

**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*.

1989, 61, 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.

1979, 51, 2247