

solvation energy

The change in Gibbs energy when an ion or molecule is transferred from a vacuum (or the gas phase) to a solvent. The main contributions to the solvation energy come from: (a) the cavitation energy of formation of the hole which preserves the dissolved species in the solvent; (b) the orientation energy of partial orientation of the dipoles; (c) the isotropic interaction energy of electrostatic and dispersion origin; and (d) the anisotropic energy of specific interactions, *e.g.* hydrogen bonds, donor-acceptor interactions *etc.*

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