

Sample Preparation

Chemistry

Getting from a real sample to something measurable.

The stages that precede measurement.

1

Sampling

Representative of the bulk. This is where the largest errors arise.

2

Homogenising

Grinding, mixing, dissolving.

3

Extraction

Separating the analyte from the matrix.

4

Clean-up

Removing interfering substances.

5

Dilution to range

Bringing the concentration into the instrument's working range.

MATRIX EFFECTS

Other components can suppress or enhance the signal

Standard addition corrects for it

Matrix-matched standards are the alternative

A perfect measurement of an unrepresentative sample is worthless.
Sampling deserves as much attention as the analysis.