

White papers – Index

The following White Papers can be downloaded in pdf format from our website (http://www.sepsolve.com/white-papers/).

- Detailed characterisation of essential oils by flow-modulated GCxGC and Tandem Ionisation mass spectrometry
- Comprehensive analysis of tobacco smoke using TD–GCxGC–TOF MS with Tandem Ionisation
- Enhanced separation of hop oils by flowmodulated GC×GC–TOF MS
- Fast analysis of semi-volatile organic compounds using PTV-GC-TOF MS
- Rapid aroma-profiling of cookies by dynamic headspace sampling and TD–GC–TOF MS
- Determining petrochemical composition by GC×GC-TOF MS/FID: The benefits of flow modulation and Tandem Ionisation
- Technical note: Comprehensive two-dimensional gas chromatography
- Analysis of complex phthalate mixtures by GC– TOF MS with Select-eV soft ionisation
- Comparison of aroma compounds in whisky by SPME–GC×GC–TOF MS/FID
- 10. Technical note: Overcoming the limitations of split/splitless inlets using large-volume injection
- Comprehensive analysis of coffee bean extracts by GC×GC–TOF MS
- 12. Reliable separation and efficient group-type quantitation of total petrochemical hydrocarbons using GC×GC–FID

- Tackling the extended list of fragrance allergens by flow-modulated GCxGC-TOF MS/FID
- 14. Enhanced characterisation of cannabis extracts using flow-modulated GCxGC- TOF MS/FID with Tandem Ionisation
- Flavour profiling of milk using high-capacity sorptive extraction and TD–GCxGC–TOF MS/FID
- Aroma profiling of pet food using high-capacity sorptive extraction and TD–GC×GC–TOF MS
- 17. Reliable speciation of fatty acid methyl esters (FAMEs) by flowmodulated GC×GC–TOF MS/FID with Tandem Ionisation
- Improving confidence in the quantitative analysis of cannabis terpenes using flowmodulated GC×GC-FID
- Fully automated on-line headspace monitoring of VOCs from waste effluent by GC–FID and GC–TOF MS
- Determining petrochemical composition by GCxGC-TOF MS/FID: Reliable, automated group-type analysis
- 21. Comparison of the aroma profiles of hops using dynamic headspace sampling with TD–GC– TOF MS
- 23. Discovery of biomarkers in breath: Efficient screening with TD–GC–TOF MS



- 24. Discovery of biomarkers in breath: Enhancing separation and identification using GC×GC-TOF MS
- 25. Routine monitoring of airborne VOCs using TD–GC×GC–TOF MS/FID
- 26. Aroma profiling of hops and beer using highcapacity sorptive extraction with GC×GC– FID/TOF MS/SCD
- Automated aroma profiling of wine using sorptive extraction with GCxGC-TOF MS/SCD
- 28. Discovery of biomarkers in breath: Development and optimisation of a TD– GC×GC–TOF MS analytical platform
- 29. Robust comparison of terpene profiles across cannabis strains
- 30. Comprehensive screening of volatile emissions from plastics
- 31. New car smell: Improved identification of odours in vehicle interior air
- 32. Fast and efficient group-type (PiPNA) classification of jet fuels
- 33. Quantitation of residual solvents and terpenes in cannabis products a combined approach
- 34. Comprehensive aroma profiling of cannabis using a discovery workflow
- Rapid quantitation of azo dyes in water and textiles by GC–TOF MS
- 36. Evaluation of fruit quality using GC–TOF MS and innovative chemometrics
- 37. Easy-to-learn workflows for quality control of essential oils
- Uncovering hidden compositional changes in breath profiles using untargeted chemometric workflows

- 39. Reverse engineering the aroma of plant-based meat substitutes
- 40. Uncovering trace additives in gasoline
- 41. Improving discovery workflows using Tandem Ionisation® data
- 42. Evaluating the authenticity of brand perfumes
- 43. Tandem Ionisation® Revolutionary soft ionisation to enhance confidence in identification
- 44. Technical note: Why choose a time-of-flight mass spectrometer?
- 45. Investigating the quality of Darjeeling teas using comprehensive VOC fingerprints
- 46. Reliable separation and efficient group-type quantitation of volatile petrochemical hydrocarbons (VPH)
- 47. Confident profiling of controlled substances using GC–TOF MS
- 48. Improved characterisation of malodours in recycled plastics using TD–GC×GC with BenchTOF2 MS



Application glossary

Application area	Relevant white papers
Food and beverages	3, 5, 9, 11, 15, 15, 17, 21, 26, 27, 36, 39, 45
Fragrances	1, 13, 37, 42
Biomarker discovery	23, 24, 28, 38
Petrochemical	6, 20, 32, 40
Cannabis & tobacco	2, 14, 18, 29, 33, 34
Odours & emissions	8, 30, 31, 48
Environmental	4, 12, 19, 25, 35, 46
Defence & Forensics	47
Technical notes	7, 10, 41, 43, 44

