

## matrix effect

1. (*in analytical chemistry*) The combined effect of all components of the sample other than the analyte on the measurement of the quantity. If a specific component can be identified as causing an effect then this is referred to as interference.

**See:** matrix

**Source:**

PAC, 1989, 61, 1657 (*Nomenclature for automated and mechanised analysis (Recommendations 1989)*) on page 1660

2. (*in surface analysis*) Effects which cause changes in Auger-electron, photoelectron, secondary ion yield, or scattered ion intensity, the energy or shape of the signal of an element in any environment as compared to these quantities in a pure element. (a) Chemical matrix effects: changes in the chemical composition of the solid which affect the signals as described above. (b) Physical matrix effects: topographical and/or crystalline properties which affect the signal as described above.

**Source:**

PAC, 1979, 51, 2243 (*General aspects of trace analytical methods - IV. Recommendations for nomenclature, standard procedures and reporting of experimental data for surface analysis techniques*) on page 2247