

flow injection enthalpimetry

Synonym: enthalpimetric flow injection analysis

A term used to describe several related methods in which a transient temperature change in a flowing liquid stream, caused by a chemical reaction, is used to quantitatively determine an analyte. The analyte is introduced as a discrete liquid sample (i.e. test portion) into the flowing stream. This definition limits the scope to experiments with primarily an analytical emphasis, performed in a flow injection calorimeter. This maintains a clear distinction from classical flow calorimetric methods where reagents are combined continuously in flowing streams, or where the heat effect is measured *via* the flowing of a fluid over a reaction vessel. An acceptable synonym is enthalpimetric flow injection analysis. Other non-recommended terms which have been used in the literature include peak enthalpimetry and enzyme thermistor. Flow enthalpimetry has been used to describe the flow injection technique, but its use for this purpose is discouraged.

Source:

PAC, 1994, 66, 2487 (*Nomenclature of thermometric and enthalpimetric methods in chemical analysis (IUPAC Recommendations 1994)*) on page 2491