THERMODYNAMICS

- First taw of therrriodyriamim
  LI =q+W

- Errkhatpy of reaclion

  bkI= /AH^{D} (products)— I (reactants)

  By convention heat of formation of every element In R5 standard state is arbitrarily assumed to be zero.

  ^{143} = A_{vap} I-f

- Heat Caplicity — Specific heat tapacirty c = noCr

  C = molar heat capacity c_n = nAT

- Energy changes — q_y _4. heat exchange at constant volume

  AU=c1,,, AH=q_p — c_p —> heat exchange at constant pressure

- Enthalpy
  - Li+ 0/

- Relation between 3K and a U

  12 Or

  - ALI + RT

- $I_{;}CmR$

  : $^{tit}_{rr}$

  AG = tSH — MS_

  - = •.RT In K

Atomicity	γ	Cp	Cv
Monoatomic	5/3	5R12	3R12
Diatomic	7/5	7R/2	5R/2
Triatomic non linear	4/3	4R	3R