CH-314 Structural Analysis
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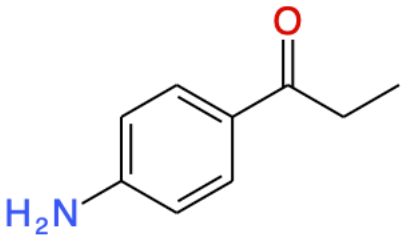
Jigsaw 4E

2D NMR: HSQC and HMBC



1. [From past exam] Draw schematically the solution state ^{1}H spectrum of the molecule in $CDCl_3$ and label the peaks. Use qualitative estimates for the expected chemical shifts. Consider only $^{3}J_{HH}$ couplings.

2. [From past exam] Draw schematically the ^{1}H-^{13}C HMBC and HSQC spectra on the same plot. Assume the HMBC spectrum shows connectivity through up to three bonds. Circle the peaks unique to the HMBC spectrum.