

Problem 27

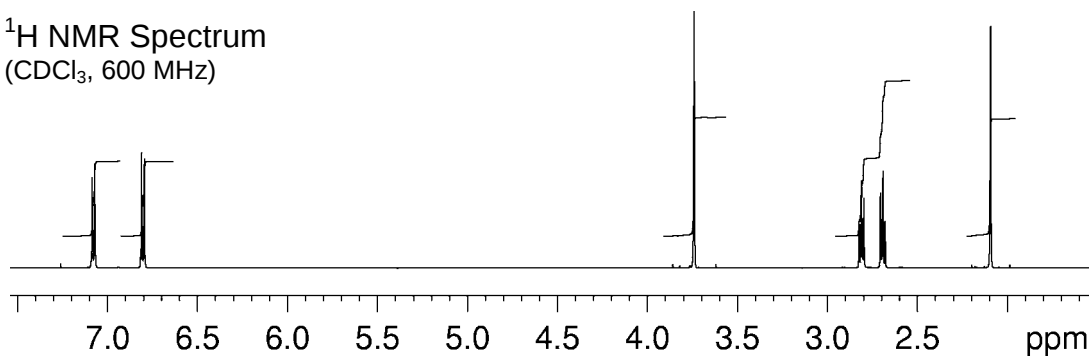
Identify the following compound.

Molecular Formula: $C_{11}H_{14}O_2$

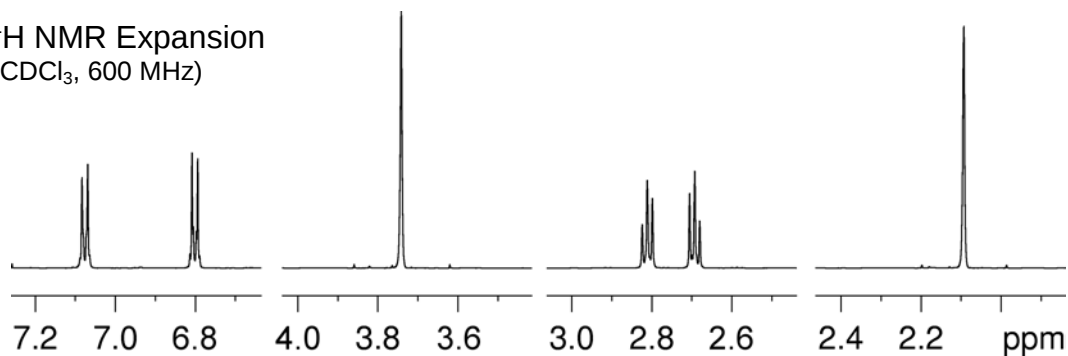
IR: 1715 cm^{-1}

Draw a labelled structure, and use the me-HSQC and INADEQUATE spectra to assign each ^1H and ^{13}C resonance to the corresponding nucleus in the structure.

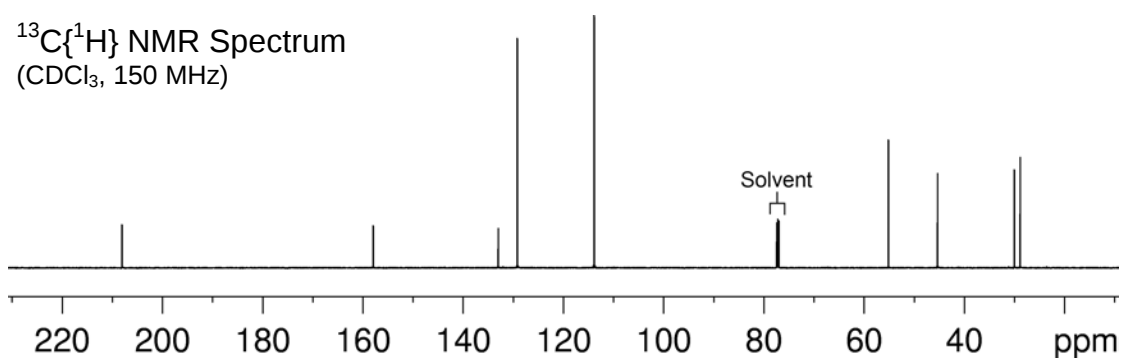
^1H NMR Spectrum
(CDCl_3 , 600 MHz)



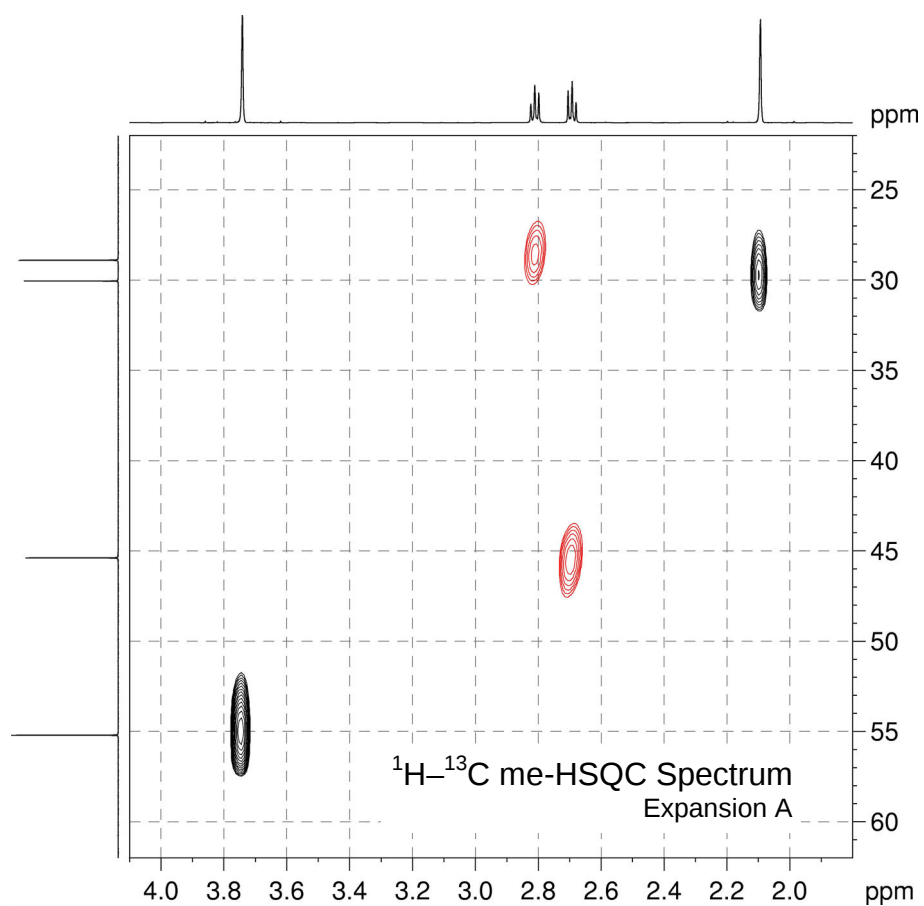
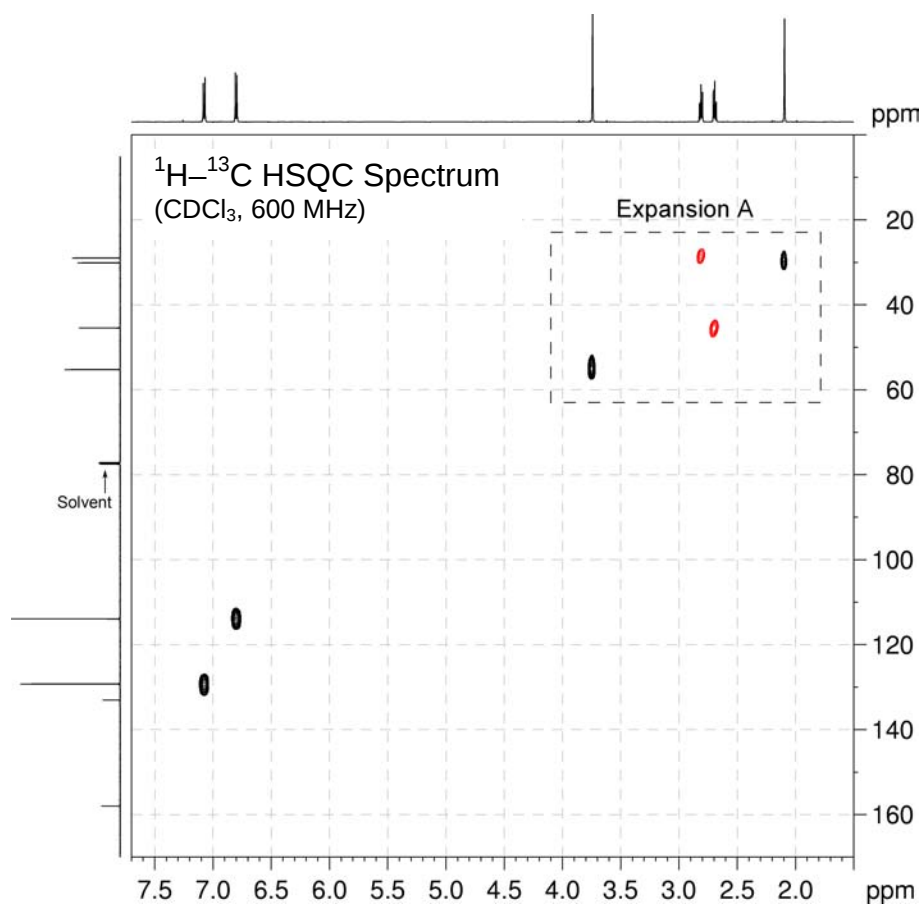
^1H NMR Expansion
(CDCl_3 , 600 MHz)

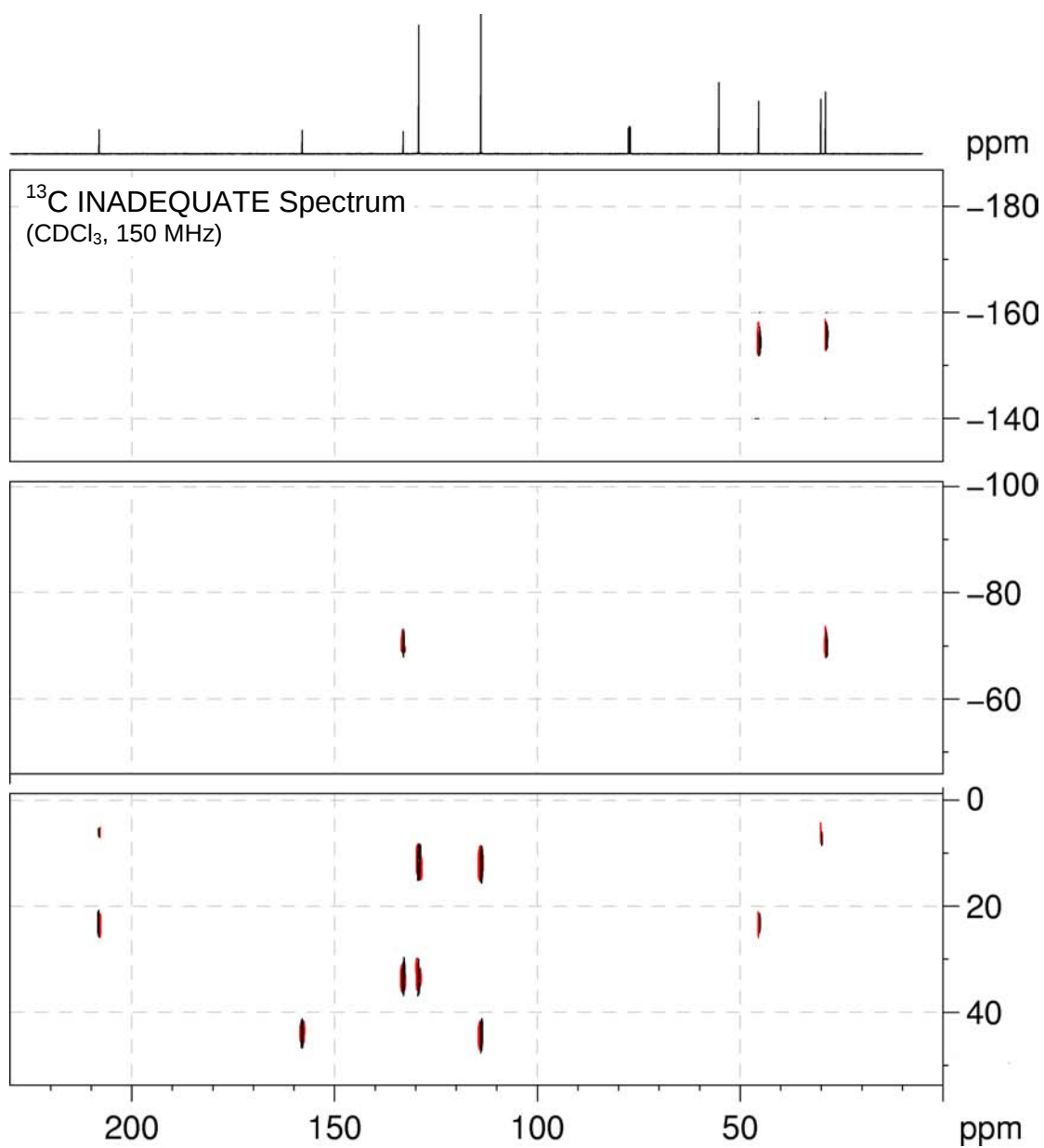


$^{13}\text{C}\{^1\text{H}\}$ NMR Spectrum
(CDCl_3 , 150 MHz)



Structure:





Proton	Chemical Shift (ppm)	Carbon	Chemical Shift (ppm)