

surface excess Gibbs energy

Defined by

$$G^\sigma = H^\sigma - T S^\sigma = A^\sigma - \gamma A_s$$

where H^σ is the surface excess enthalpy, T is the thermodynamic temperature, S^σ is the surface excess entropy, A^σ is the surface excess Helmholtz energy, γ is the surface tension, and A_s is the area relative to a Gibbs surface.

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 599