activation

Also contains definition of: degree of activation

This word is used in different senses:

- 1. Input of external energy into a chemical system is said to bring about activation of the system.
- 2. An added substance that increases the rate of a catalysed reaction is known as an activator, and the effect is called activation. The degree of activation ε_a is defined by:

$$\varepsilon_{\mathrm{a}} = \frac{v - v_0}{v_0} = \frac{v}{v_0} - 1$$

where v_0 is the rate of the catalysed reaction in the absence of the activator and v

is the rate of the catalysed reaction in the presence of the activator

3. When some of the energy required for a reaction to occur is provided by a previous exothermic chemical reaction there is said to be chemical activation.

See: chemical activation, catalysis

See also: activator, inhibition

Source:

PAC, 1996, 68, 149 (A glossary of terms used in chemical kinetics, including reaction dynamics (IUPAC Recommendations 1996)) on page 151