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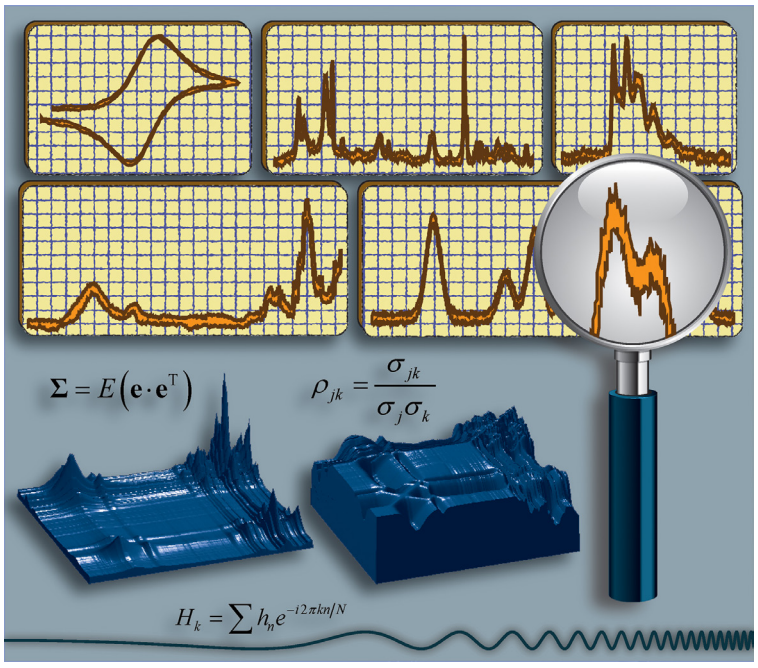
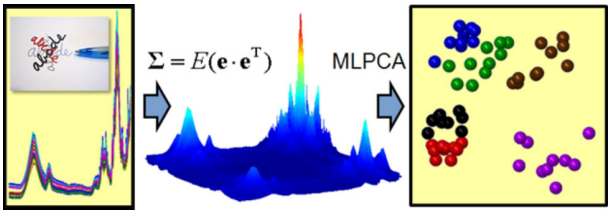
Cover Picture



Characterization of errors in multichannel analytical measurement vectors, in particular instrument noise, is important for understanding and improving experimental measurements and for the optimization of multivariate data analysis methods. This article reviews some of the techniques used to describe the interdependence of multivariate measurement errors, including error covariance/correlation matrices and frequency domain methods. Details are presented in the Account **Measurement Errors in Multivariate Chemical Data** by *Peter D. Wentzell* on page 183.

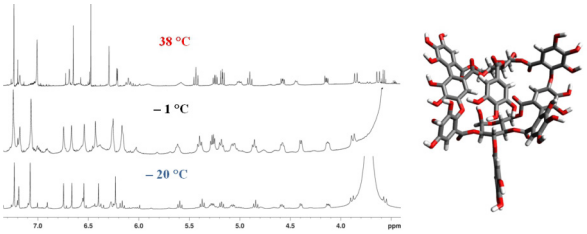
Contents

Account



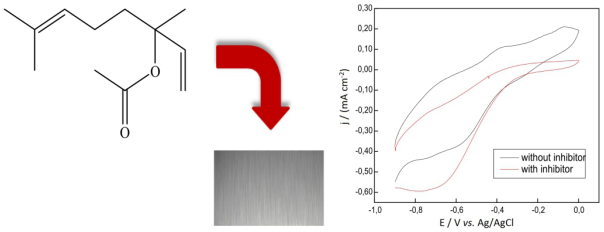
Graphical Abstract
Graphical abstract illustrating the conversion of IR spectra of ink samples to a scores plot by making use of the error covariance matrix and maximum likelihood principal components analysis

Articles



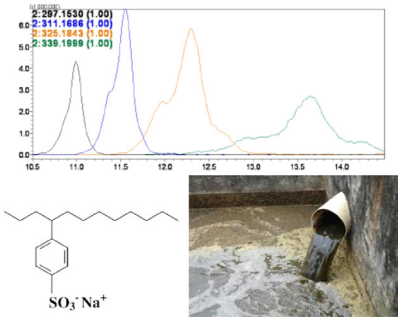
Graphical Abstract

NMR experiments at lower temperatures and DFT(B3LYP/6-31G)/PCM methods were used to determine the 3D geometry of the favoured conformer of the macrocyclic ellagitannin oenothein B



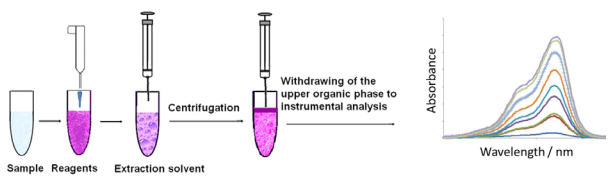
Graphical Abstract

Linalyl acetate (LA): a chemical compound extracted from biomass and used as green corrosion inhibitor. Adsorbed species formed from LA adsorption on the metal surface inhibits the mechanism associated with the oxidation processes of the metal



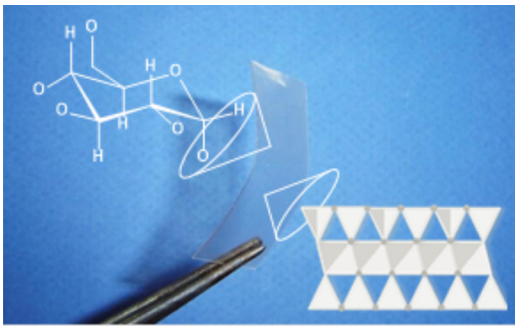
Graphical Abstract

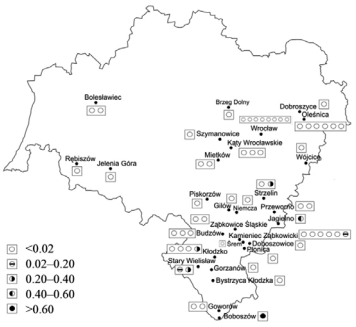
Linear alkylbenzene sulphonates (LAS) occur in high concentration in raw sewage, thereof interfering with the analysis of micropollutants by mass spectromety. This paper proposes a tandem solid phase extractionprocedure that combines two distinct solid phase extraction cartridges to reduce LAS concentration in the extracts, thereby enhancing the sensitivity of the analytical method for the quantification of five pharmaceutical compounds and three endocrine disrupting chemicals in samples of raw and treated sewage

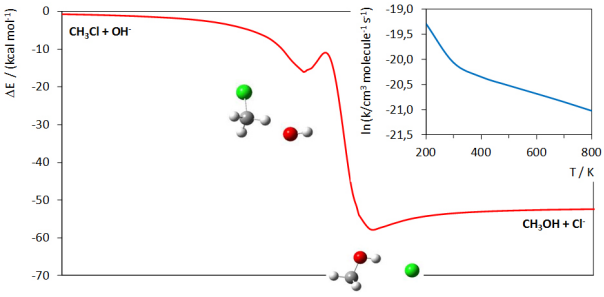


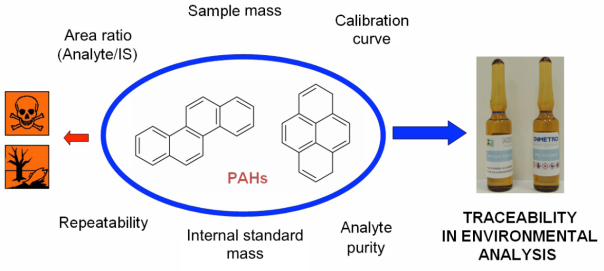
Graphical Abstract

A donor-active solvent-assisted liquid-phase microextraction procedure followed by spectrophotometric determination of zinc was developed. The method is based on the ion associate formation between Zn(II), thiocyanate and 2-[2-(5-dimethylamino-thiophen-2-yl)-vinyl]-1,3,3-trimethyl-3*H*-indolium bromide (DTVTI) reagent which is extractable by the mixture of toluene and tributylphosphate









Short Reports