Containment and Surveillance Systems Laboratory

Description

The Containment and Surveillance Systems Laboratory is an arm of the highly acclaimed ORNL Safeguards Technology Integration Center. This lab is used to evaluate and develop custom technology as well as integrate, mock up, and stage equipment for evaluation deployments for a variety of containment and surveillance and process monitoring applications. Activities in this lab also focus on integrating technology for sealing, monitoring, and tracking nuclear material in a variety of environments. It is well suited for developing, integrating, and deploying active and passive tamper- indicating devices and enclosures, unattended and remote monitoring systems, and wired and wireless attribute-monitoring systems.

Applications

- Asset Tracking and Inventory Systems
- Integrated Safeguards Monitoring Systems
- Tamper-Indicating Devices and Enclosures
- Vulnerability Assessments
- Unattended Remote Monitoring Systems
- Wired & Wireless Sensor Based Monitoring

Specifications	
Laboratory Space	1281 sq. Ft. Dry Laboratory Bench top Soldering Area
Electronics Resources	Power supplies Signal Analyzers Oscilloscopes Ultra wideband circuit development
Computing Resources	Servers and Storage Private Network Networked Camera Equipment
Test Beds	Mock Feed and Withdrawal RF Tracking Enrichment Monitoring System Integration Networked Continuous Radiation Monitoring

Online Enrichment Monitor (OLEM)
An Unattended Remote Monitoring System

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