Secondary Bonds

Dipole-Dipole

$$E = -\frac{\mu^2}{4\pi\epsilon_0 r^3},$$

where $\mu = q \cdot l$, the dipole moment.

Dipole-Induced Dipole

$$E = -\frac{2\alpha\mu^2}{(4\pi\epsilon_0)^2 r^6}$$ where α is the polarizability.

London Dispersion Forces

$$E = -\frac{3\alpha^2 h\omega_0}{4(4\pi\epsilon_0)^2 r^6}.$$

Hydrogen Bond

Special Case of Dipole-Dipole

O—H or N—H near O, F, N, or Cl.