

UV LiDAR System for Detection of Bio-Threats (BWAs)

Laser Induced Sensing Technology Demonstrated for the detection of Biological Agents in the form of solid, liquid, absorbed Surfaces and Bio-aerosols in open atmosphere and also detection of water surface oil spill.

Salient Features:

- Detection Ranges: 1000 meters
- Detector: ICCD Spectrometer and PMT
- Excitation source: Solid State Laser (UV Lasers)
- Telescope
- Data acquisition

Summary:

Laser is a powerful technology for Homeland security in Defence as well environmental sciences and medical sciences. In present scenario due to increased Bio-terrorist activities, threat to military personnel and civilians appears in the form of biological, chemical warfare agents and explosives. Minimizing the impact of such threats requires early detection of the presence of these hazardous agents from a remote or standoff safe distance as well as point distance. Early detection and warning systems are one of the most sought after gadgets for homeland security. Scattering & Ultra Violet Laser Induced Fluorescence (UV LIF) is fast emerging as potential technique for development of such systems for standoff detection of biological warfare agents. Standoff UV LIF technique is highly capable to detect any kind of bio-agents like Anthrax Bacillus in aerosol form, from ranges up to 1.0 kilometre.

Interested Industries are requested to **forward their Expression of Interest (EOI) with supporting documents as per Appendix 'D' of DRDO Policy and Procedure for ToT available at <https://www.drdo.gov.in/sites/default/files/inline-files/DRDO%20Policy%20%26%20Procedure%20%20for%20ToT.pdf> to Director, Instruments Research and Development Establishment (IRDE), Dehradun** with a copy to Director, Directorate of Industry Interface and Technology Management (DIITM), DRDO HQ on following addresses:-

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