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relative adsorption

If Γ_i^σ and Γ_1^σ are the Gibbs surface concentrations of components *i* and 1, respectively, with reference to the same, but arbitrarily chosen, Gibbs surface, then the relative adsorption of component *i* with respect to component 1, is defined as

$$\Gamma_i^{(1)} = \Gamma_i^\sigma - \Gamma_1^\sigma \frac{c_i^\alpha - c_i^\beta}{c_1^\alpha - c_1^\beta}$$

and is invariant to the location of the Gibbs surface. Alternatively, $\Gamma_i^{(1)}$ may be regarded as the Gibbs surface concentration of *i* when the Gibbs surface is chosen so that Γ_i^σ is zero, i.e. the Gibbs surface is chosen so that the reference system contains the same amount of component 1 as the real system. Hence $\Gamma_1^{(1)} \equiv 0$.

Source:
PAC, 1972, *31*, 577 *(Manual of Symbols and Terminology for Physicochemical Quantities and Units, Appendix II: Definitions, Terminology and Symbols in Colloid and Surface Chemistry)* on page 591

