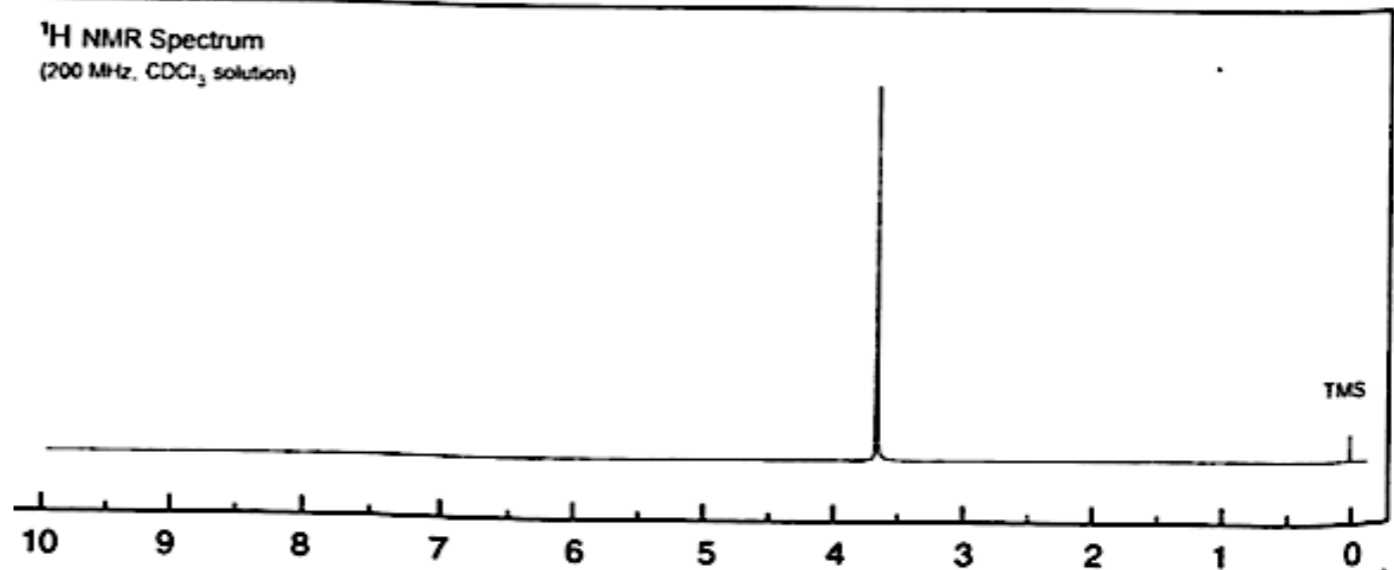
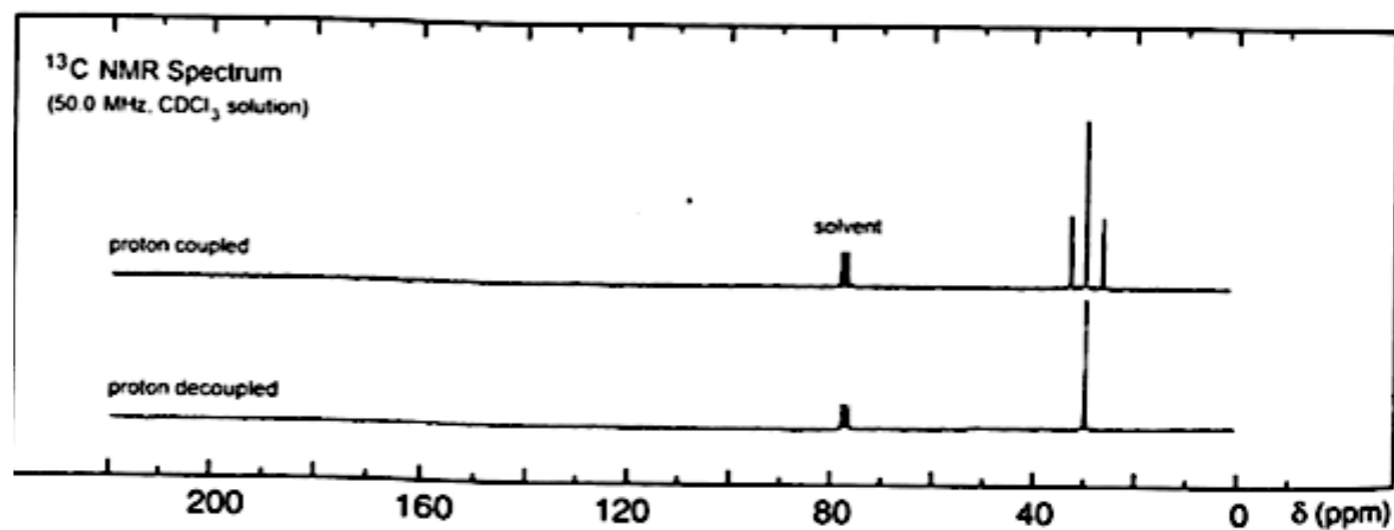
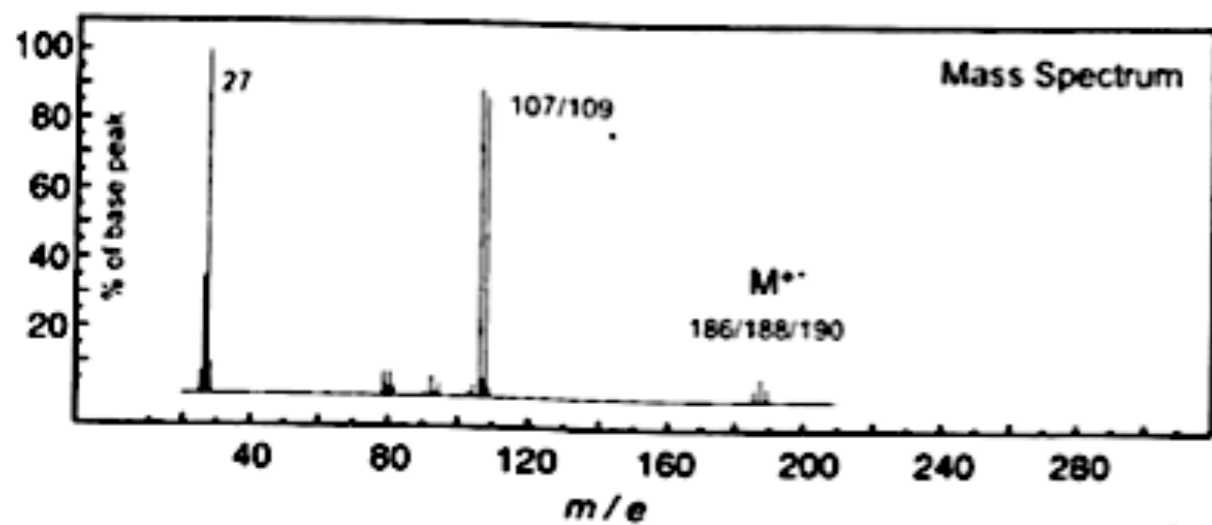
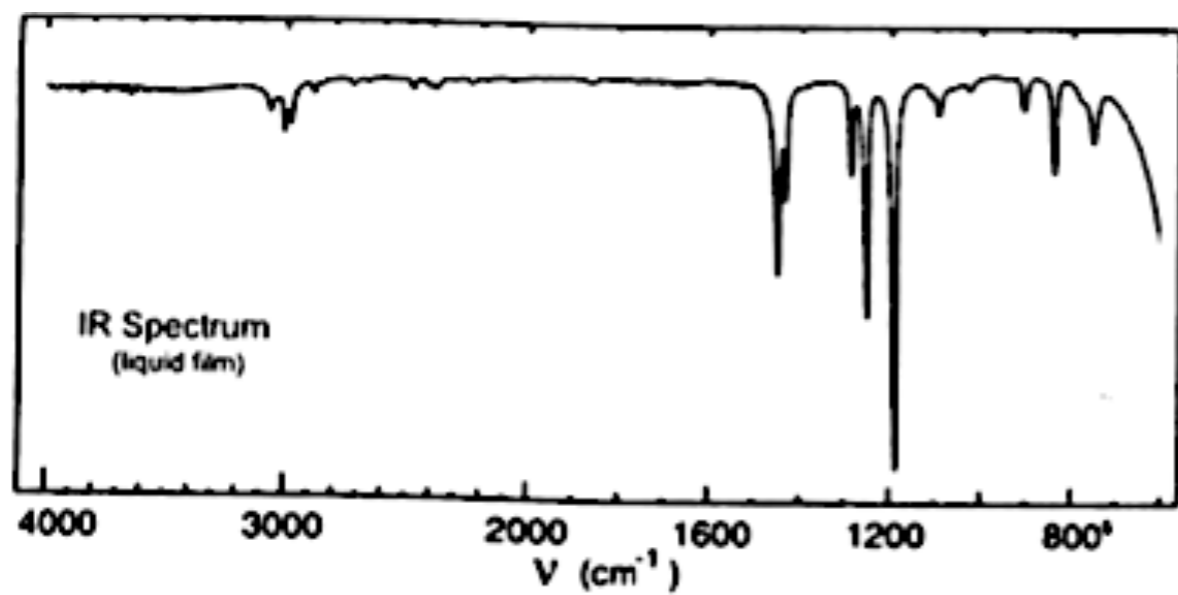


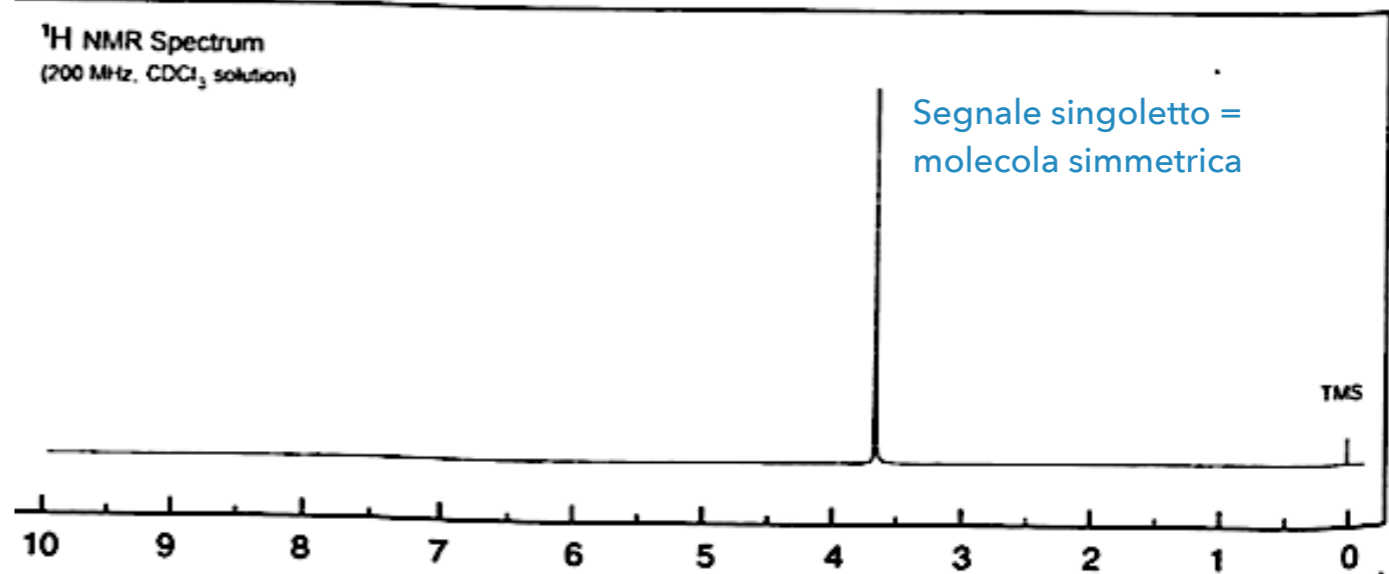
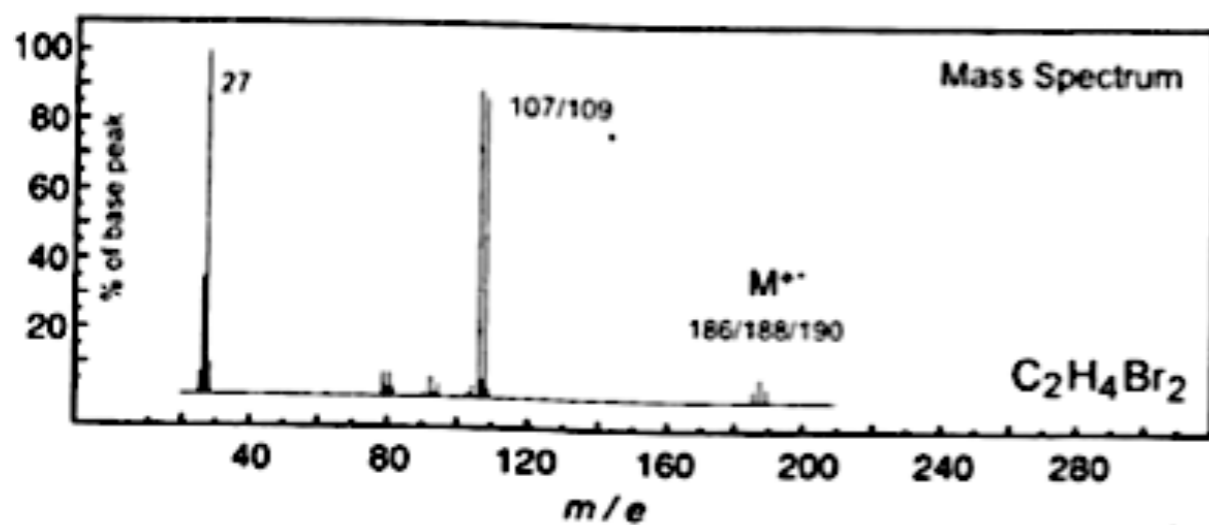
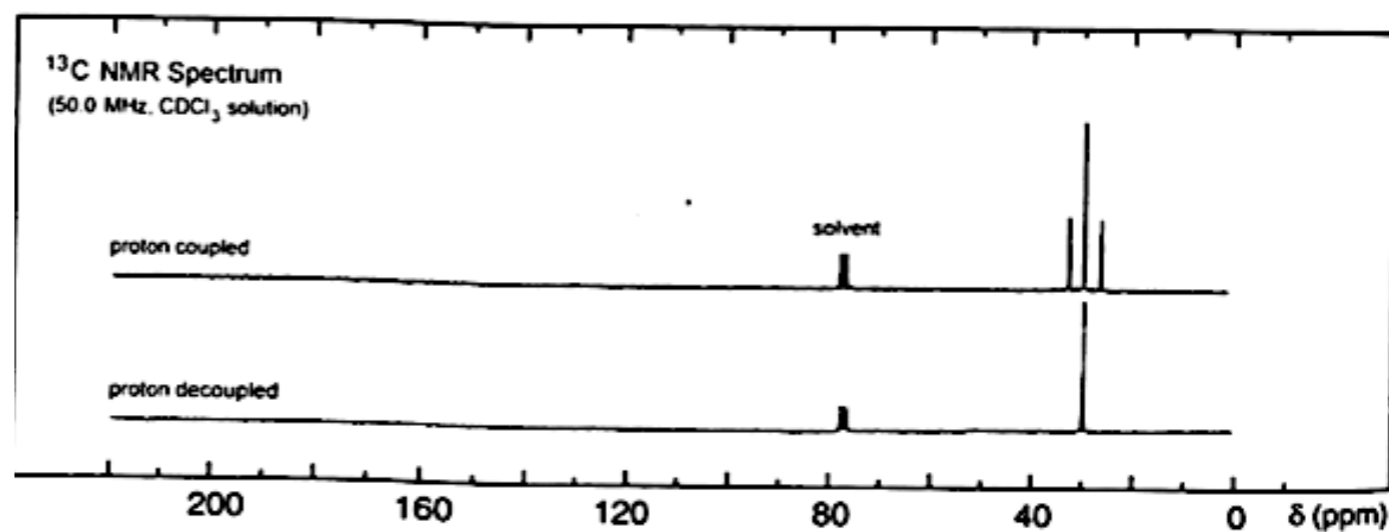
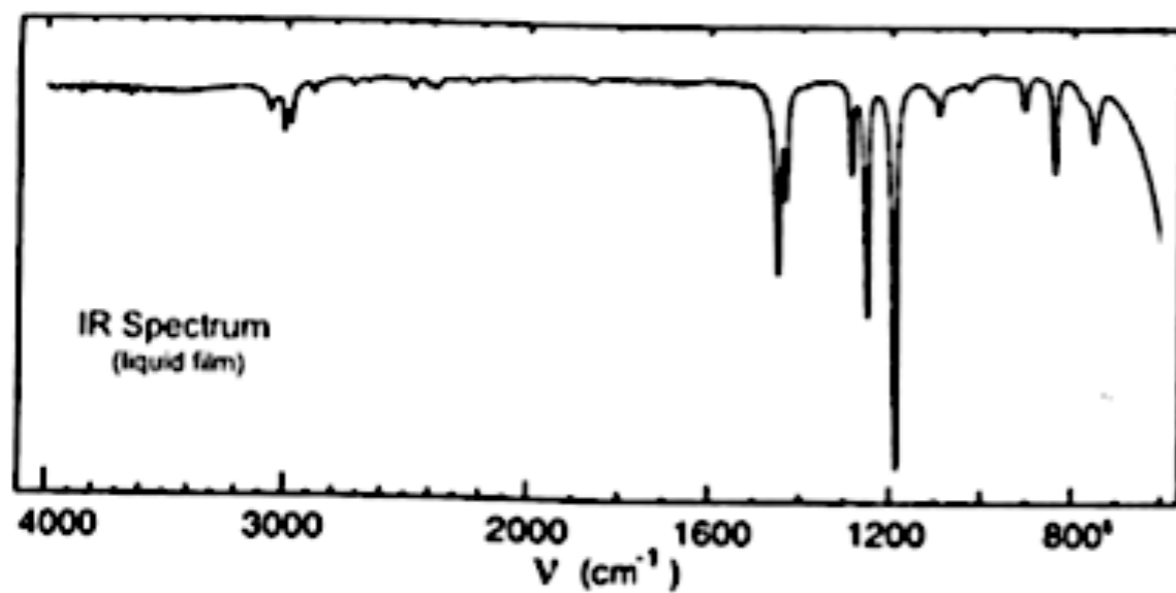
ESERCIZI SU SPETTROMETRIA DI MASSA
E ^{13}C NMR (RIPASSO IR E ^1H NMR)

LEZIONE 12

SPETTRO 1



SOLUZIONE

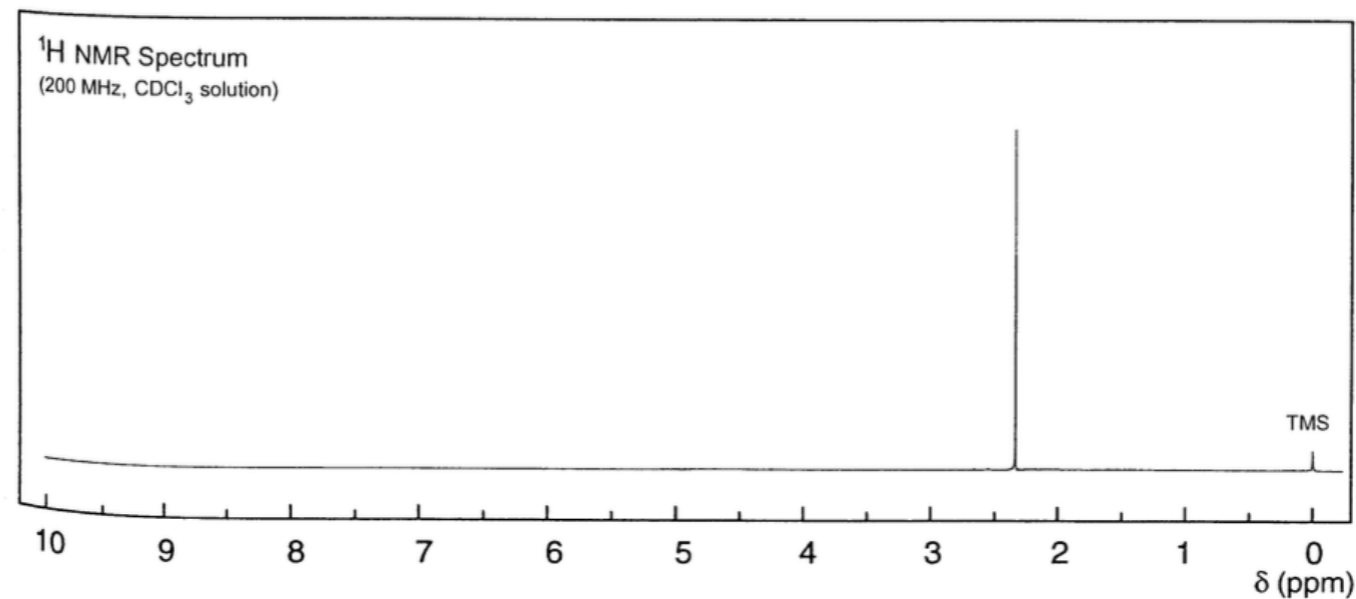
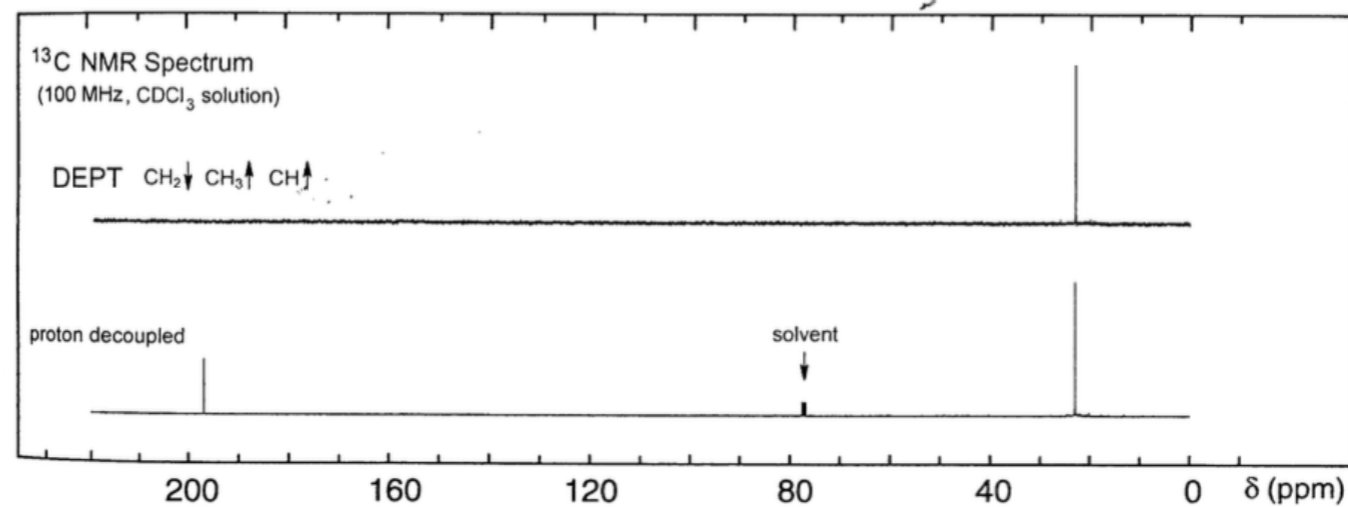
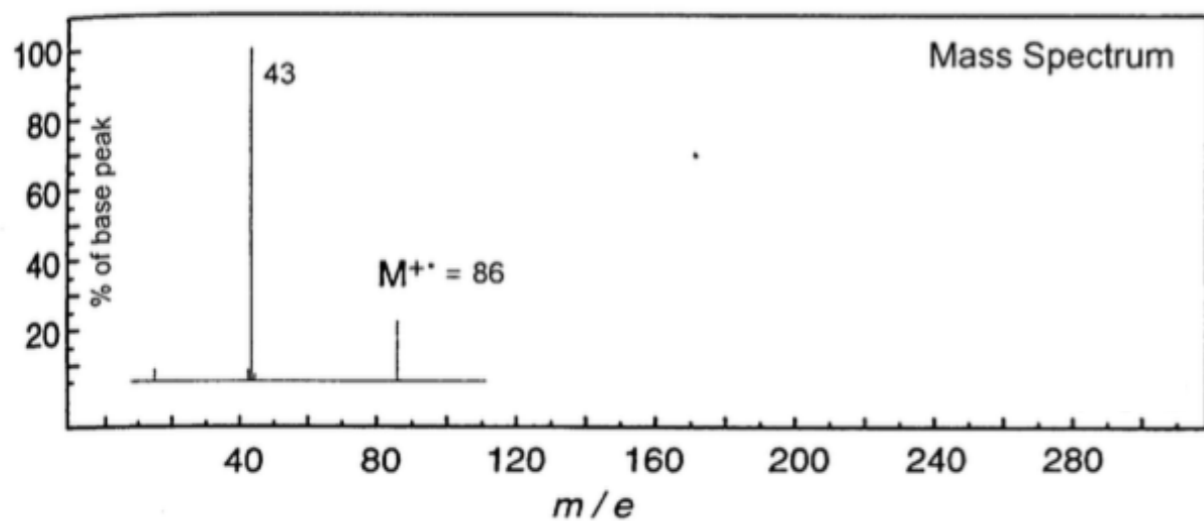
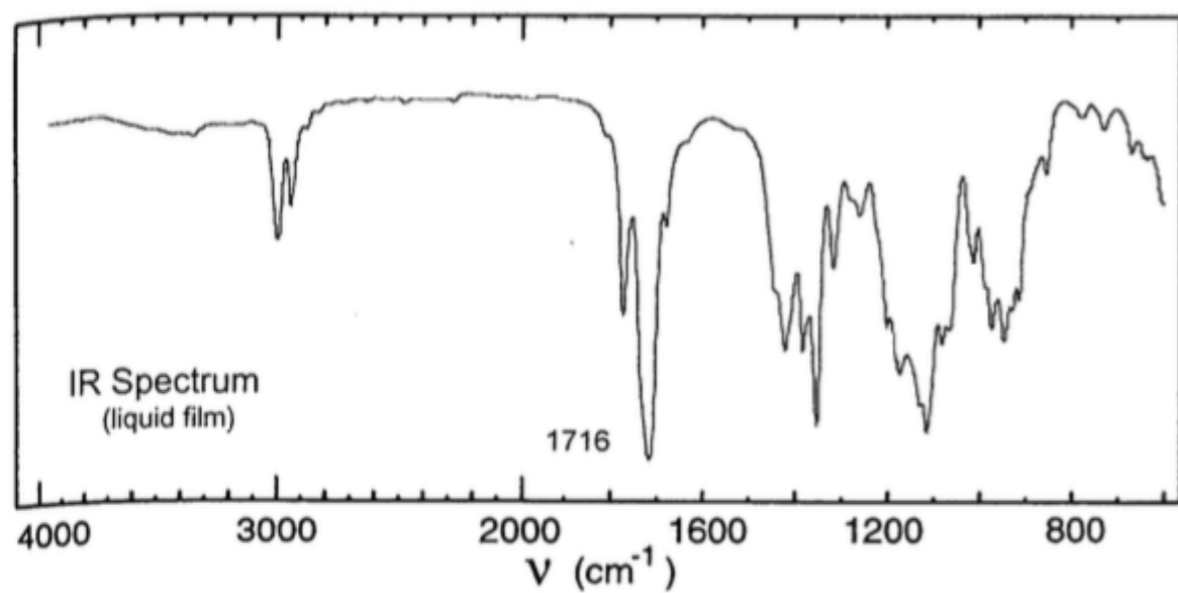


SPETTRO 2

UV Spectrum

λ_{\max} 289 nm ($\log_{10} \epsilon$ 1.4)

solvent: methanol

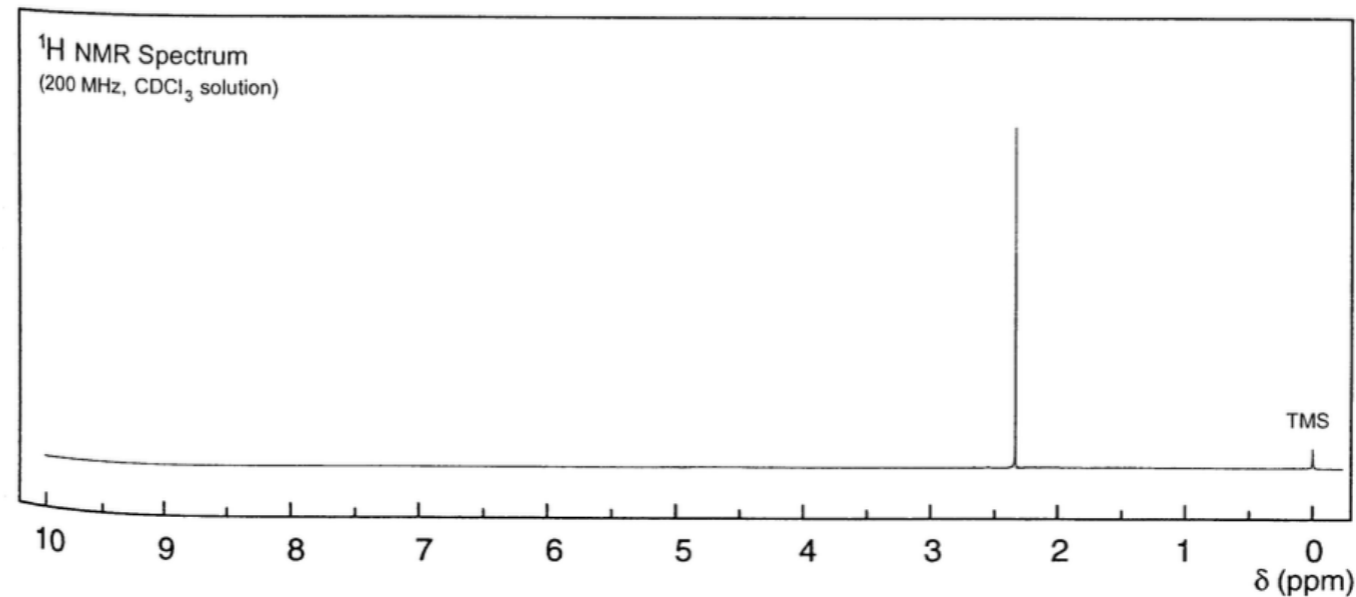
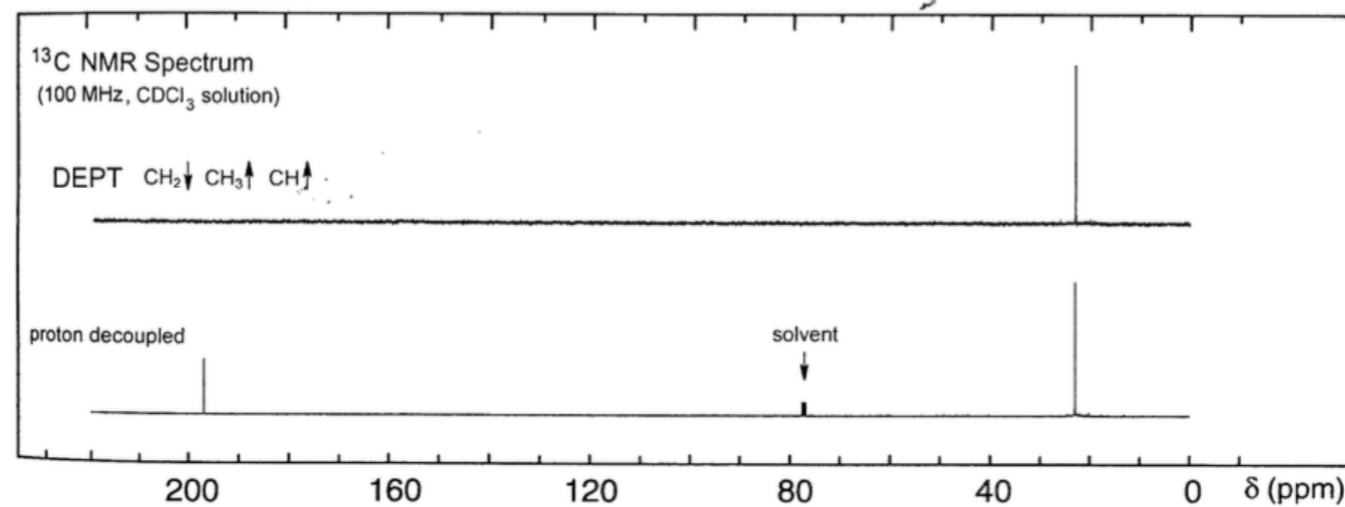
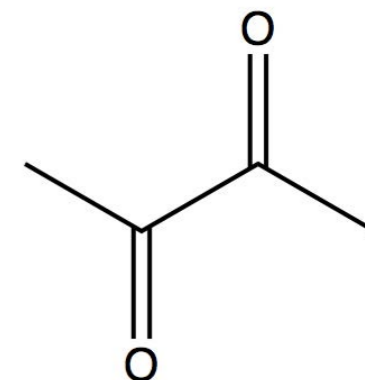
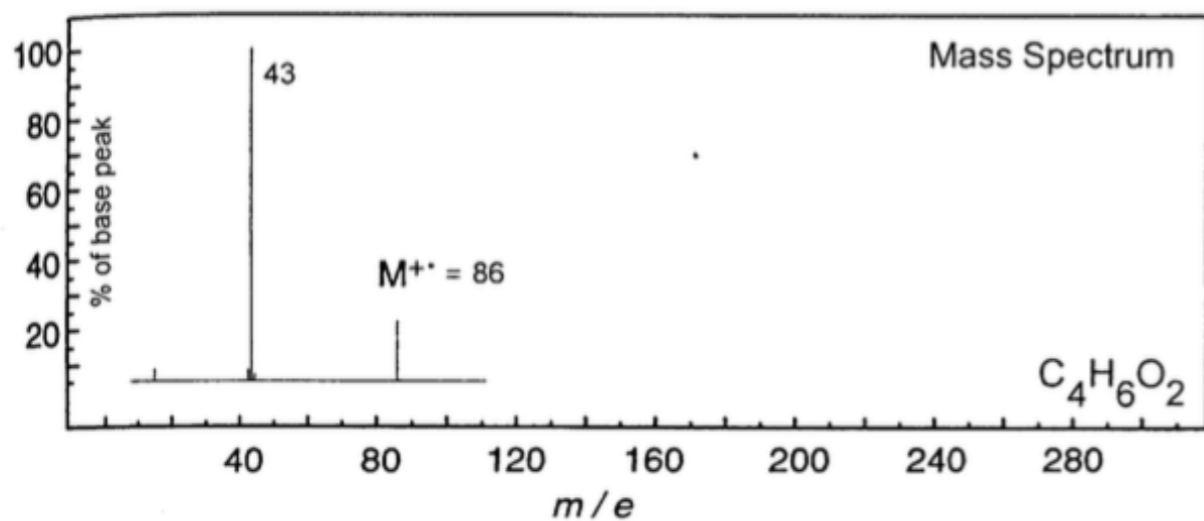
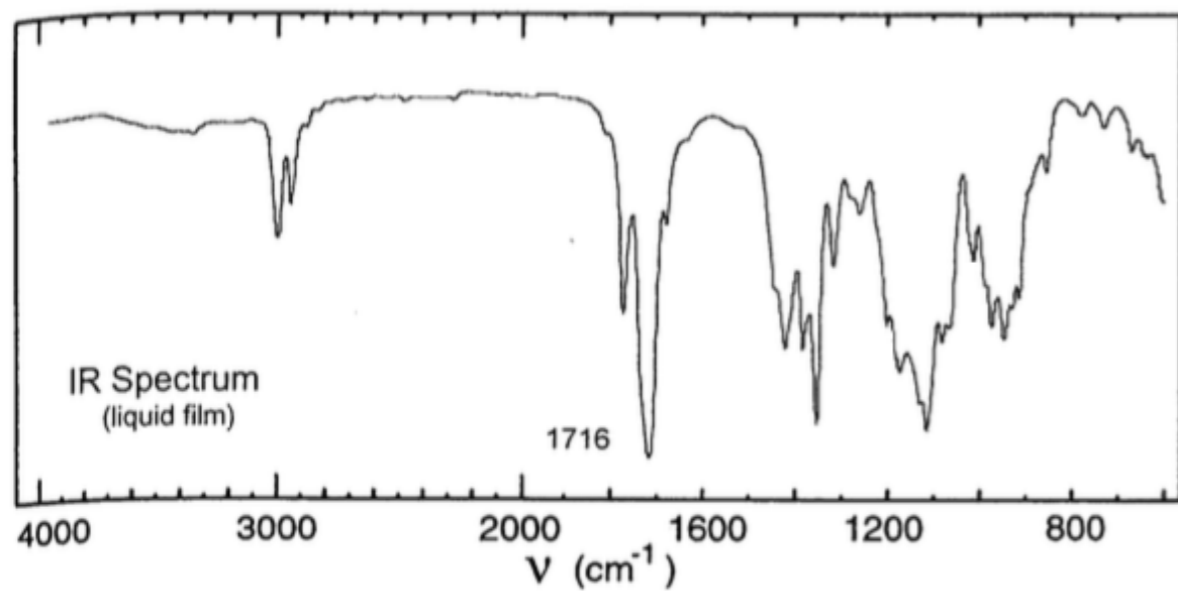


SOLUZIONE

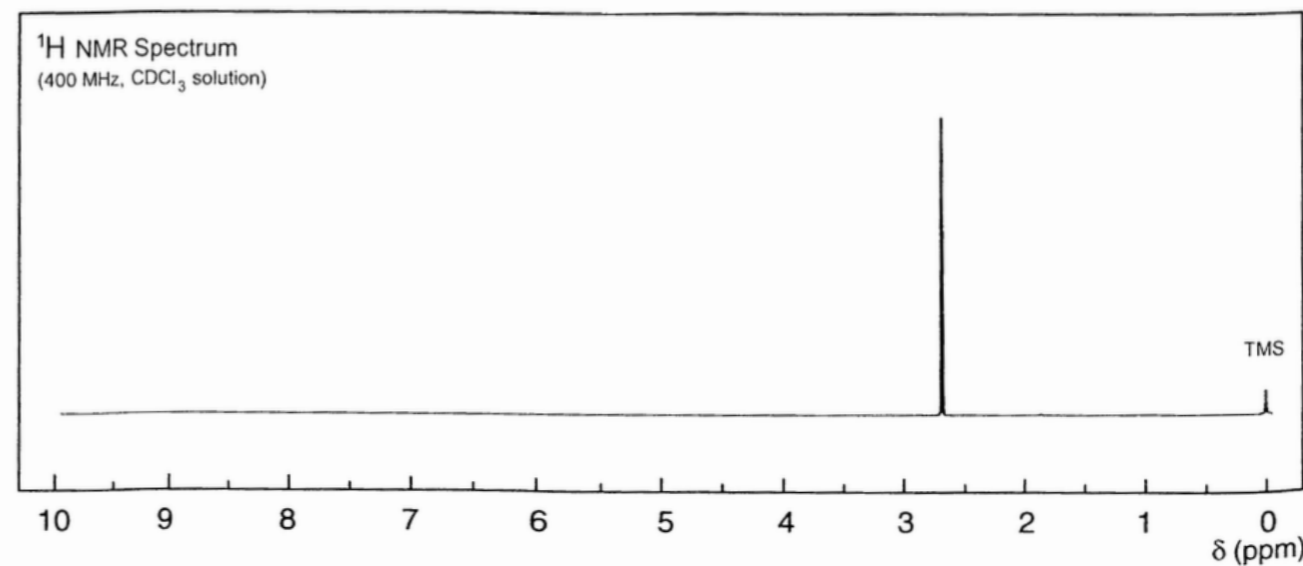
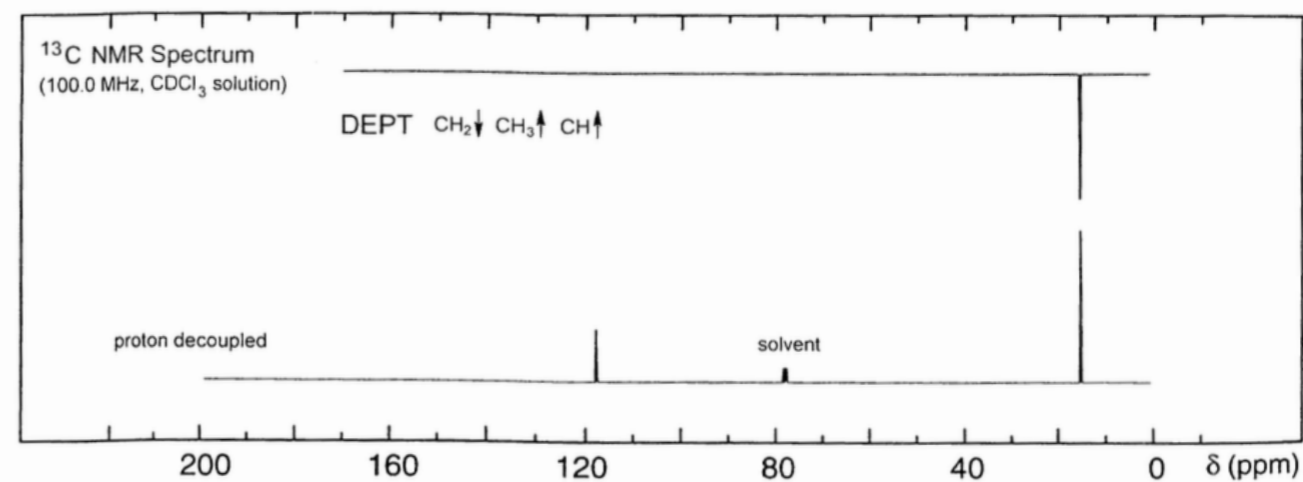
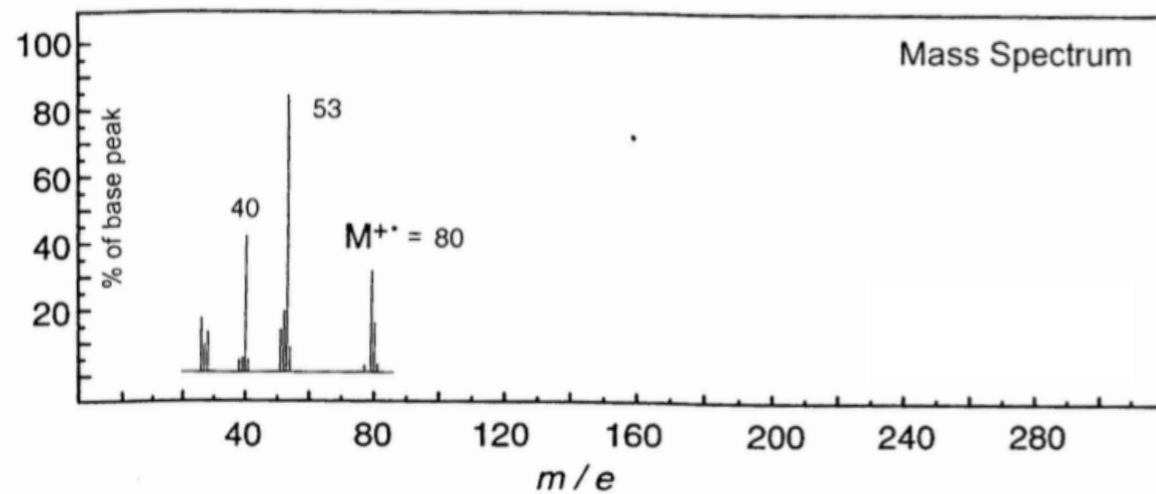
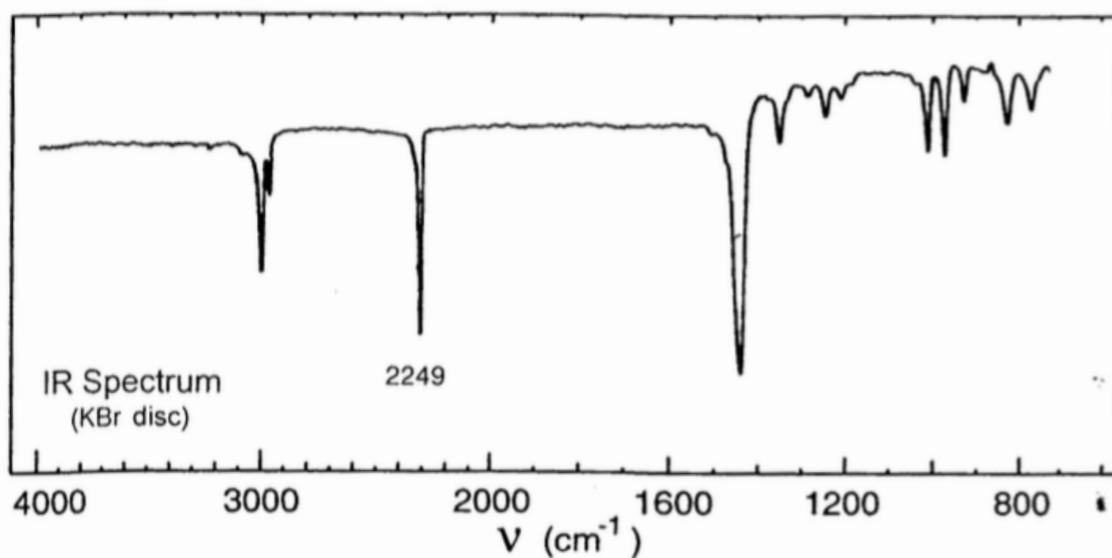
UV Spectrum

λ_{\max} 289 nm ($\log_{10} \epsilon$ 1.4)

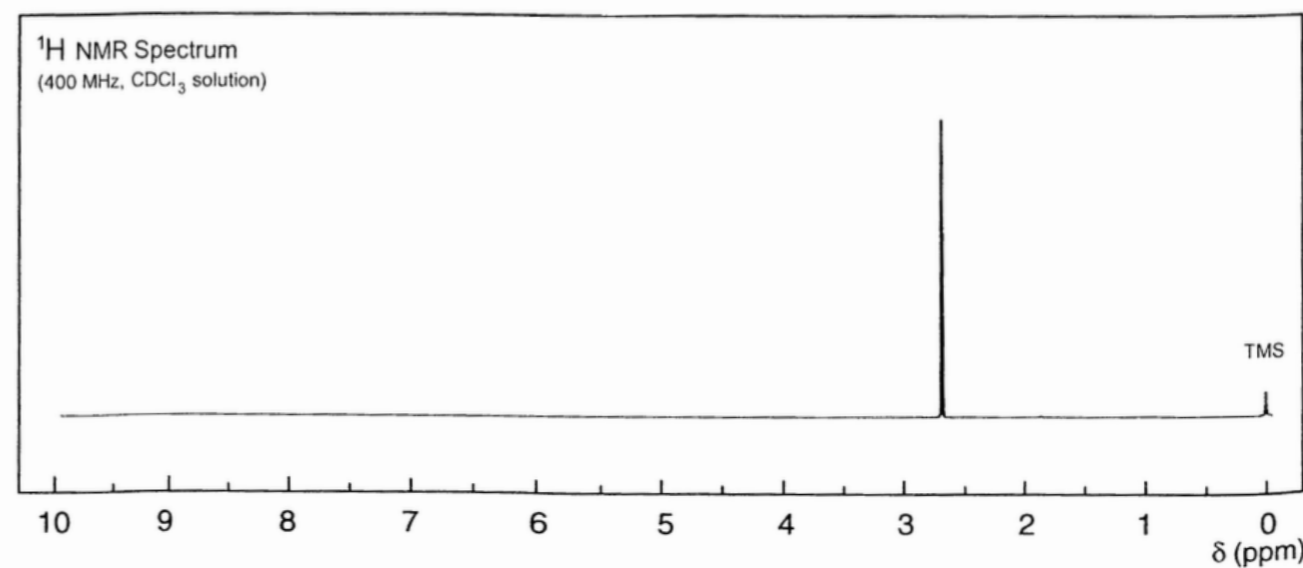
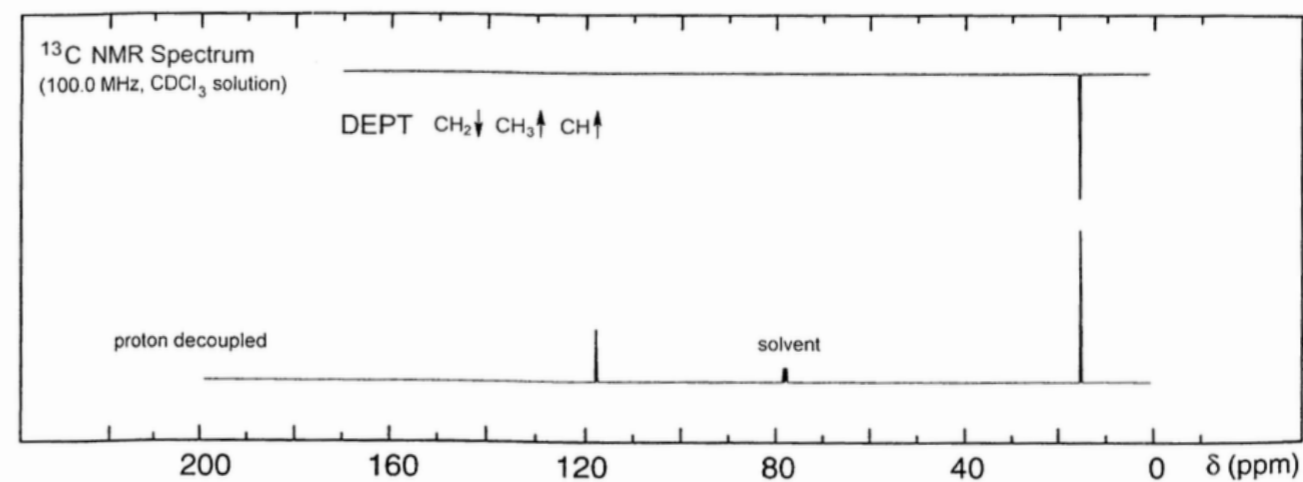
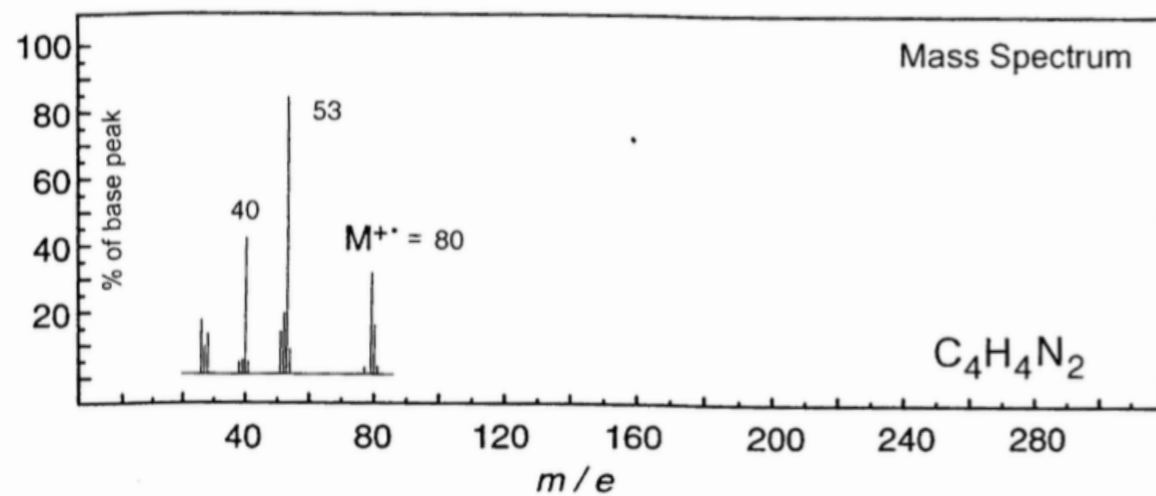
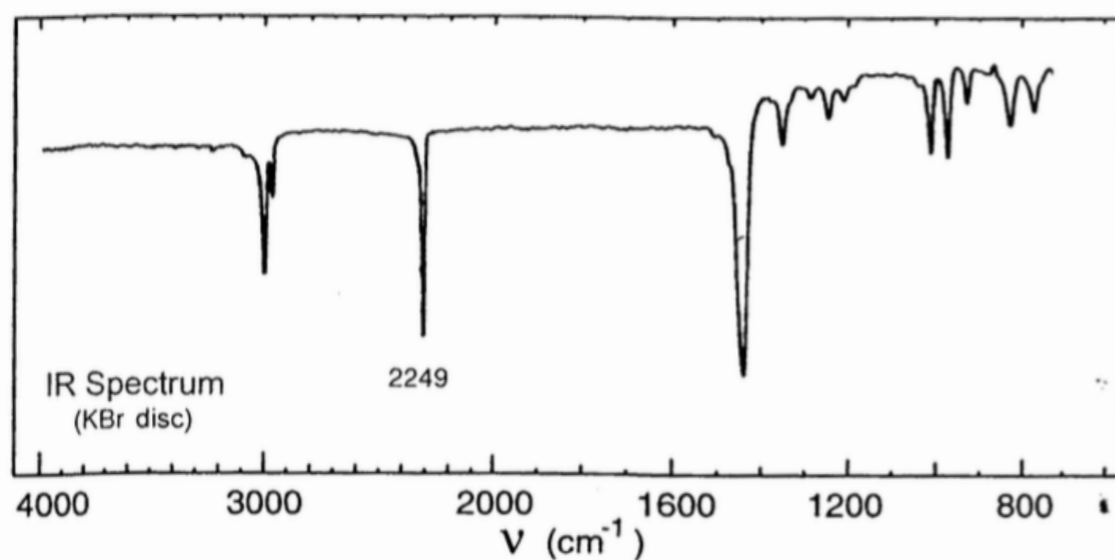
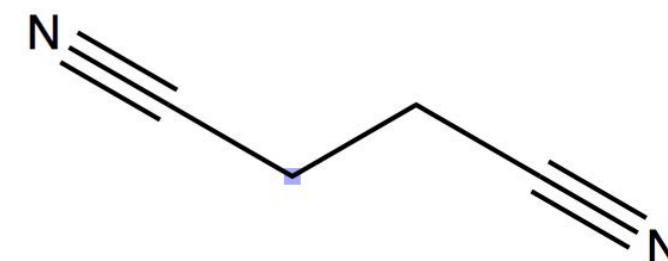
solvent: methanol



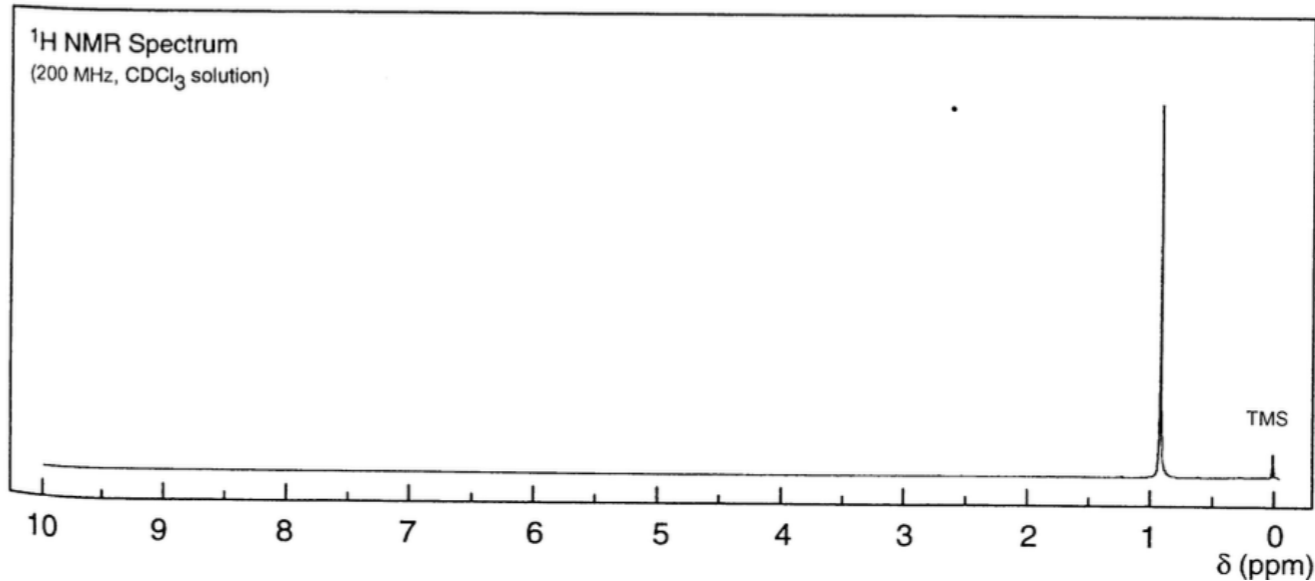
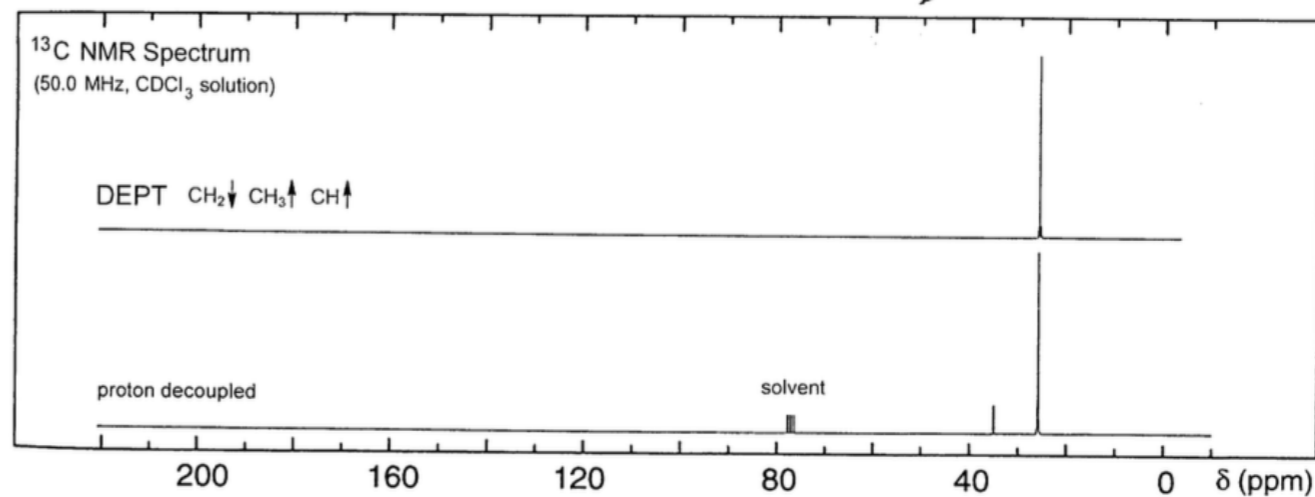
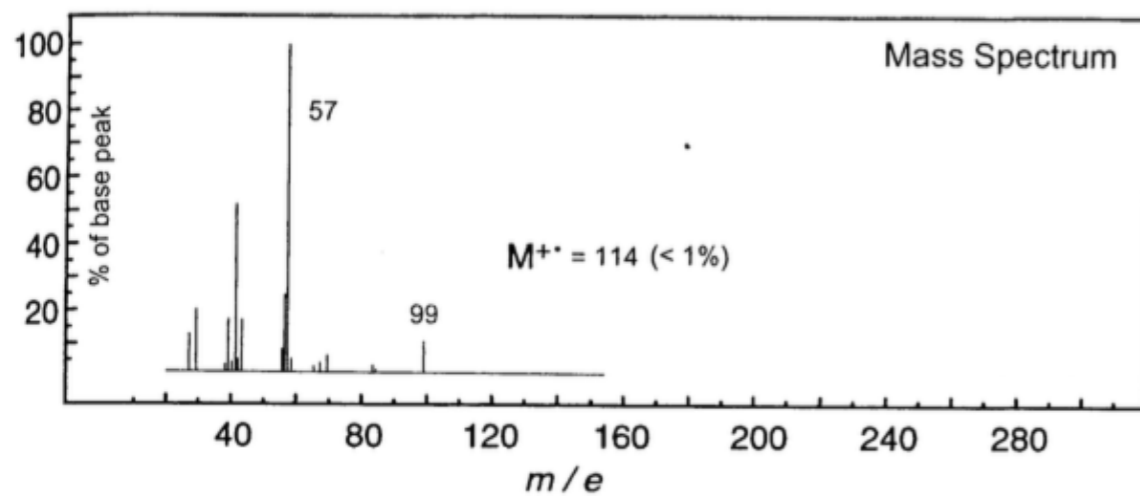
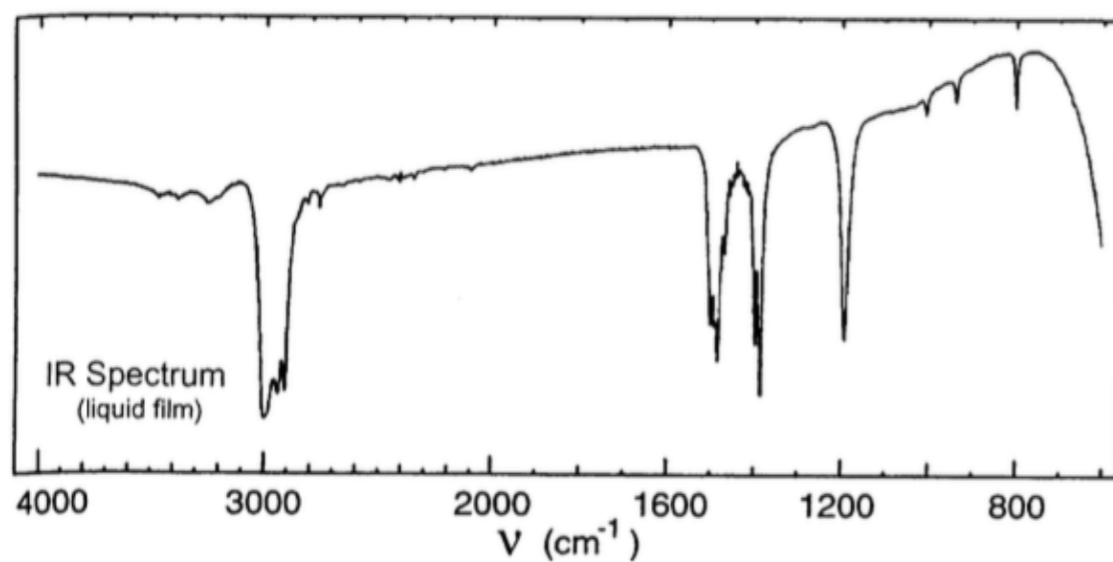
SPETTRO 3



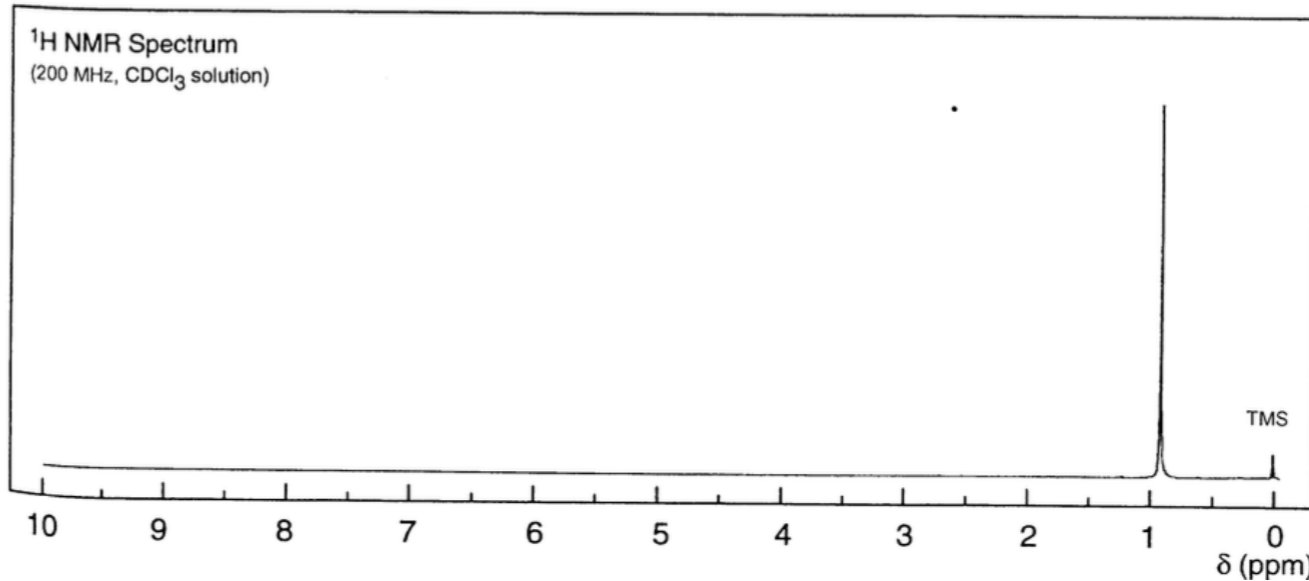
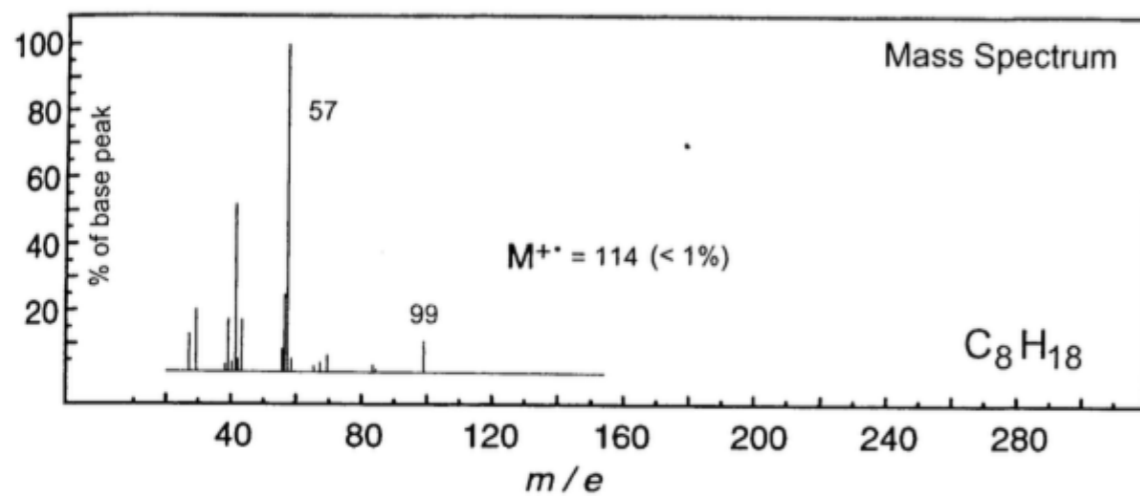
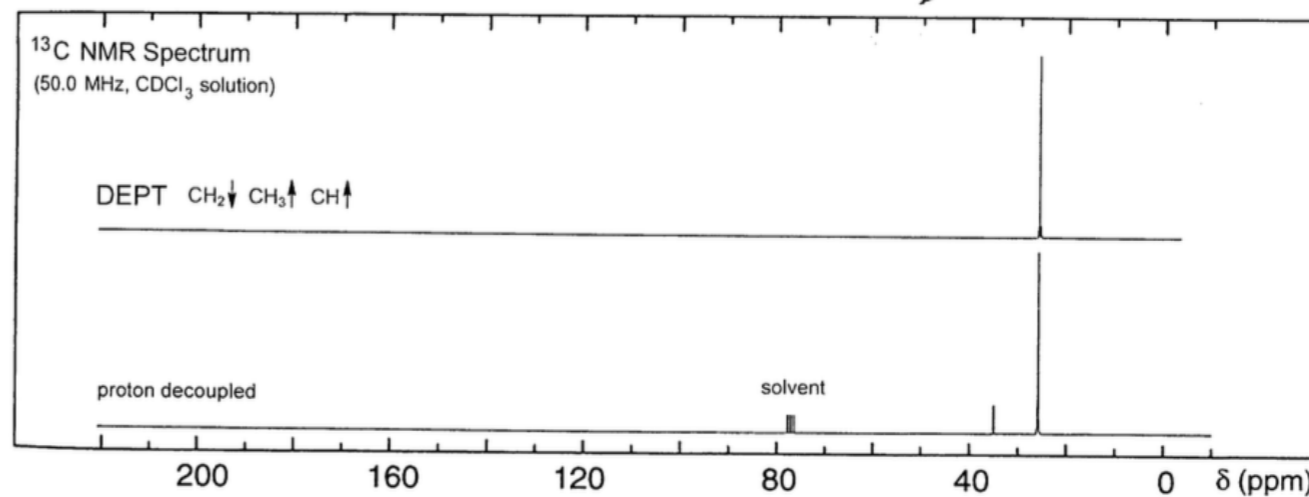
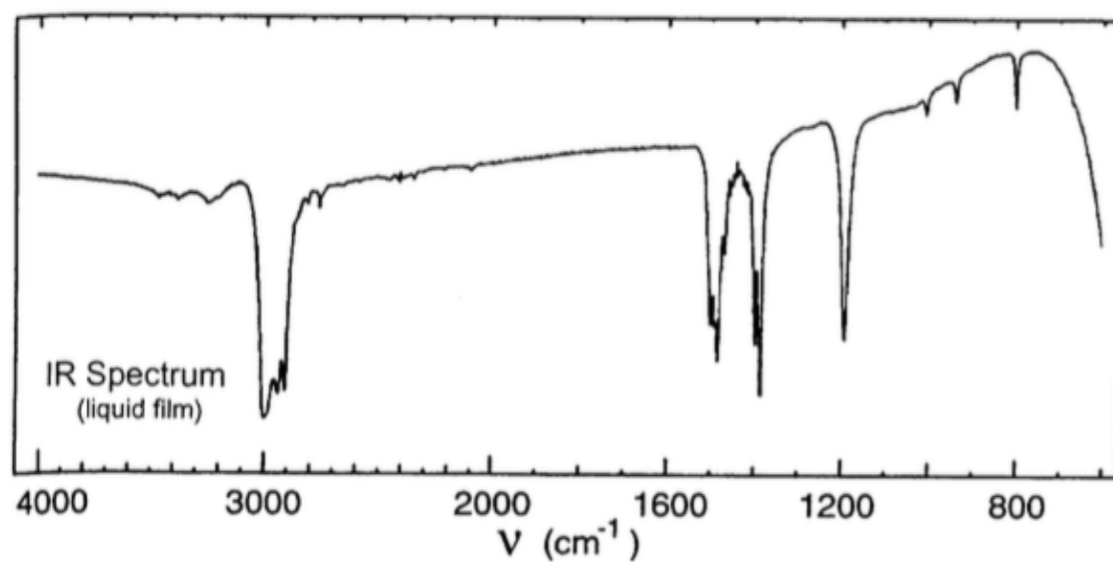
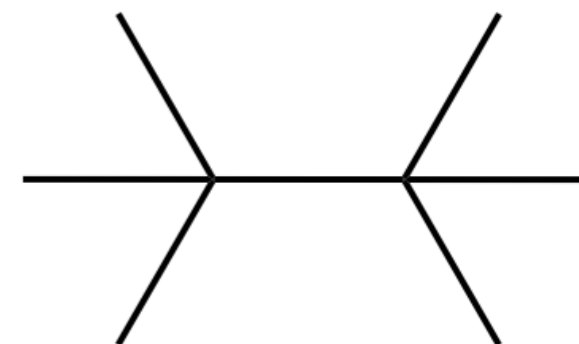
SOLUZIONE



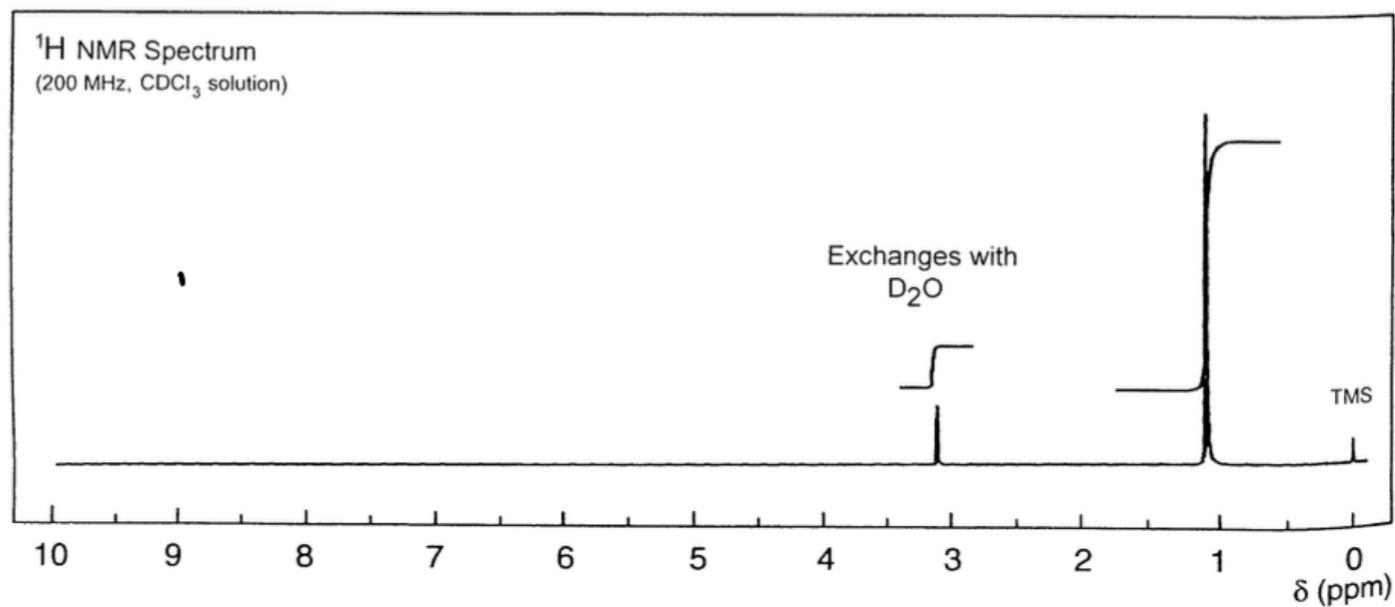
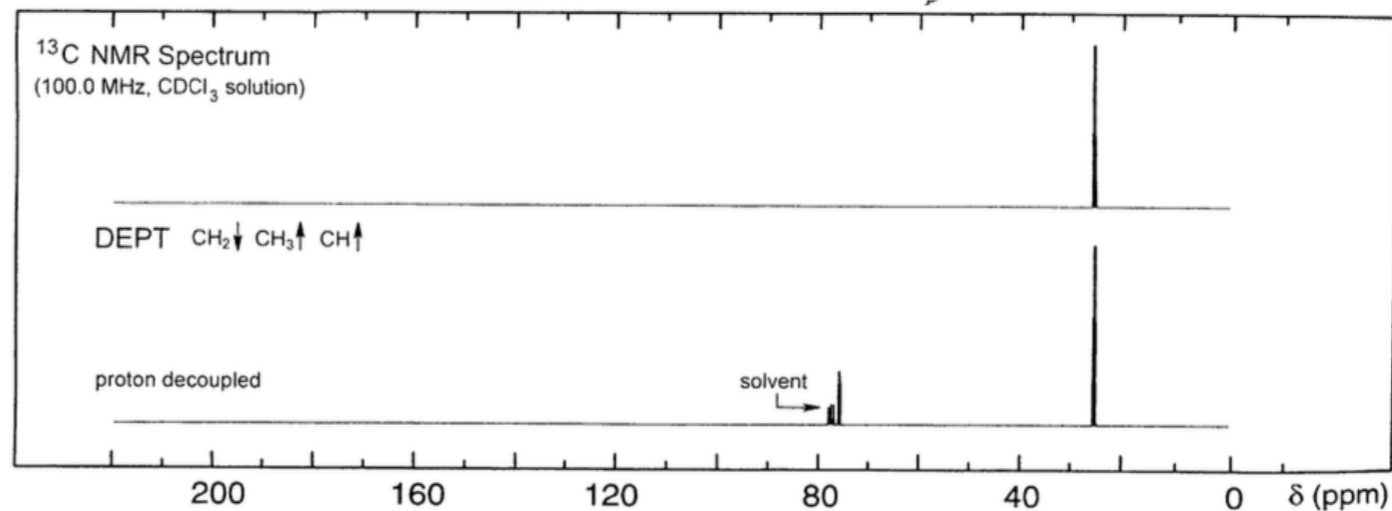
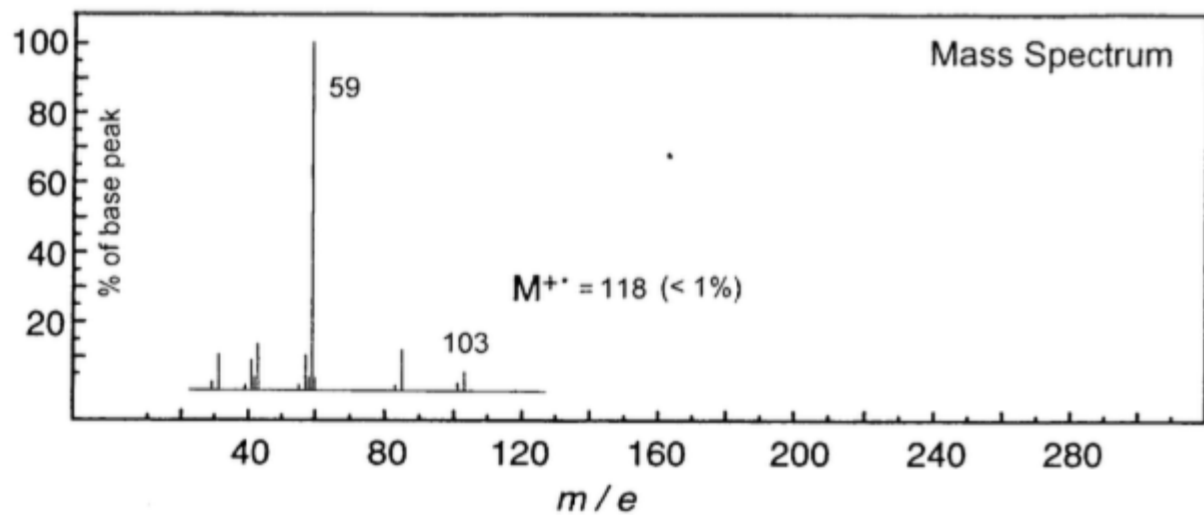
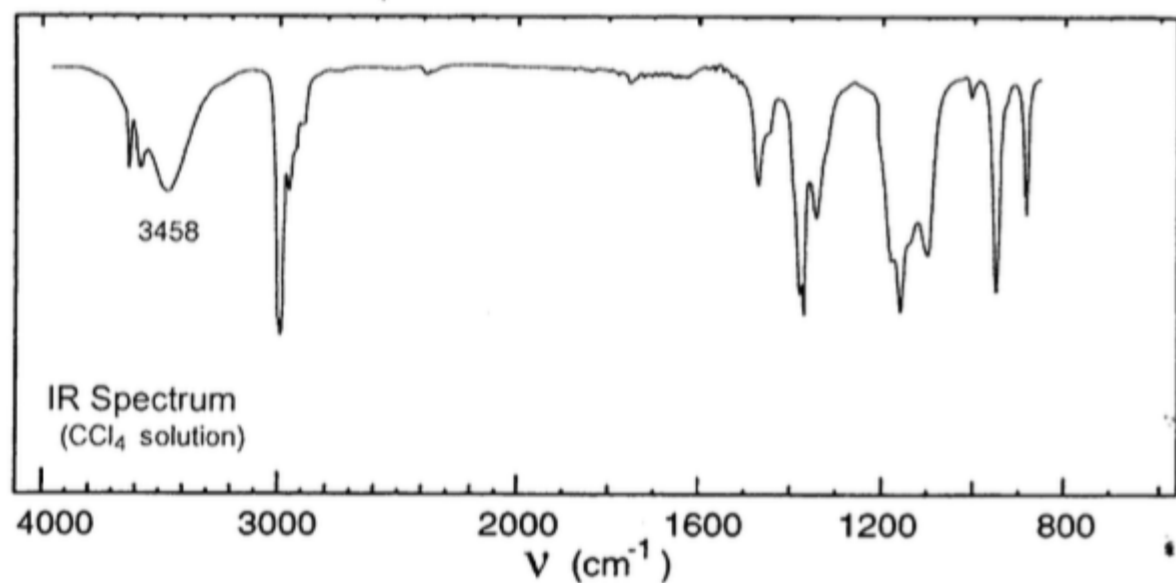
SPETTRO 4



SOLUZIONE



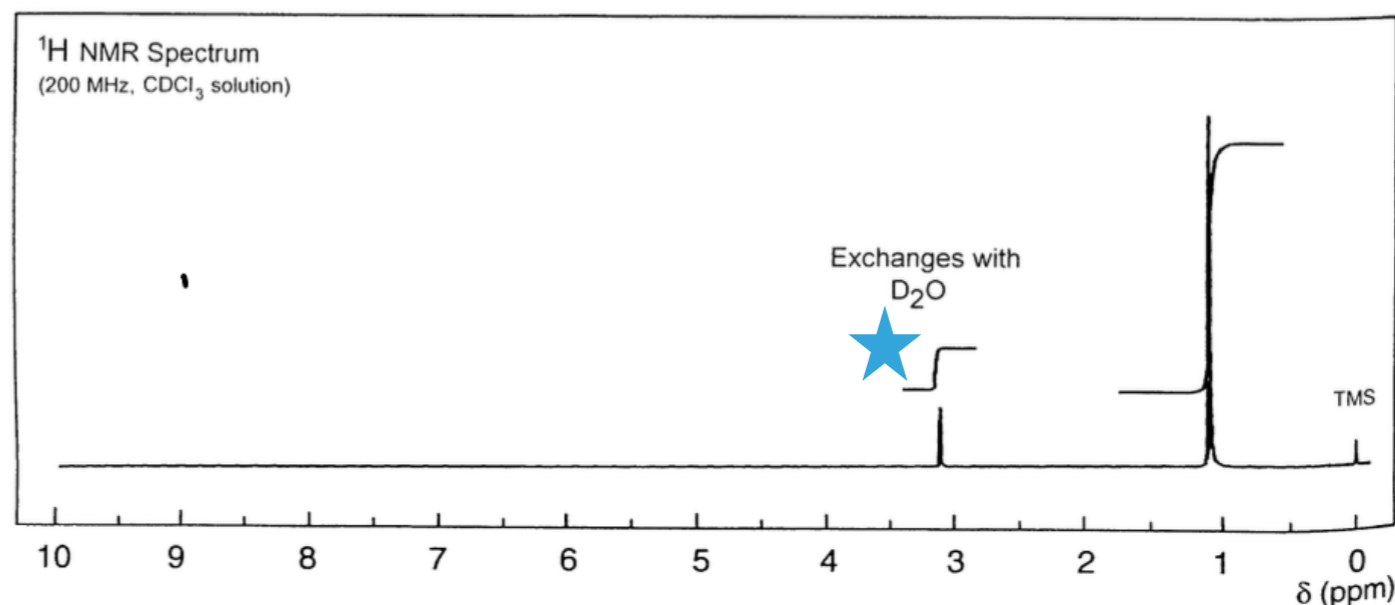
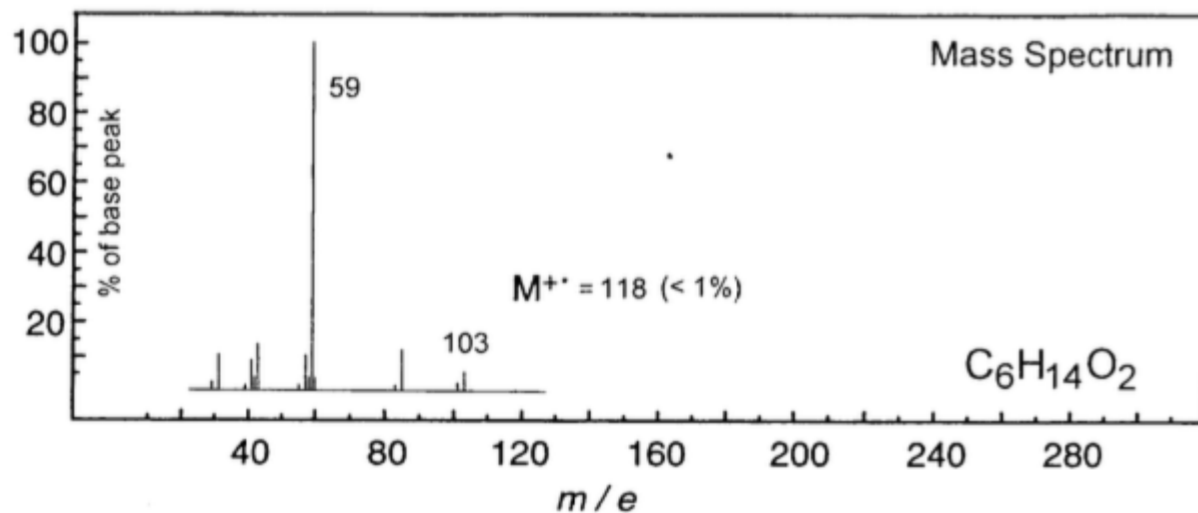
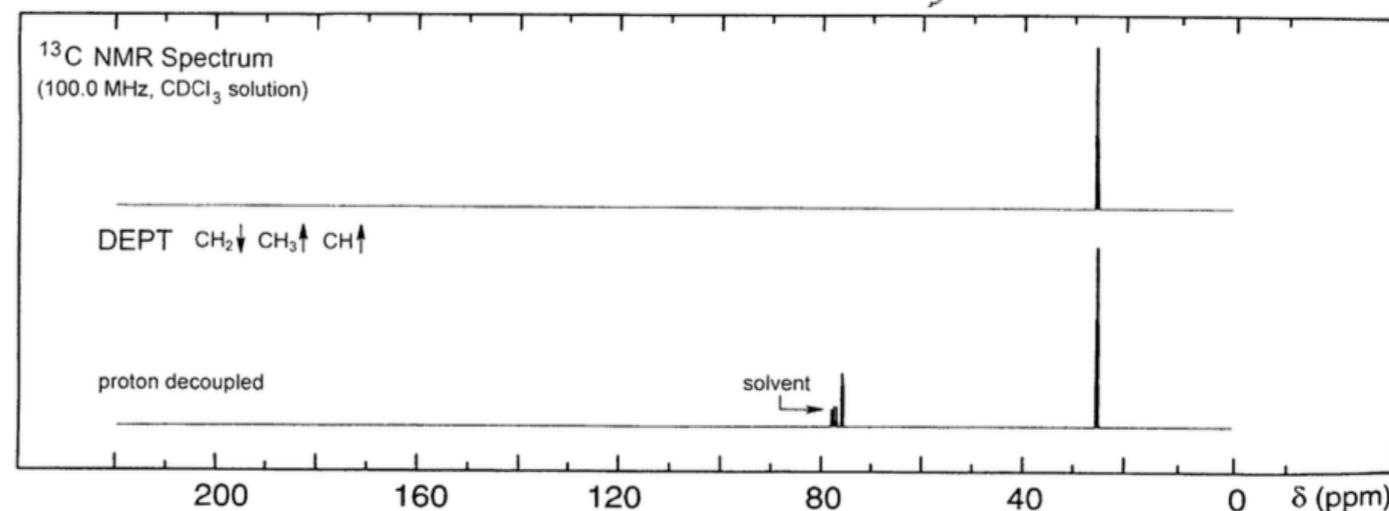
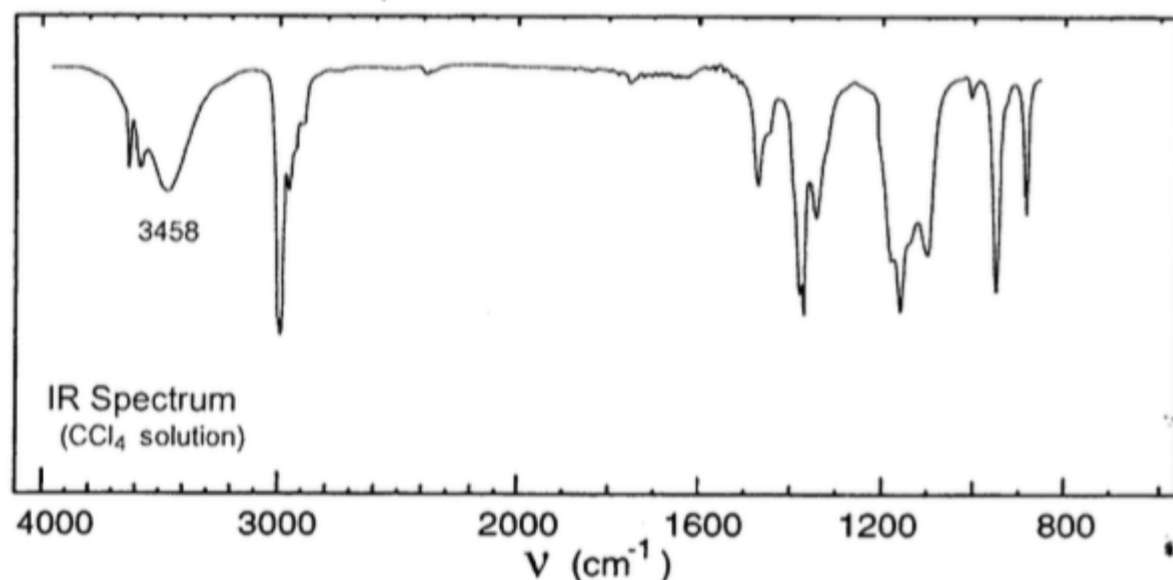
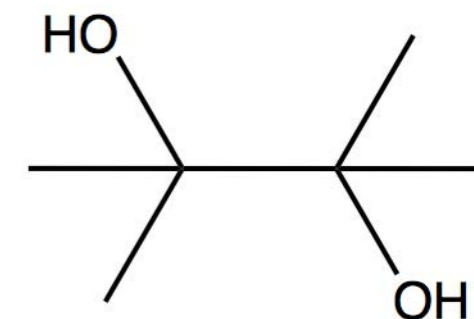
SPETTRO 5



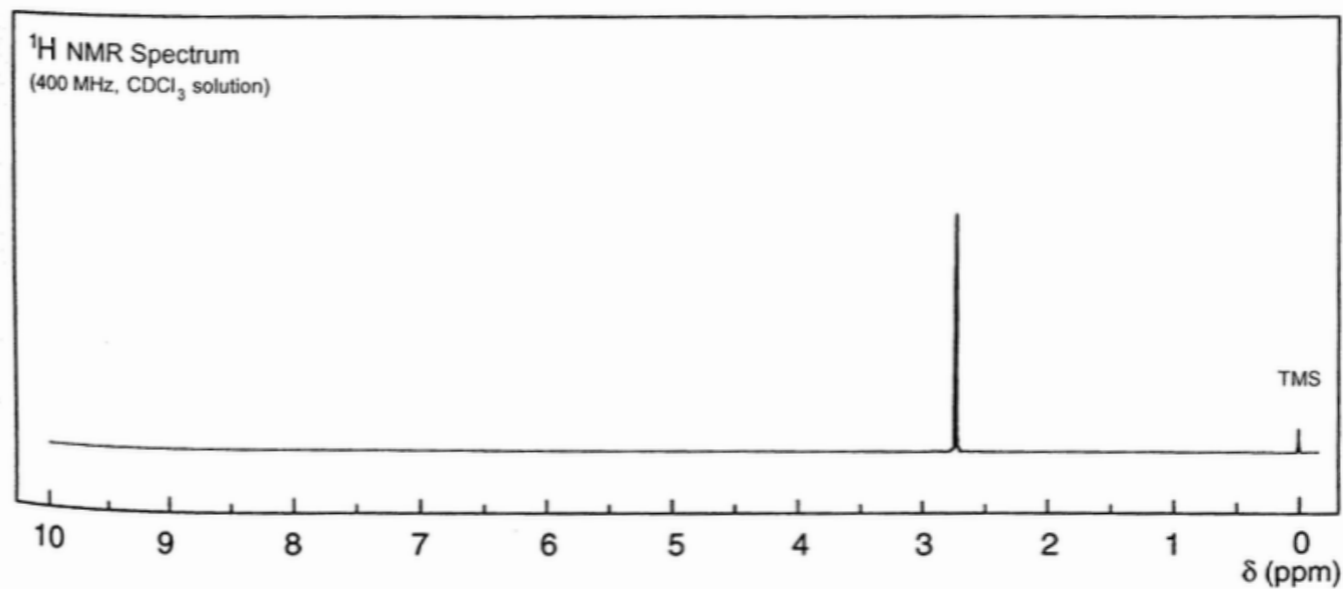
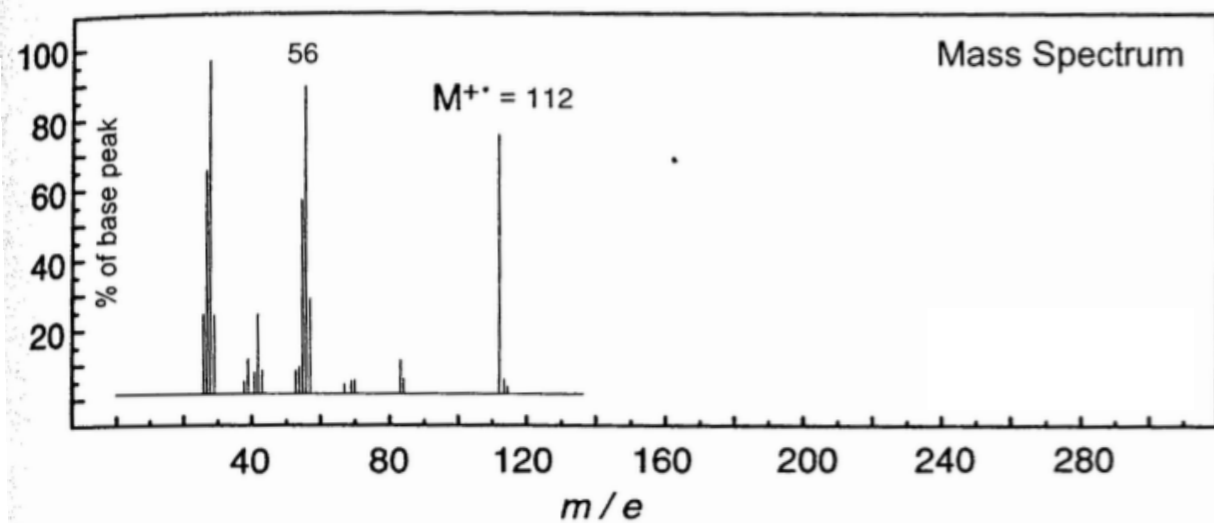
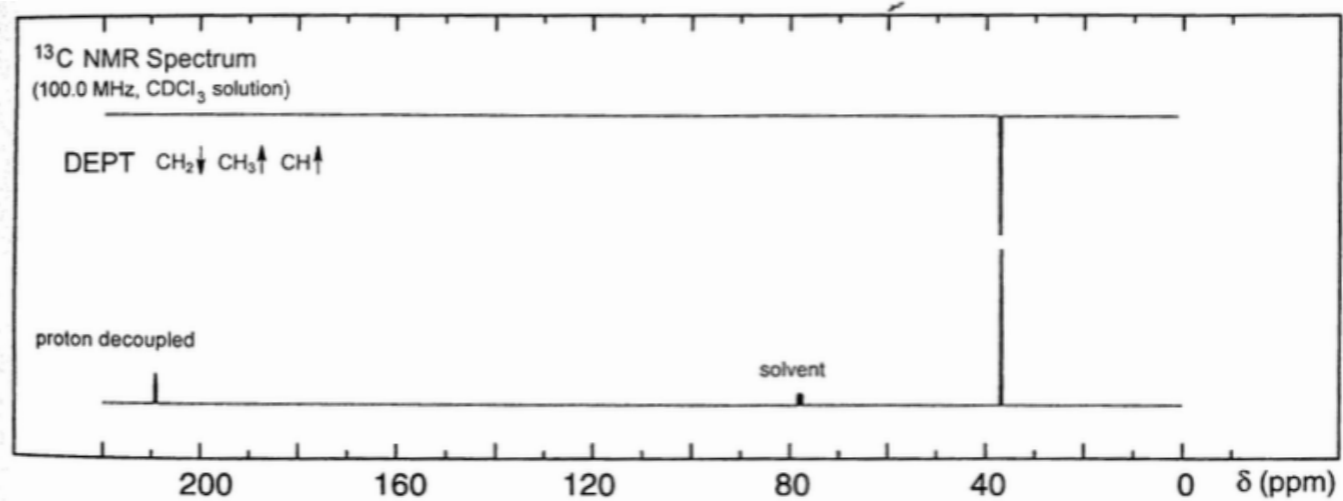
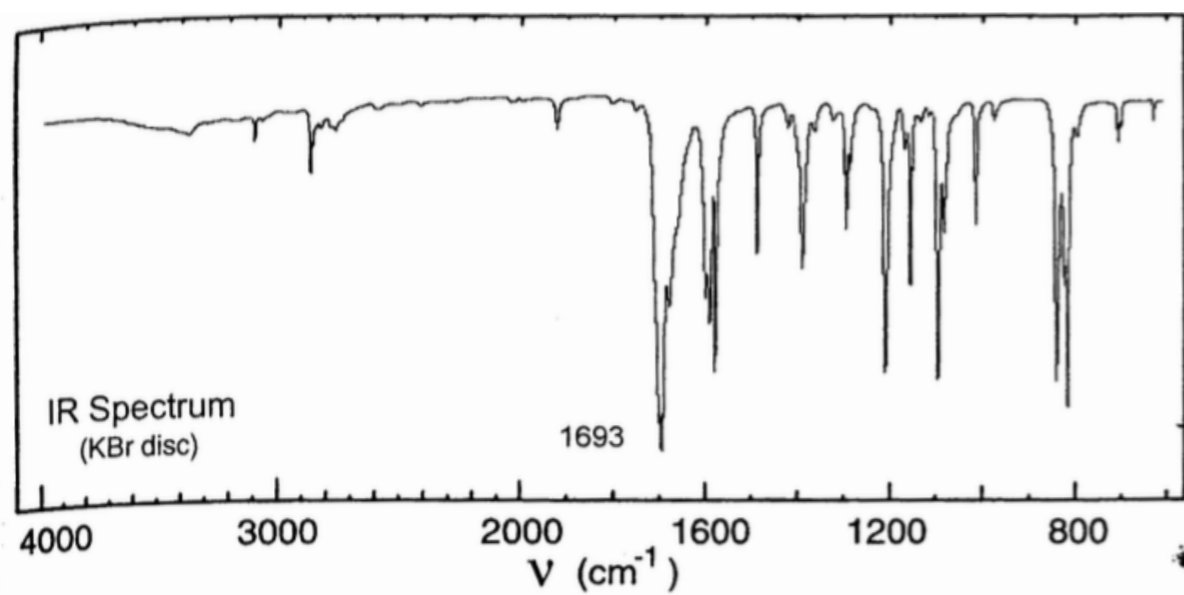
SOLUZIONE

★ Dopo l'aggiunta di acqua deuterata il segnale a δ 3.1 sparisce, questo è tipico dei protoni abbastanza acidi, legati ad eteroatomi (es O).

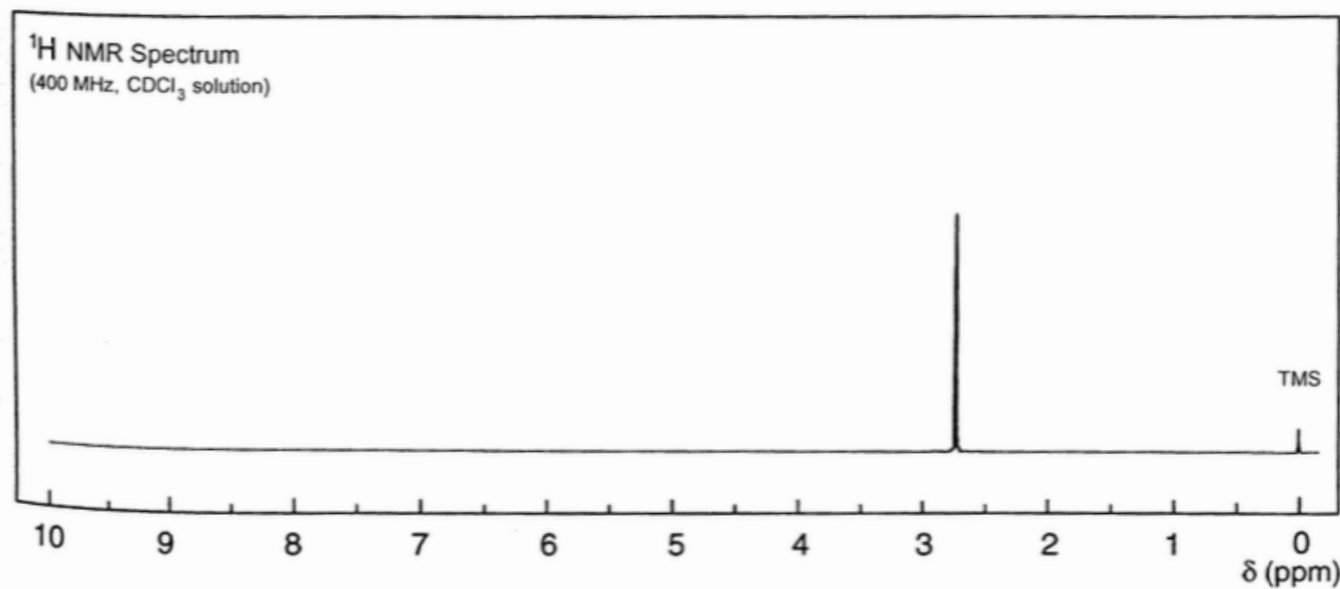
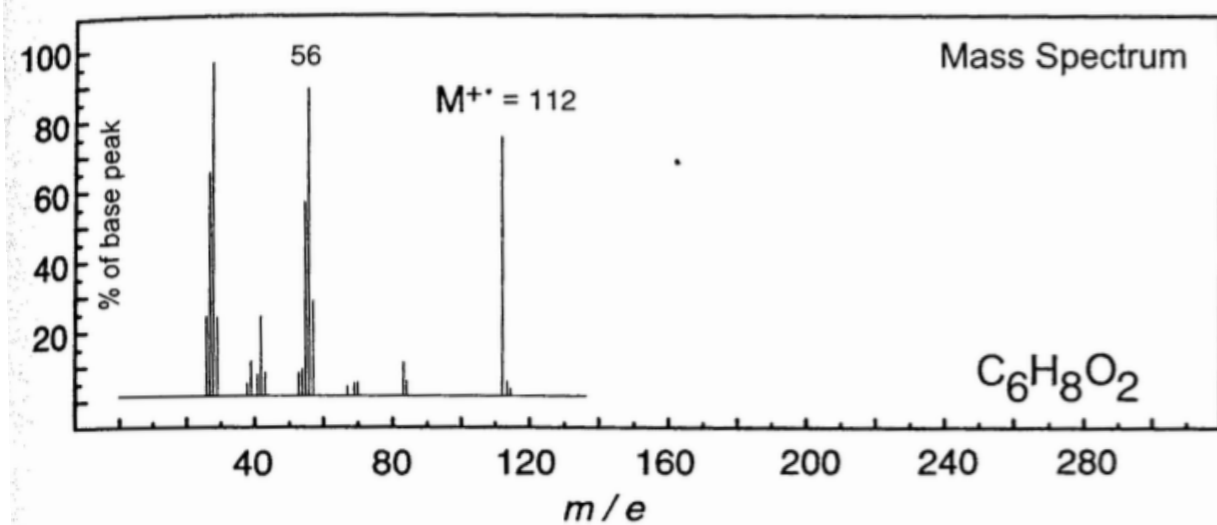
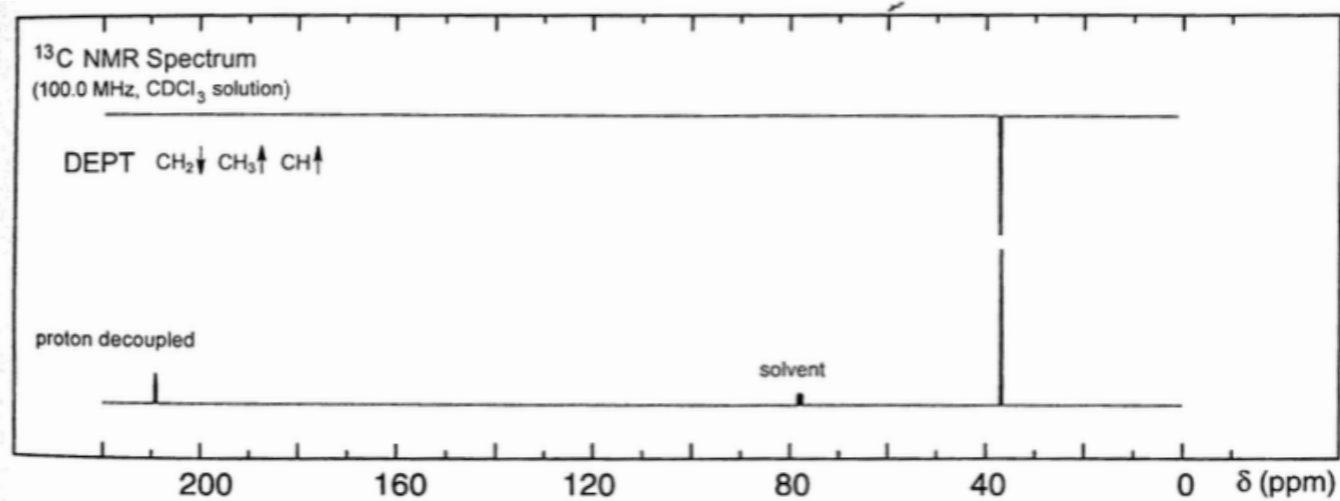
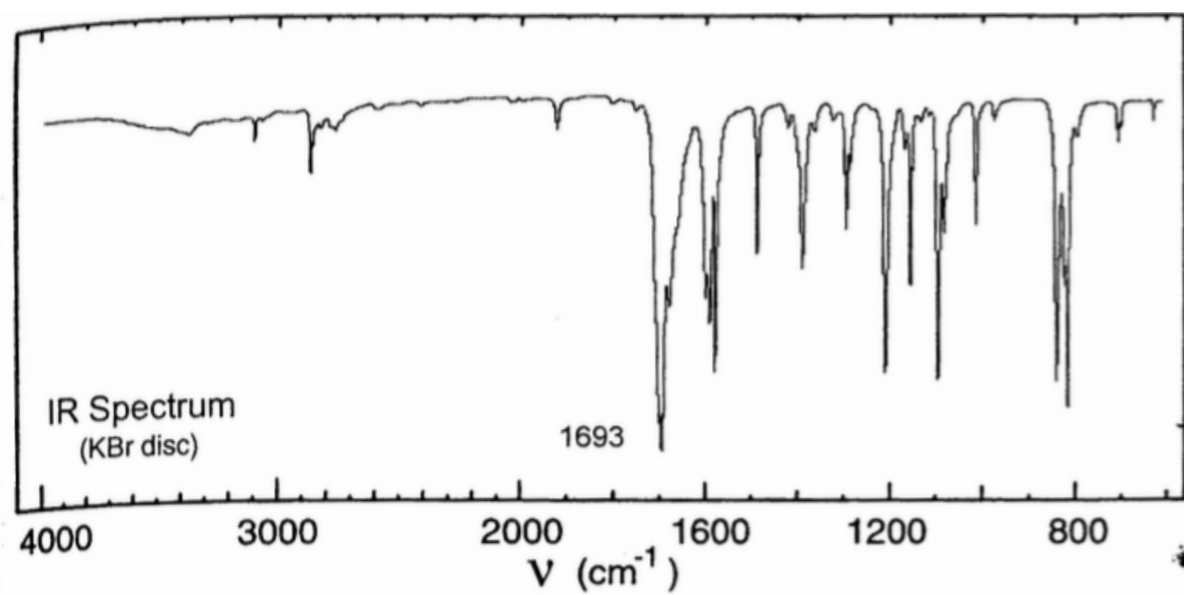
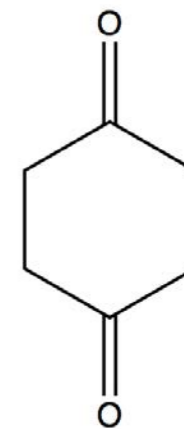
L'nmr è lento nell'acquisire il risultato rispetto alla velocità elevata di scambio protonico e quindi non viene registrato il segnale dei protoni che scambiano non perché non ci siano ma perché il tempo di scansione è troppo lungo.



SPETTRO 6



SPETTRO 6



SPECTRO 7

UV Spectrum

λ_{\max} 243 nm ($\log_{10} \epsilon$ 1.9)

λ_{\max} 248 nm ($\log_{10} \epsilon$ 2.1)

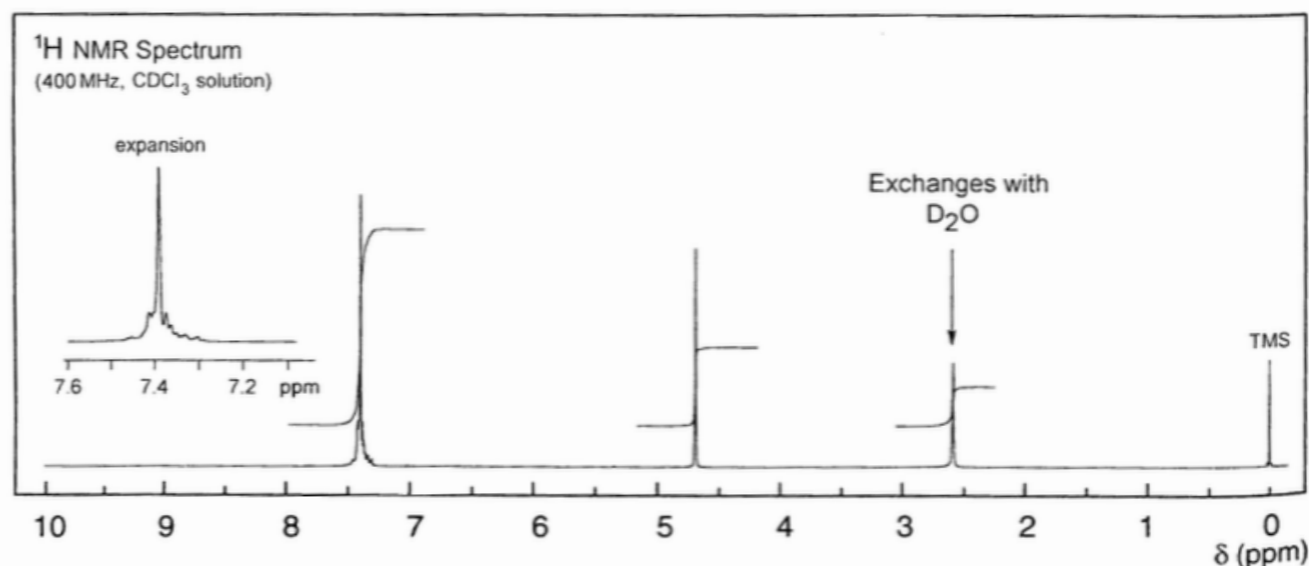
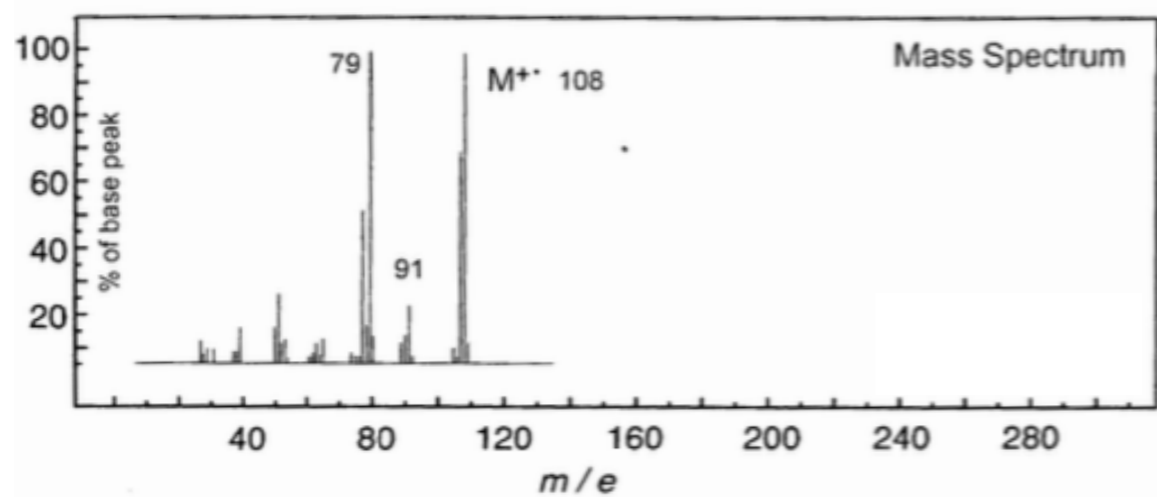
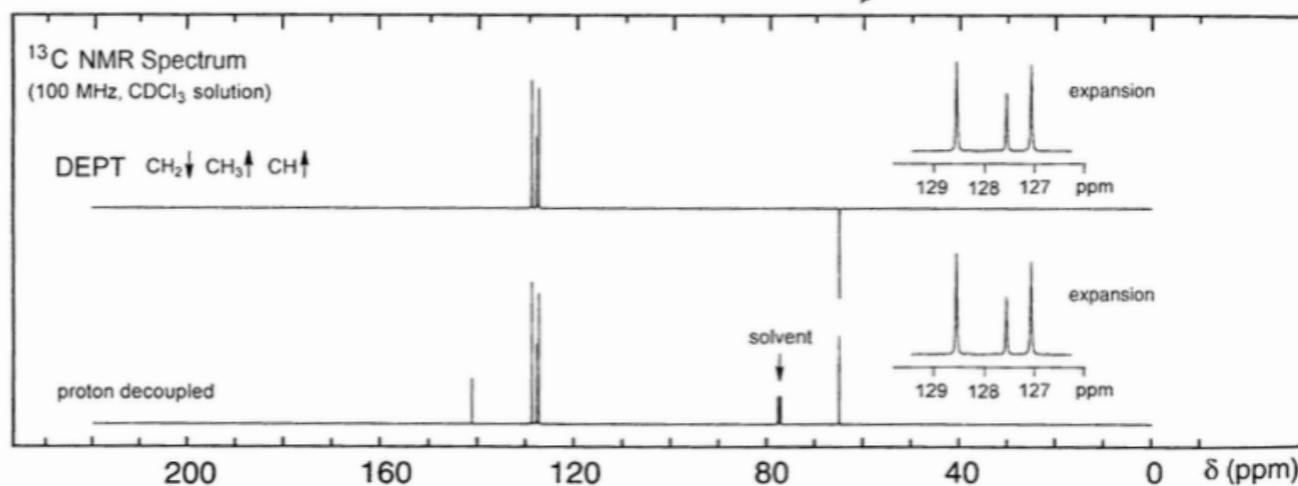
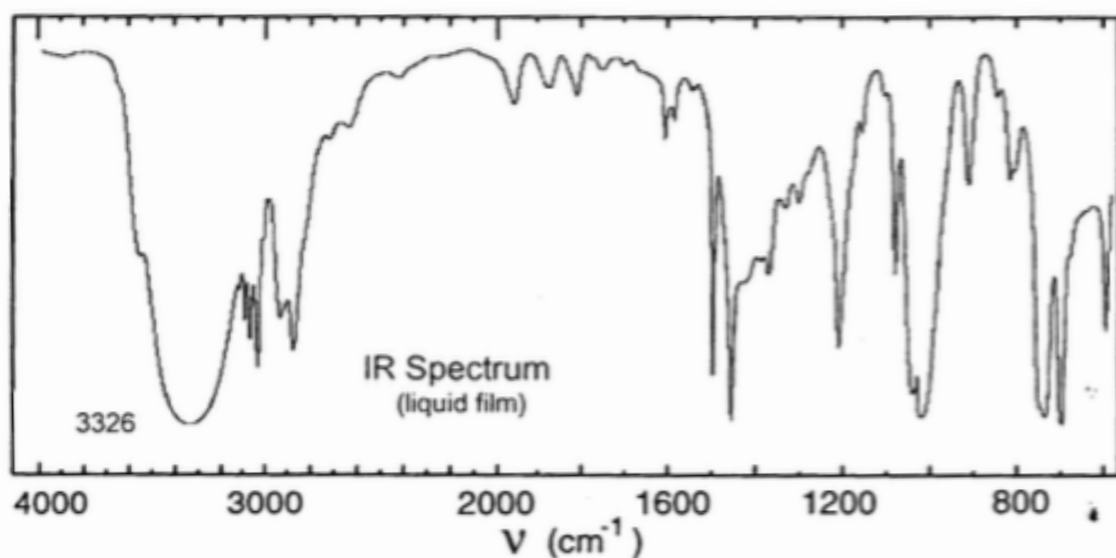
λ_{\max} 252 nm ($\log_{10} \epsilon$ 2.2)

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



SOLUZIONE

UV Spectrum

λ_{\max} 243 nm ($\log_{10}\epsilon$ 1.9)

λ_{\max} 248 nm ($\log_{10}\epsilon$ 2.1)

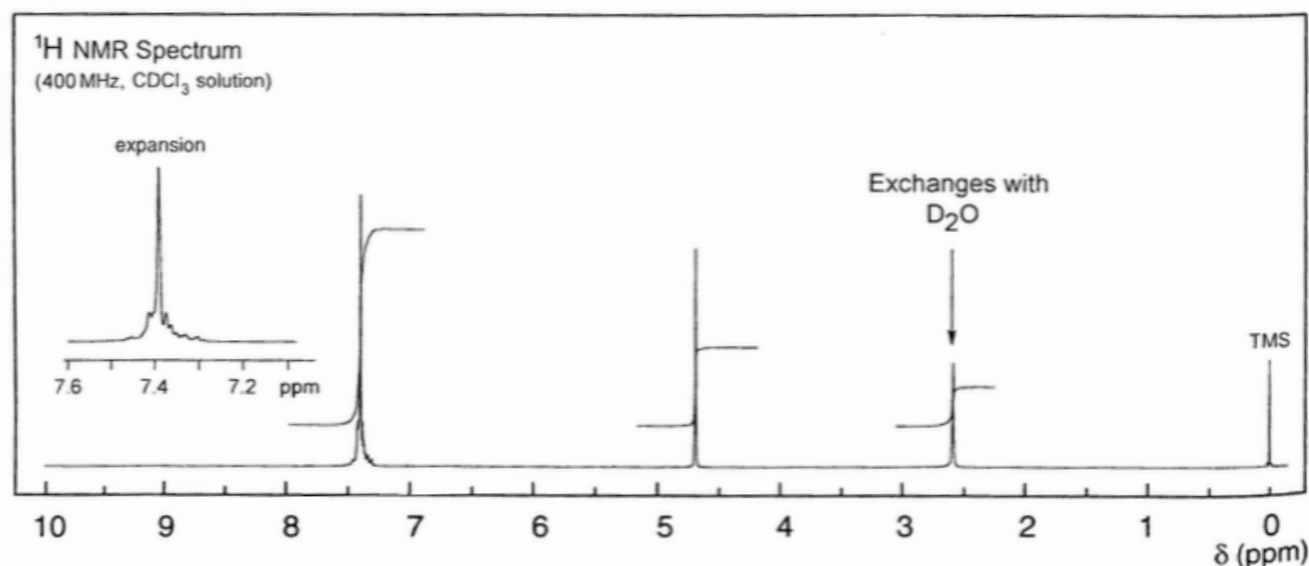
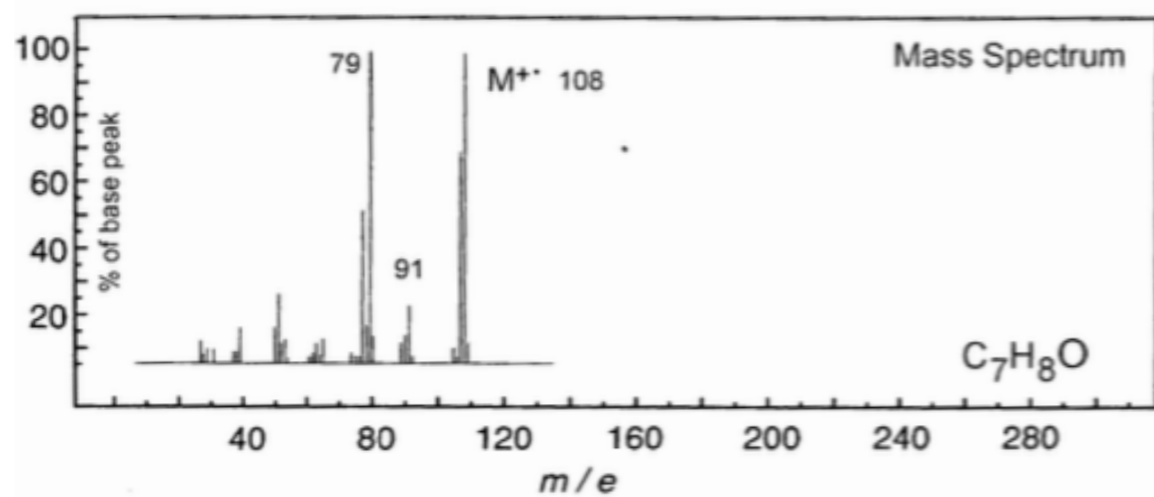
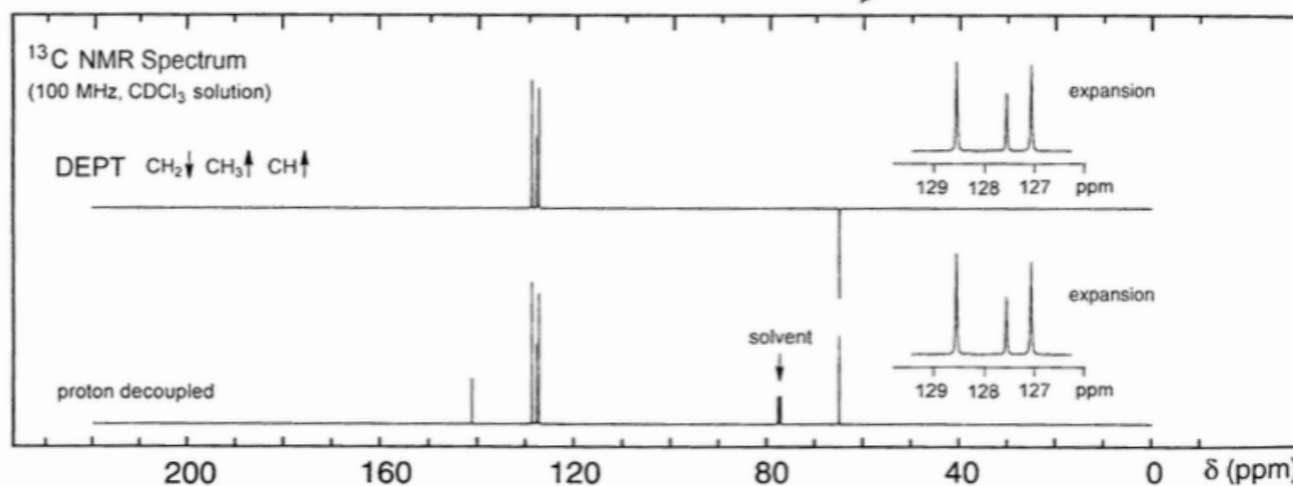
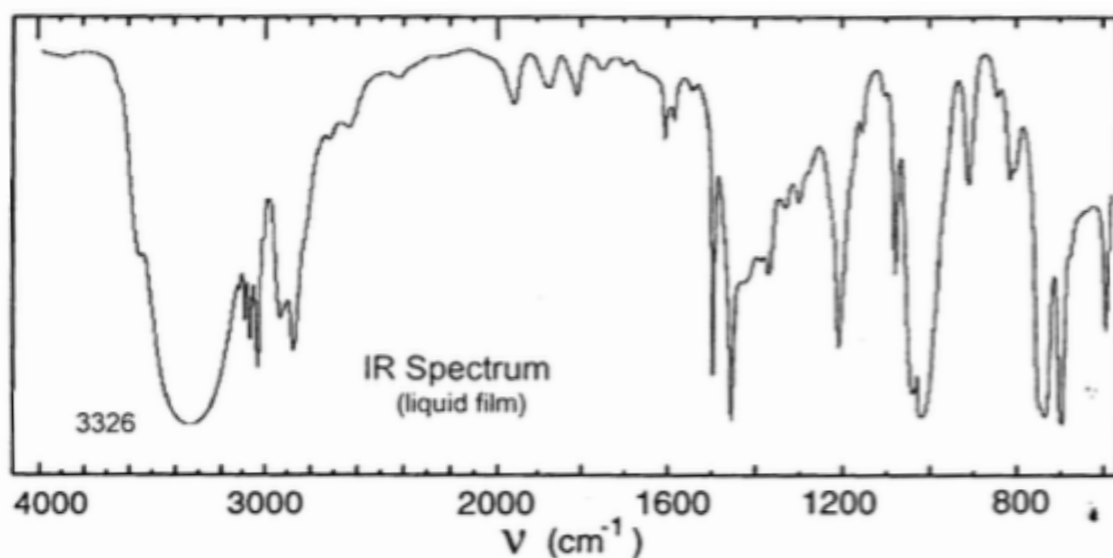
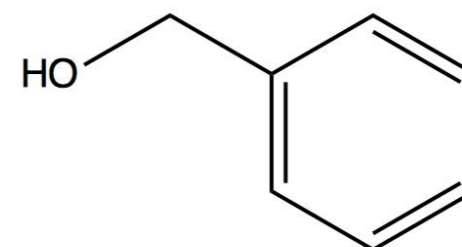
λ_{\max} 252 nm ($\log_{10}\epsilon$ 2.2)

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



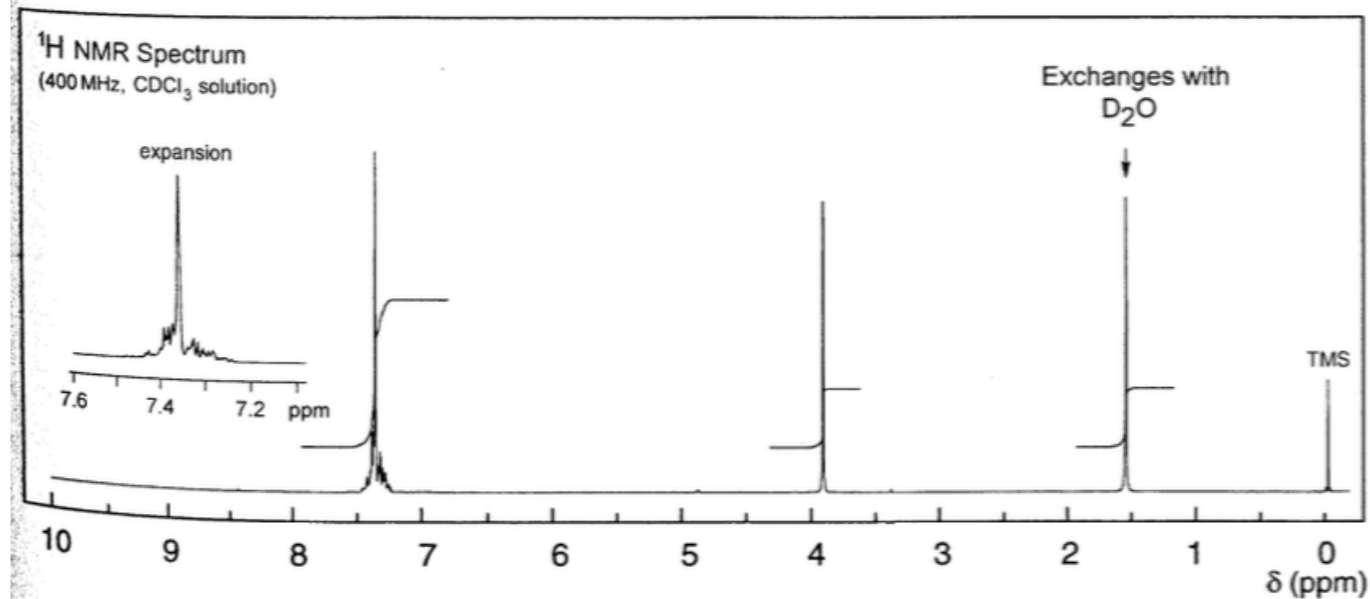
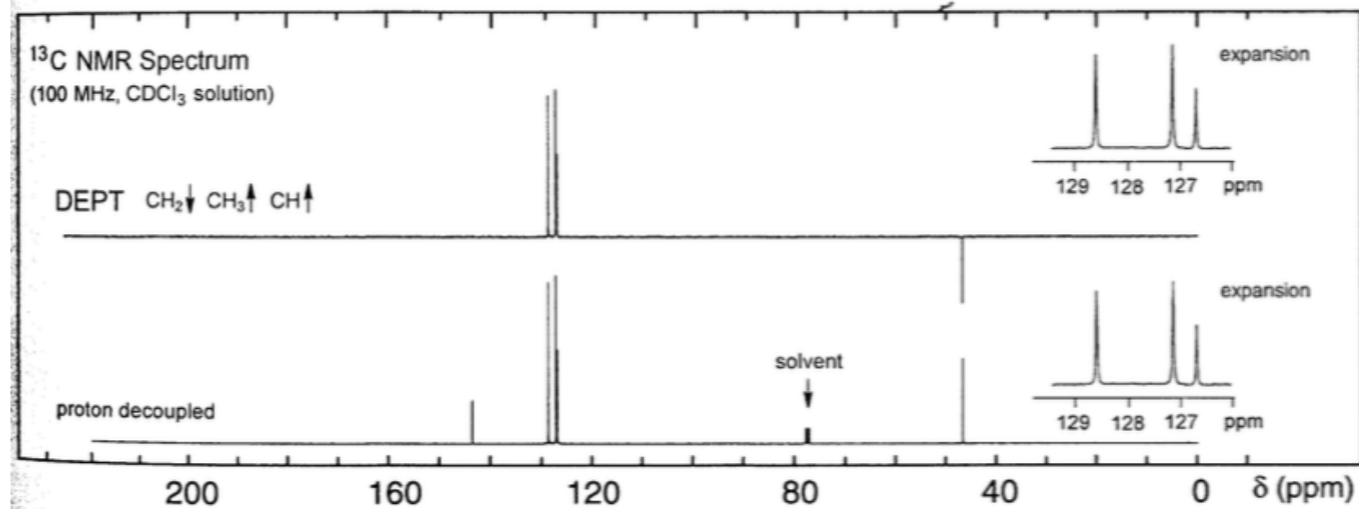
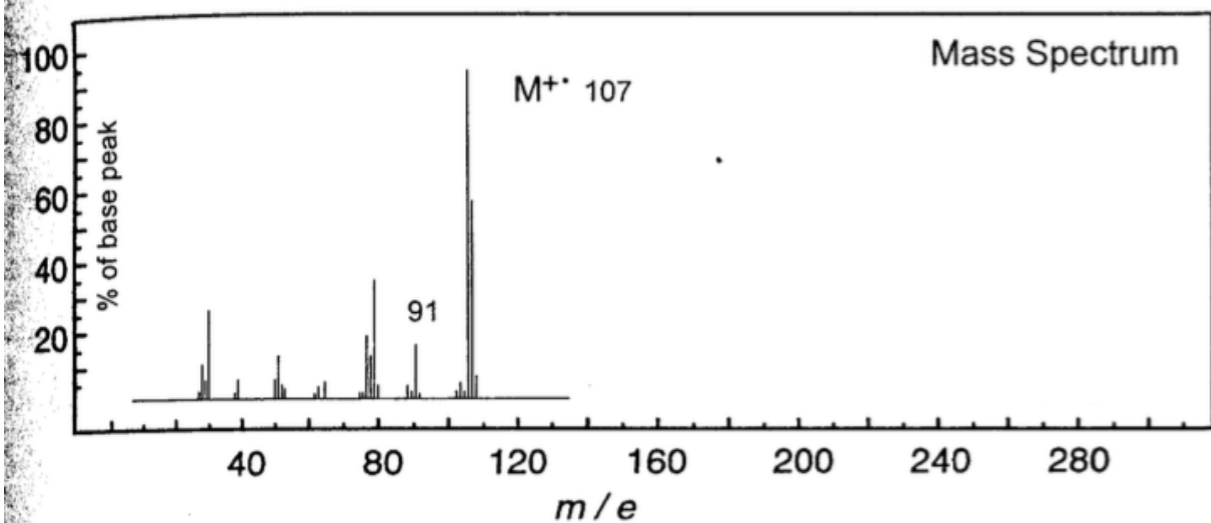
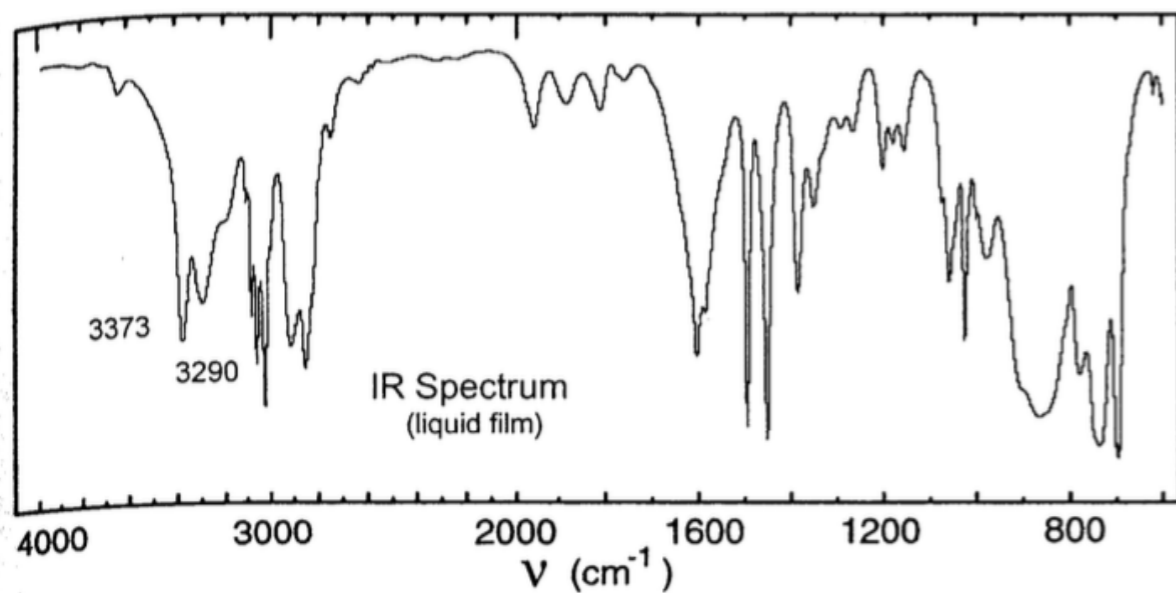
SPETTRO 8

UV Spectrum

λ_{\max} 256 nm ($\log_{10} \epsilon$ 2.2)

λ_{\max} 264 nm ($\log_{10} \epsilon$ 2.1)

solvent : ethanol



SPETTRO 8

UV Spectrum

λ_{\max} 256 nm ($\log_{10} \epsilon$ 2.2)

λ_{\max} 264 nm ($\log_{10} \epsilon$ 2.1)

solvent : ethanol

