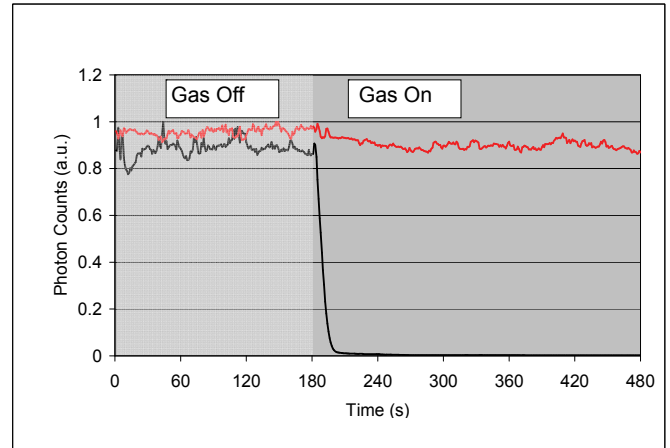




Multi-Agent Optical Sensor Array (MOSA)
Multiple Sensors, Parallel Processing, Real-time Analysis



MOSA waveguide sensor response to target analyte. Dosimetric response is rapid and sensitive.

MOSA (Multiple-Agent Optical Sensor Array) technology is based upon miniature, chemically-sensitive, polymeric optical waveguides. When exposed to their target analyte, the optical waveguides respond by changing colorimetrically; the magnitude of the response corresponds to the concentration of the chemical and the duration of the exposure.

Leveraging off of expertise in optical sensing, polymer indicator chemistry, optoelectronics, and signal processing, IOS' team of scientists and engineers have developed a multi-analyte sensor technology based upon the MOSA waveguide sensors. Portable, real-time monitors can assist first responders in identifying toxic agents and in measuring their concentration levels - critical information required to tailor appropriate emergency response.

APPLICATIONS

- Personal protection
- Autonomous, rapid detection of toxic chemicals, warfare agents
- Air sampling
- Remote leak detection
- Intrinsically-safe optical monitoring of volatile gases and fuels
- Leak detection
- Toxic site and decontamination efficacy profiling
- Environmental monitoring and air sampling
- Remote and portable chemical detection/monitoring

FEATURES & BENEFITS

- Rapid assessment and identification of unknown toxic agent release at accident site
- Quantitative dosimetric sensor response
- Miniature, user-replaceable, multiple-analyte sensor chip
- Portable, real-time toxic agent measurement
- Detection sensitivity to <10% of IDLH
- Current sensors developed for GB, GD, H₂S, HCN, CL₂, H₂O, pH, O₂, and H₂
- Additional sensors in development