

November 6, 2024 (14:45-15:30)



EMPOWERING RESULTS

Elemental Analysis | GC Mass Spectrometry | Metallography

VENDOR SEMINAR:

Advanced solutions for complex matrix multi-residues analysis

Despite great advances in mass spectrometry and sample preparation some complex food matrices still prove difficult to analyse, such as dried pepper, turmeric, and chilli.

This seminar will address how even the most challenging residue analyses in complex food matrices can be tackled using state of the art GCxGC-TOFMS technology.

Learn about how LECO's new industry leading instrumentation and software provide enhanced insights and high results confidence in difficult applications including MOSH/MOAH and pesticides analysis.

The renowned sector expertise leaders, Giorgia Purcaro and Michal Stupak will describe their latest developments and approaches in solving complex residue analysis challenges in two insightful presentations:

The role of GCxGC in MOSH & MOAH analysis

*Giorgia Purcaro, Grègory Bauwens, Aleksandra Gorska, Paula Albendea
Gembloux Agro-Bio Tech, University of Liège, Passage des Déportés, 2, Gembloux, B-5030, Belgium*

GCXGC is vital in addressing the limited separation performances of the current 1D LC-GC-FID MOSH MOAH reference method in complex matrices, allowing thorough characterization and resolution of possible coelutions which can otherwise impede accurate MOH quantification. Giorgia will describe current best practices which increase quantification accuracy, whilst ensuring alignment with the analytical criteria established in the most recent European Food Safety Authority opinion.

New strategies for pesticide residue analysis in chilli peppers using GCxGC-TOFMS

*Michal Stupak, Jingwen Han, Jana Hajslova
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Chilli peppers are widely used in many food stuffs and are among imported foods which have recently been reported via the EU rapid alert system for food & feed (RASFF) due to excessive pesticide levels observed from some origins. Chilli peppers present significant analytical challenges for residue analysis due to high matrix complexity, particularly regarding high concentrations of capsaicinoids and alkaloids.

Michal Stupak will present the latest developments in addressing these challenges using the latest ultra-high sensitivity GCxGC-TOFMS technology, the Pegasus BTX 4D, to provide excellent separation and low LOQ detection capabilities and deliver high quality, accurate results.