Multi-block analysis; background, methodology and applications.

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Abstract

With the advancement of technology, data collected in many fields of science are getting more informative, but at the same time also more complex. For example, analytical measurements can now typically be obtained with different instruments, in different places and at different times of a production process. In consumer and sensory science, it is common that several data sets represent aspects that need to be considered together in order to obtain the information wanted. Even in medical protocols, data can be represented by blocks of independent variables that need to be considered together.

In order to utilize this type of data properly there is a strong need for methodology that can be used for linking several large data sets with focus on both interpretation and prediction. In this talk a number of situations in food science and industry where this type of methodology is important, will be presented and discussed. A discussion of different published methodologies for solving the problems will also be discussed in addition to concrete applications of the methods.