

ABSTRACT OF THE DISCLOSURE

For correcting measured spectral data of n samples for data due to the measurement process itself, e.g. due to spectral baseline variations and/or water vapor and carbon dioxide present in the atmosphere of the spectrometer used to make the spectral measurements, the spectral data being quantified at f discrete frequencies to produce a matrix X (of dimension f by n) of calibration data, matrix X is orthogonalized with respect to a correction matrix U of dimension f by m comprising m quantified correction spectra, at the discrete frequencies f , which simulate data arising from the measurement process itself. The correction method is preferably included in a method of estimating unknown property and/or composition data of a sample under consideration, in which the n samples are calibration samples and a predictive model is developed interrelating known property and composition data of the calibration samples to their spectral data corrected for the data due to the measurement process itself. Then, the unknown property and/or composition data of the example under consideration is estimated from the predictive model on the basis of its measured spectrum.

This Sheet Has Been Replaced

