

# Chemical potential

Chemical reactions are associated with a **change of composition** and a change in composition is associated with an **energy change**. Each type of energy can be expressed as a product **intensity** ( $\mu_i$  – chemical potential) and **capacity** ( $\Delta n_i$  – increase in moles of the given component  $i$ ) factor.

At **constant pressure and temperature**, the chemical potential can be defined as follows:

$$\mu_i = \frac{\delta G}{\delta n_i}$$

The partial change in Gibbs free energy, which accounts for a small change in the number of moles of a given substance.

Chemical potential is **a measure of the affinity of given substance, the chemical potential and the amount of substances** in the system determine what reactions will take place in the system and how quickly.

## Links

### Related articles

- Potential
- Gibbs Energy
- Free energy
- Enthalpy

### Source

- KUBATOVA, Senta. *Biofot* [online]. [cit. 2011-01-31]. <<https://uloz.to/!CM6zAi6z/biofot-doc>>.