

APPROVED INFRARED FUMIGATION MONITORS FOR USDA/APHIS/PPQ AND DOW AGROSCIENCES.

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New and unique infrared monitors from **Spectros Instruments, Inc. (Hopedale, MA)** www.spectrosinstruments.com offer unmatched accuracy, linearity and repeatability for a wide range of fumigation gases.

All fumigation gases display a unique absorption signature which defines the amount of energy any of these gases will absorb in relation to the concentration present at the time of measurement. Real-time measurements based upon absolute value Beer-Lambert Law calibrations offer the fumigator a new, authoritative understanding of the exposure period and greater control of the fumigation process.

Real-time response (in seconds) over a wide concentration range 100ppm to 10% (100,000ppm) for phosphine, sulfuryl fluoride, methyl bromide and other fumigants is discussed. Interferences that plague other traditional technologies (TCD) are eliminated.

Real-time, multi-zone monitoring is described. Data is automatically archived and the end-user can easily access a detailed (multi zone) dosage report for any time during the exposure period (web based platform). Optional manifold systems with solenoid valves provide automatic fumigant gas make-up to levels above required lethal dosages.

Data will be presented for

1. Linearity of Response MB-ContainIR (PPQ Quarantine Approved Methyl Bromide Monitor)
2. PM200 Cold Storage Fruit Phosphine Fumigation
3. PM200 Grain Silo Phosphine Fumigation
4. SF-ExplorIR (DAS Approved Clearance Device)
5. SF200 Sulfuryl Fluoride Fumigation
6. New Fumigant Gas Configurations