

November 6, 2019 (14:45-15:30)



VENDOR SEMINAR:

Plant Alkaloids and Mycotoxins Analyses for Routine Labs: New LCMS/MS Methodologies Presented by SCIEX Customers

Challenges and implementation of LC-MS method for multiple plant alkaloids analysis

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Various groups of toxic plant alkaloids may enter human food chain. For control of the substances, reliable methods are needed. In this study, effective method for the detection of 56 pyrrolizidine, tropane and quinolizidine alkaloids utilizing ultra-high performance liquid chromatography and tandem mass spectrometry (QTRAP 6500+ System, SCIEX) has been developed.

Validation of LC-MS/MS based methods for the simultaneous quantification of several hundreds of analytes: Do we need new guidelines?

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In the recent years, LC-MS based methods covering hundreds of analytes have been successfully developed in the field of mycotoxins, veterinary drugs and pesticides. However, the analytical burden involved in validation of such methods is huge, even if a "user-friendly" guideline like SANTE 11813/2017 is used. Based on the results we obtained on the validation of 550 mycotoxins and other secondary metabolites, this presentation aims to discuss the usefulness of current guidelines for multi-target analysis. In particular, we think that both absolute and relative matrix effects seem to be insufficiently addressed, whereas investigations close to the levels of LOD/LOQ (thus requiring manual checks / interventions as considers peak integration) may be significantly reduced.