

enthalpimetric analysis

Synonym: analytical solution calorimetry

The generic designation for a family of analytical methods in which the enthalpy change of a chemical reaction is measured, directly or indirectly, in order to perform a quantitative determination of a reactant or catalyst. In general, at least one reactant is a liquid or solution. It is a subset of calorimetry in which the system is maintained at constant (usually atmospheric pressure), and the emphasis is on a quantitative determination in a reasonable length of time. Analytical solution calorimetry is a synonymous designation that may be used but is not preferred. Thermochemical analysis has been used but is not recommended because of potential confusion and overlap with the methods of thermal analysis. The adjective thermometric is also associated with the names of some of these methods, but is not recommended as a general designation.

Source:

PAC, 1994, 66, 2487 (*Nomenclature of thermometric and enthalpimetric methods in chemical analysis (IUPAC Recommendations 1994)*) on page 2489