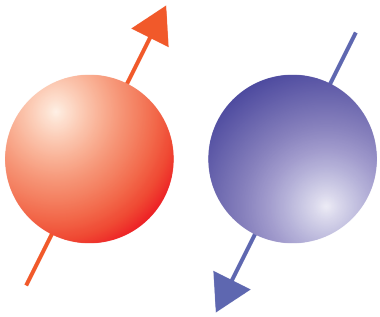

Nucleus

$$\text{Larmor Frequency} = \text{Gyromagnetic Ratio} \times \text{External Magnetic Field} \tag{1}$$

DATA SOURCE

- **NMR NOMENCLATURE. NUCLEAR SPIN PROPERTIES AND CONVENTIONS FOR CHEMICAL SHIFTS (IUPAC RECOMMENDATIONS 2001)**
- **ELECTRON GYROMAGNETIC RATIO: HTTPS://PHYSICS.NIST.GOV/CGI-BIN/CUU/VALUE?GAMMAE**

Signal

$$\text{Acquisition Duration} = \text{Number of Data Points} \times \text{Dwell Time} \tag{2}$$

$$\text{Spectral Width} = \text{Number of Data Points} \times \text{Frequency Resolution} \tag{3}$$

RF Pulse

$$\text{Flip Angle } (^\circ) = 360 \times \text{RF Amplitude} \times \text{Pulse Duration} \tag{4}$$

$$\text{Relative RF Power (dB)} = 20 \times \log_{10} \frac{\text{RF amplitude 2}}{\text{RF amplitude 1}} \tag{5}$$

Ernst Angle

$$\cos\left(\text{Ernst Angle}\right) = \exp\left(-\frac{\text{Repetition Time}}{\text{Relaxation Time}}\right) \tag{6}$$