





# SELECTIVE DETECTORS FOR GAS CHROMATOGRAPHY

### INSTRUMENT SOLUTION GROUP

#### PFPD – Pulsed Flame Photometric Detector

The PFPD excels at selective detection of sulfur and phosphorus compounds, and can be configured to detect 26 other elements

## Enhancing Chromatographic Performance

Selective GC detectors enhance chromatographic performance by measuring trace levels of target compounds in the presence of higher concentration compounds, or matrix interferences. Selective GC detectors provide precise retention time marking for improved MS library matching and peak identification. Co-elution of interferences in essential oils can make locating compounds responsible for characteristic aromas in a MS chromatogram quite difficult. The accompanying GC-MS total ion chromatogram of galbanum oil contains a large number of co-eluted compounds. A simultaneous sulfur mode PFPD chromatogram helps pinpoint sulfur compounds contributing to the fragrance profile of the oil.

#### Tandem GC Detectors

OI Analytical patented\* tandem GC detectors combine a photoionization detector (PID) with an FID or second selective detector providing two

simultaneous chromatograms from a single run. The PID selectively responds to aromatic and unsaturated hydrocarbons in the presence of alkanes and saturated hydrocarbons. The second detector is used to further differentiate and identify compounds with specific heteroatoms.

XSDTM – Halogen Specific Detector The XSD halogen specific detector is designed for selective detection of halogenated compounds such as pesticides, THMs, and PCBs.

## ELCD-Electrolytic \* Conductivity Detector

The ELCD is designed for high sensitivity measurement of halogenated compounds. Interfacing an ELCD with a PID as tandem detectors is prescribed in USEPA methods 502.2 and 8021 for

measurement of chlorinated and aromatic volatile organic compounds (VOCs) in drinking water and wastewater samples.



## Our expertis

Wasson-ECE Instrumentation is a world leader in gas chromatography. We can assist you every step of the way from sampling to service and support. Method development and leading edge gas chromatography applications are our primary focus. Wasson-ECE applications are developed on Agilent Technologies GC platforms for a level of quality and reliability that is unsurpassed.

**Gas Chromatography Solutions** 

## Analytical Engineering

**WASSON ECE INSTRUMENTATION** 

Our expertise is not limited to laboratory solutions. The Wasson-ECE Analytical Engineering Group designs solutions for projects that require analytical accuracy and innovative engineering. We employ a highly experienced, multi-disciplinary engineering team ready to solve challenges such as fluid handling, hazardous areas, analyte extraction, micro-reactors, and more. We specialize in laboratory and pilot plant automation providing on-line and process gas chromatographs. Our custom hardware and software can be designed to meet project requirements in ways that off-the-shelf products cannot.