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VENDOR SEMINAR:

Automated solutions for the determination of contaminants in food and packaging

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New automated solutions for sample preparation in the MOSH/MOAH analysis

The determination of MOSH and MOAH with online LCGC FID is a common method which meanwhile has become part of international regulations. Analytics require manual sample preparation steps such as aluminum oxide purification and epoxidation. The lecture presents approaches how these sample preparation steps can easily be automated. A further discussion concerning MOSH/MOAH analytics is the use of other methods than FID. Advantages and disadvantages of the usage of mass-spectrometric detection and UV detectors for the MOSH and MOAH analysis will be examined.

imPAHct - a new approach of fast and sensitive analysis of PAH in foodstuff

PAH is one of the most analyzed contaminants in foodstuff. It has a good fat solubility and a low limit of determination. Therefore, analytics are time-consuming and require many sample preparation steps. imPAHct is a complete new approach to solve this analytical problem. It consists of an easy and fast manual sample preparation in combination with a fully automated clean-up with a LCGC and GCMS as detection method. The lecture describes the method and presents experiences and validation data of a routine laboratory.

Automation solution for robust analysis of 2-,3-MCPD and glycidyl esters

Within the last months, analysis of MCPD and glycidyl esters as contamination of fats, oils and other foodstuffs have received high attention. Based on the ALARA principle, producers should try to keep the amount as small as possible. Currently, new thresholds are under consideration. Normally, the esters are determined as free MCPD by an indirect method. But the official methods are extensive and time-consuming. So the need for an efficient automation solution occurred. The lecture presents an MCPD workstation which enables to automate the methods AOCS Cd 29a and c. Special attention is given to the modified AOCS Cd 29c-13 method: DGF Fast and Clean. It enables not only a higher sample throughput. Regarding to the whole system, it also is more robust. Comprehensive validation data and practical experiences of routine laboratories are presented as well.