

wetting tension (or work of immersional wetting per unit area)

The work done on a system when the process of immersional wetting involving unit area of phase β is carried out reversibly:

$$w_{\text{W}}^{\alpha\beta\delta} = \gamma^{\beta\delta} - \gamma^{\alpha\beta}$$

where $\gamma^{\alpha\beta}$ and $\gamma^{\beta\delta}$ are the surface tensions between two bulk phases α , β and β , δ , respectively.

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 598