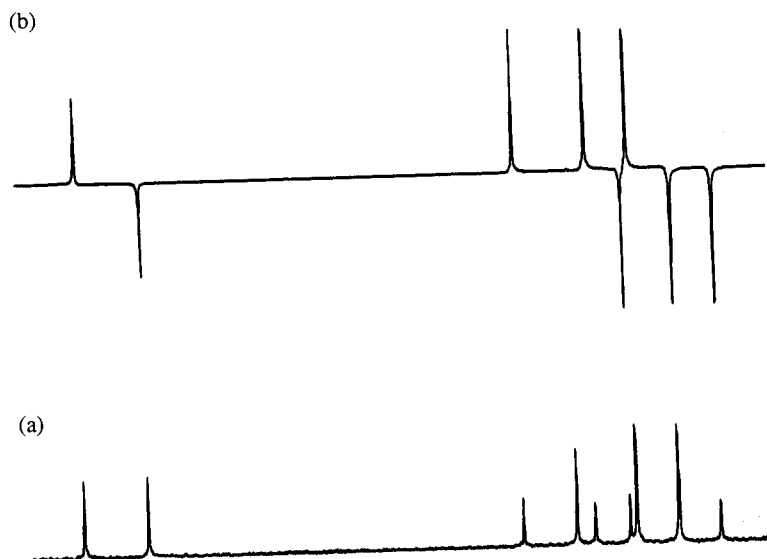
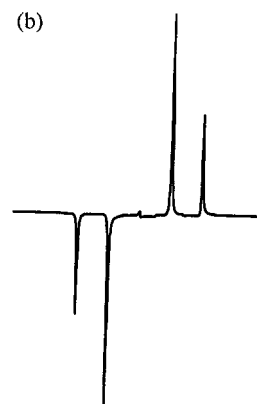


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INEPT NMR Spectroscopy

Fig. 3.37. (a) The one-pulse ^1H -coupled spectrum of a mixture of CHCl_3 , CH_2Cl_2 , and CH_3OH ; (b) INEPT spectrum of the same sample, with $t_D = 4J^{-1}$ set for $J = 175 \text{ Hz}$.



INEPT of a Mixture Regular spectrum on the bottom. INEPT on top. Which set of lines belongs to what compound? How can you determine the coupling constants in each case (as the difference of what lines)?



INEPT of a Quintet

The central line is missing, the outer ones are stronger. The example also demonstrates the use of the INEPT in ^{15}N NMR.

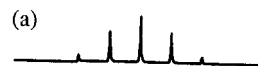


Fig. 3.38. The 40.6 MHz ^{15}N spectrum of $^{15}\text{NH}_4^+$ in water, (a) without polarization transfer or NOE, and (b) using INEPT.