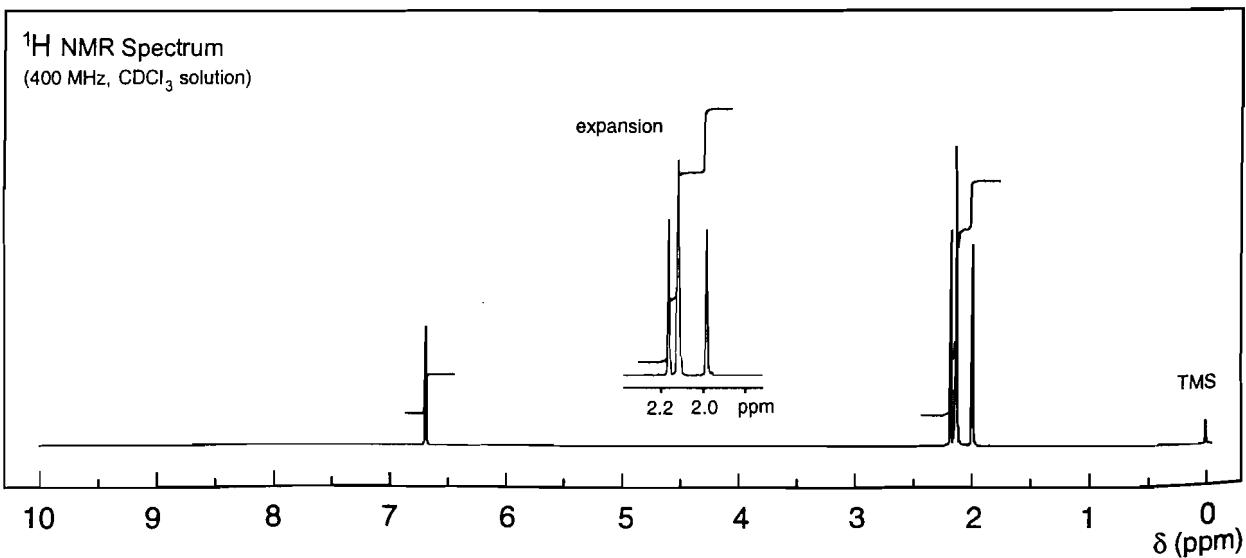
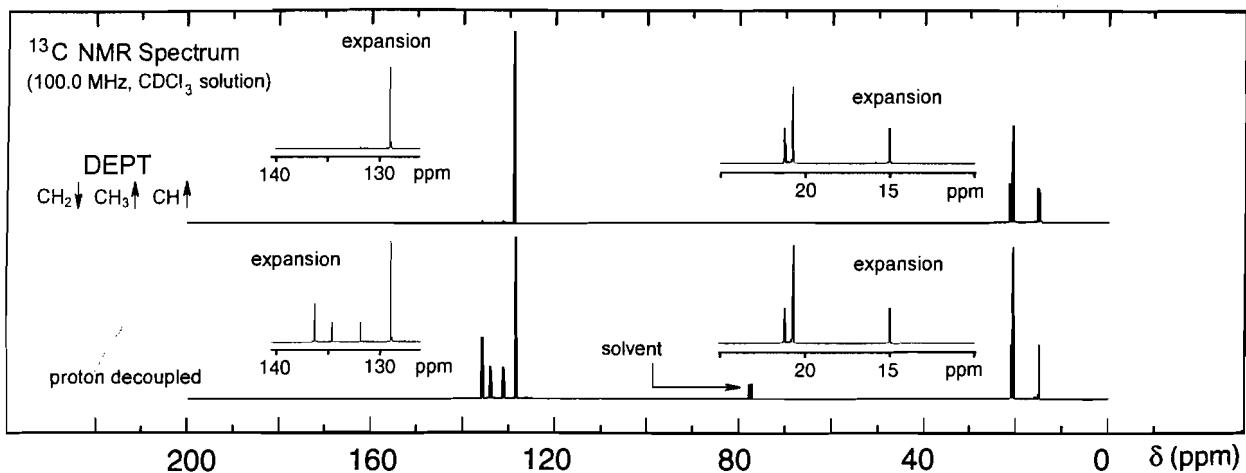
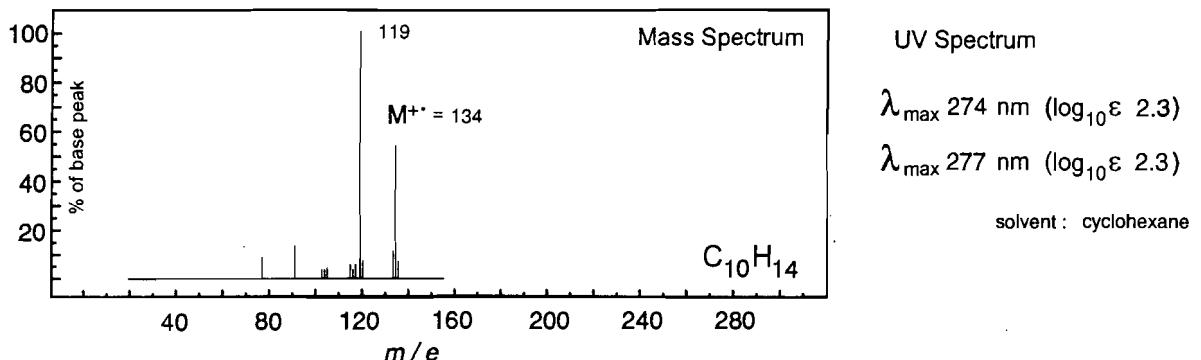
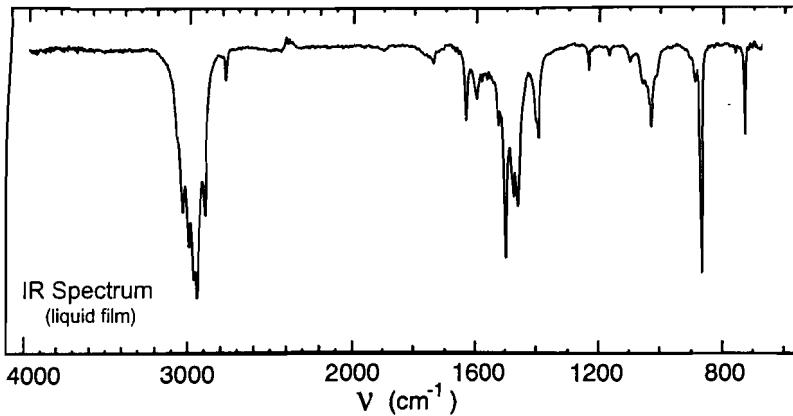
Problem 61



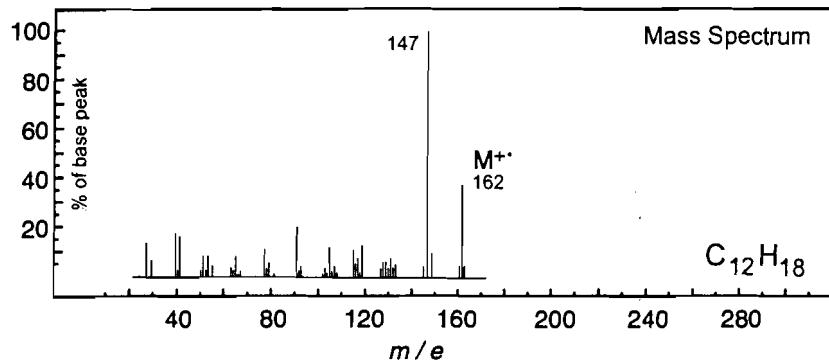
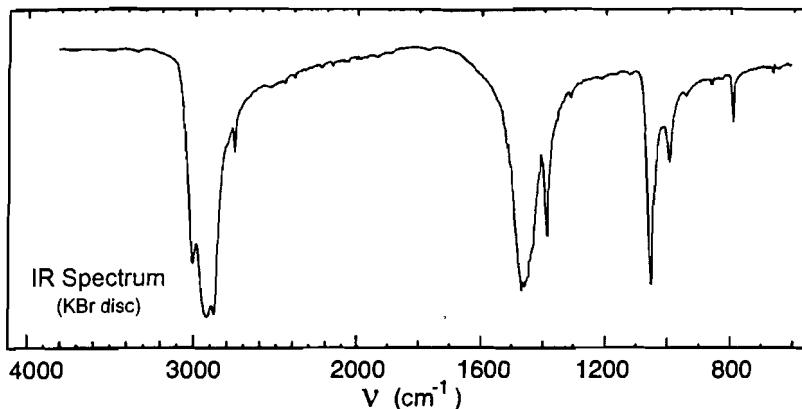
Problem 62



Problem 63



Problem 64



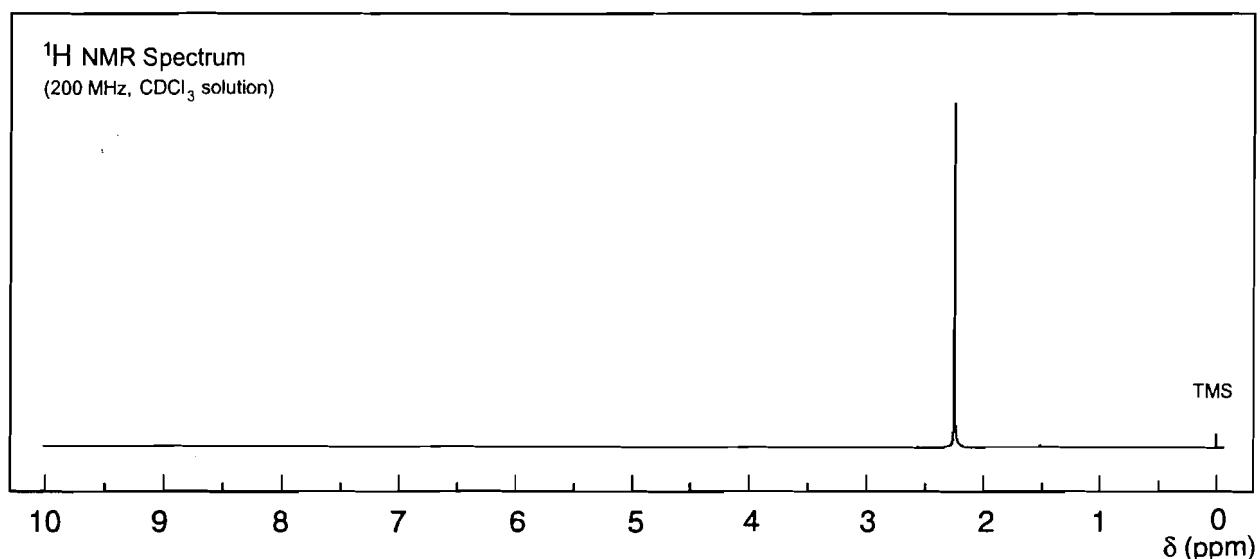
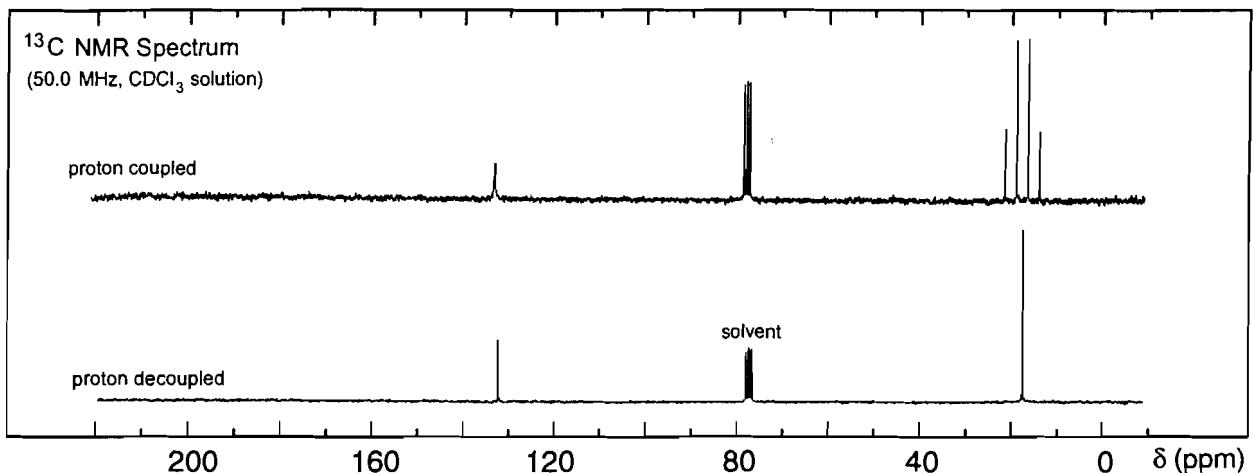
UV Spectrum

λ_{max} 278 nm ($\log_{10}\epsilon$ 2.4)

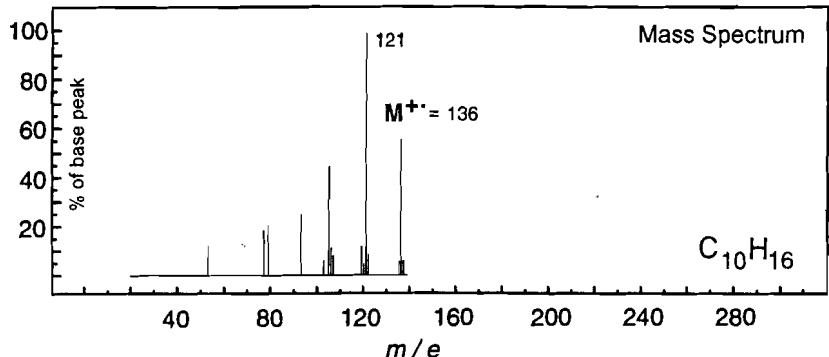
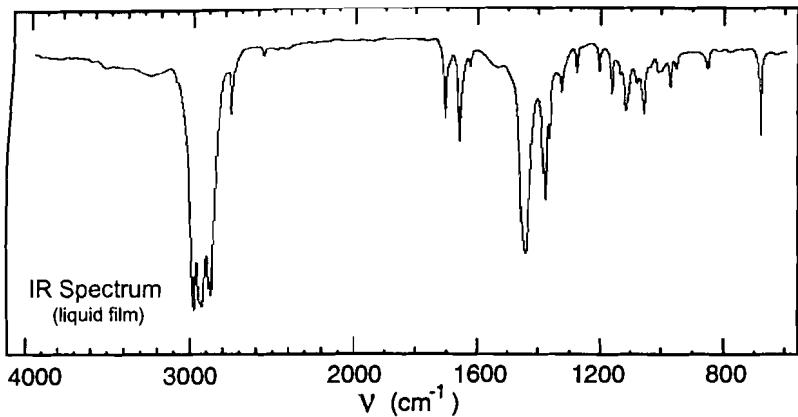
λ_{max} 274 nm ($\log_{10}\epsilon$ 2.4)

λ_{max} 270 nm ($\log_{10}\epsilon$ 2.5)

solvent : methanol



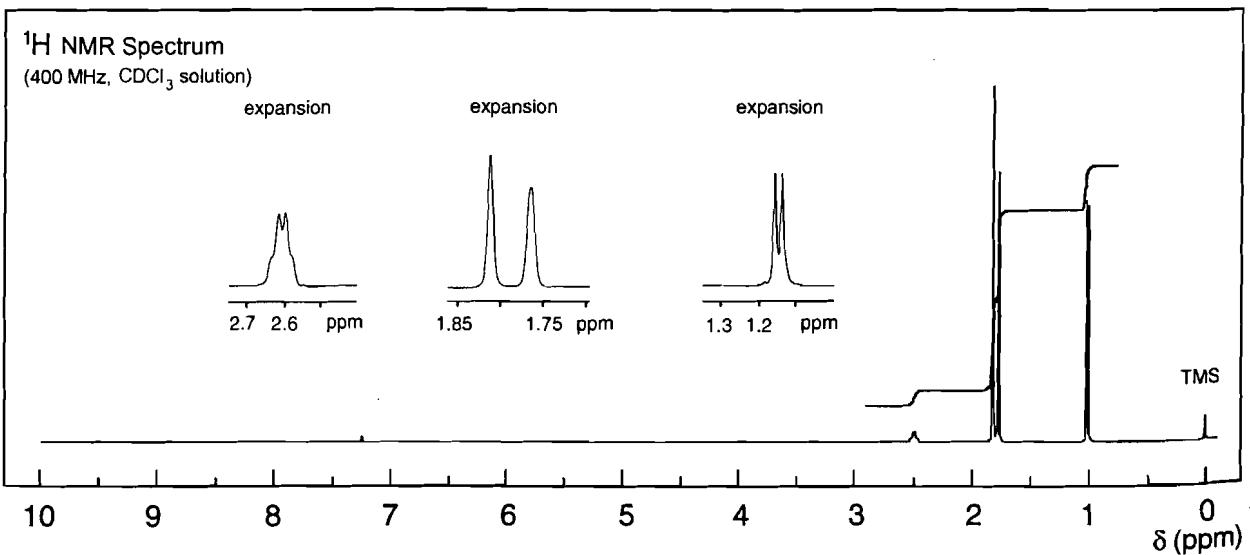
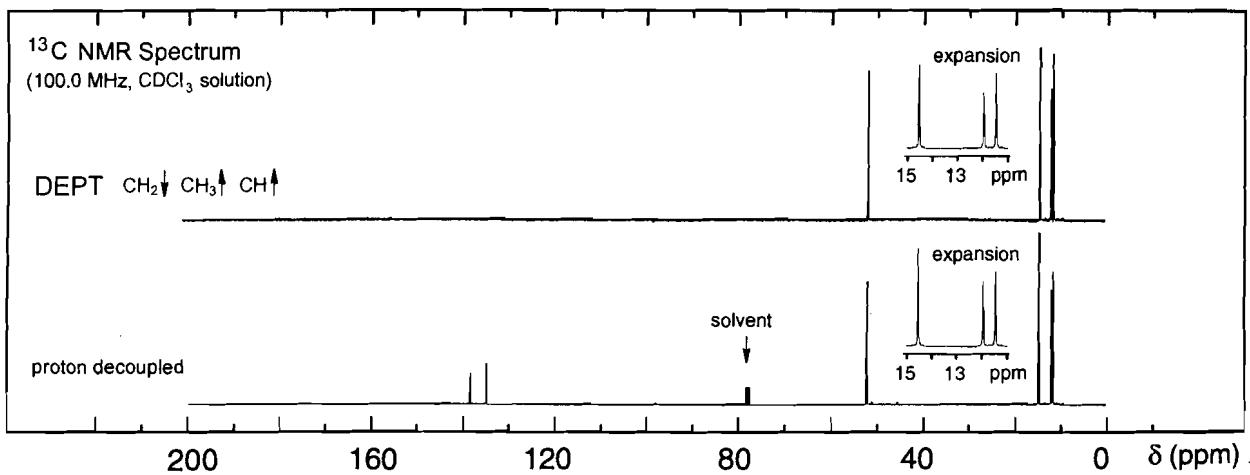
Problem 65



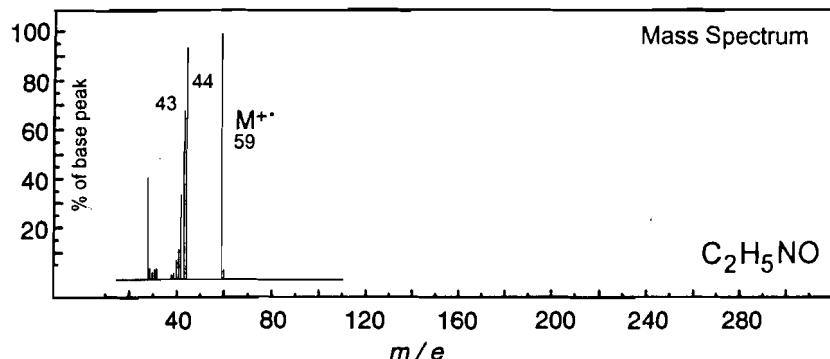
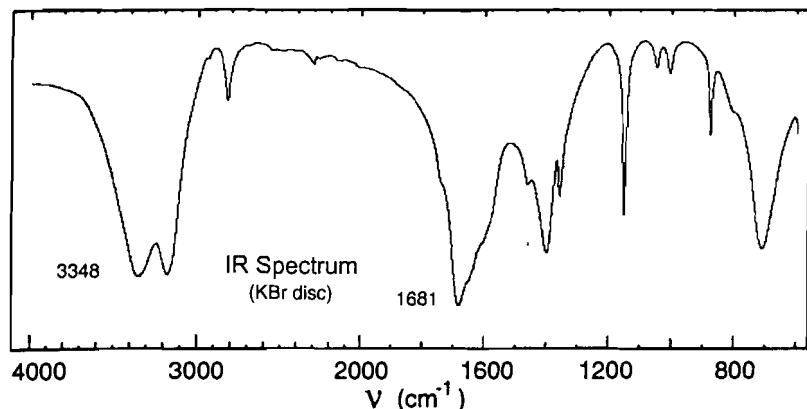
UV Spectrum

$\lambda_{\text{max}} 232 \text{ nm } (\log_{10} \epsilon 3.4)$
 $\lambda_{\text{max}} 248 \text{ nm } (\log_{10} \epsilon 3.5)$
 $\lambda_{\text{max}} 265 \text{ nm } (\log_{10} \epsilon 3.4)$

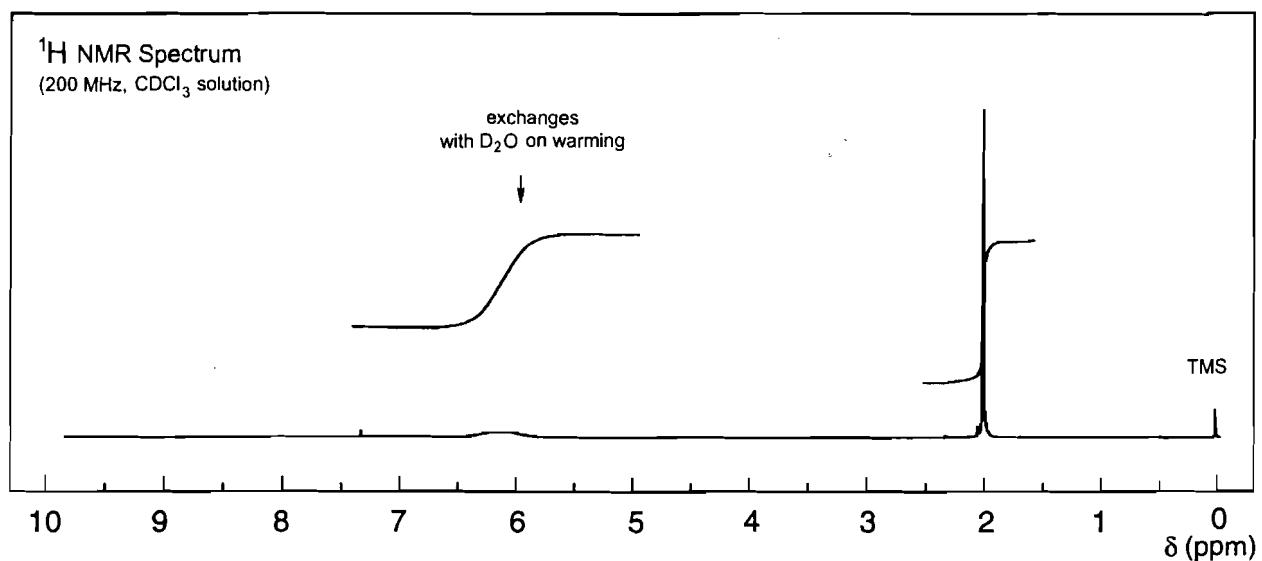
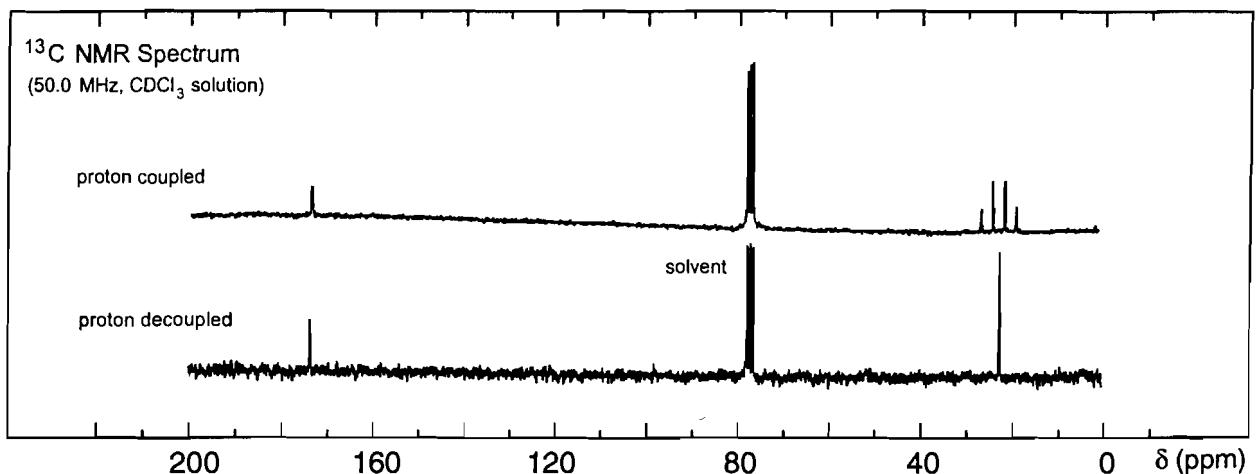
solvent: isoctane



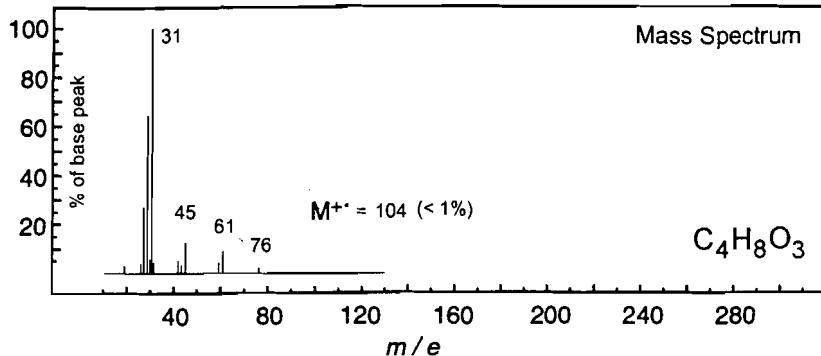
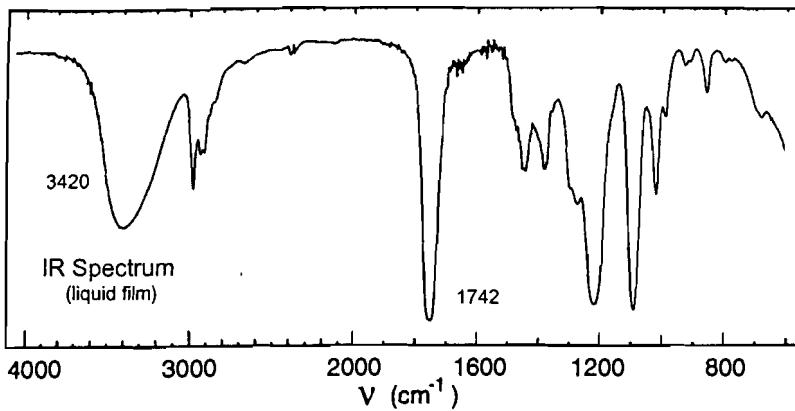
Problem 66



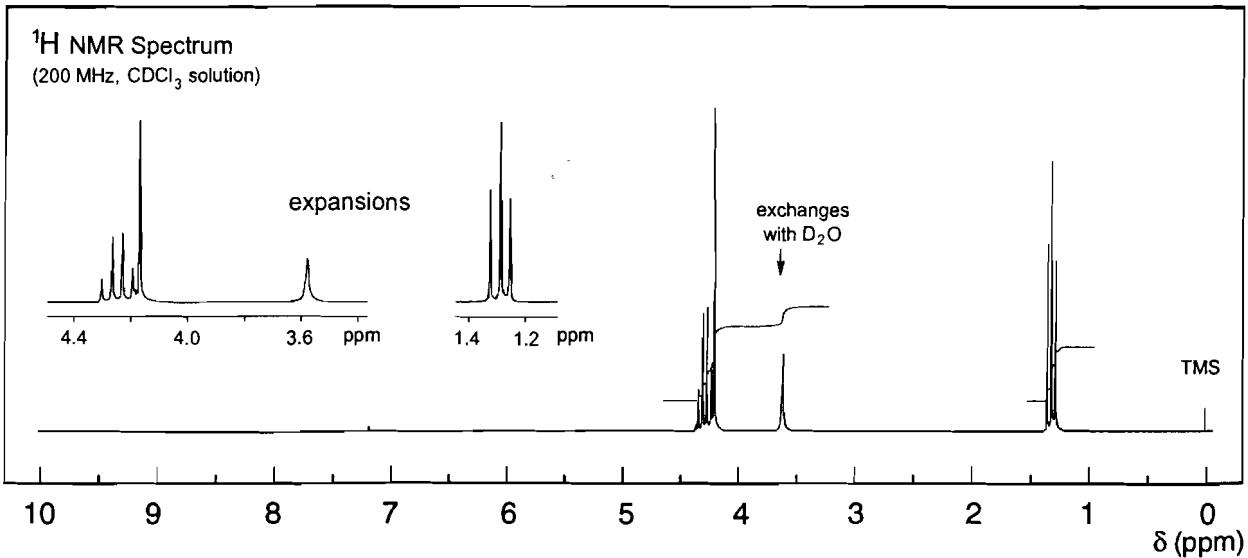
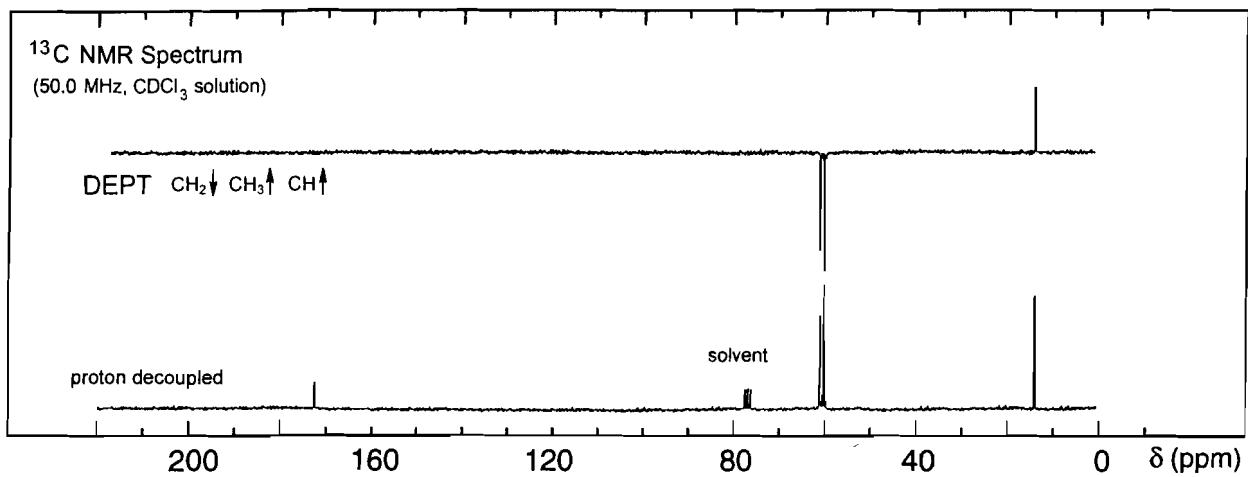
No significant UV absorption above 210 nm



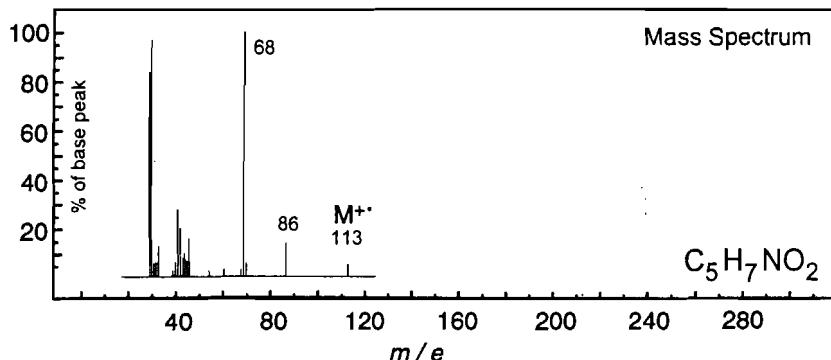
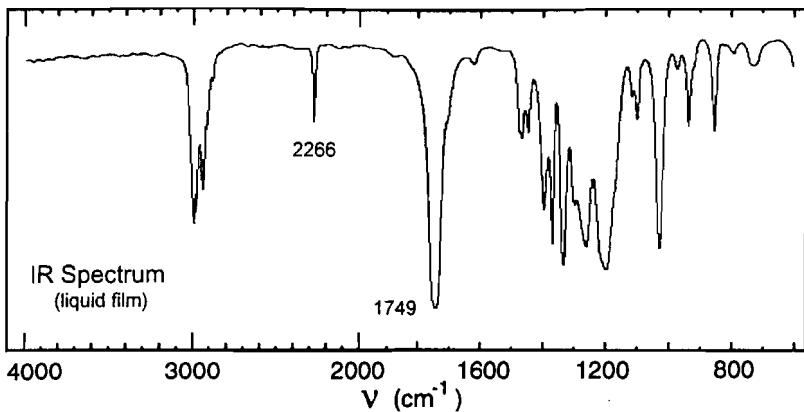
Problem 67



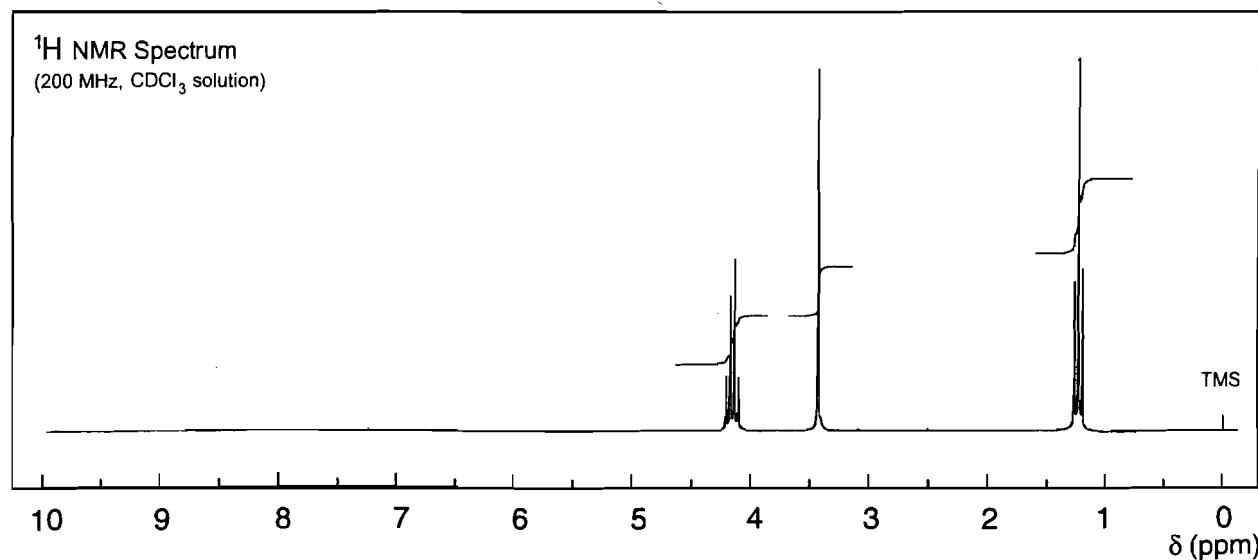
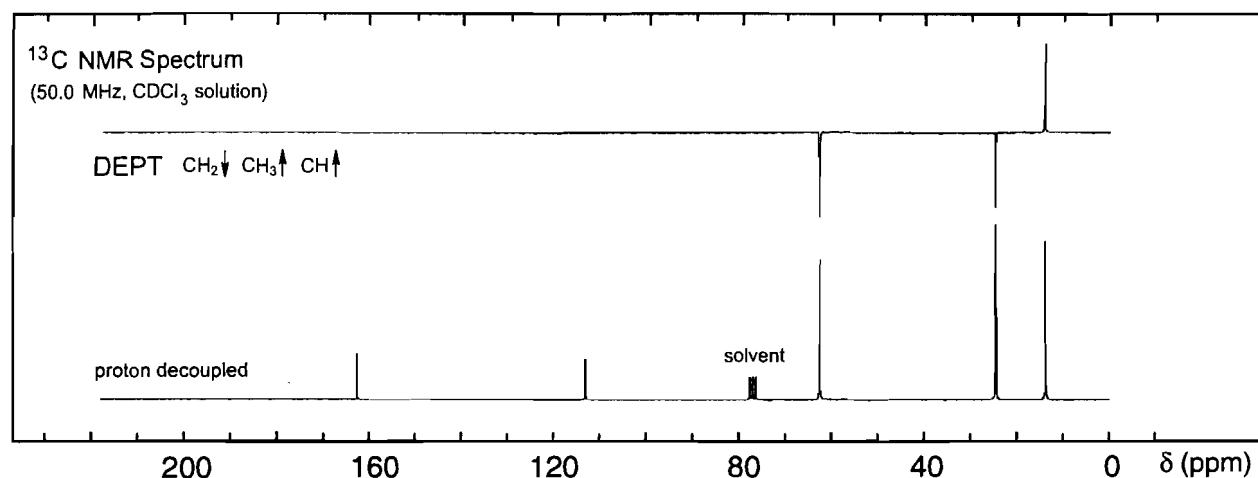
No significant UV absorption above 220 nm



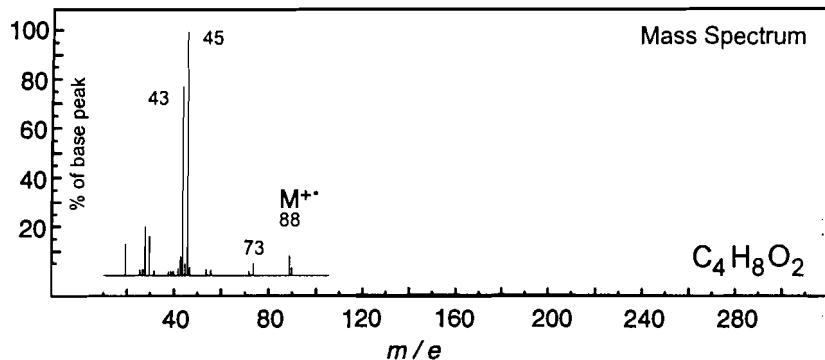
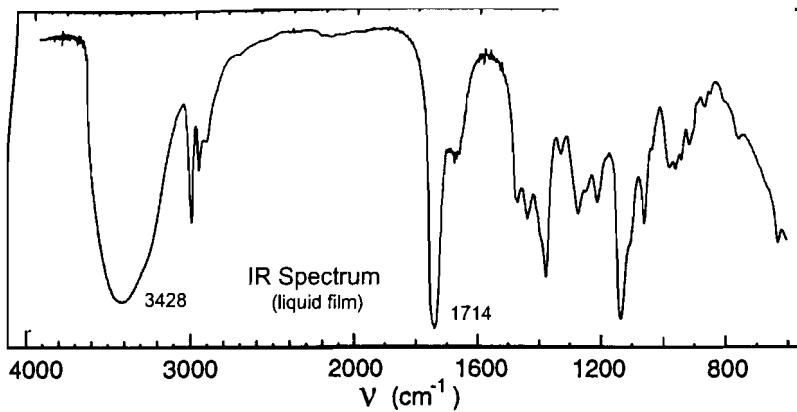
Problem 68



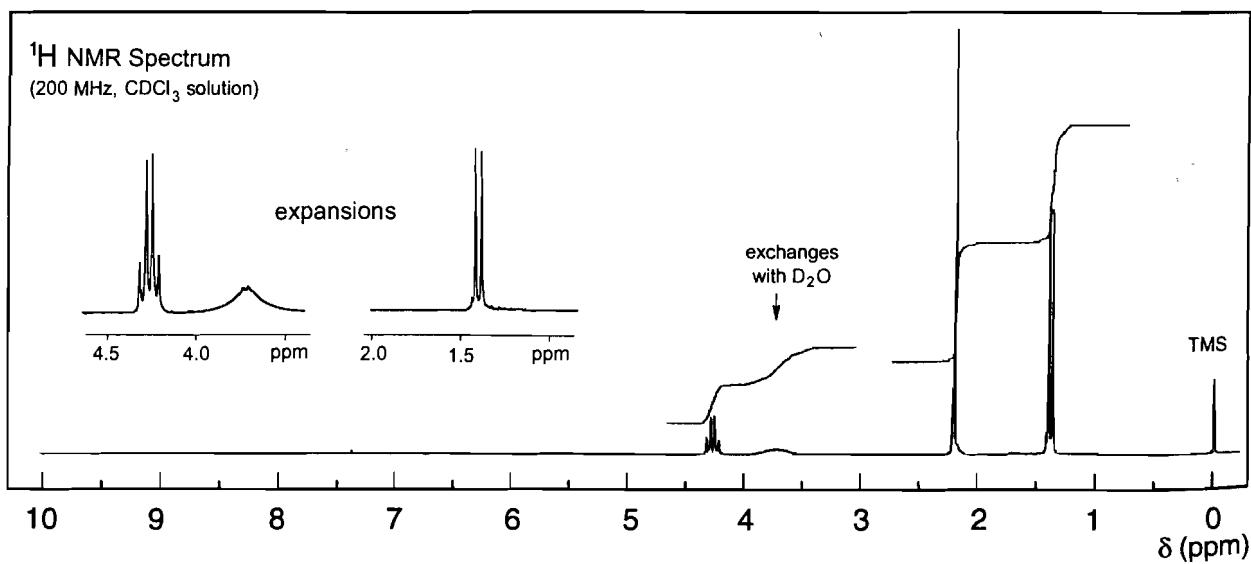
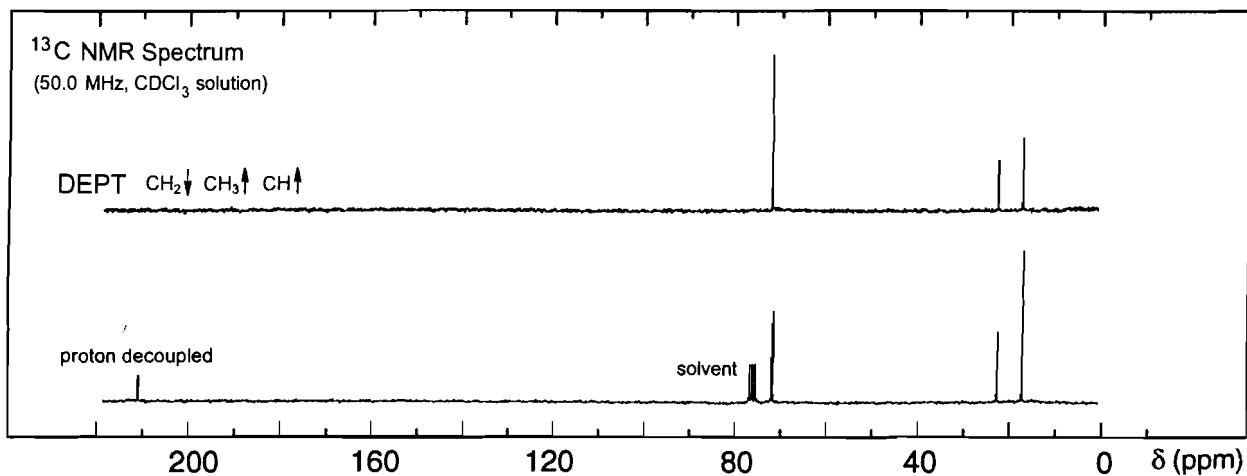
No significant UV absorption above 220 nm



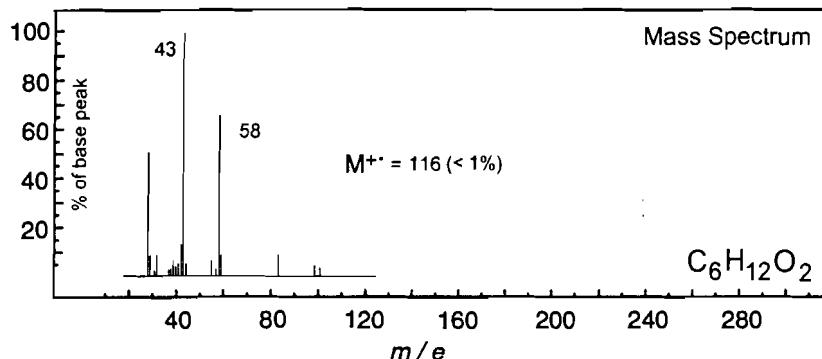
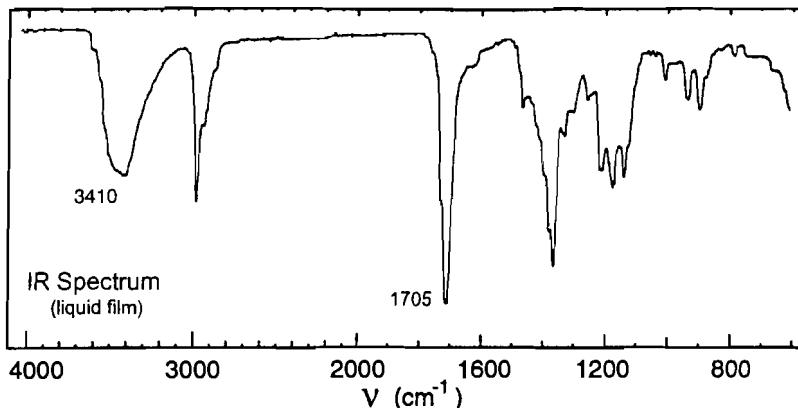
Problem 69



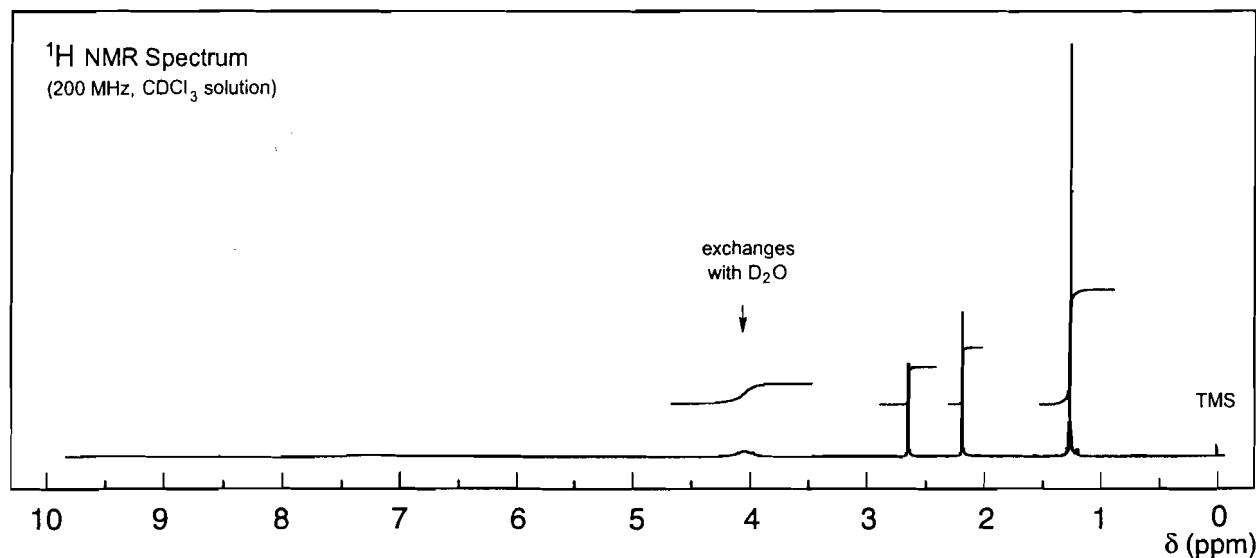
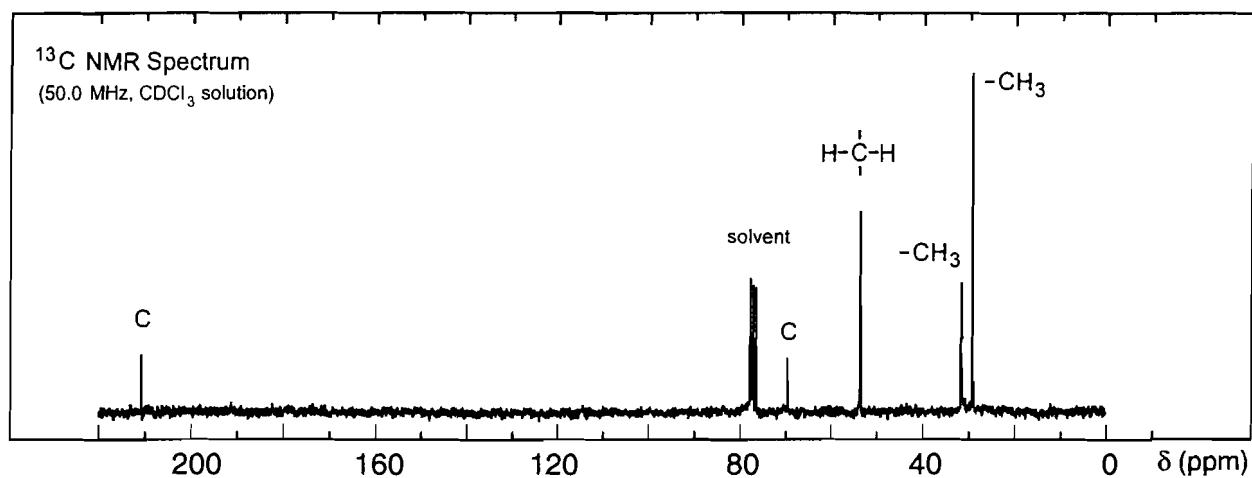
No strong UV absorption above 220 nm



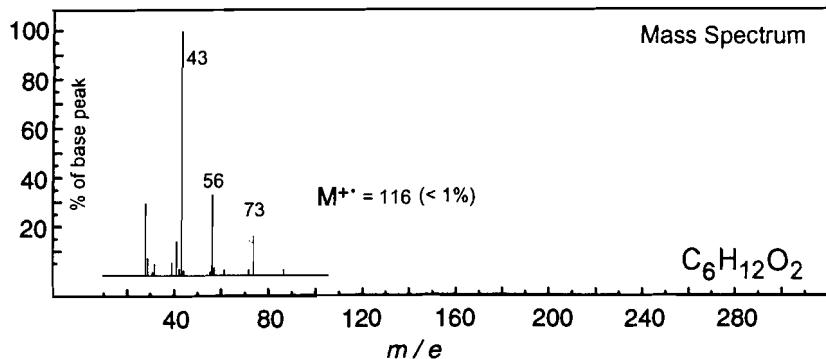
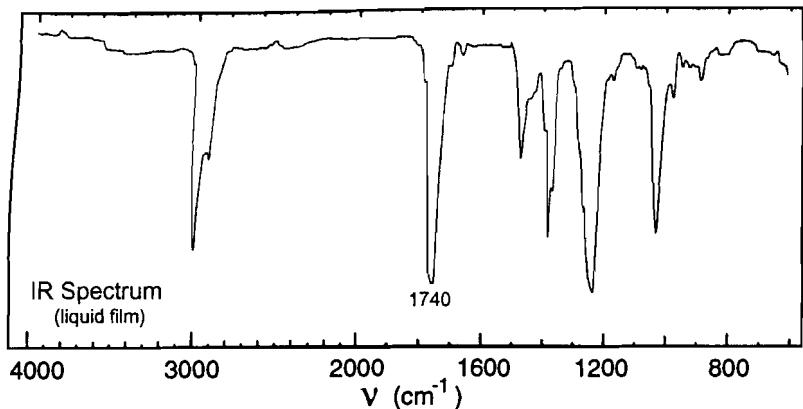
Problem 70



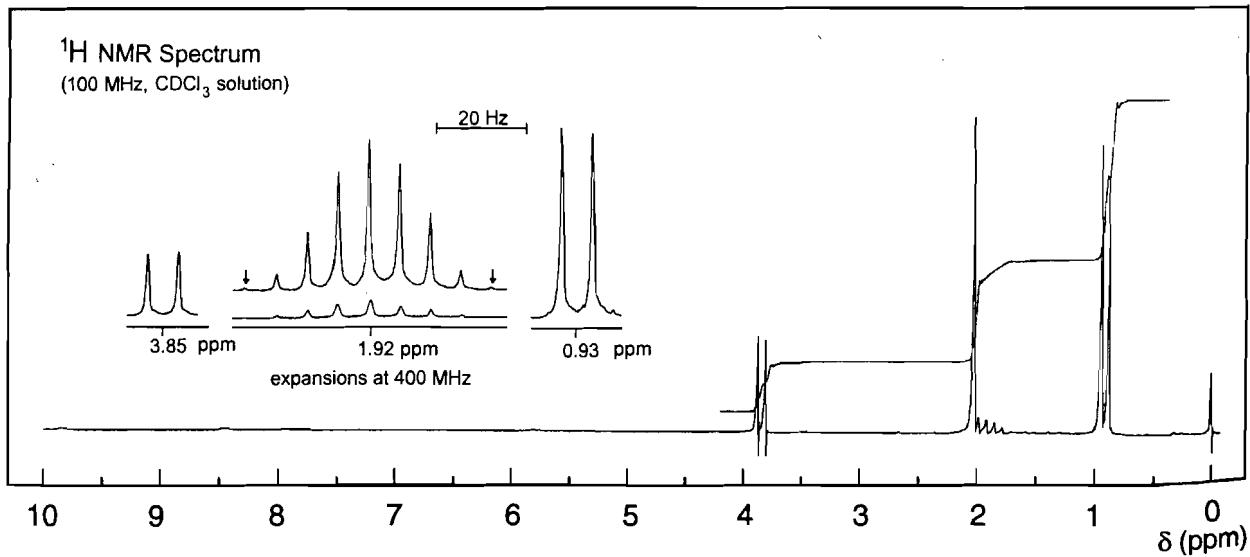
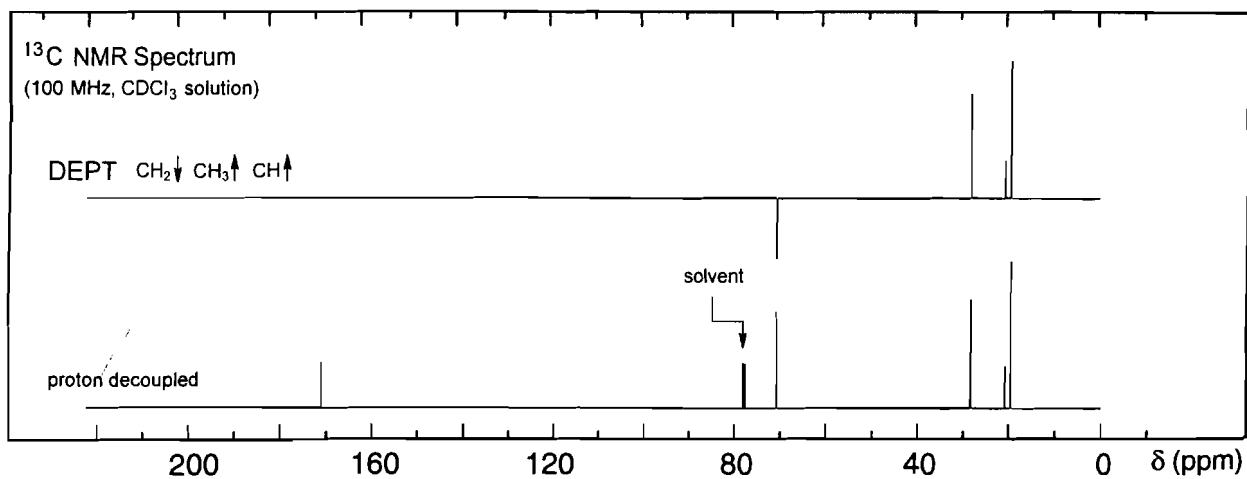
UV Spectrum
 $\lambda_{\text{max}} 283 \text{ nm } (\log_{10} \epsilon 1.4)$
 solvent : hexane



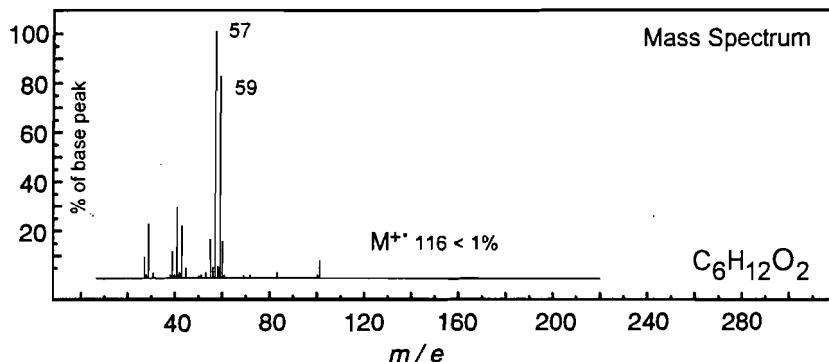
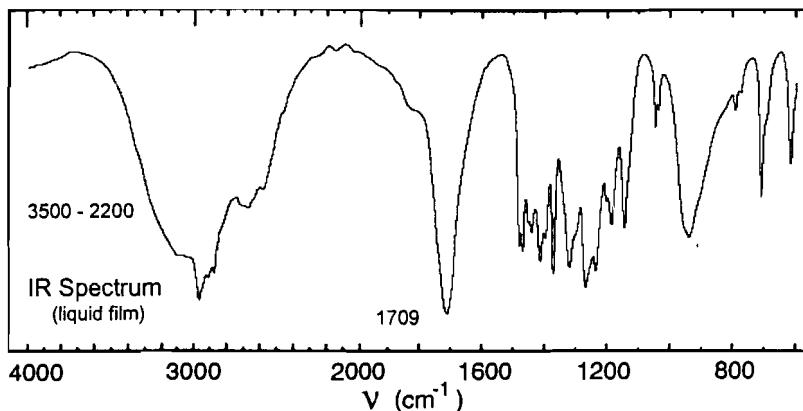
Problem 71



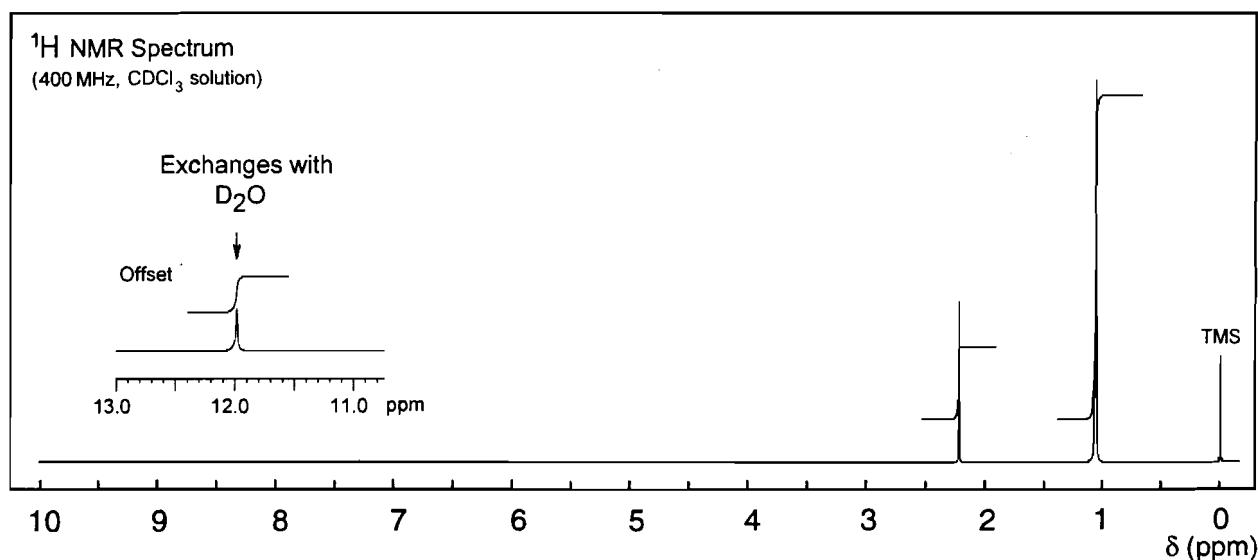
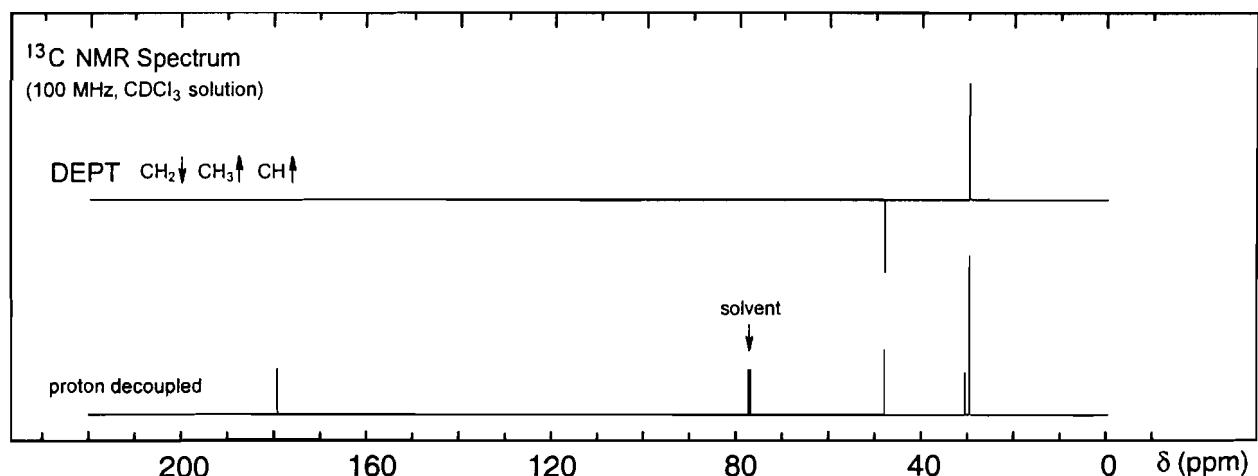
No significant UV absorption above 220 nm



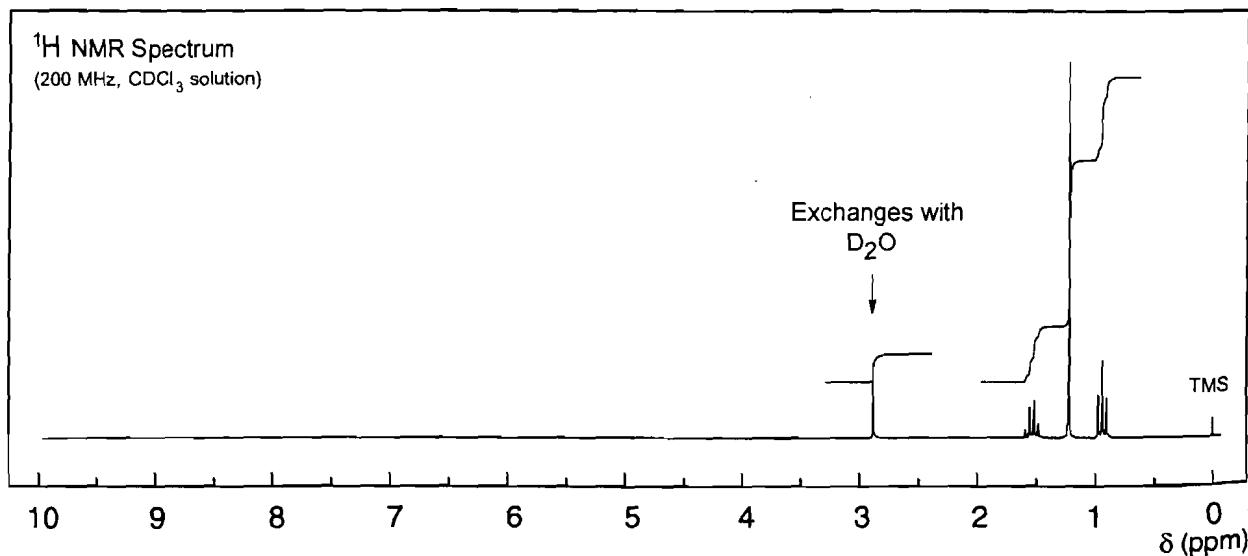
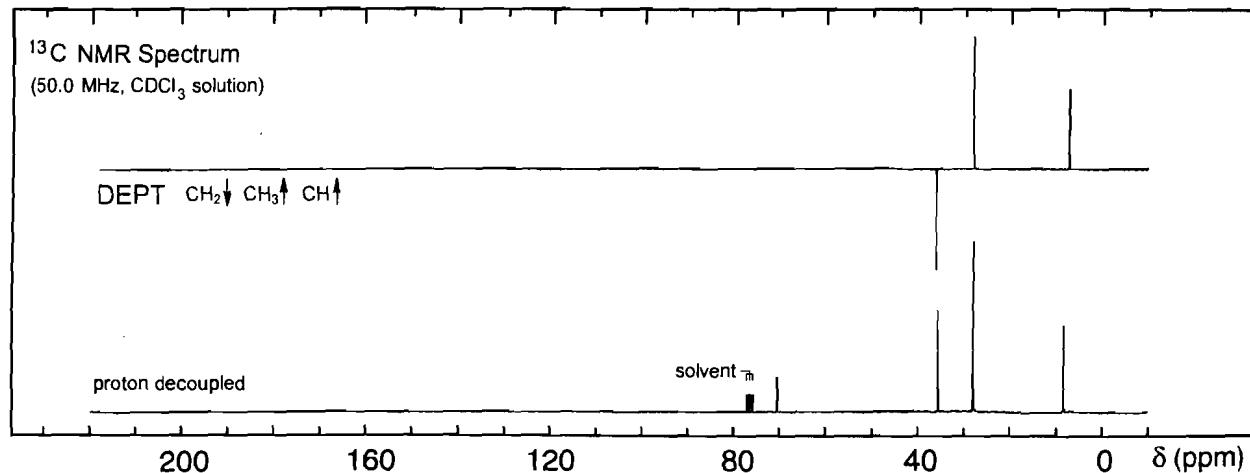
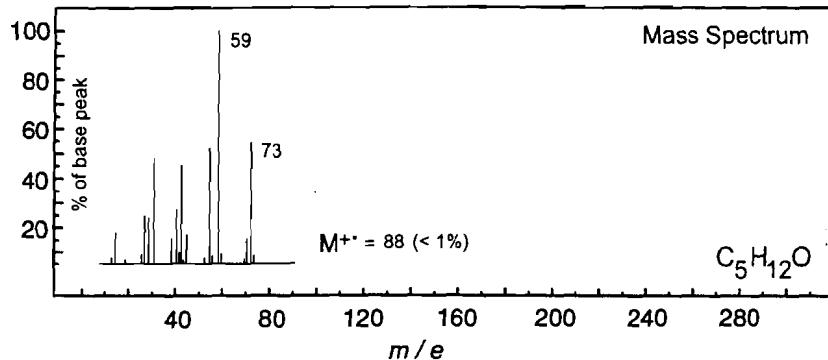
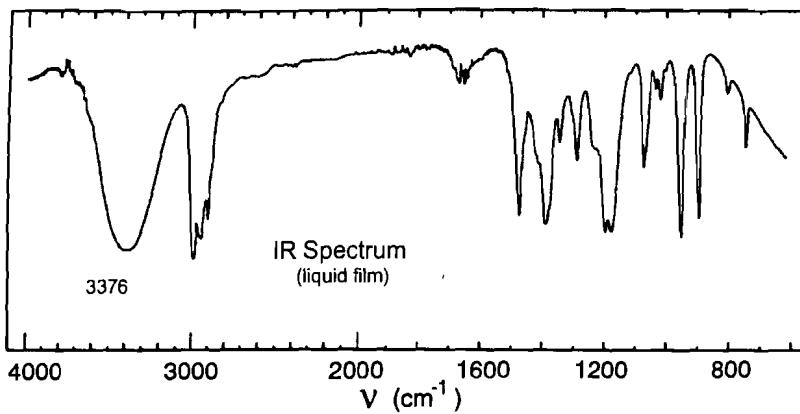
Problem 72



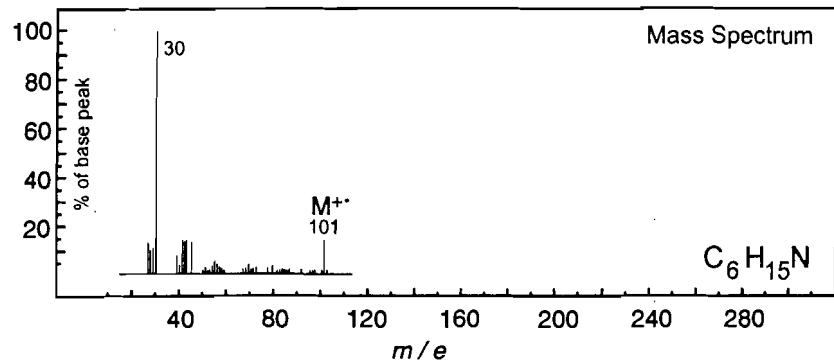
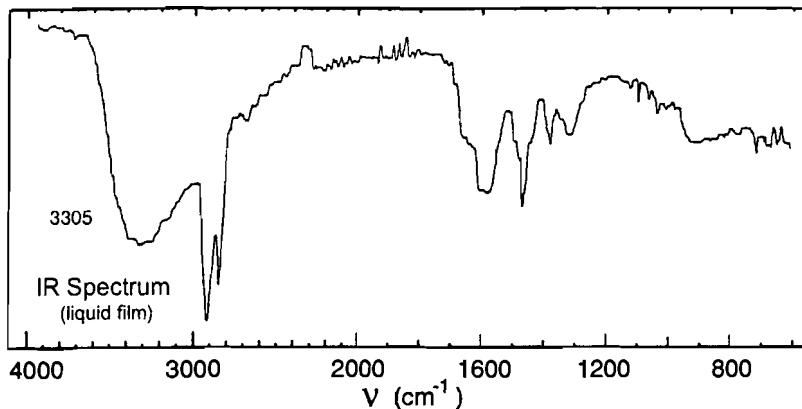
No significant UV absorption above 220 nm



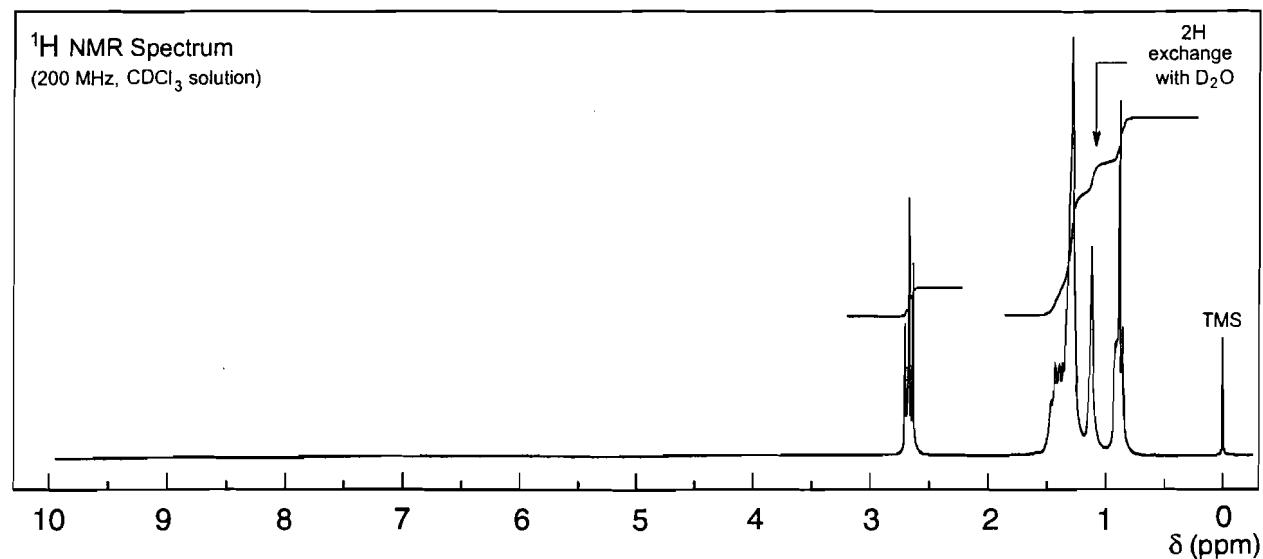
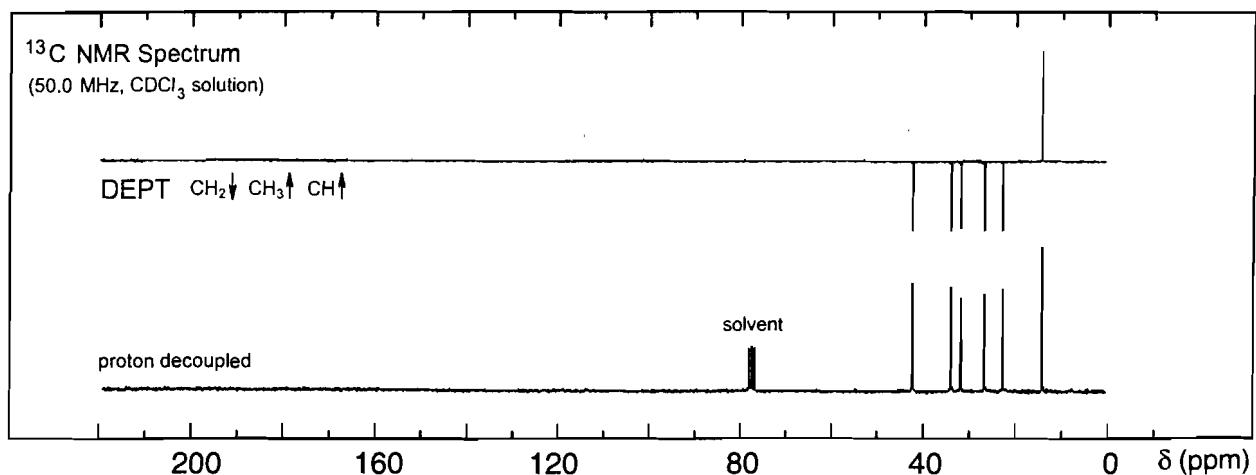
Problem 73



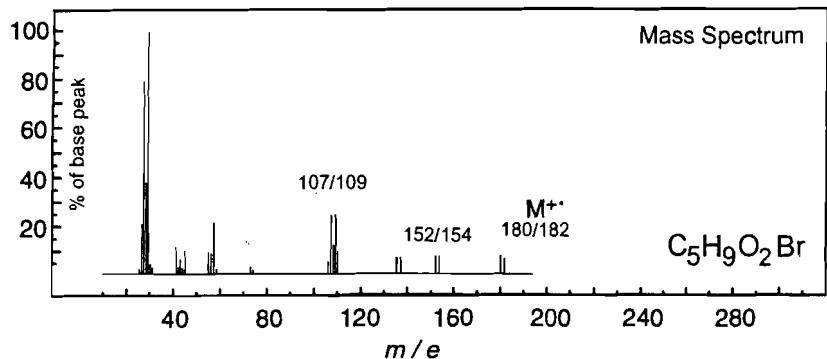
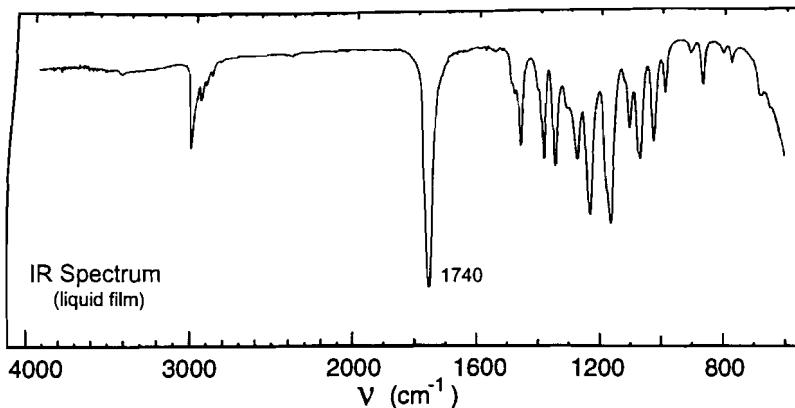
Problem 74



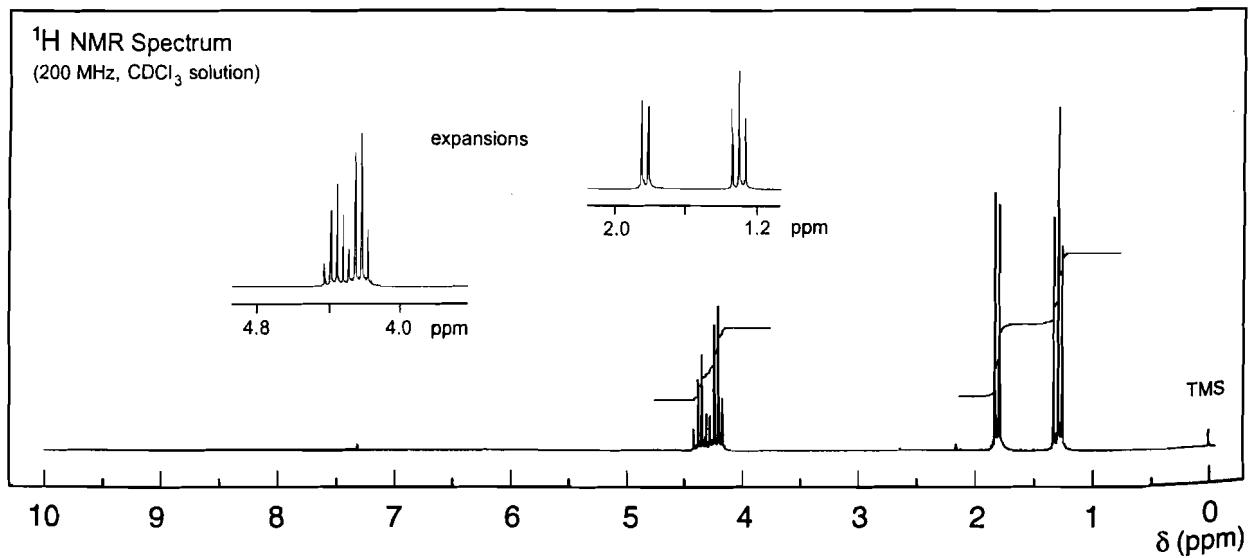
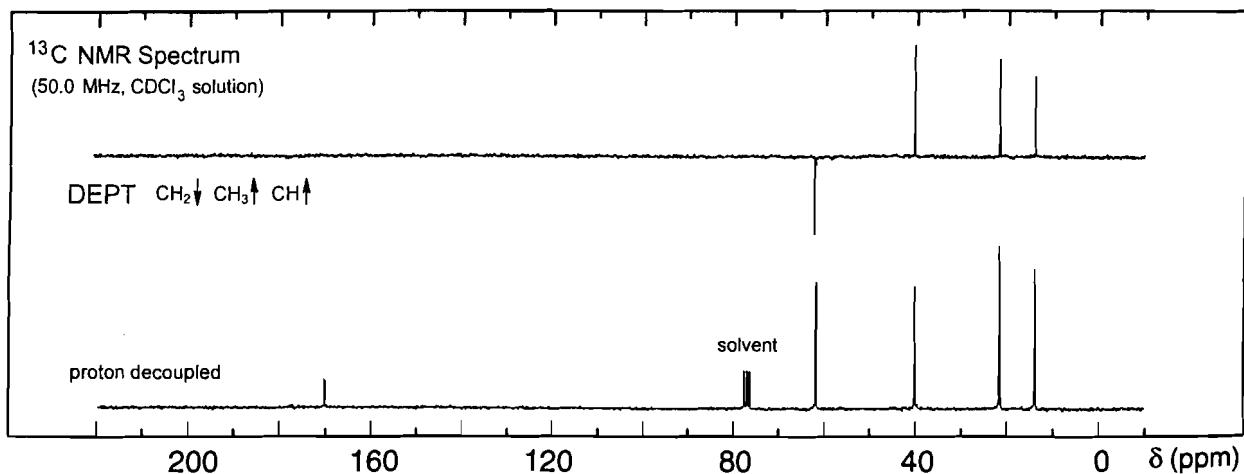
No significant UV absorption above 220 nm



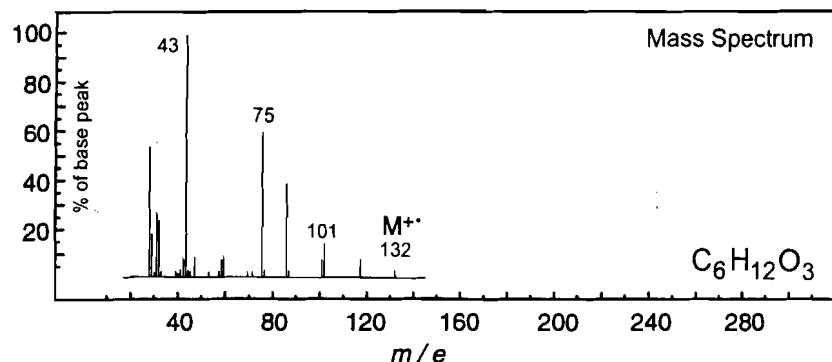
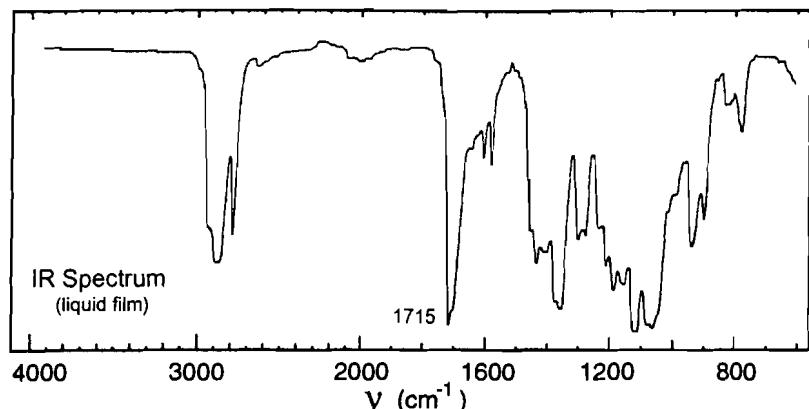
Problem 75



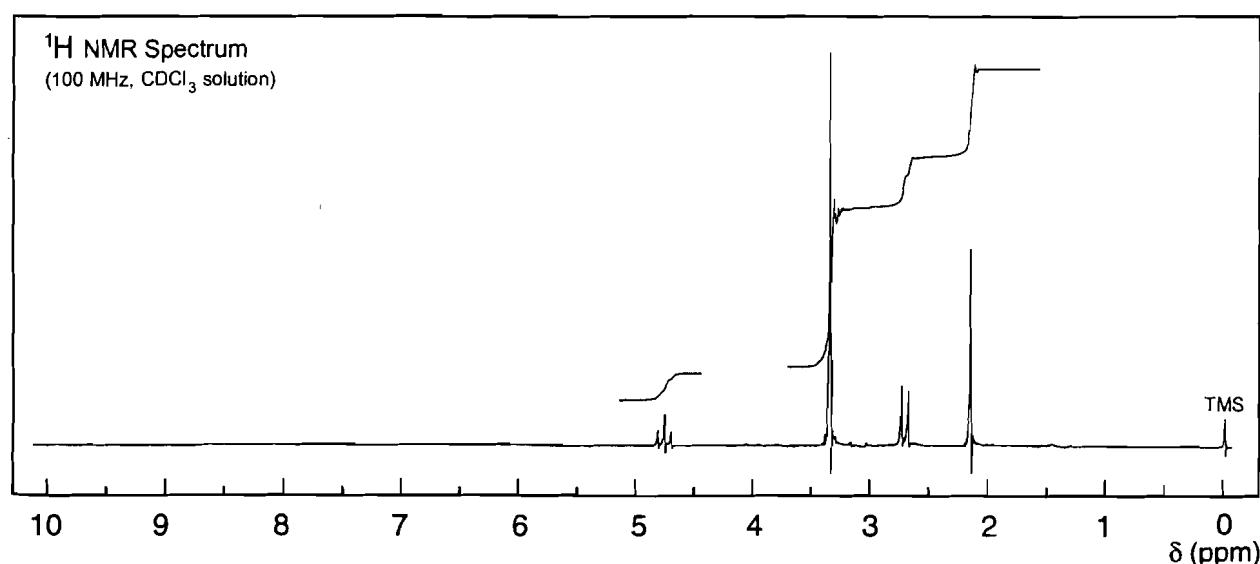
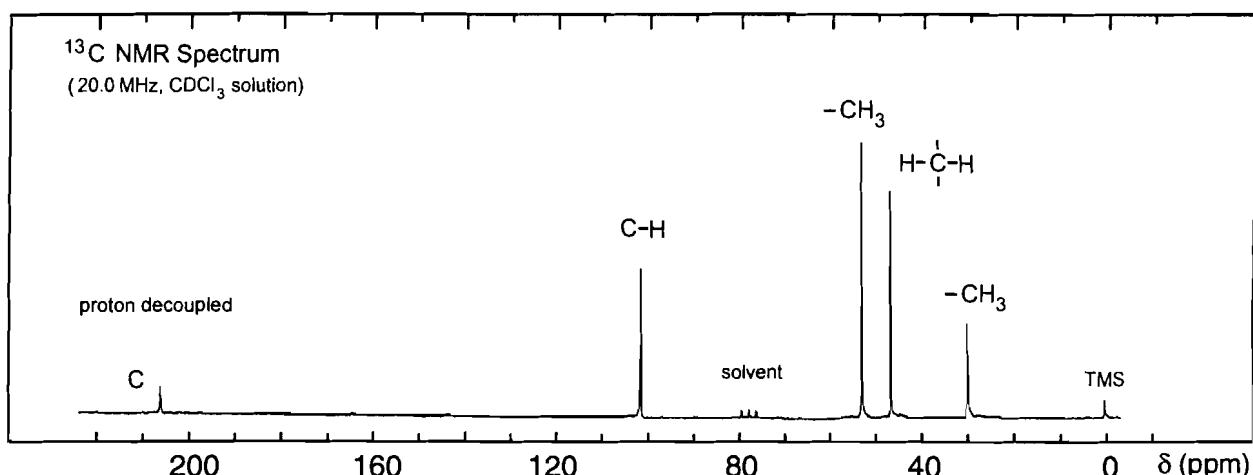
No significant UV absorption above 220 nm



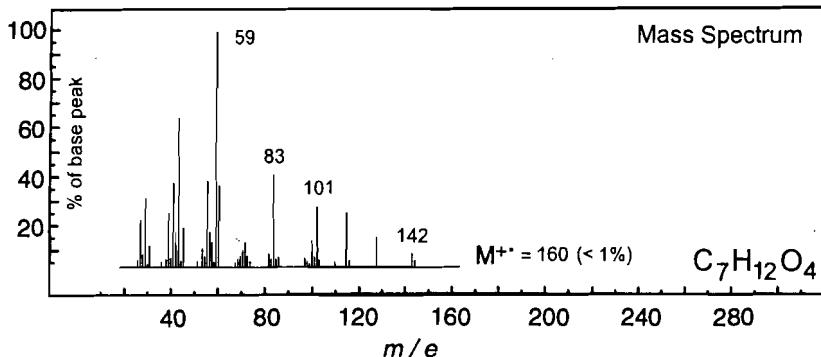
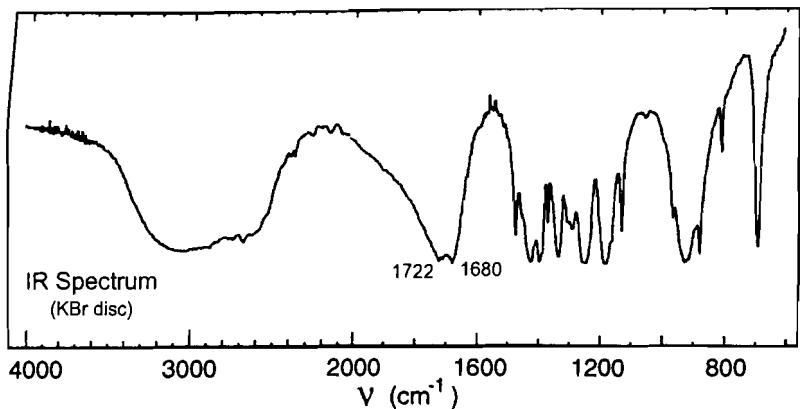
Problem 76



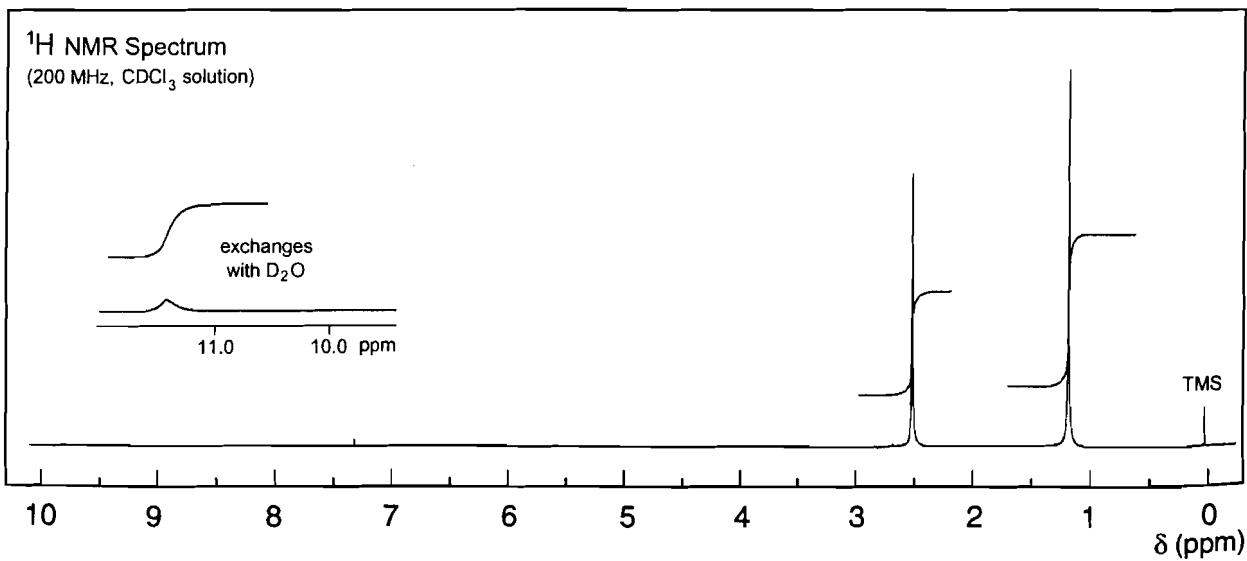
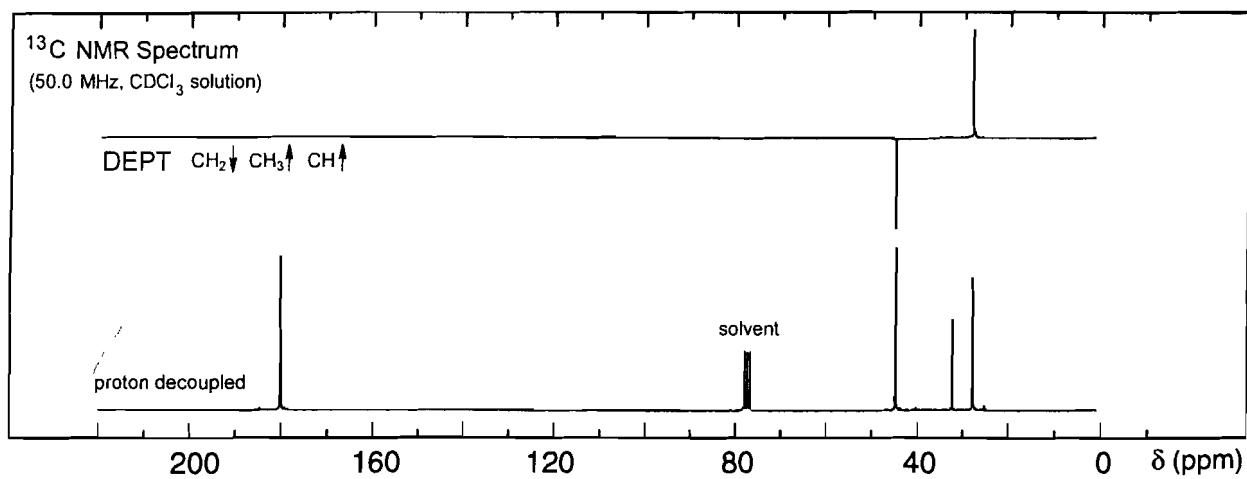
No significant UV absorption above 220 nm



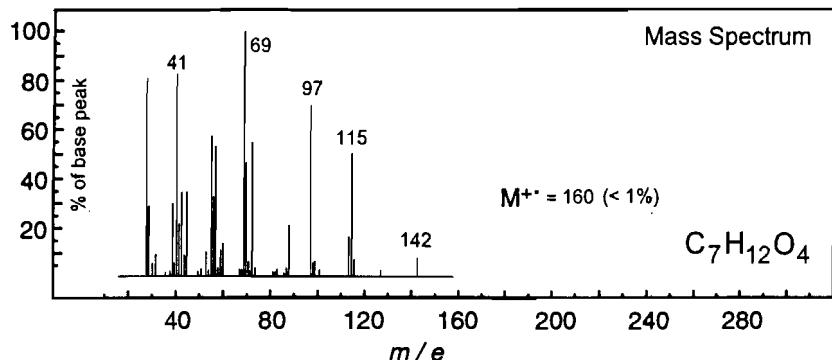
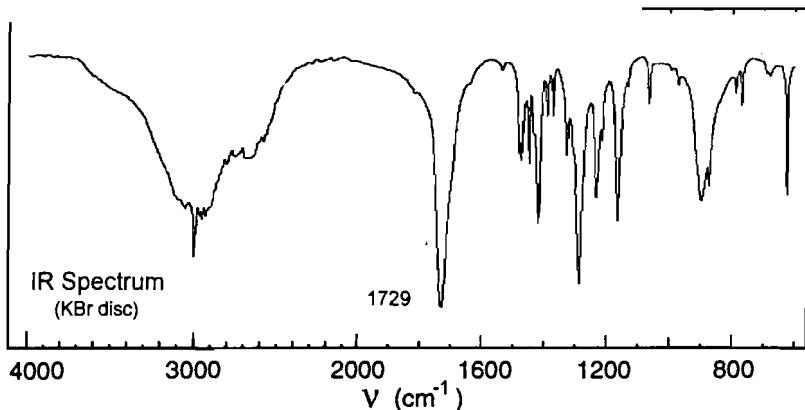
Problem 77



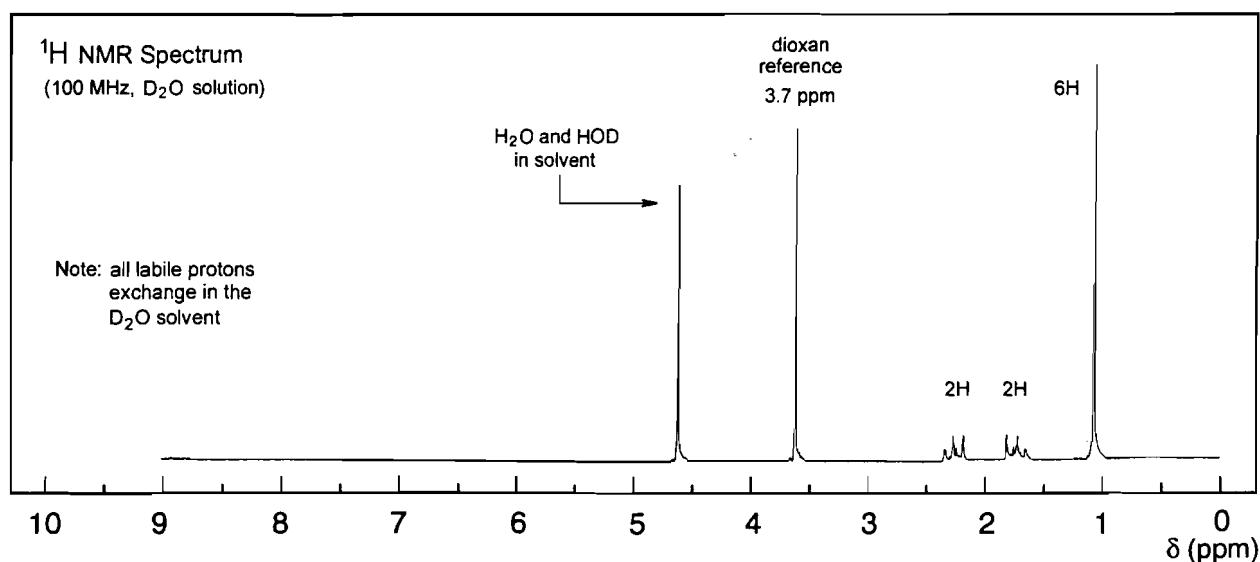
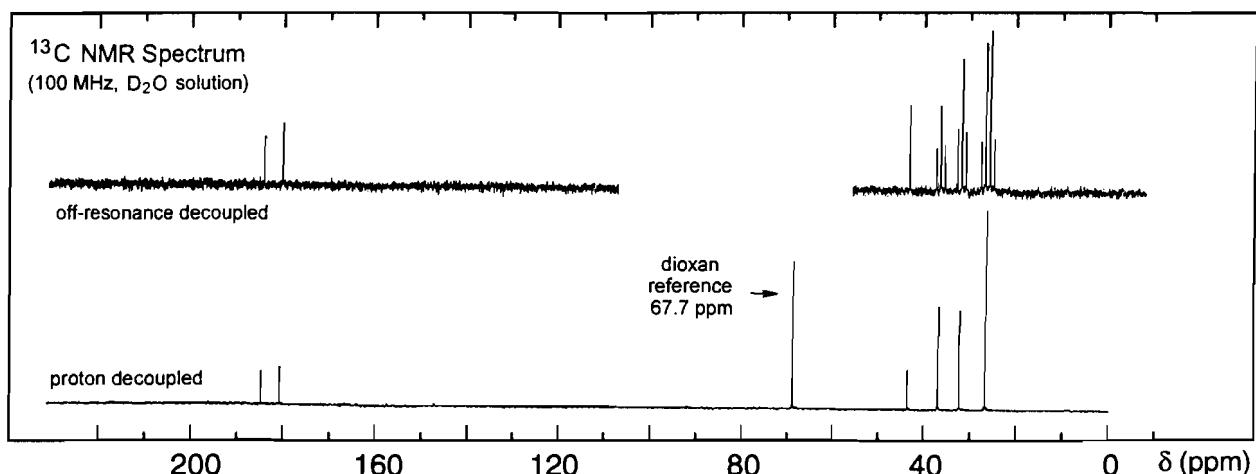
No significant UV absorption above 220 nm



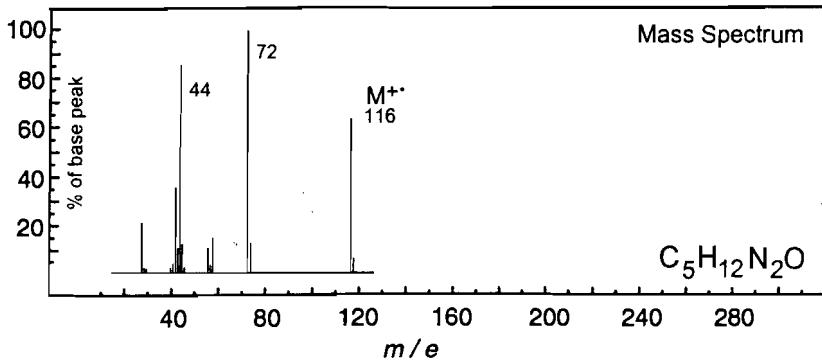
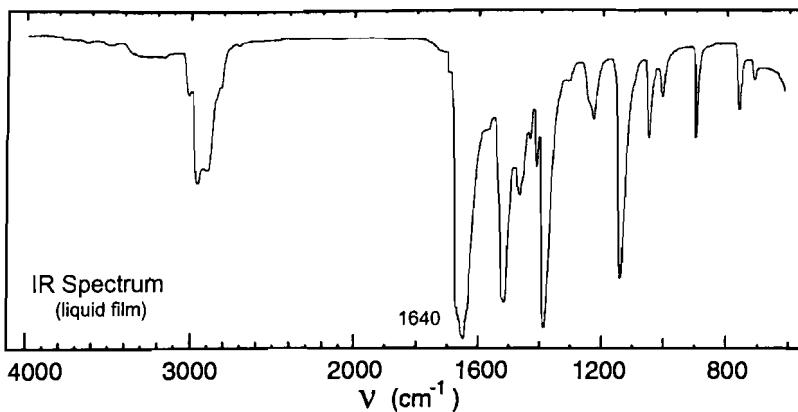
Problem 78



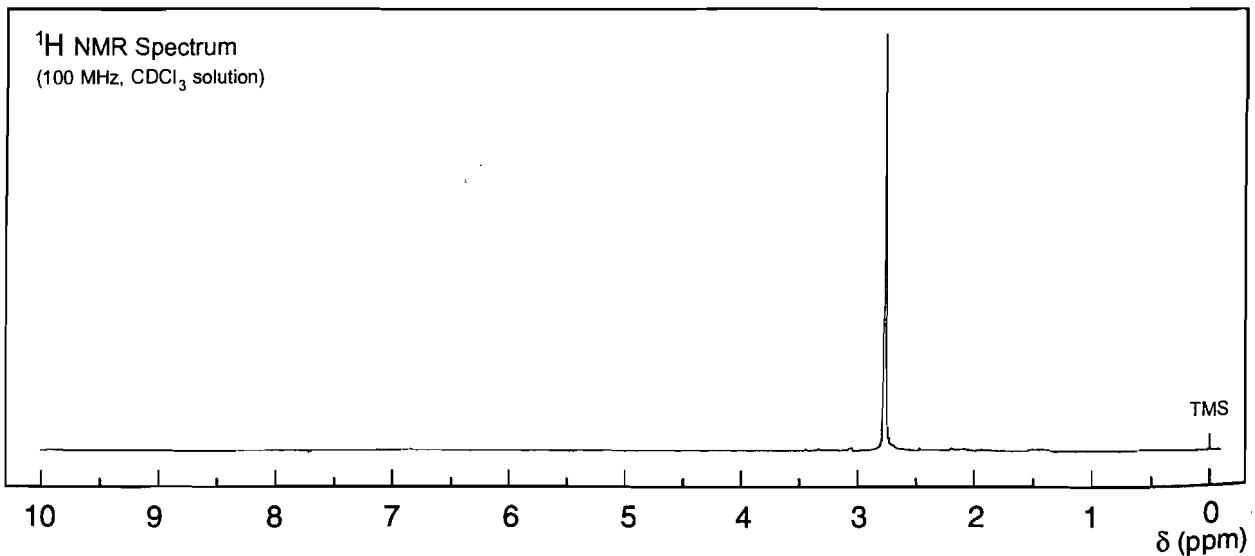
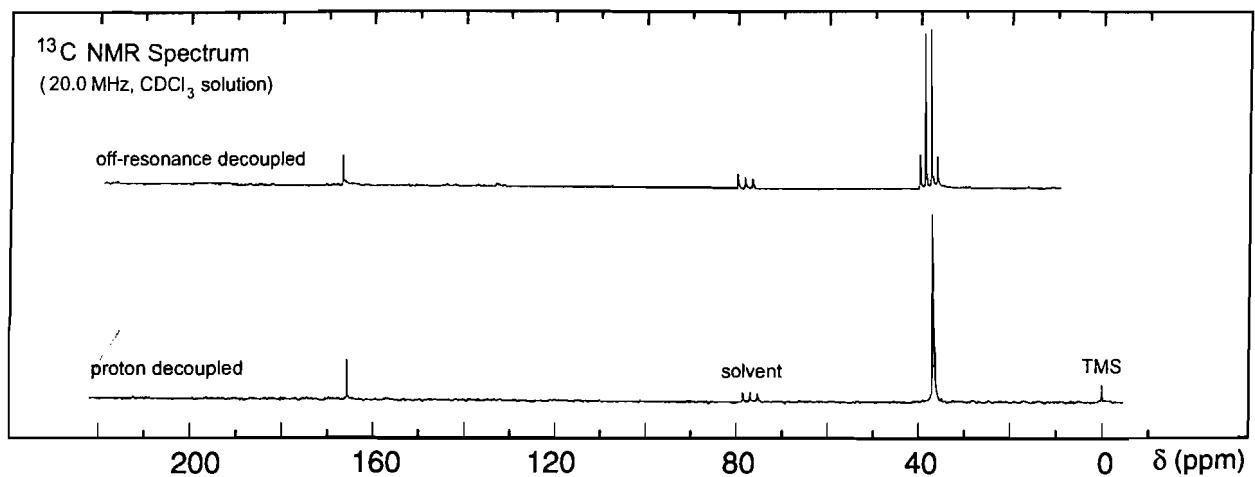
No significant UV absorption above 220 nm



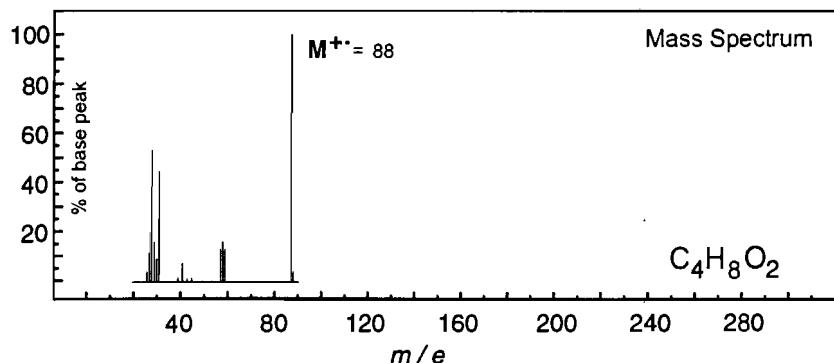
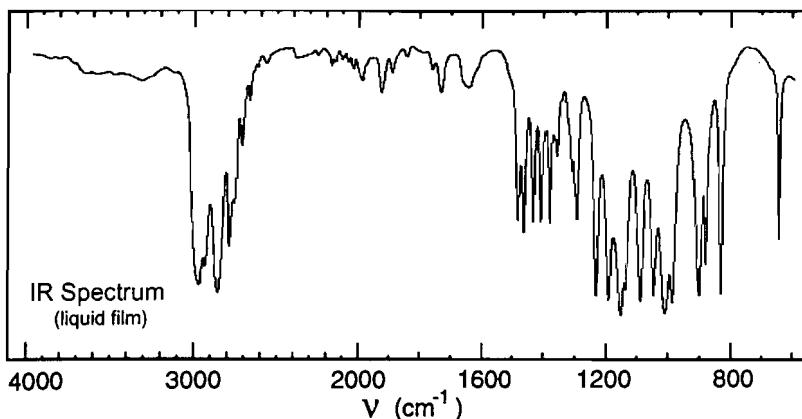
Problem 79



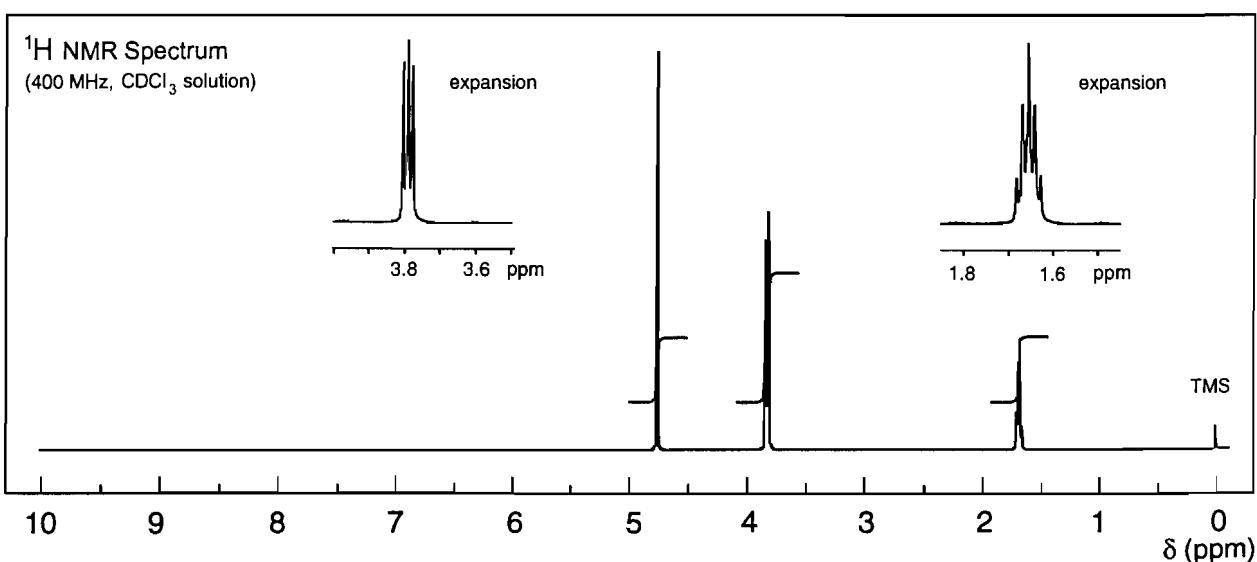
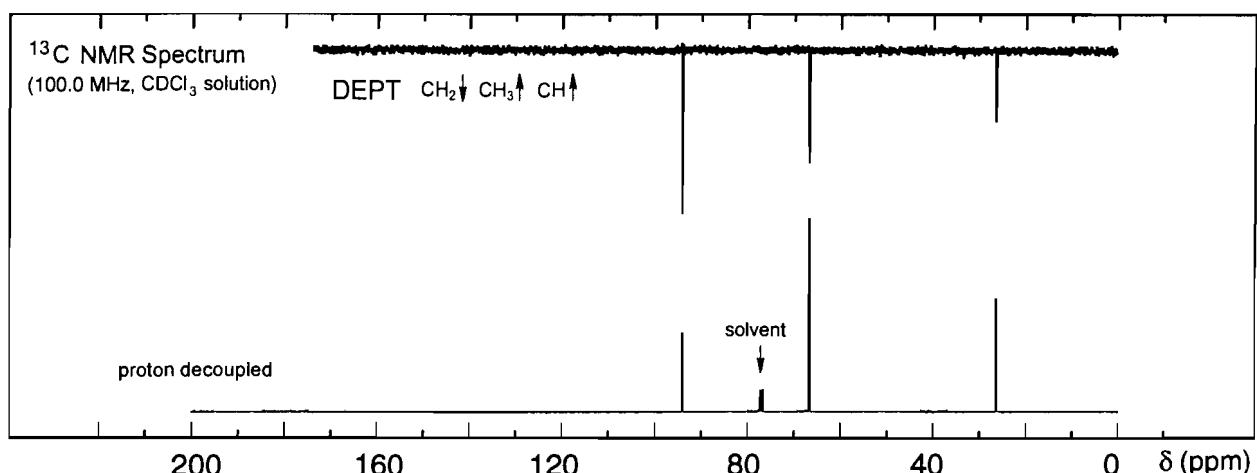
No significant UV absorption above 220 nm



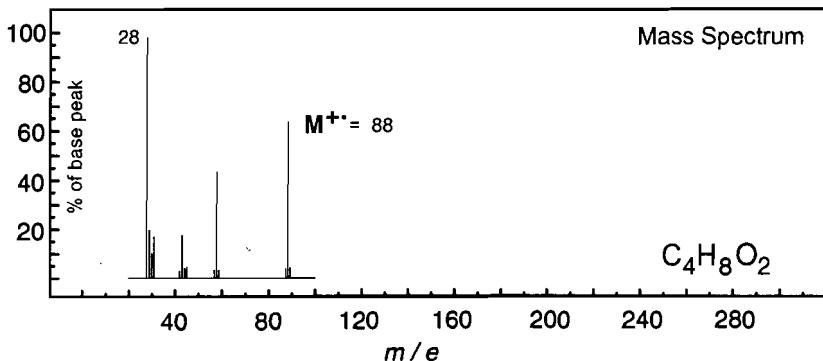
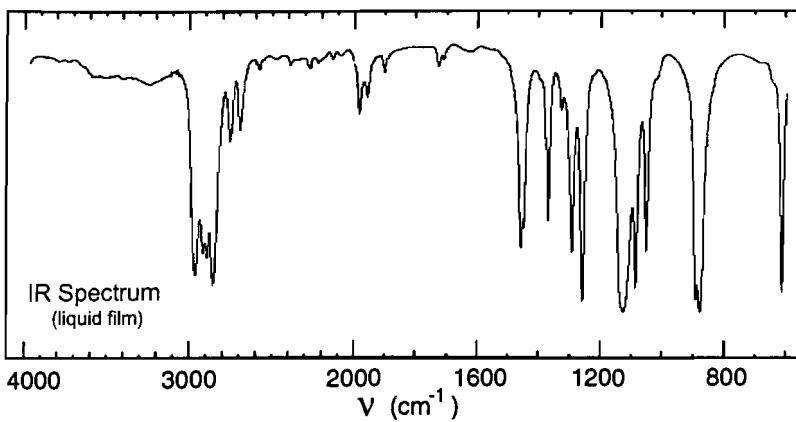
Problem 80



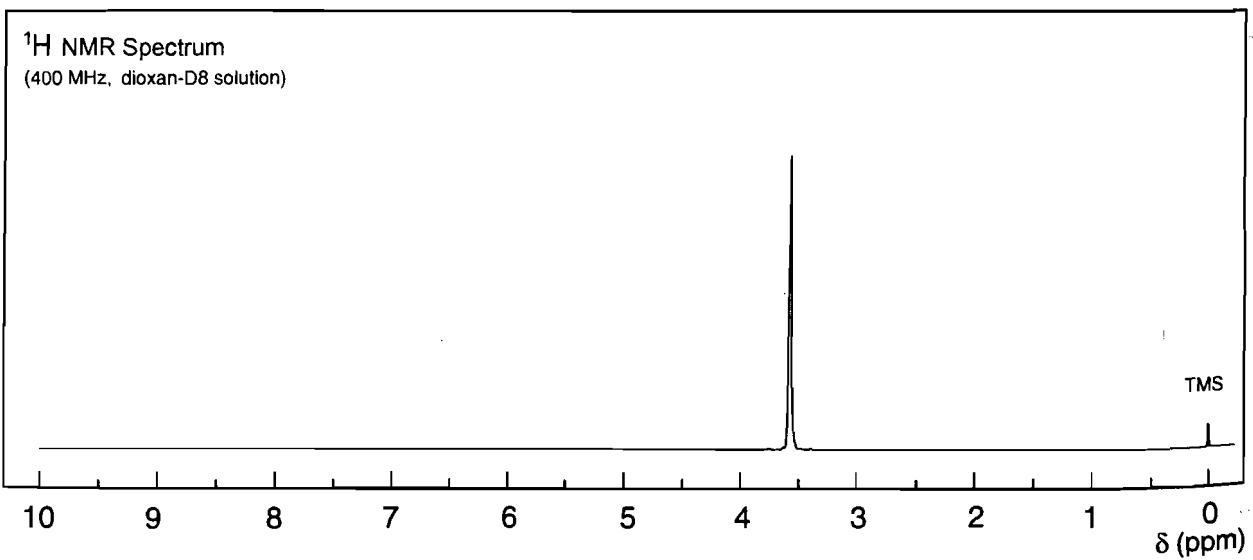
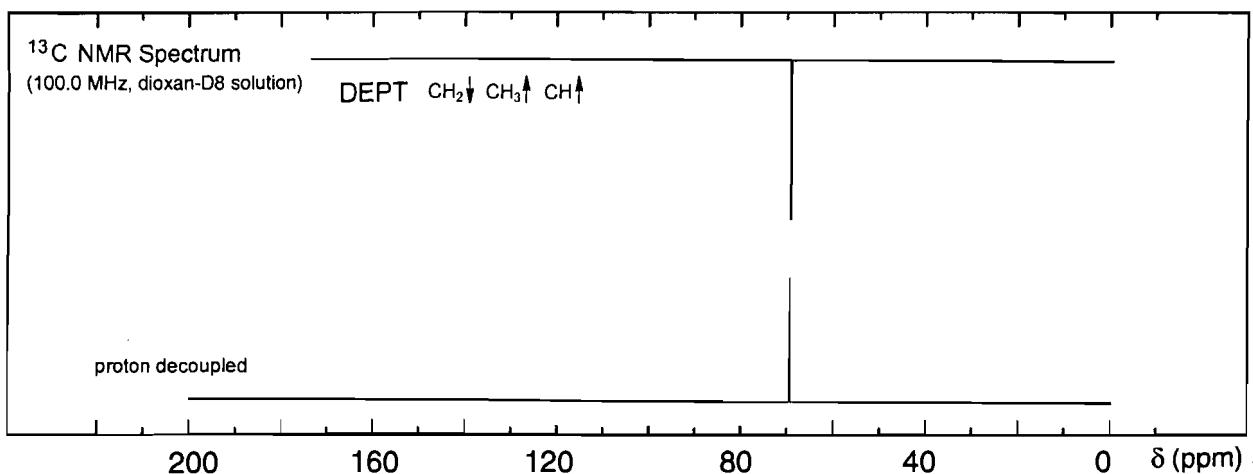
No significant UV absorption above 220 nm



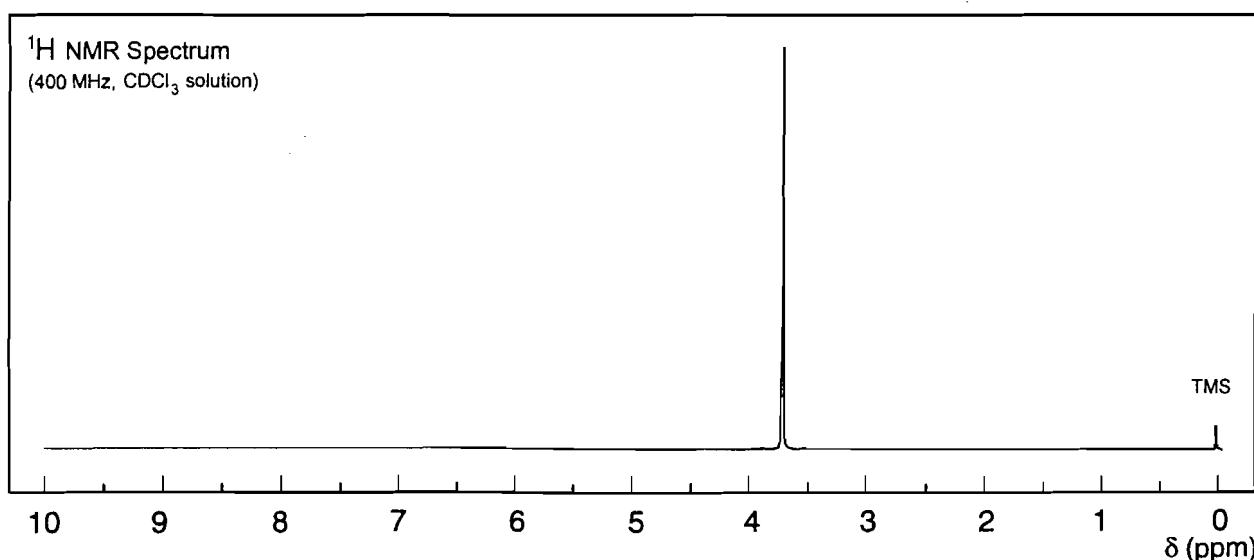
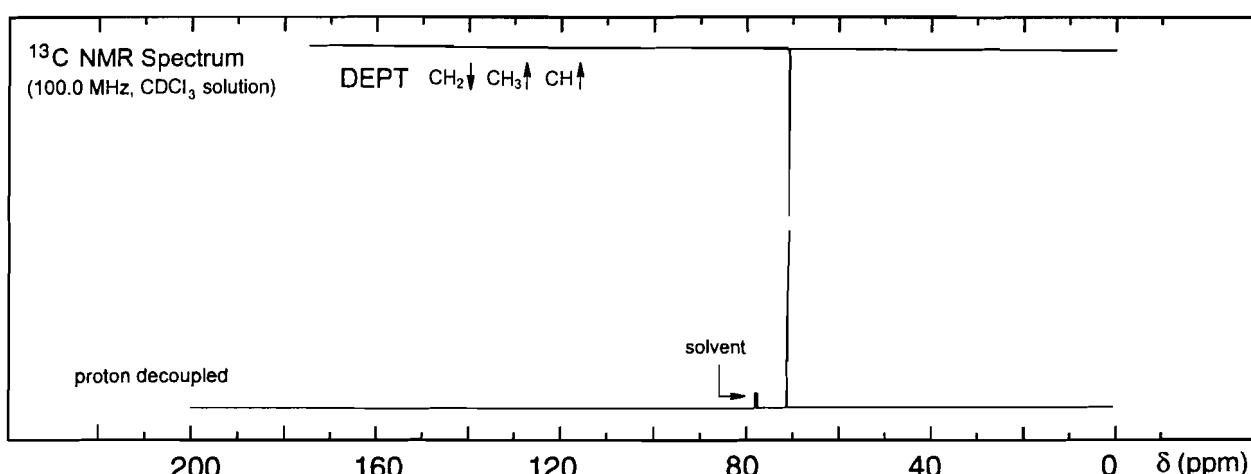
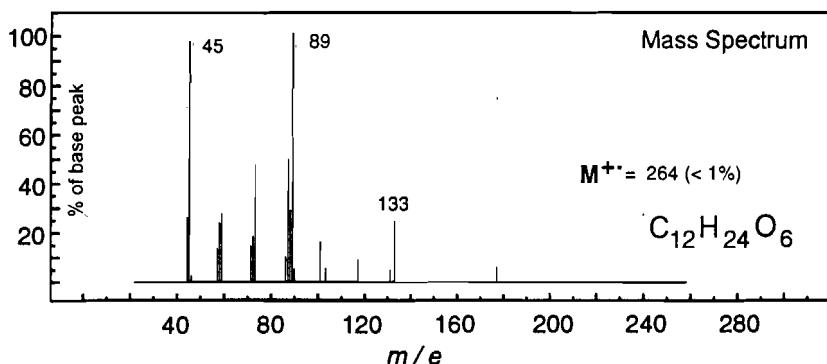
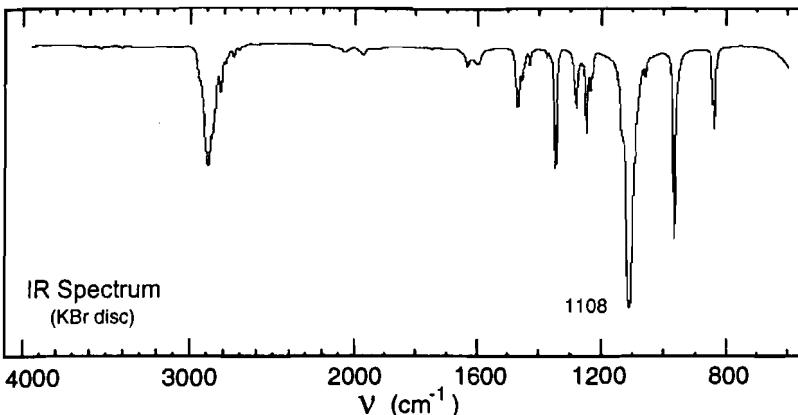
Problem 81



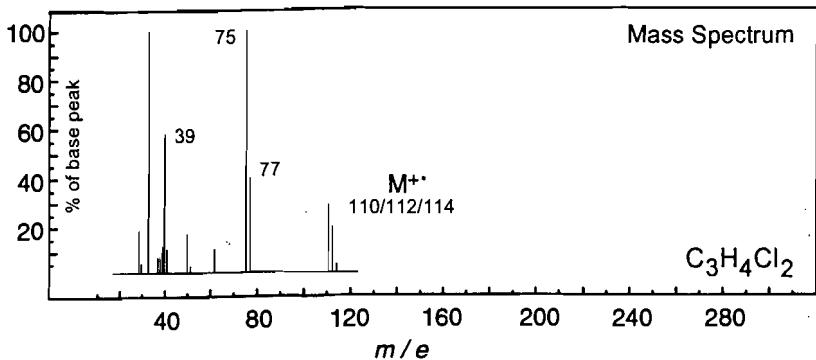
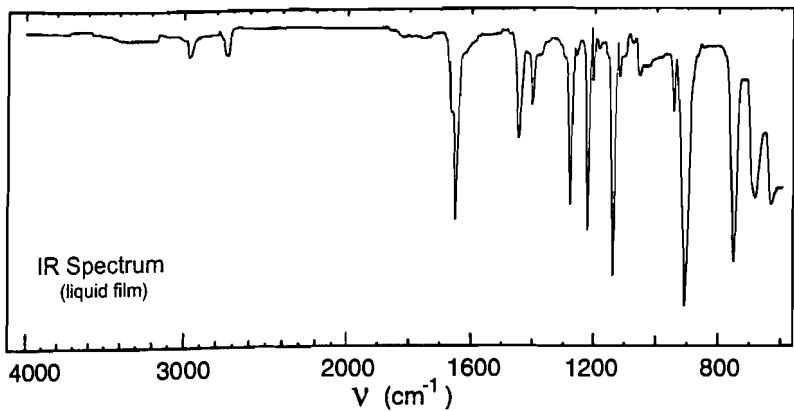
No significant UV absorption above 220 nm



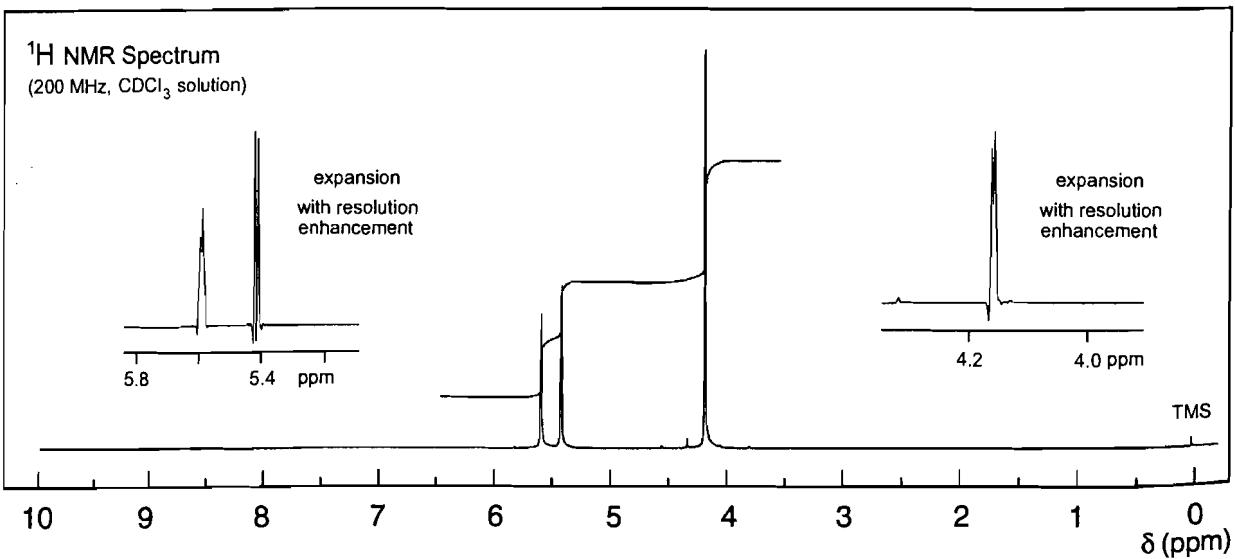
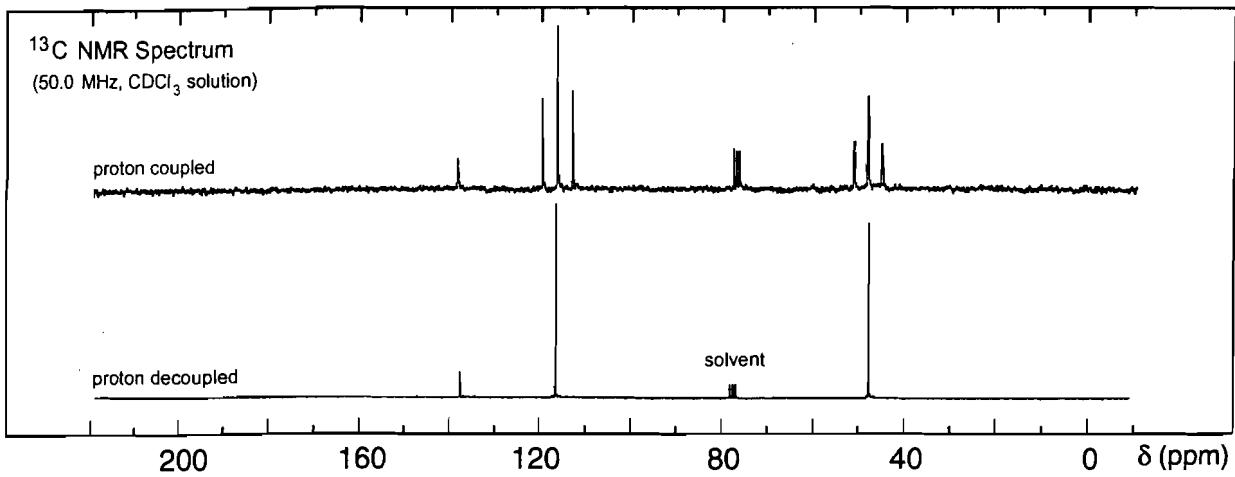
Problem 82



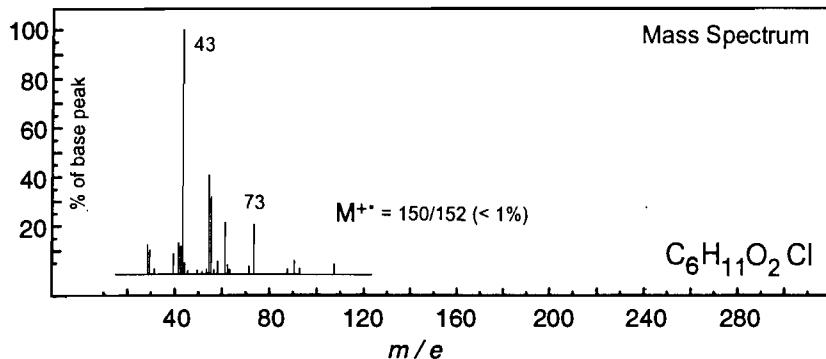
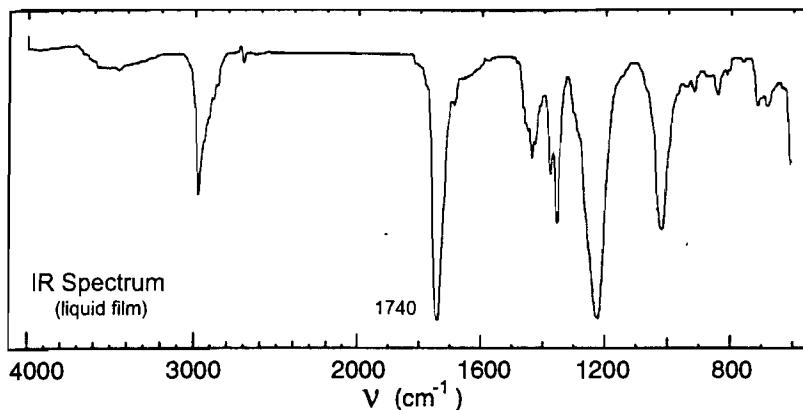
Problem 83



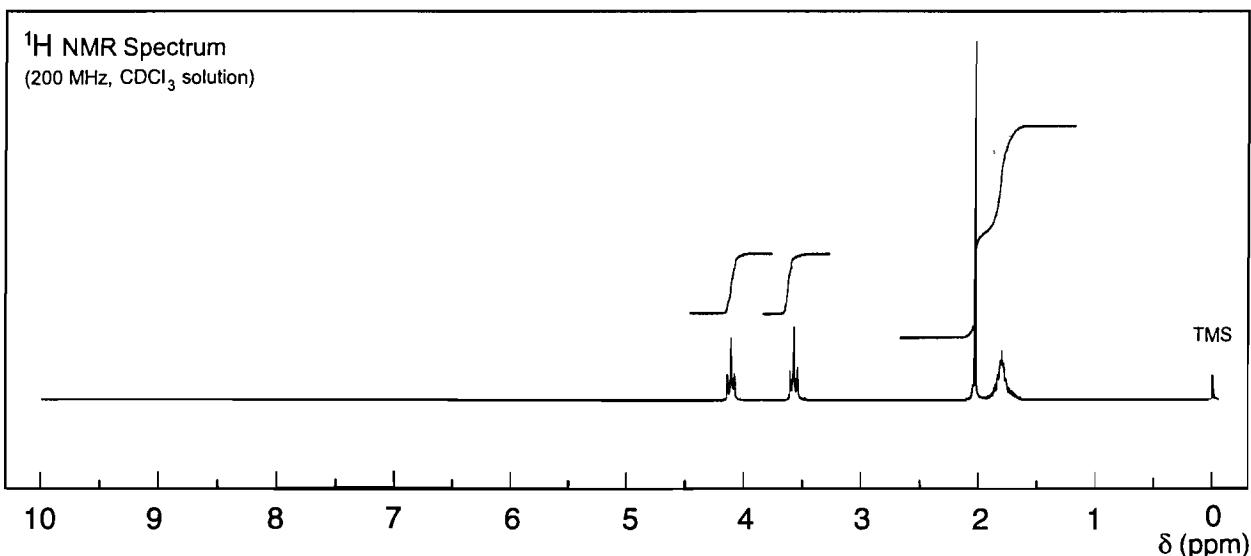
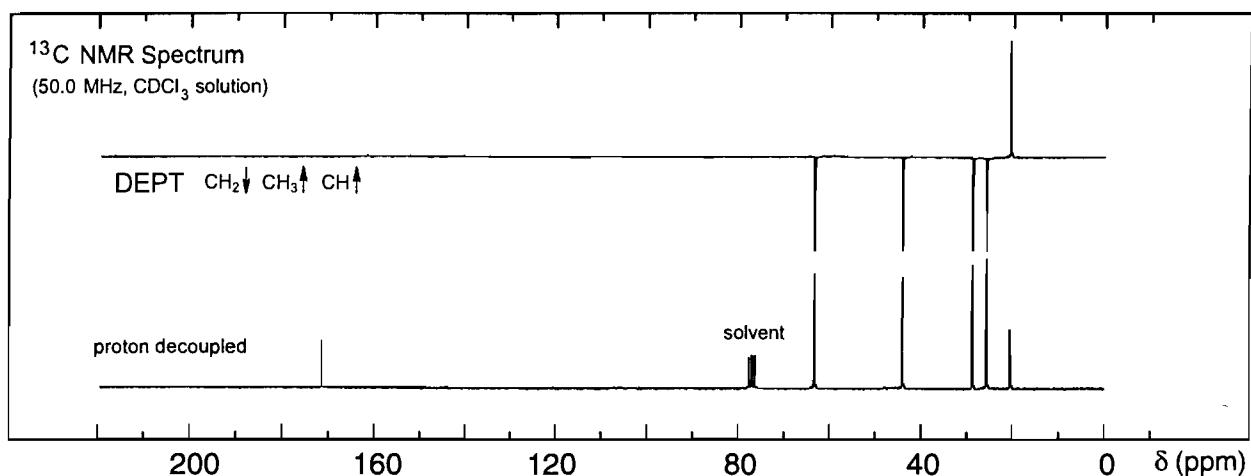
No significant UV absorption above 220 nm



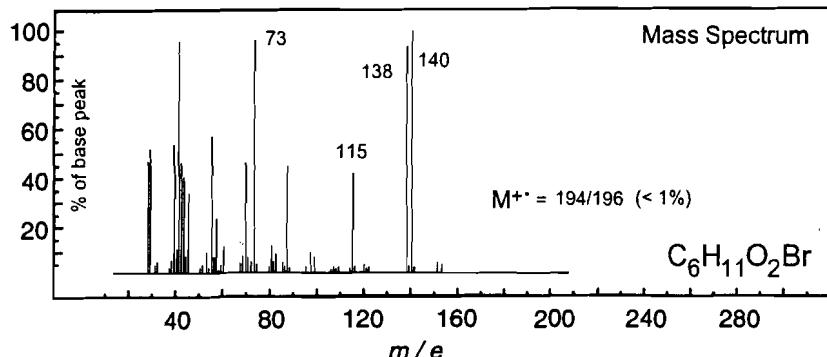
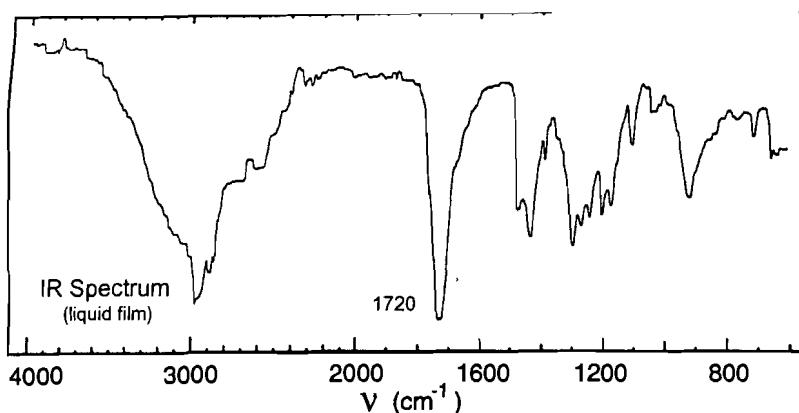
Problem 84



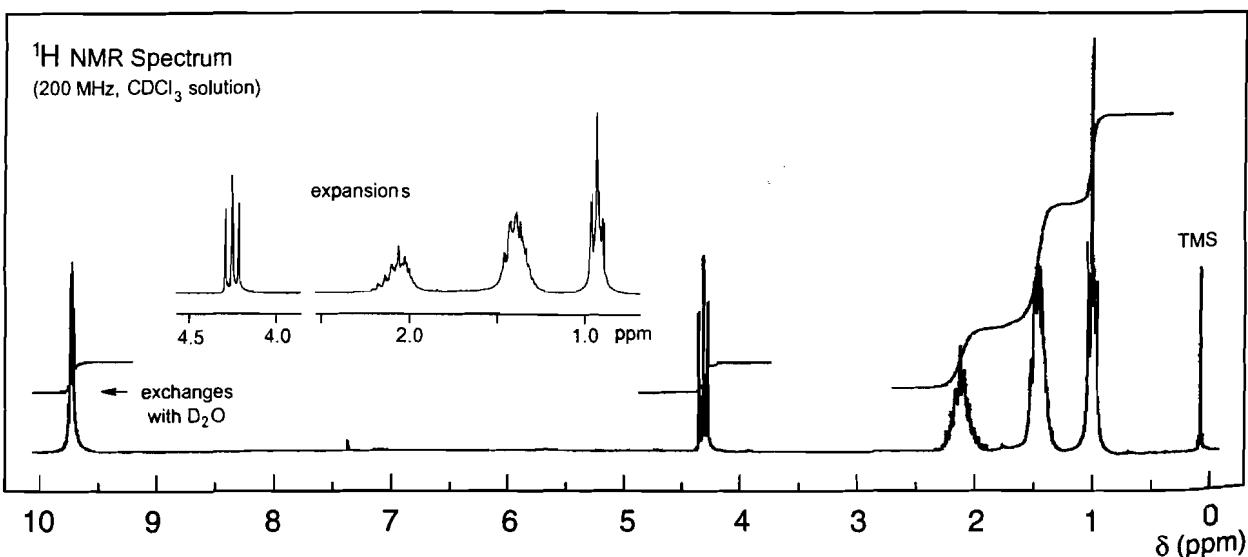
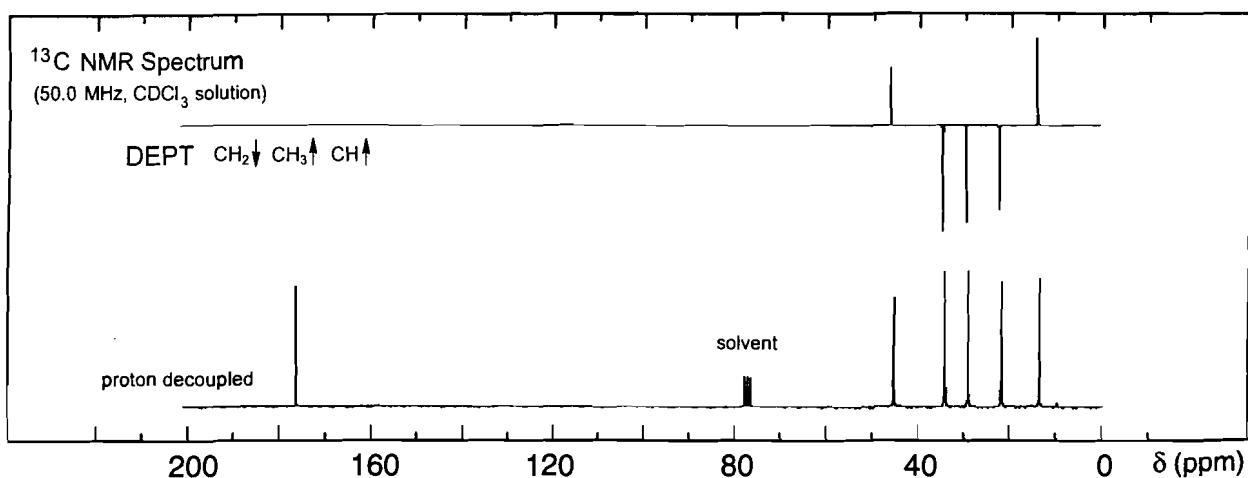
No significant UV absorption above 220 nm



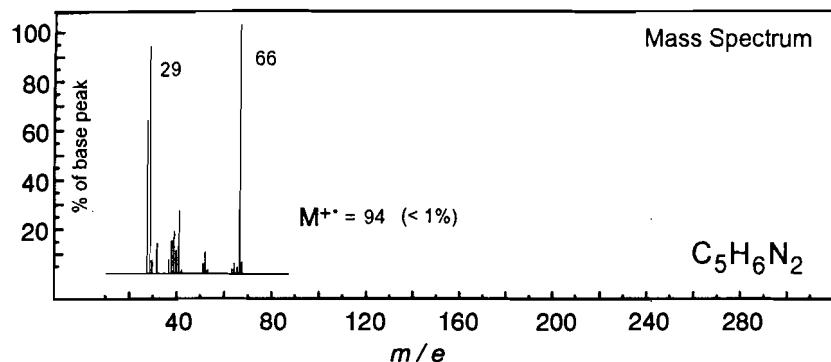
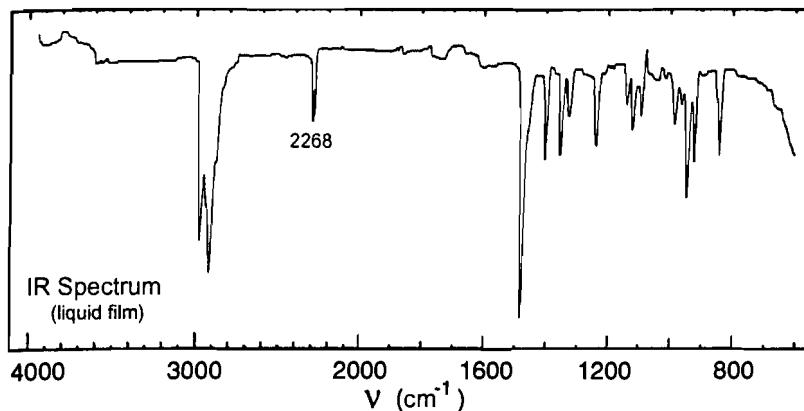
Problem 85



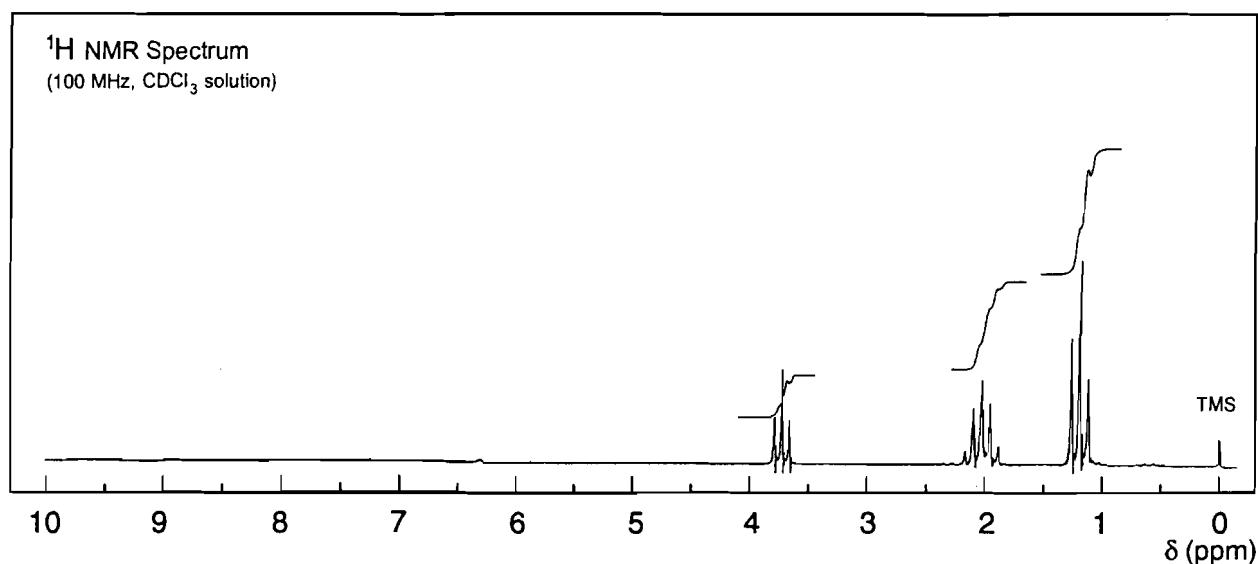
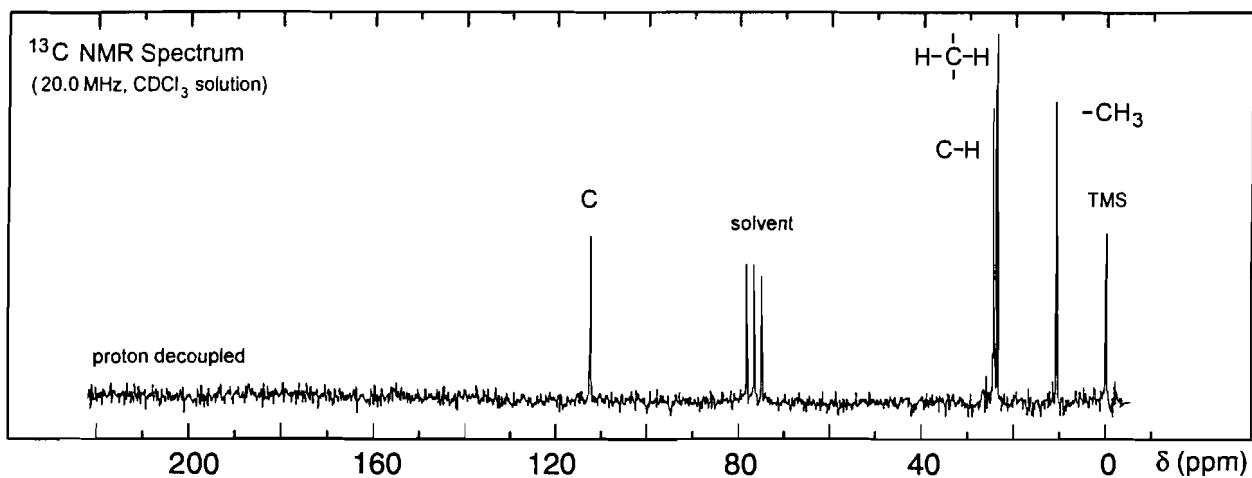
No significant UV absorption above 220 nm



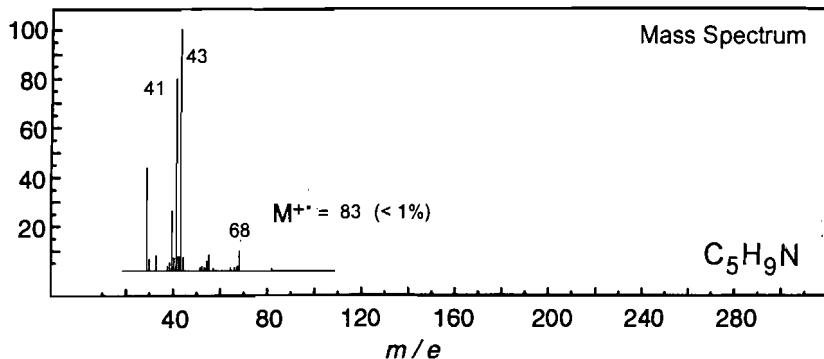
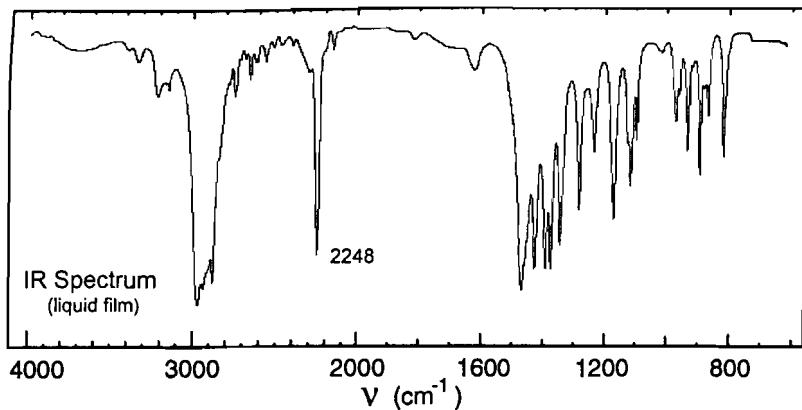
Problem 86



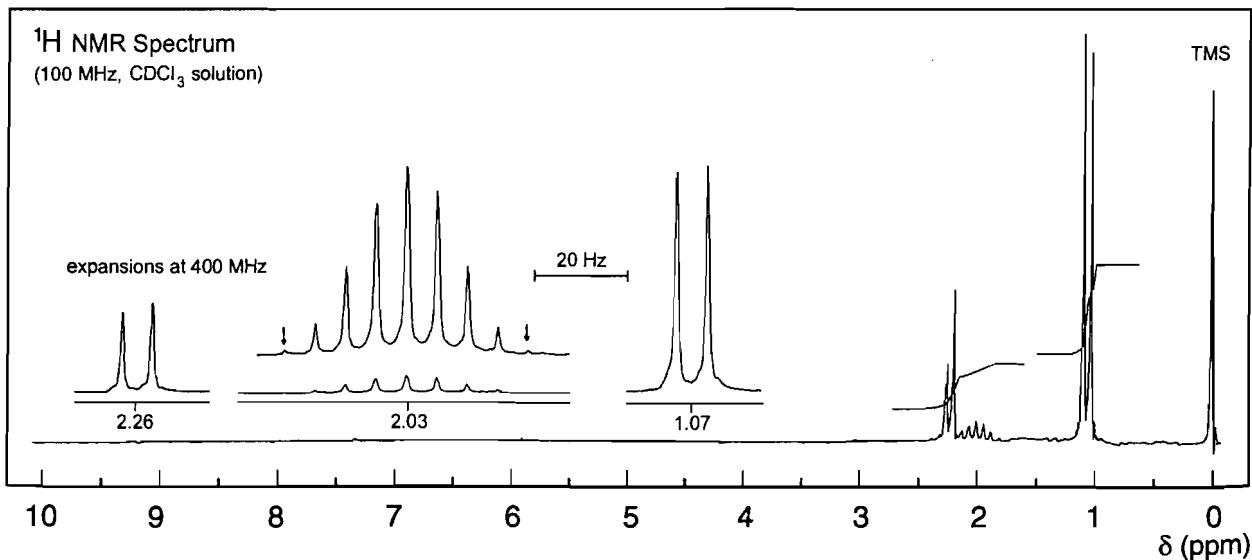
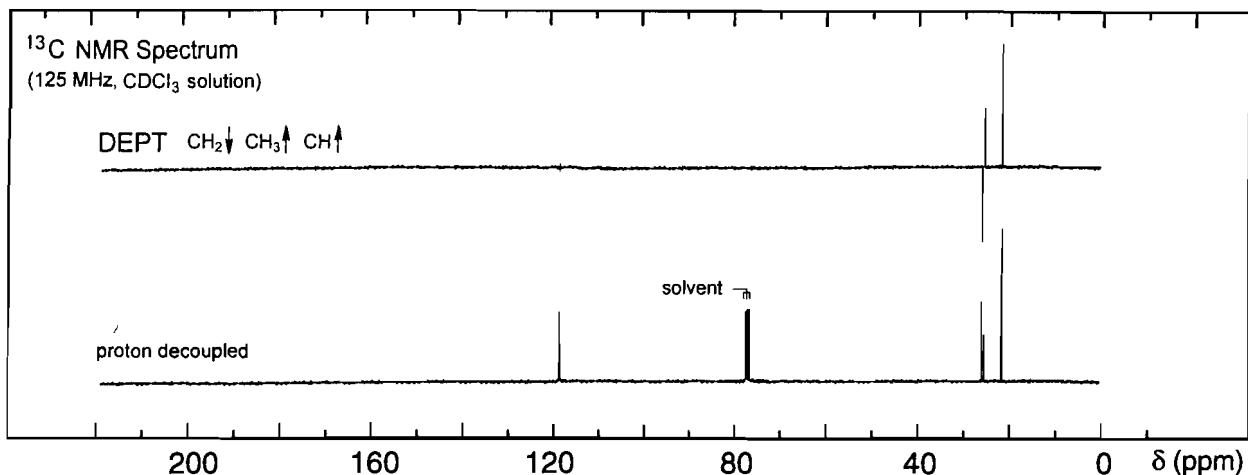
No significant UV absorption above 220 nm



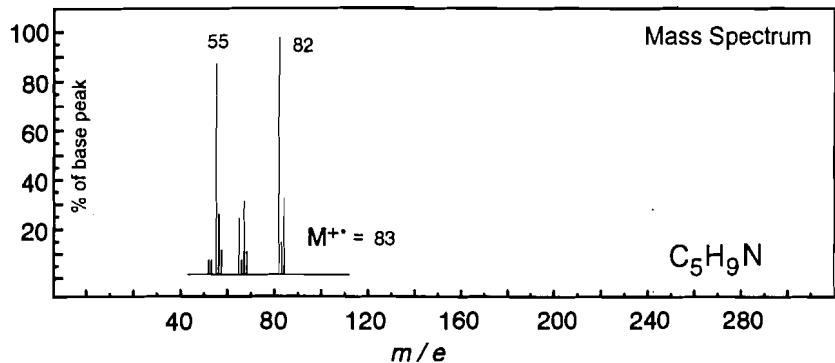
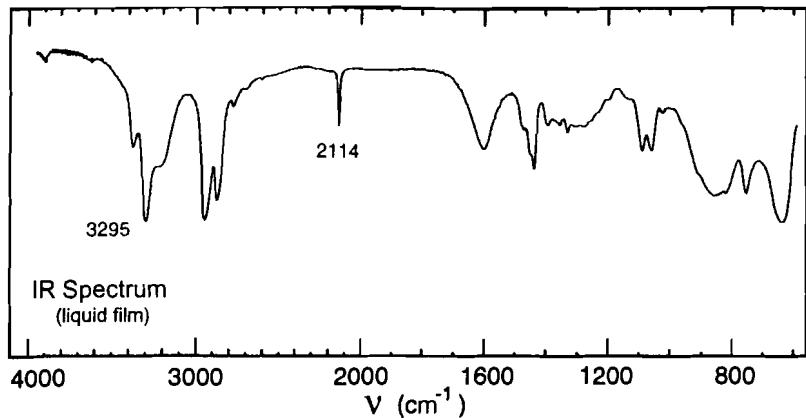
Problem 87



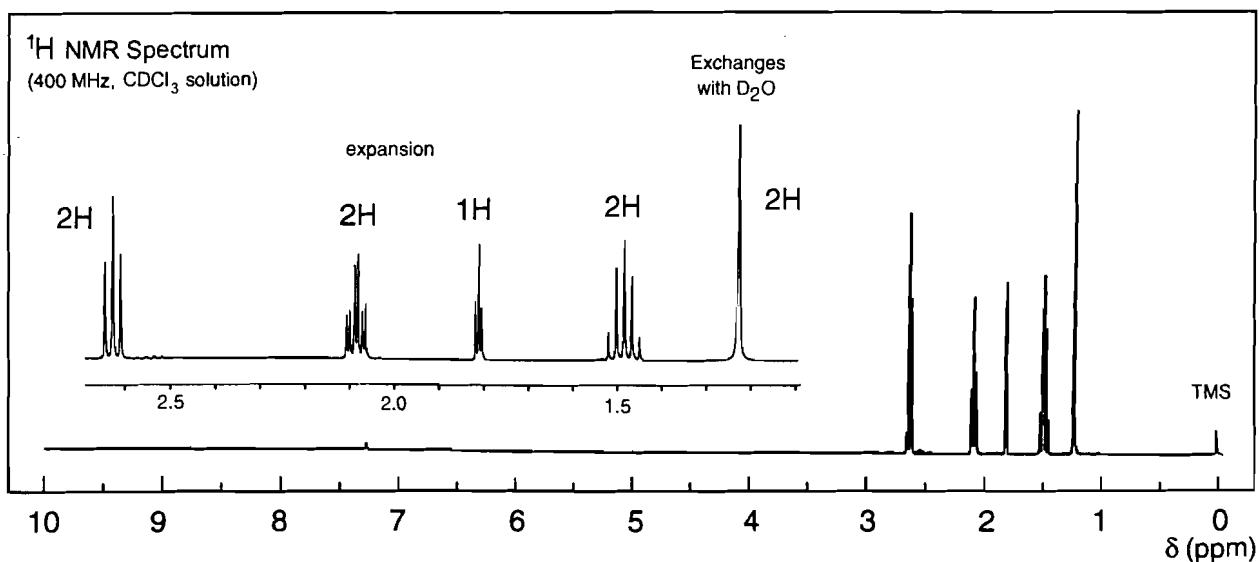
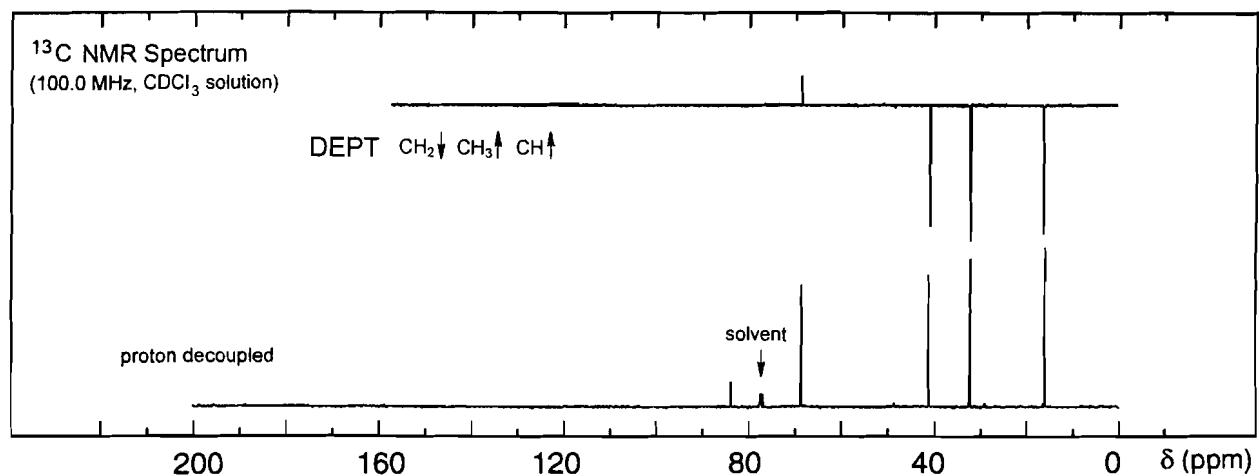
No significant UV absorption above 220 nm



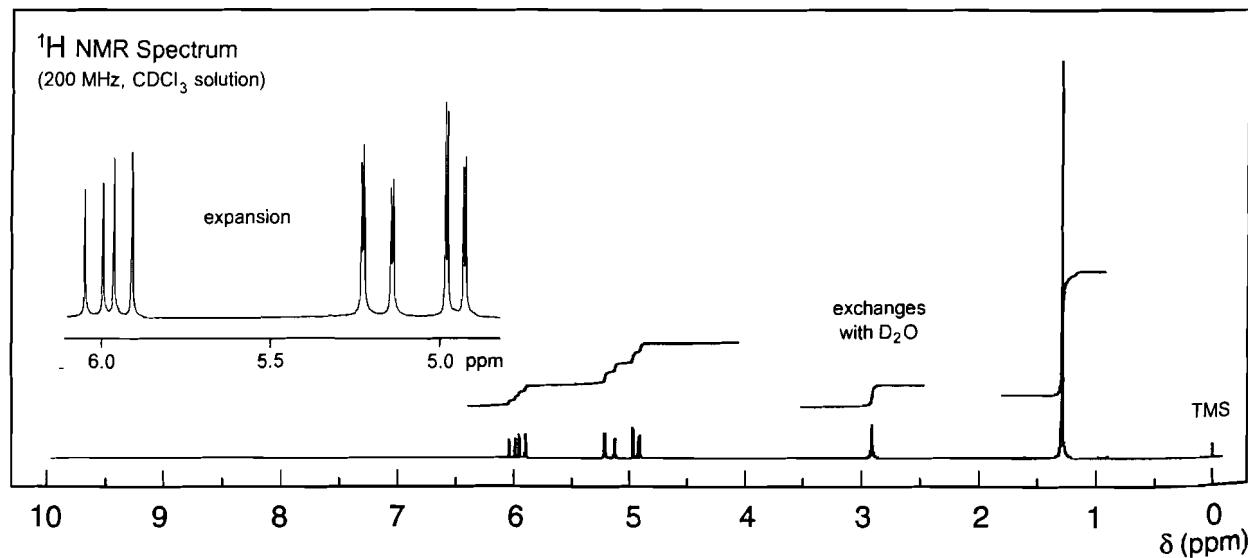
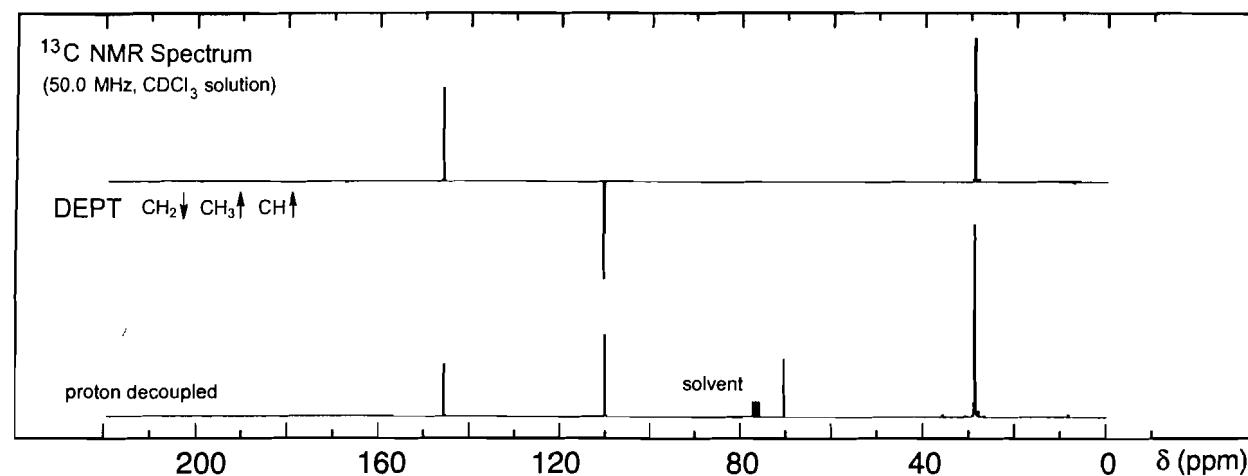
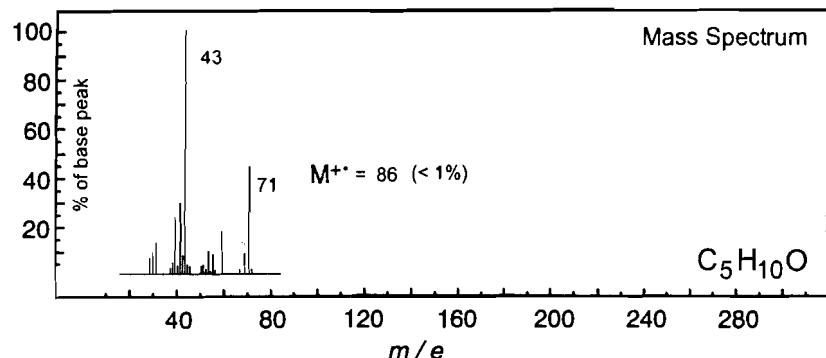
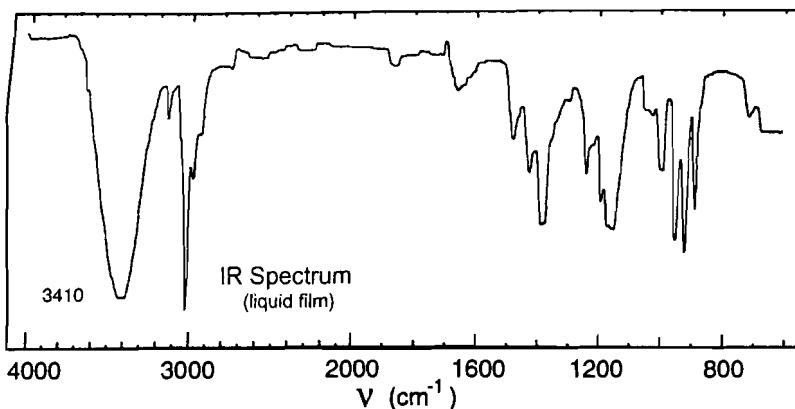
Problem 88



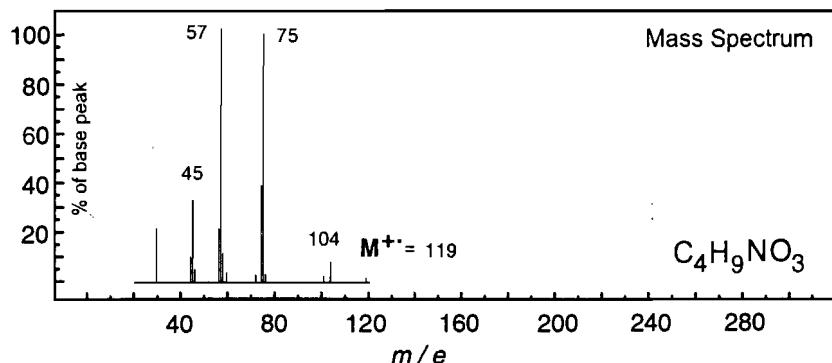
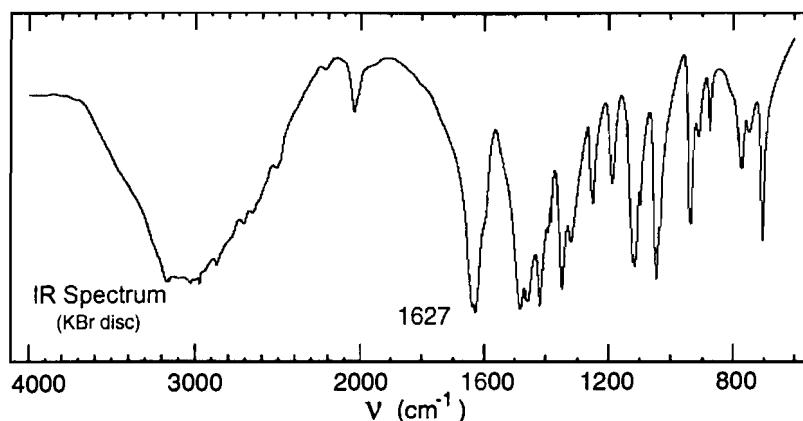
No significant UV absorption above 220 nm



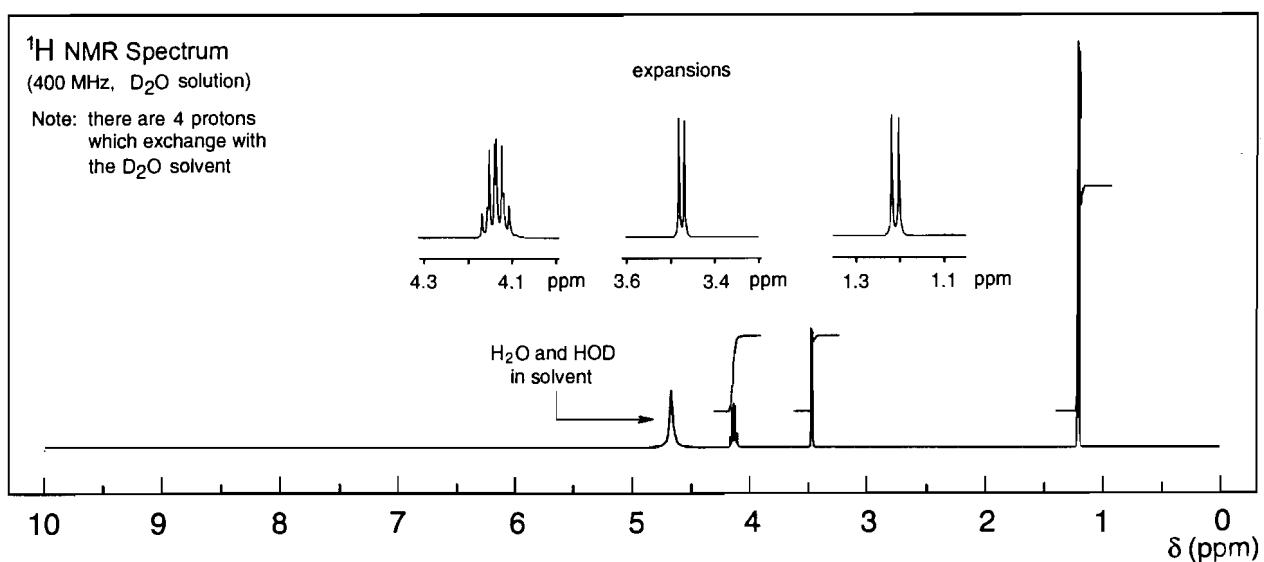
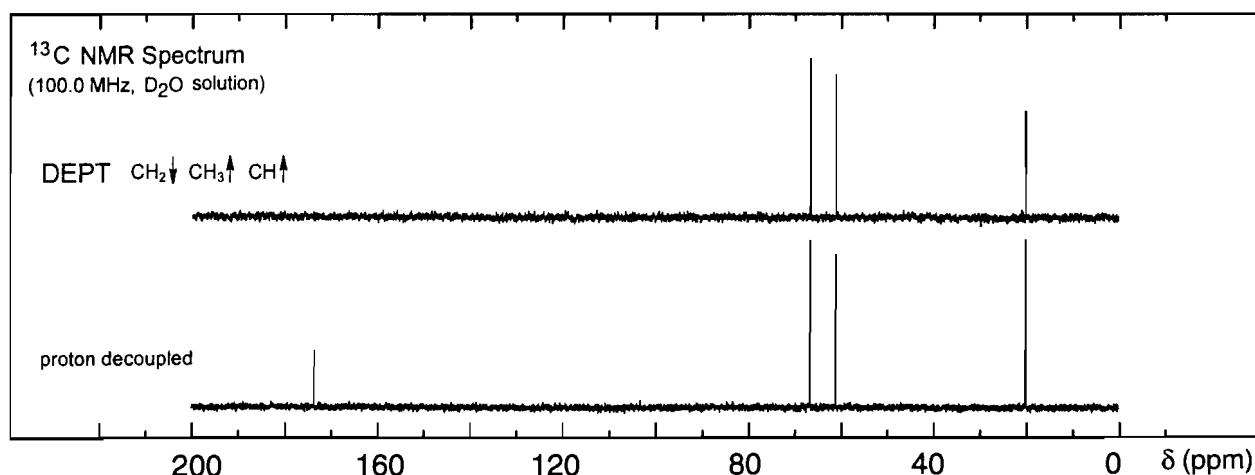
Problem 89



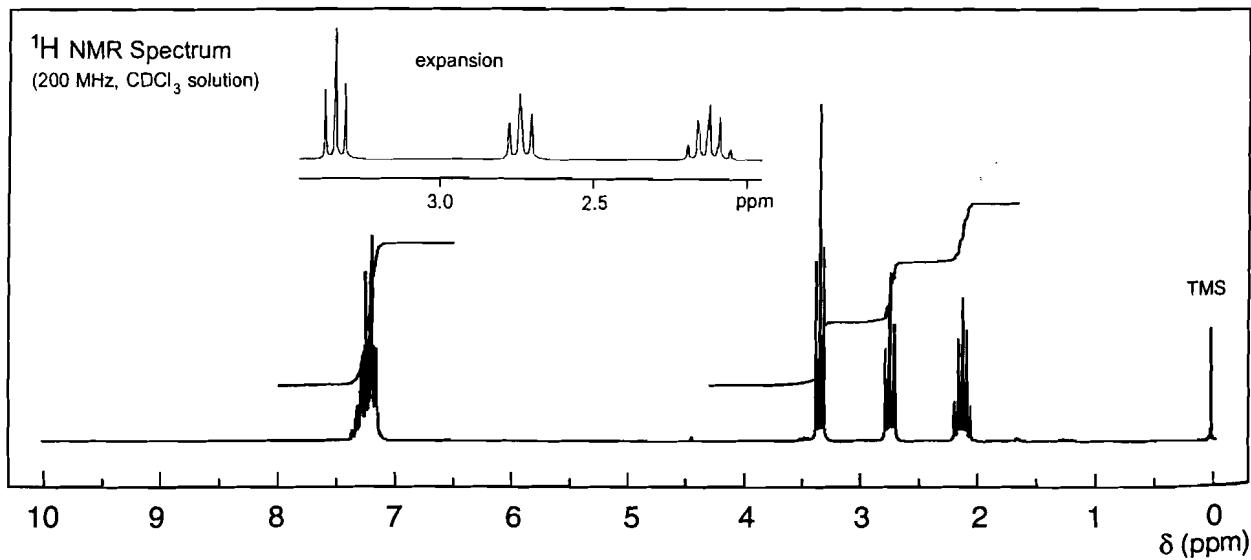
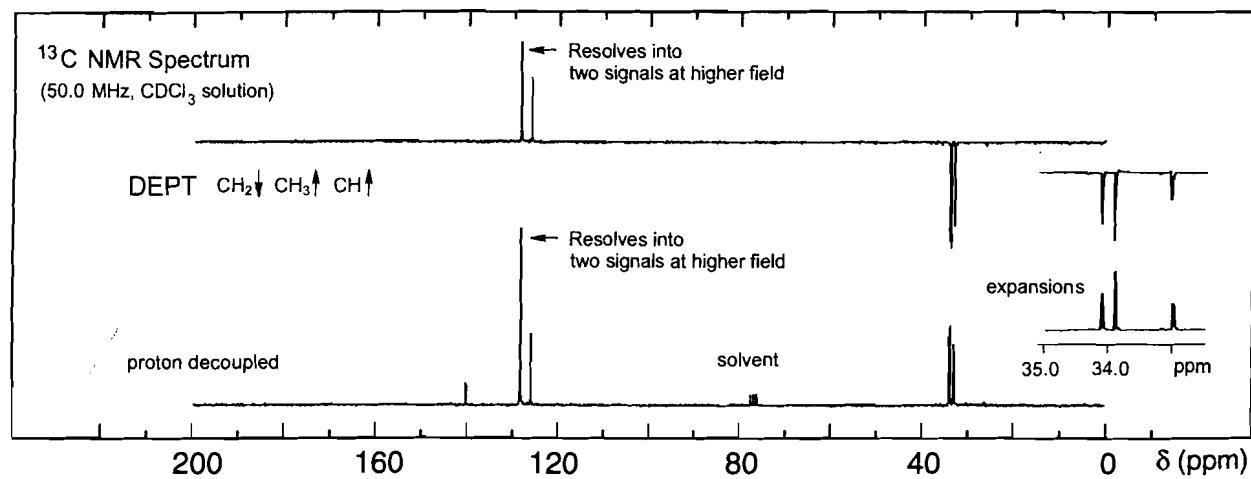
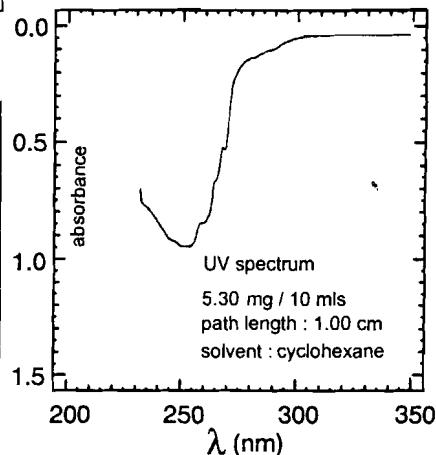
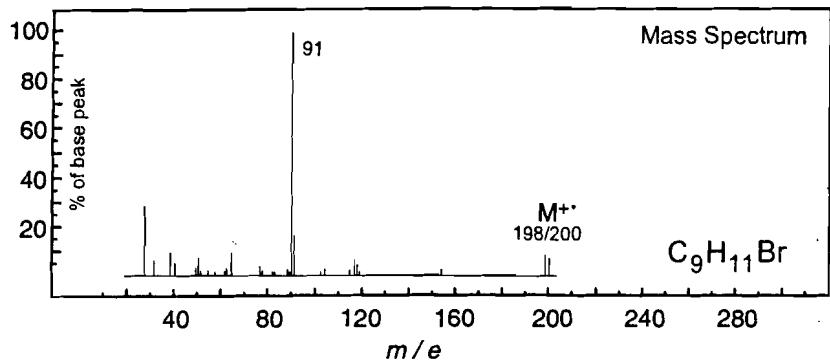
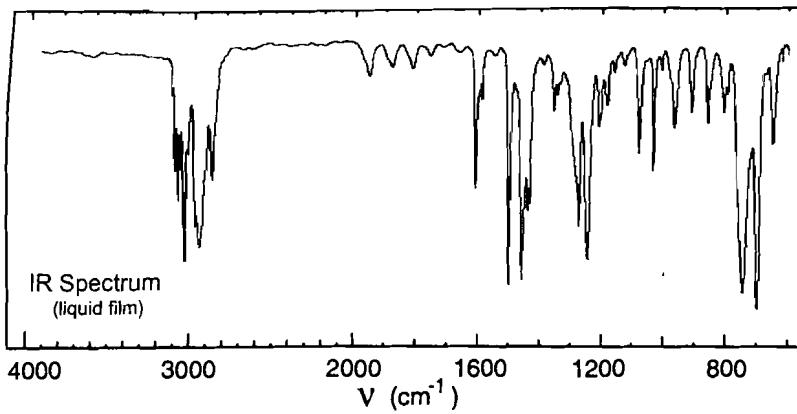
Problem 90



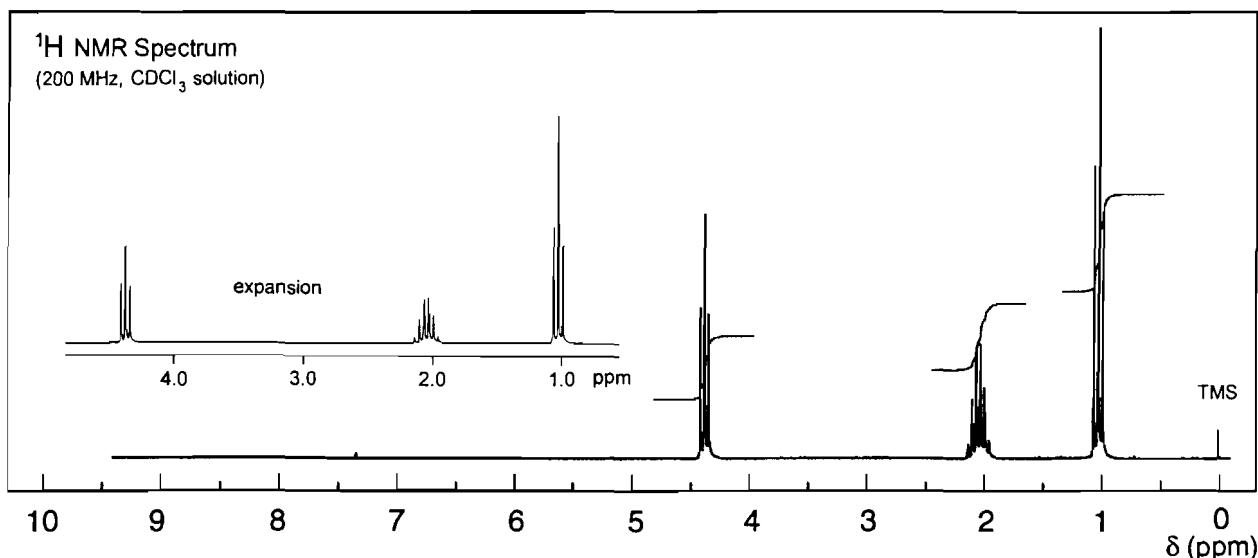
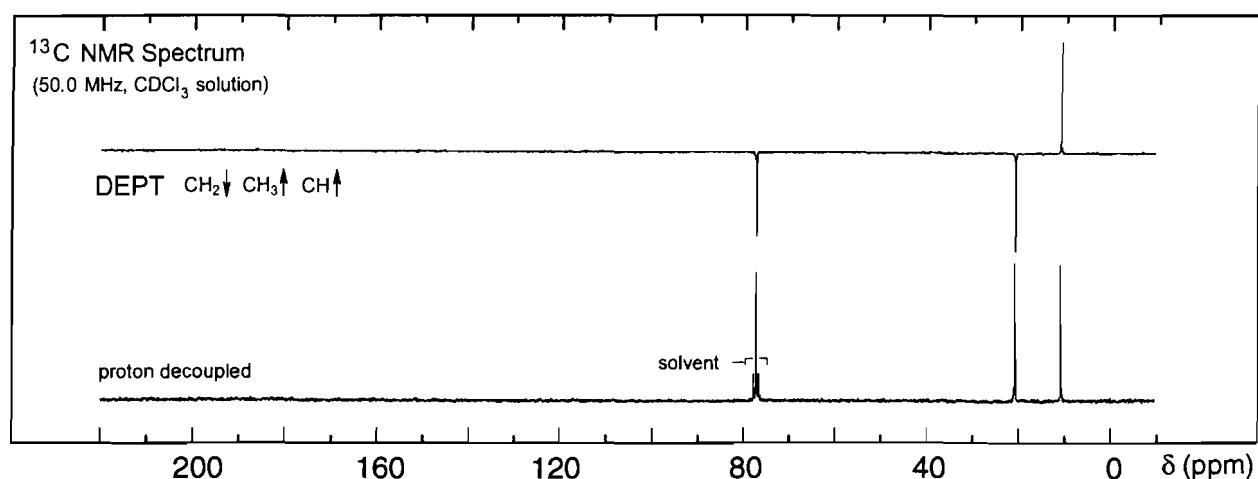
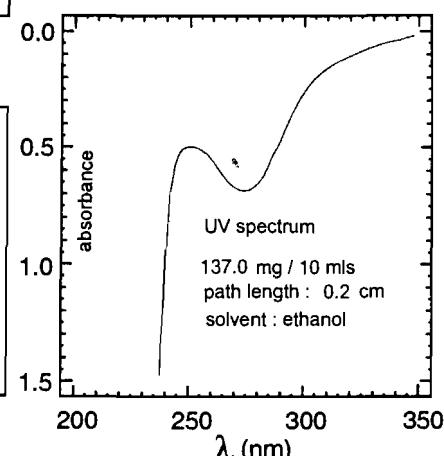
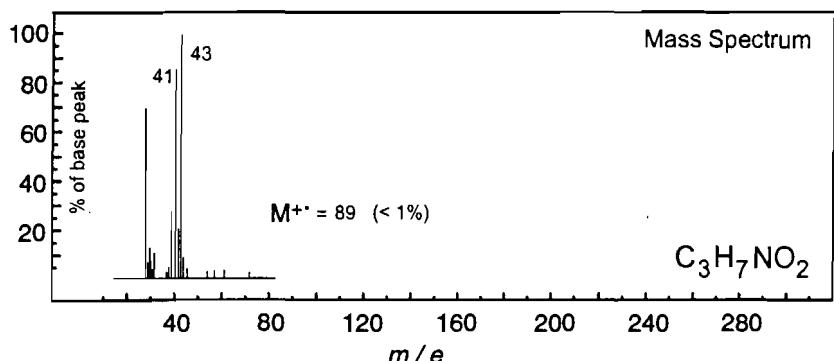
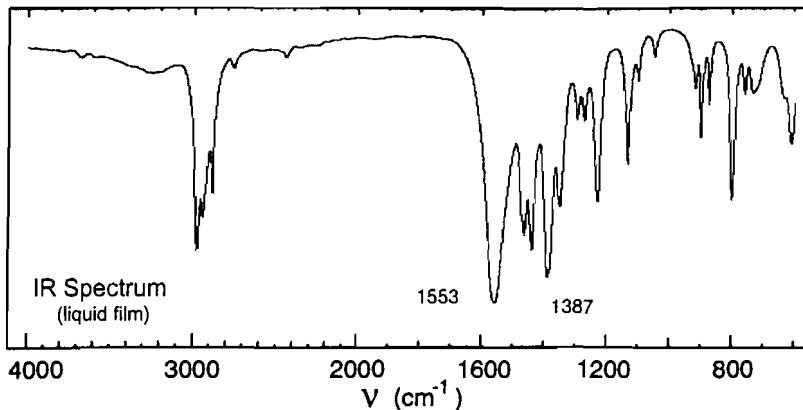
No significant UV absorption above 220 nm



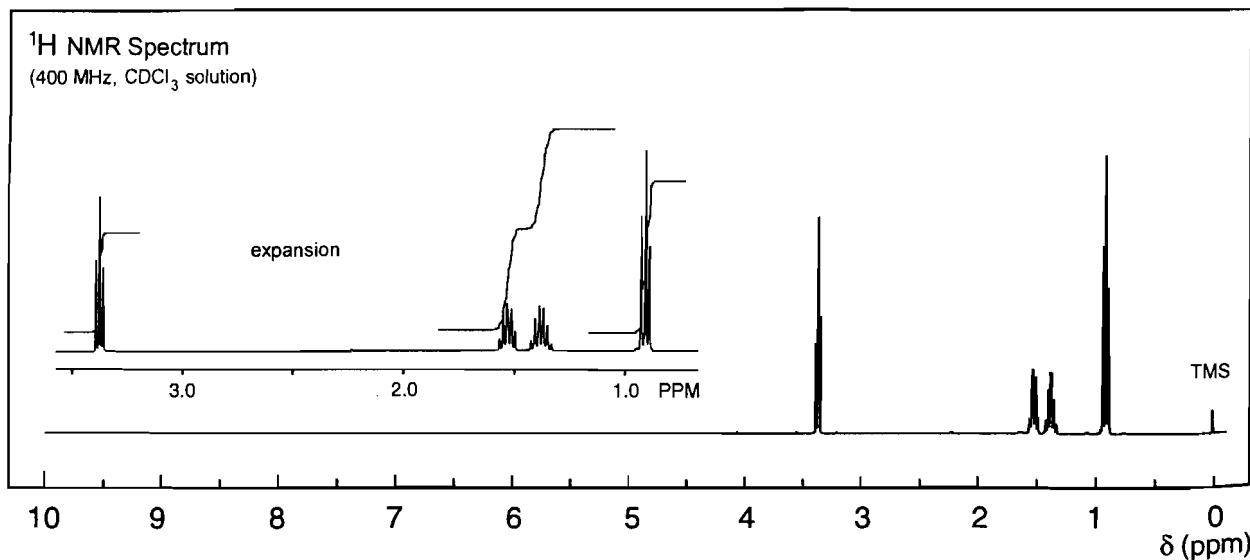
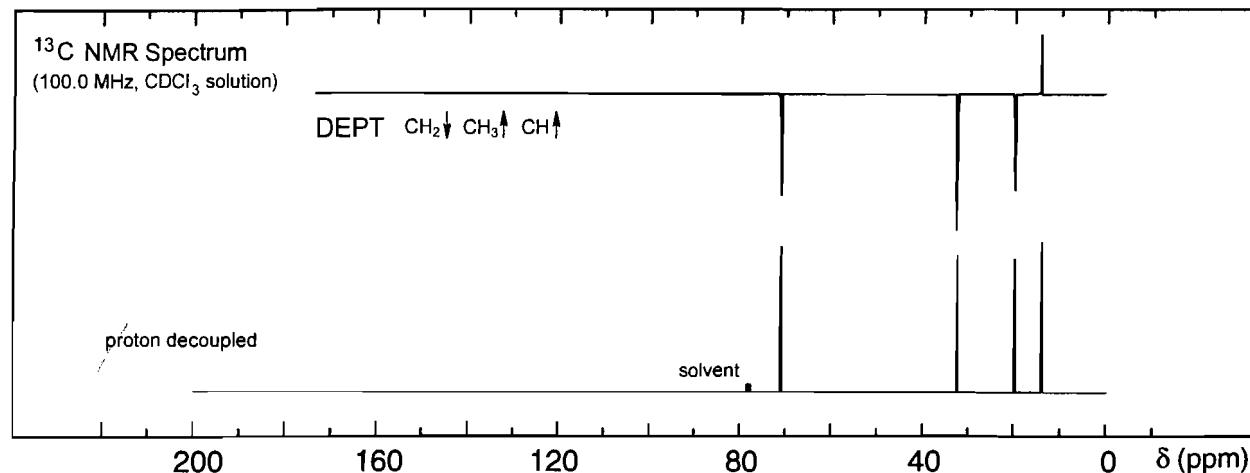
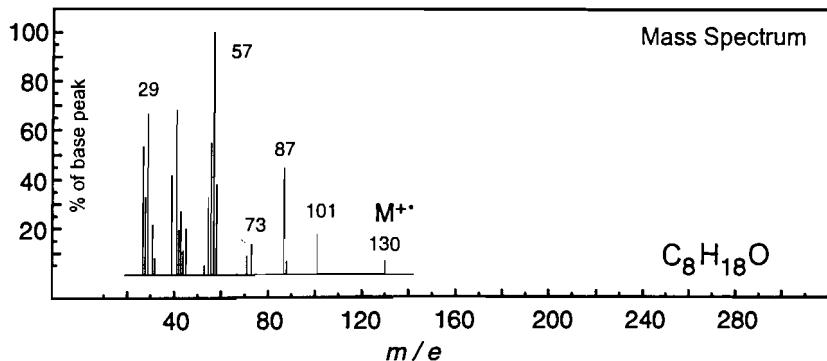
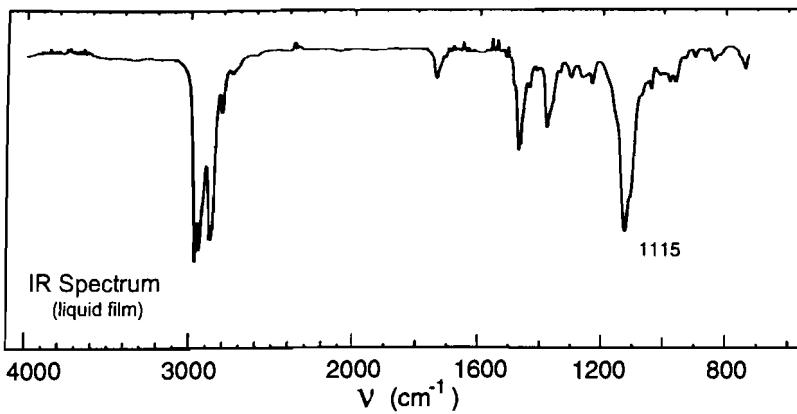
Problem 91



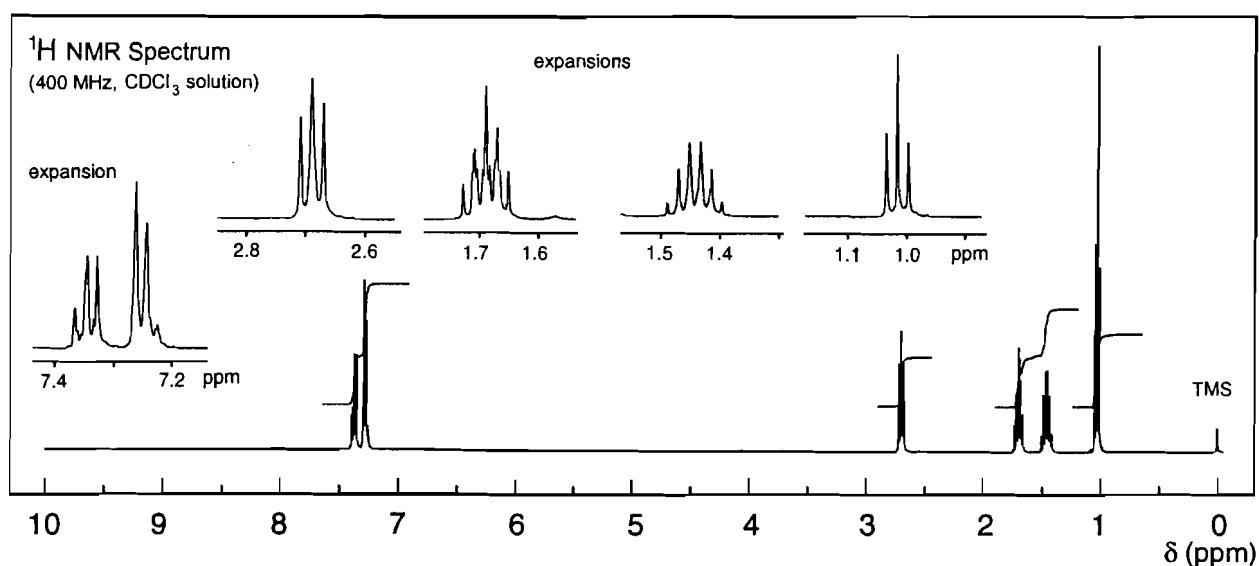
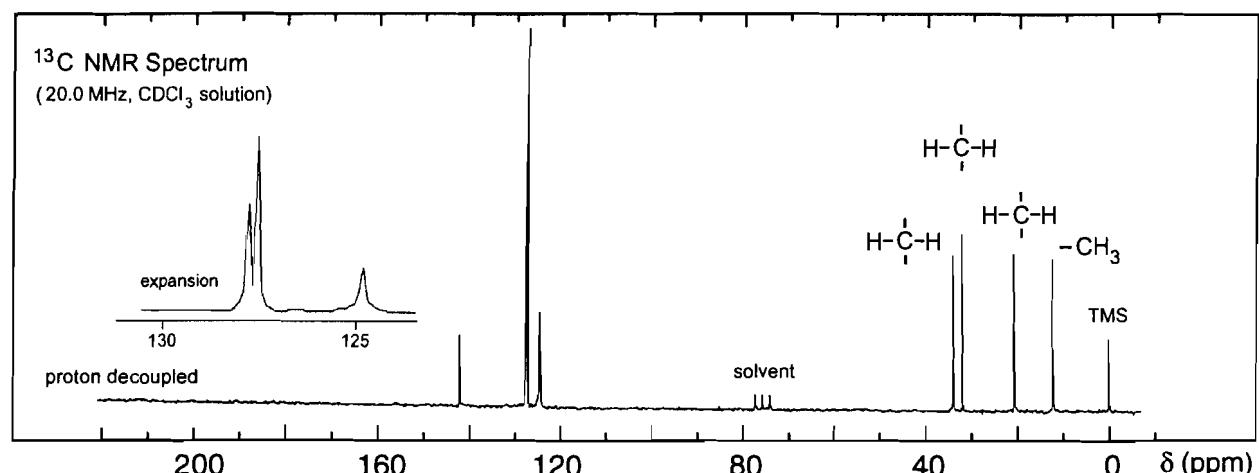
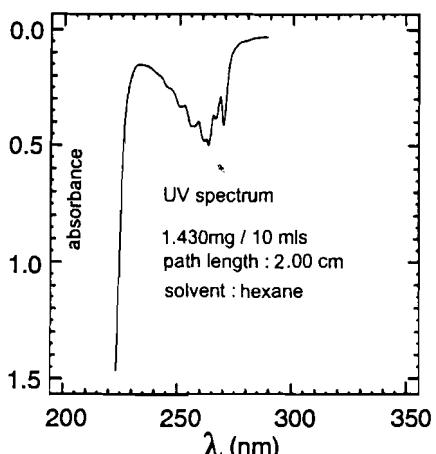
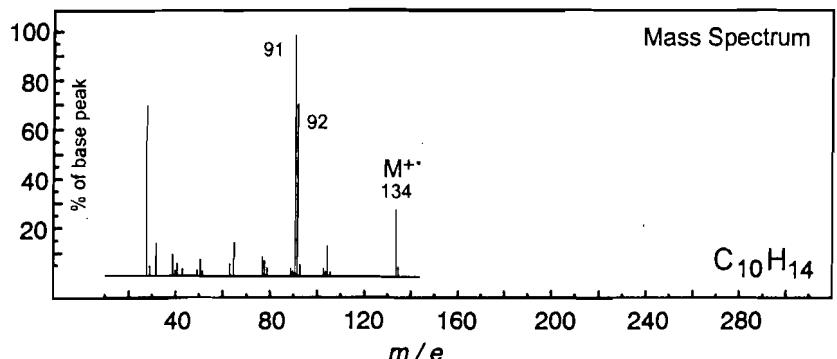
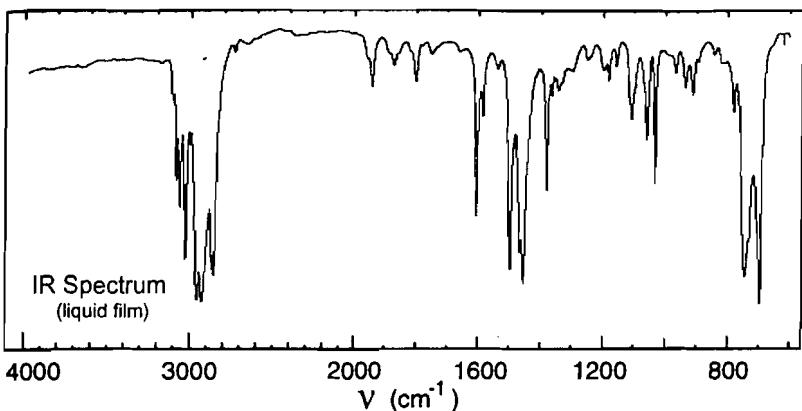
Problem 92



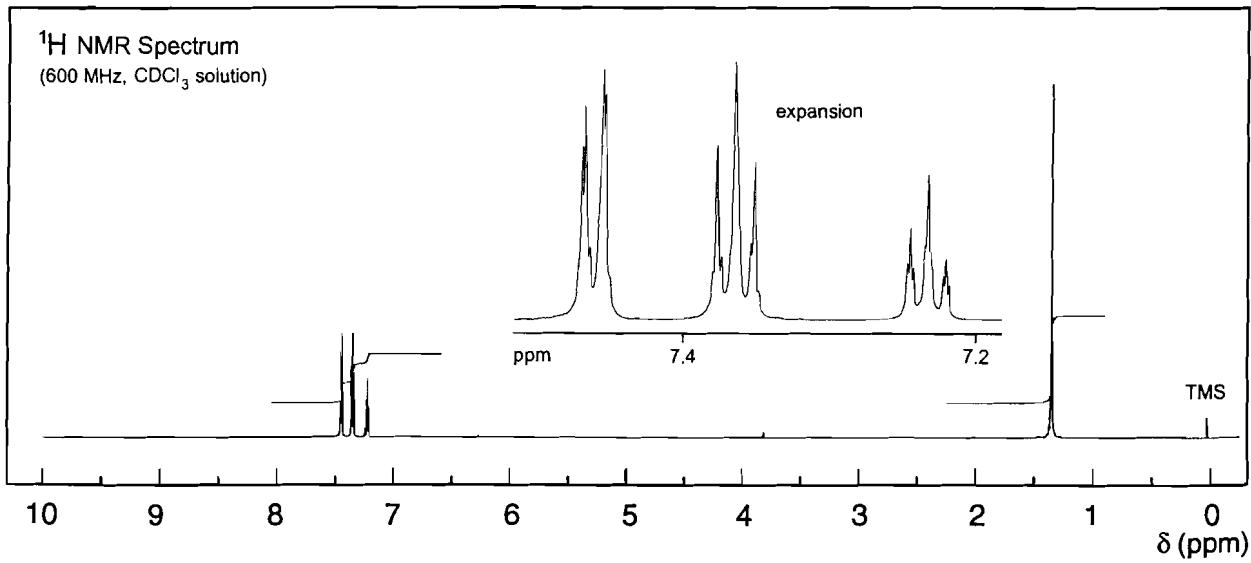
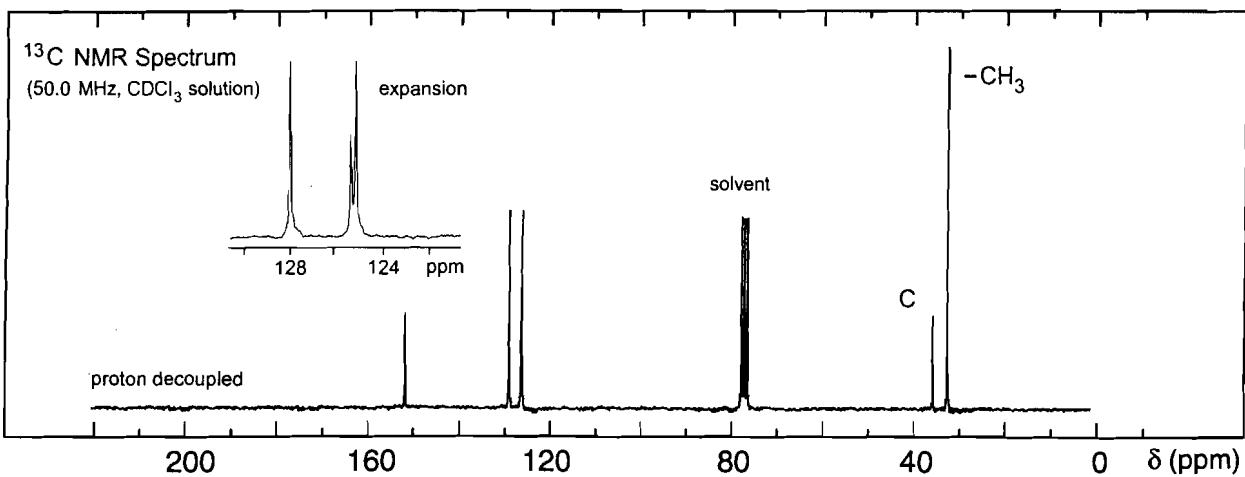
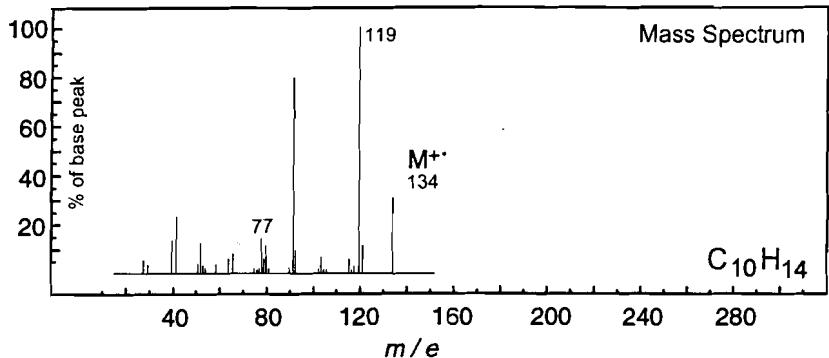
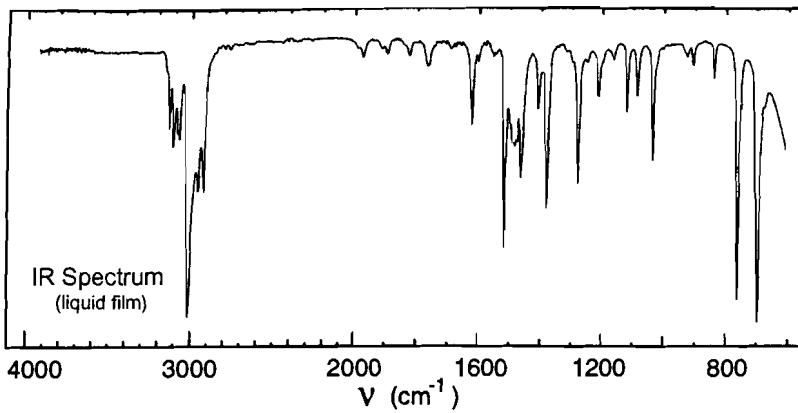
Problem 93



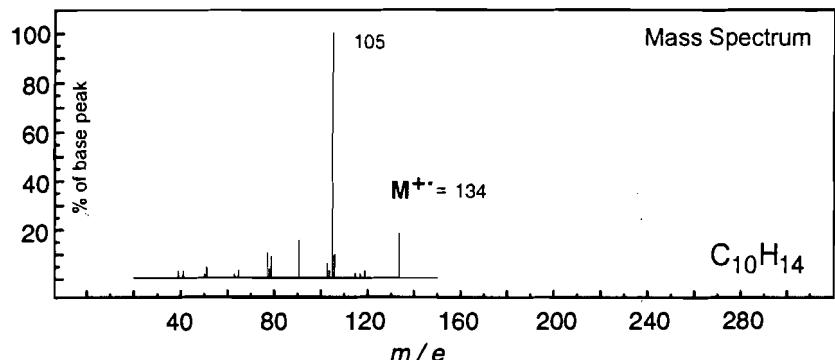
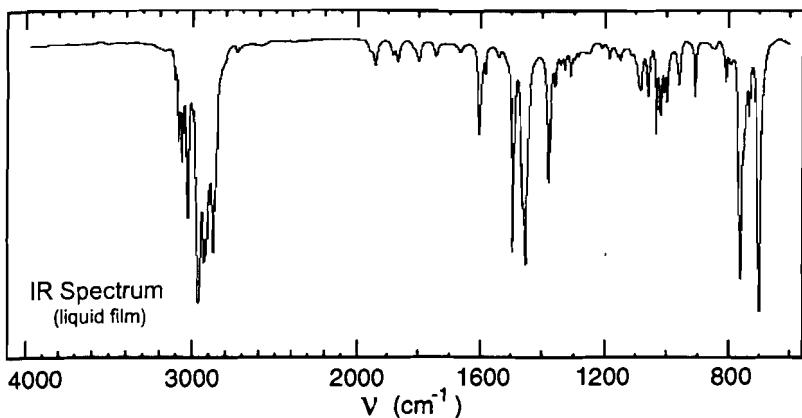
Problem 94



Problem 95

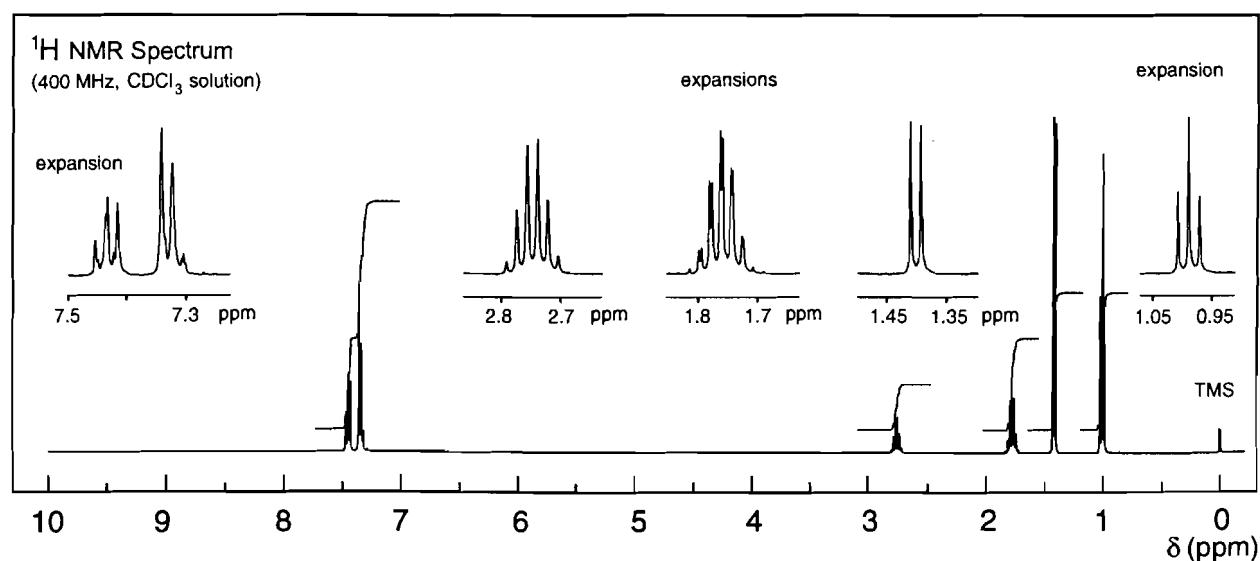
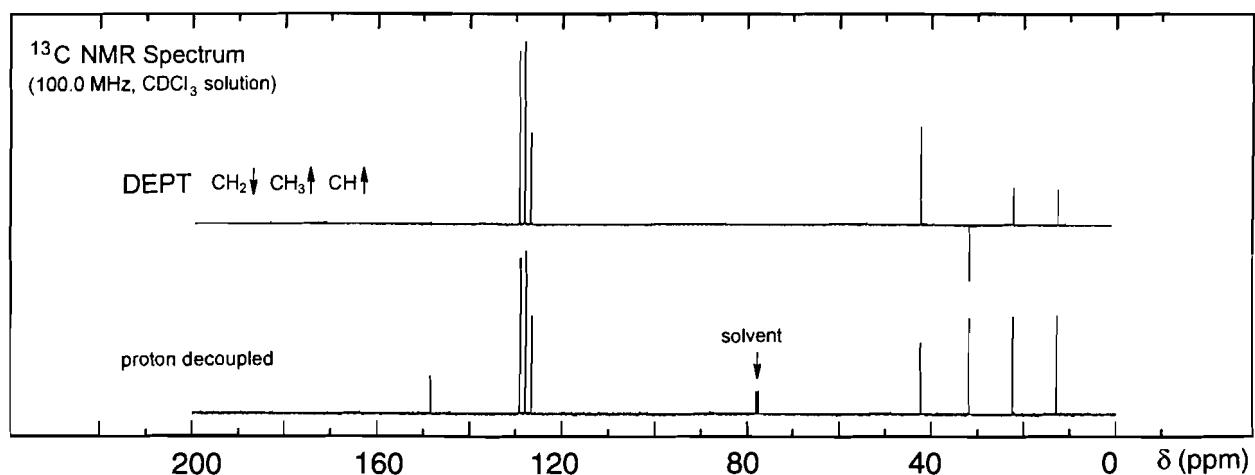


Problem 96

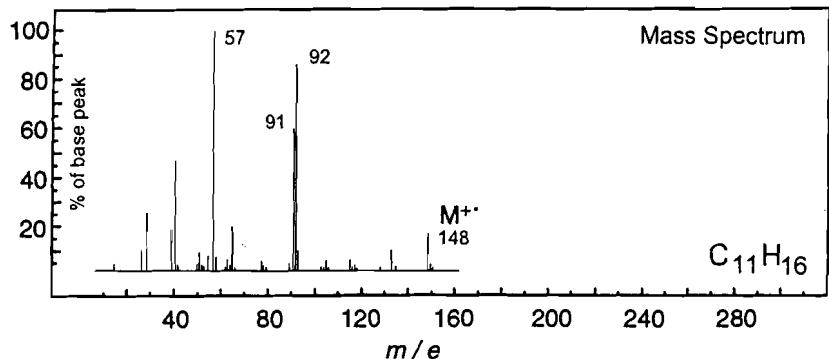
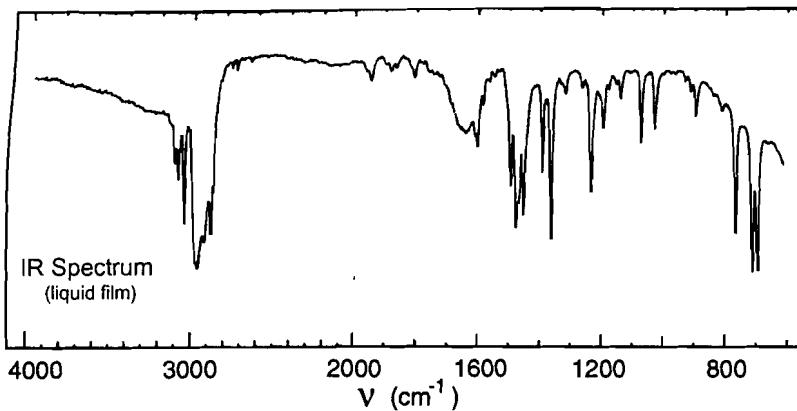


UV Spectrum

$$\lambda_{\max} \approx 260 \text{ nm} (\log_{10} \epsilon \approx 2.5)$$



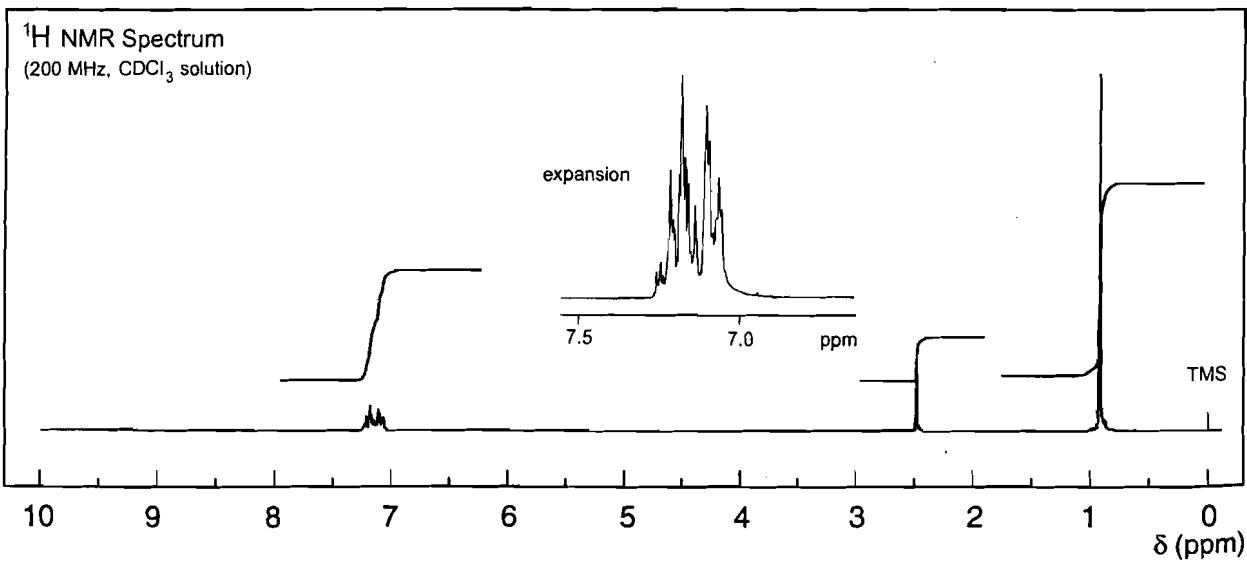
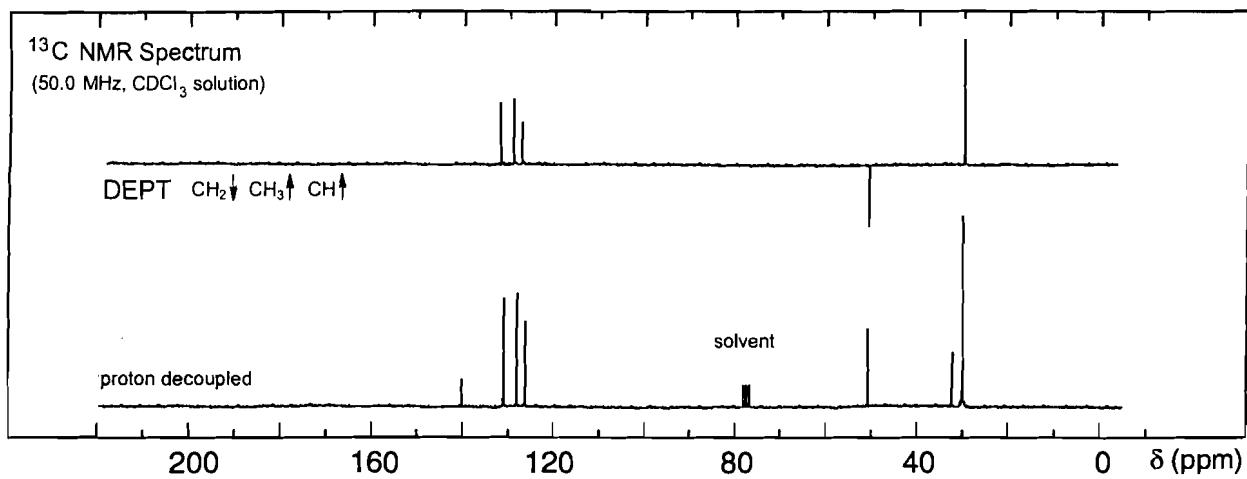
Problem 97



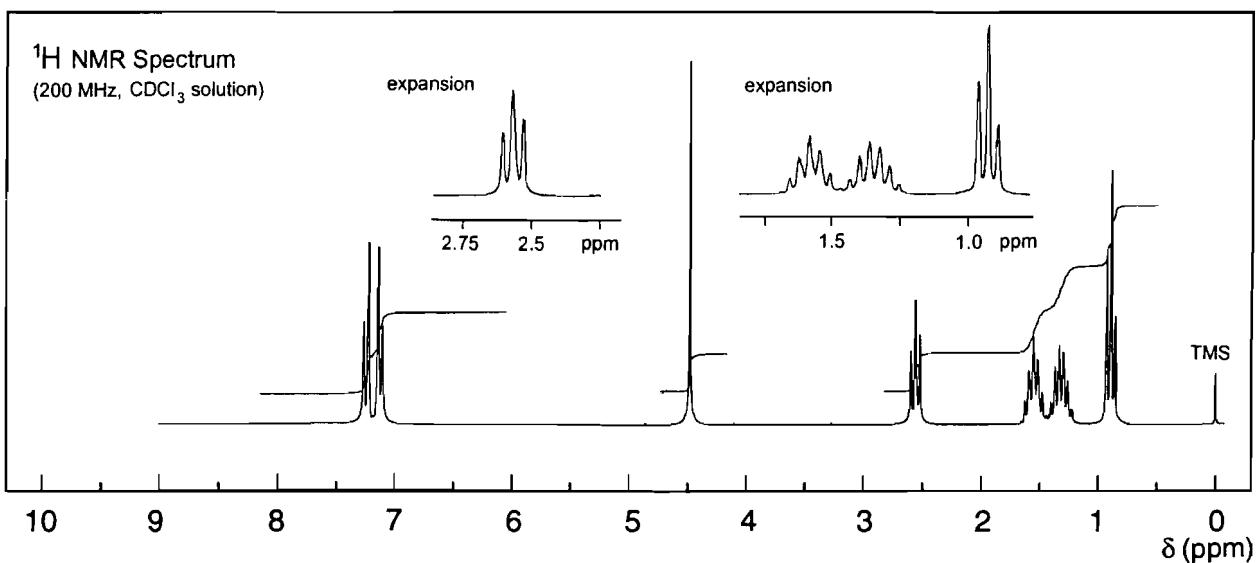
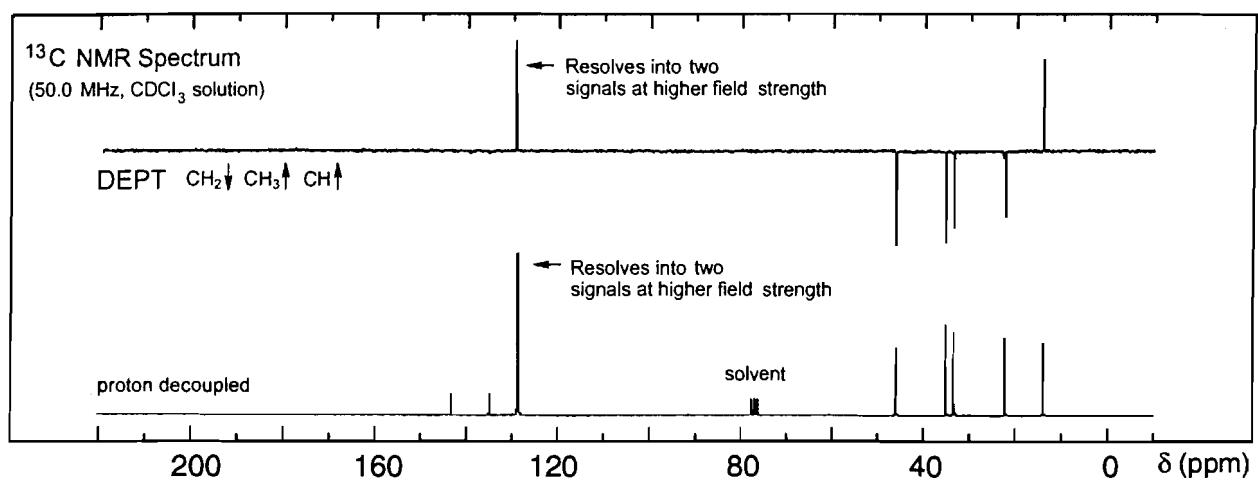
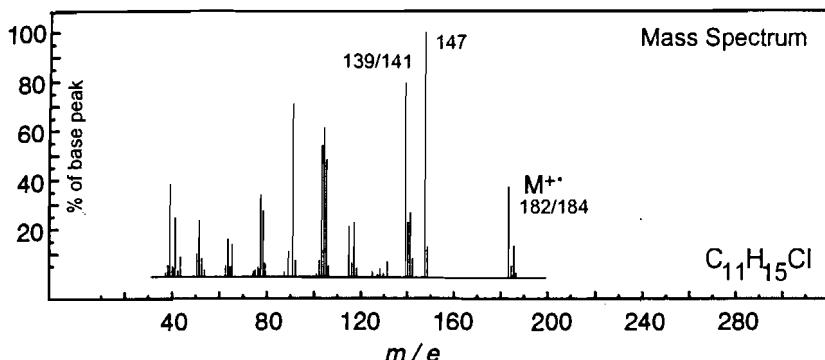
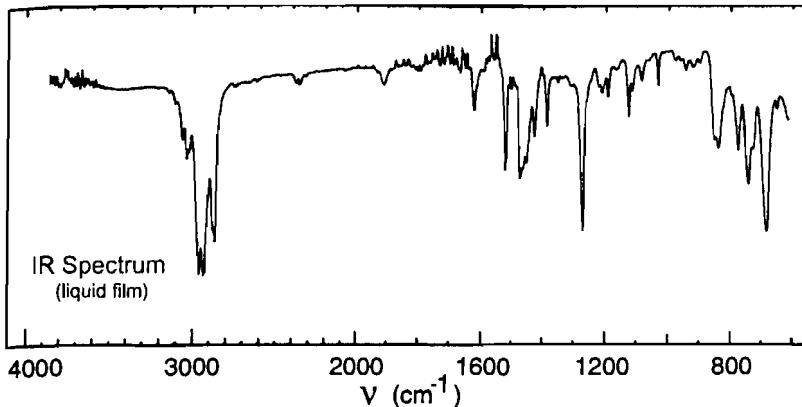
UV Spectrum

λ_{\max} 260 nm ($\log_{10}\epsilon$ 2.5)

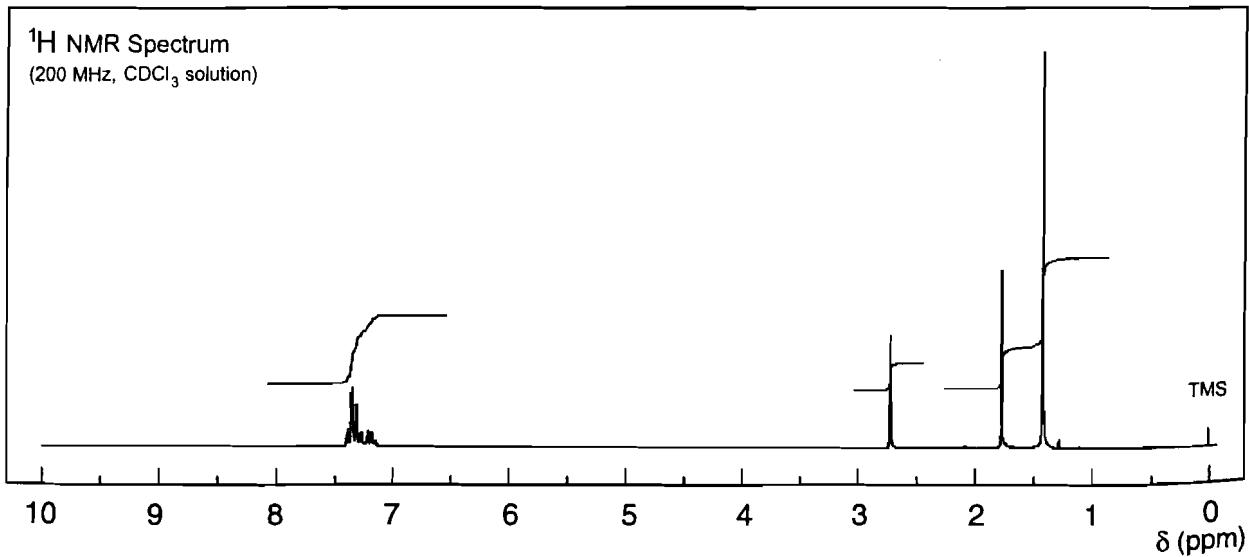
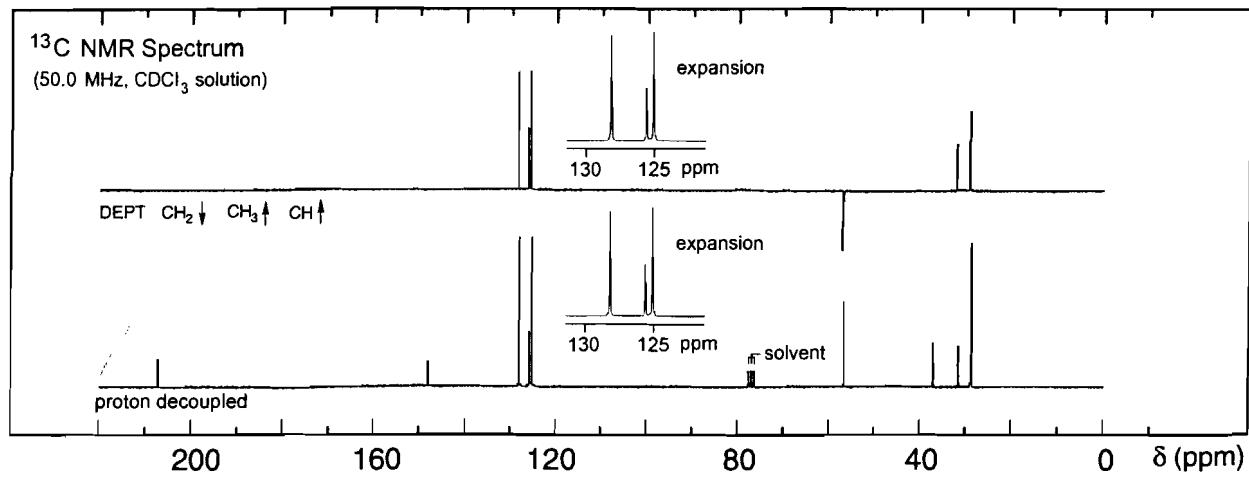
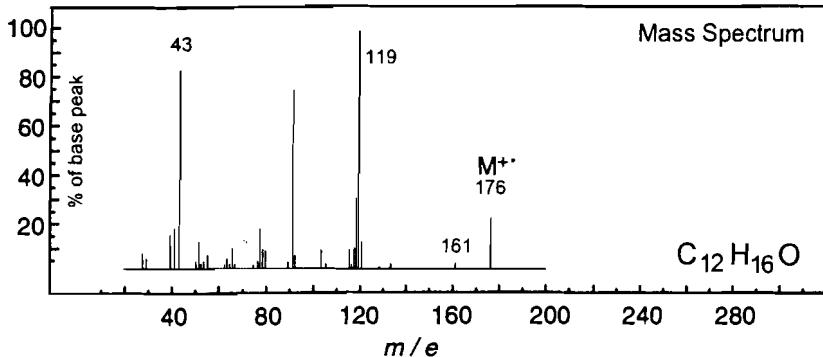
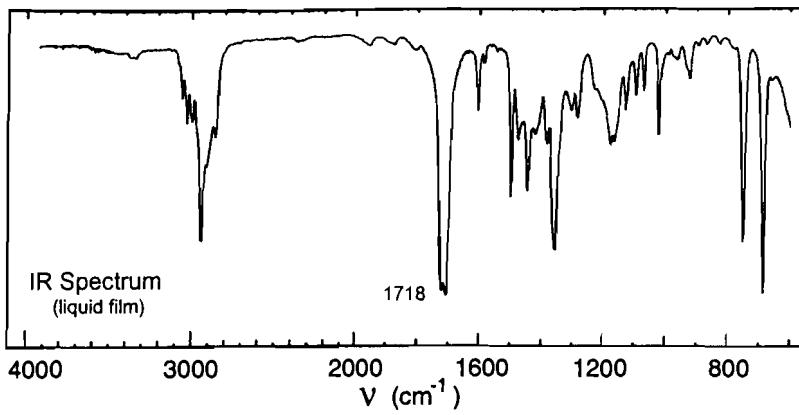
solvent : methanol



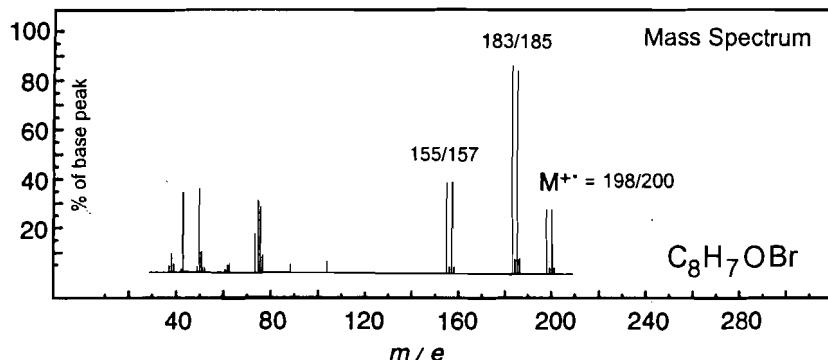
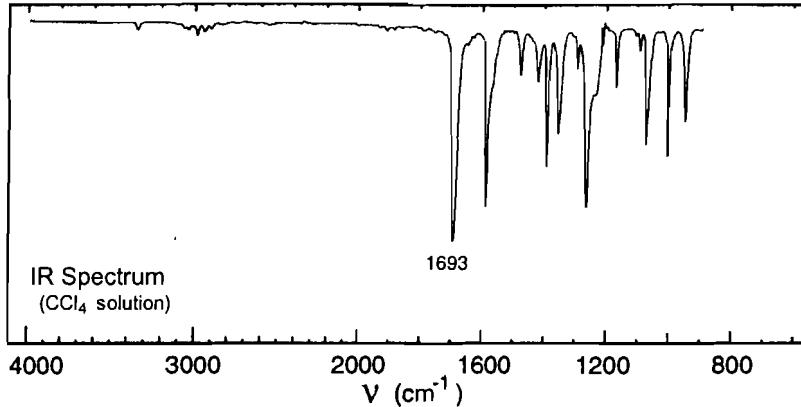
Problem 98



Problem 99



Problem 100



UV Spectrum
 $\lambda_{\max} 258 \text{ nm } (\log_{10} \epsilon 4.2)$
 solvent : ethanol

