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inaccuracy

in analysis

A quantitative term to describe the (lack of) accuracy of a chemical measurement process; comprises the imprecision and the bias. Inaccuracy must be viewed as a two-component quantity (vector); imprecision and bias should never be combined to give a scalar measure for chemical measurement process inaccuracy. (One or the other component may, however, be negligible under certain circumstances.) Inaccuracy should not be confused with uncertainty. Inaccuracy (imprecision, bias) is characteristic of the measurement process, whereas error and uncertainty are characteristics of a result. (The latter characteristic, of course, derives from the imprecision and bounds for bias of the chemical measurement process.)

Note:

The resultant bias and imprecision for the overall measurement process generally arise from several individual components, some of which act multiplicatively (e.g. sensitivity), and some of which act additively (e.g. the blank).

Source:

PAC, 1995, *67*, 1699 *(Nomenclature in evaluation of analytical methods including detection and quantification capabilities (IUPAC Recommendations 1995))* on page 1706

PAC, 1989, *61*, 1657 *(Nomenclature for automated and mechanised analysis (Recommendations 1989))* on page 1663

