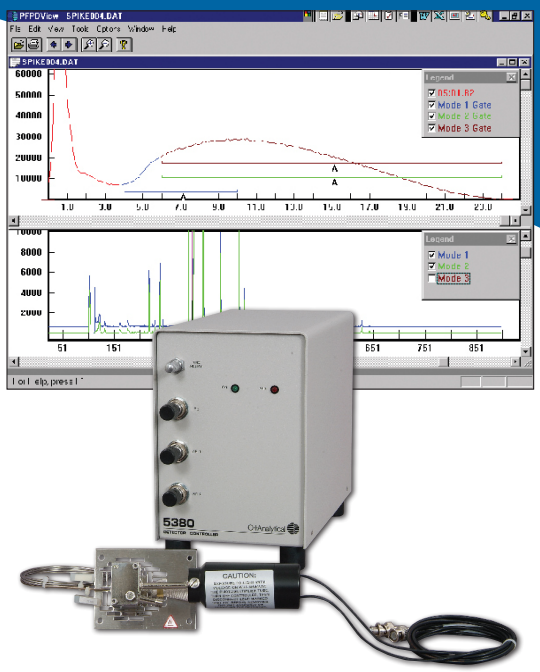
PFPDView DETECTOR SOFTWARE

OPTIONAL SOFTWARE FOR THE PULSED FLAME PHOTOMETRIC DETECTOR

PFPDView is an optional Windows®-based software package for use with a 5380 PFPD and WinPulse to reprocess chromatograms under different PFPD operating conditions. This reprocessing capability is useful for detector and dual-gate mode optimization and for method development in challenging applications. PFPDView parameters can be adjusted for optimal selectivity without the extra time and expense of rerunning an analysis to find ideal settings. WinPulse also collects digital pulsed flame emission traces that can be used to obtain chemical structural information on a specific peak.

PFPDView allows up to five different chromatograms to be viewed simultaneously to determine optimal parameters for an application or specific analysis. If integration time gate parameters need to be changed, the resulting chromatogram can be viewed instantly.

After chromatograms are reviewed, they can be exported as a GC data file (AIA format) for import into a chromatographic data system. Viewing, reprocessing, printing, or reintegrating a GC run under new PFPD parameters are accomplished without rerunning the sample.



PFPDView Capabilities

- Displays post-run pulse emission profiles and up to five chromatograms using different integration time gate parameters
- Provides heteroatom structural information of unknown compounds
- Reanalyzes off-line chromatographic runs under different PFPD parameters
- Optimizes parameters for dual-gate operation mode
- Optimizes sensitivity and selectivity with post-run integration time gate selection
- Provides dual gate response ratios for elemental identification and multi-element analysis

Principal Applications

- Optimization of dual-gate operating parameters
- Reducing S interference in P pesticide analysis
- Simultaneous multi-element analysis
- Optimization of integration time gate settings for best sensitivity and selectivity
- Elemental identification with dual gate response ratio
- Quenching identification and reduction

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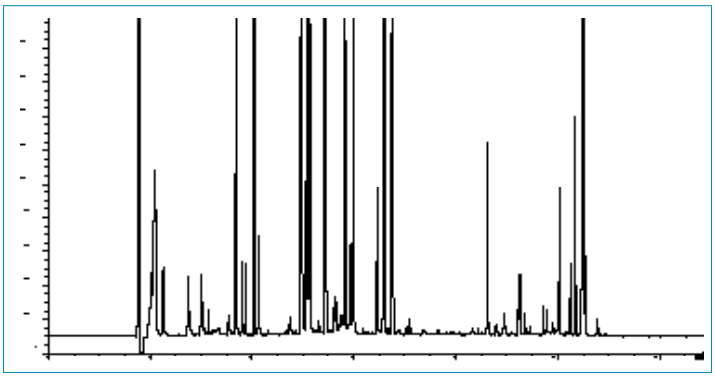
PFPDView Software

Computer Requirements

Parameter	Recommended
Processor Speed	3 GHz
Memory (RAM)	1.0 GB or greater
Free Disk Space	1 GB or greater 2 GB for data service
Operating System	Windows XP Pro, Windows 7 (32 or 64 bit)
Disk Drive	CD-ROM
COM Port	1 Available RS-232 port or a USB-to-Serial converter

Example of Dual-Gate Subtraction with PFPDView Software

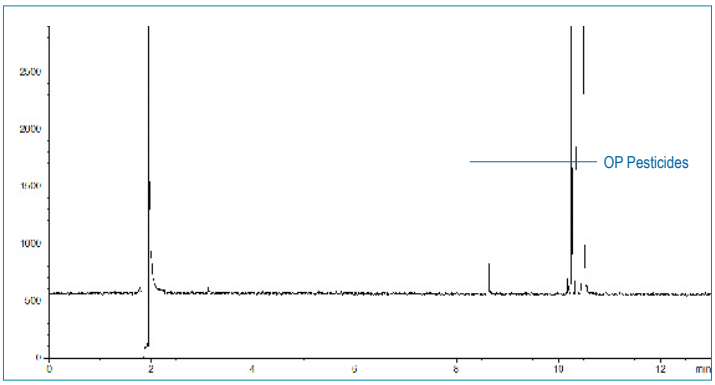
Without Dual-Gate Subtraction



Garlic extract with high sulfur content spiked with OP pesticides and analyzed on the PFPD in the phosphorus mode without and after dual-gate subtraction.

Without dual-gate subtraction, the OP pesticides are impossible to identify due to sulfur interference.

With Dual-Gate Subtraction



With dual-gate subtraction applied, the sulfur interference is eliminated, leaving the OP pesticides easily identifiable.

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Dr. Aviv Amirav, Professor of Chemistry at the University of Tel Aviv, Israel, developed and patented the PFPD under U.S. Patent number 5,153,673, and licensed it to O.I. Corporation.