

## **Method of analysis towards feed safety**

Christoph von Holst, DG Joint Research Centre, European Commission, 2400 Geel, Belgium

Since the composition of feed has a direct impact on the health of animals and the safety of food of animal origin, legal limits in feed are established for various components including undesirable substances and products that previously underwent an authorisation procedure such as feed additives. For checking the compliance of feed with these legal provisions, both industry and official feed laboratory require appropriate methods of analysis. The ever increasing challenge of feed analysis in terms of number of target analytes and samples to get analysed has triggered the development of new techniques and concepts for feed analysis. The availability of multianalyte methods and the application of different screening tests are typical examples for this trend. Screening methods allow for the analysis of a high number of samples, delivering the results of analysis in short time. The use of screening methods is based on the principle that samples with a negative response are considered as compliant, while positive samples need to undergo additional analysis by confirmatory methods. While all these methods need to be validated prior to their use, in order to demonstrate that they are fit for the intended purpose, some of the relevant guidelines have only been published recently. The lecture will elaborate on relevant examples, showing how this process works under real world conditions. Other topics that will be addressed are the use of methods validated by a group of laboratories - which often leads to ISO standards - versus methods using latest technology, but exclusively validated in a single laboratory. Pros and cons of either options will be discussed.