

Born-Haber cycle

As the direct experimental determination of lattice energy is difficult, they are determined by indirect calculations using a cyclic process known as the Born-Haber cycle.

As a necessary consequence of the first law of thermodynamics, the enthalpy of a reaction will be the same whether the reaction takes place in one or several steps. This is Hess's law and is a statement of the conservation of energy.

The Born-Haber cycle relates the standard molar enthalpy of formation ΔH_f° when one mole of ionic compound MX is formed from the elements in their more stable physical states.

