

extended Hammett equation

This term applies in a general way to any multiparametric extension of the Hammett equation. It is sometimes used specifically for a form of dual substituent-parameter equation in which the actual value of the correlated property P under the influence of the substituent X is used, rather than the value relative to that for $X = H$. An intercept term h corresponding to the value of P for $X = H$ is introduced, e.g.

$$P = \alpha \sigma_I + \beta \sigma_R + h$$

The equation may be applied to systems for which the inclusion of further terms to represent other effects, e.g. steric, is appropriate.

Source:

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1114