MCCGC-IMS PEAKMACHINE

The PeakMachine allows two dimensional separation of volatiles compounds presented in complex matrix. The combination of Multi Capillary Column GC (MCCGC) with ion mobility spectrometer makes this instrument excellent for analysis of liquid and solids samples via the headspace technique. The Peak Machine operates in atmospheric as well like in subatmospheric pressure. The AIMS working temperature 30-140 °C and resolving power up to 100 FWHM makes this instrument appropriate for analysis of flavors and odors presented in complex matrixes. The Peak Machine also allows plugin of dopant gas (Reactant ions modifier) to IMS what increase the selectivity of instrument for targeted compounds. In combination with machine learning classification techniques integrated to our software is PeakMachine excellent for quality control in food, beverage and pharmaceutical industry.

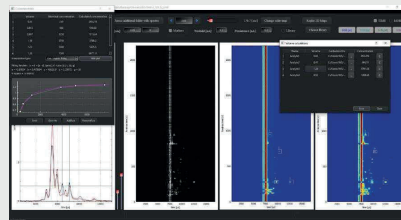|			
Working pressure	600 - 1200 mbar	Polarity	Positive/Negative
Working temperature	30 - 140 °C	Ionization source	Corona Discharge
Resolving power N2/Air	90/100 FWHM	Pre-separation	MCC - GC
Sensitivity	Low ppb	Power supply	250V/24V
Drift gas flow	500 - 1200 ml/min	Connectivity	TCP/IP, USB 2.0
Sample gas flow	2 - 500 ml/min	Dimensions (mm)	490x390x150
Drift field intensity	200 - 560 V/cm		

MAIN ADVANTAGES

- Non-radioactive plasma ionization source
- High sensitivity
- High resolving power
- Operation at atmospheric and sub-atmospheric pressures
- Highest working temperature in the field
- Compatibility with any auto sampler
- Machine learning classification

DESIGNED FOR:

- 2D analysis of complex matrix
- Classification of analyzed compounds
- Food, beverages, chemical industry
- VOC/TOC analysis
- Chemical analysis
- Research laboratories

① Injector
② Communication ports
③ External pump connector
④ Gas Inlet
⑤ Gas Outlet
⑥ Dopant gas Inlet

CONTROLSOFTWARE

For comfortable work with Peak Machine we developed a control software that offers full and intuitive control of our instruments. The complete MaSaTECH software is a part of each spectrometer. In addition we offer also the customization of our software.

SOFTWARE FEATURES

- Control all AIMS working parameters
- Online analysis and data collection
- Machine learning classification
- Post process data analysis
- Synchronization with library
- Quantification