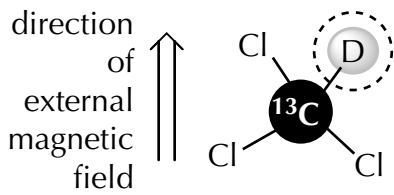
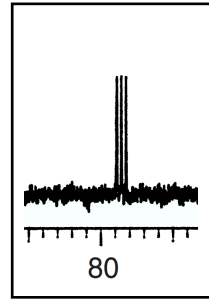


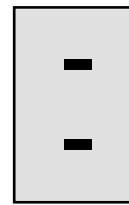
^{13}C signal for deuteriochloroform if D (^2H) had no spin (theoretical)



actual ^{13}C signal



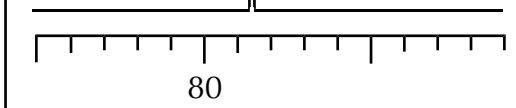
external field only



^{13}C nuclei

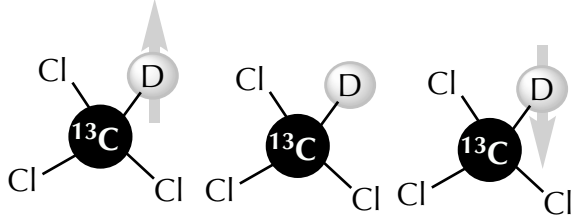
the appearance of the ^{13}C signal if the D has no spin ($I=0$):

100% of C with one energy gap due to external field



^{13}C signal for deuteriochloroform with D (^2H) as spin $I=1$

spin = +1 spin = 0 spin = -1

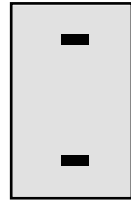


1/3 of ^{13}C in CDCl_3 feel a higher field compared to external only

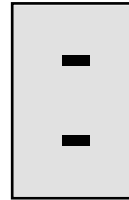
1/3 of ^{13}C in CDCl_3 feel only the external field

1/3 of ^{13}C in CDCl_3 feel a lower field compared to external only

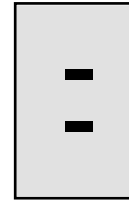
external field + D spin = +1



external field + D spin = 0



external field + D spin = -1



^{13}C nuclei

the appearance of the ^{13}C signal with D as spin $I=1$:

1/3 external + 1 1/3 external + 0 1/3 external - 1

