reduced adsorption

Of component i, defined by the equation

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

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:

$$\Gamma^\sigma = \sum_i \Gamma_i^\sigma$$

$$c^\alpha = \sum_i c_i^\alpha$$

$$c^\beta = \sum_i c_i^\beta$$

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.

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