Redfield equations

$$\frac{1}{T_1} = \frac{d_{\mathrm{NH}}^2}{20} [J(\omega_\mathrm{H} - \omega_\mathrm{N}) + 3J(\omega_\mathrm{N}) + 6J(\omega_\mathrm{H} + \omega_\mathrm{N})]$$

$$\frac{1}{T_2} = \frac{1}{2} \frac{d_{\mathrm{NH}}^2}{20} [4J(0) + J(\omega_\mathrm{H} - \omega_\mathrm{N}) + 3J(\omega_\mathrm{N}) + 3J(\omega_\mathrm{H}) + 6J(\omega_\mathrm{H} + \omega_\mathrm{N})]$$

$$\mathrm{NOE} = 1 + \frac{d_{\mathrm{NH}}^2}{20} [J(\omega_\mathrm{H} + 6J(\omega_\mathrm{H} + \omega_\mathrm{N})] \frac{\gamma_\mathrm{H} T_1}{\gamma_\mathrm{N}}$$