VENDOR SEMINAR:

Out of the routine – Automated analysis of contaminants like MOSH/MOAH and Mycotoxins in a contract lab

New automated workflow for the analysis of MOSH/MOAH in different food matrices

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The analysis of MOSH/MOAH has become a standard parameter to be analyzed in a lot of food matrices, not only in edible oil and fat. Chemical Institute Burkon is doing MOSH/MOAH analysis for several years now. In routine analysis, manual sample workup and saponification is used to prepare for subsequent LC-GC-FID analysis using epoxidation with mCPBA. As part of a project, the "Automated Workflow" from Trajan Scientific and Medical / AxelSemrau was used to analyse different matrices applying automated sample preparation/saponification an epoxidation with performic acid in chloroform. The parameter setup and the results of the manual method vs automated method are presented. After further improvements to the epoxidation procedure by Marco Nestola from Trajan first validation data are shown for spiked samples using of 1-chlorbutane and hydrogen peroxide 30 % as reagents.

Validation of an online µSPE system for the analysis of mycotoxins in food

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The analysis of mycotoxins is an important parameter in each food lab and belongs to the most requested analytes. Therefore, highly efficient methods are important for type of analysis. To achieve this, Institute Burkon introduced an online coupled µSPE system to analyze these parameters. The lecture presents the key considerations for the use of the automatization for the analysis of the aflatoxins B1, B2, G1 and G2 at Chemical Institut Burkon. Further some validation data for four matrices, in accordance with Commission Regulation (EU) 2023/2782 are reported as well as the experience of the users with the system after half a year in routine analysis.