

reduced adsorption

Of component i , defined by the equation

$$\Gamma_i^{(n)} = \Gamma_i^\sigma - \Gamma^\sigma \left\{ \frac{c_i^\alpha - c_i^\beta}{c^\alpha - c^\beta} \right\}$$

where Γ^σ , c^α and c^β are, respectively, the total Gibbs surface concentration and the total concentrations in the bulk phases α and β :

$$\begin{aligned}\Gamma^\sigma &= \sum_i \Gamma_i^\sigma \\ c^\alpha &= \sum_i c_i^\alpha \\ c^\beta &= \sum_i c_i^\beta\end{aligned}$$

The reduced adsorption is invariant to the location of the *Gibbs surface*. Alternatively, the reduced adsorption may be regarded as the Gibbs surface concentration of i when the Gibbs surface is chosen so that Γ^σ is zero, i.e. the Gibbs surface is chosen so that the reference system has not only the same volume, but also contains the same total amount of substance (n) as the real system.

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