

compensation

in catalysis

For the process:

$$k = A e^{\frac{-E}{RT}}$$

where k is a rate constant, A the frequency factor and E the activation energy, A and E sometimes exhibit compensation, i.e. they change in the same direction with change in catalyst for a given reaction or with change in reaction for a given catalyst.

Source:

PAC, 1976, 46, 71 (*Manual of Symbols and Terminology for Physicochemical Quantities and Units - Appendix II. Definitions, Terminology and Symbols in Colloid and Surface Chemistry. Part II: Heterogeneous Catalysis*) on page 82