

Spin-spin coupling between spinning nuclei.

The interaction between the spin magnetic moments of the different sets of H atoms in the molecule under study, is known as spin-spin coupling. It is imperative that a minimum of 2 sets of protons are present in **adjacent** positions. The magnetic spins of these resonating nuclei interact with each other and affect each other's precession frequencies. The effective magnetic field (B_{eff}) experienced by neighboring protons as a result of magnetic spins thereby affect the chemical shift values. ^[5] In addition

to the chemical shifts, the nature of the peaks in the NMR spectrum is also affected.