

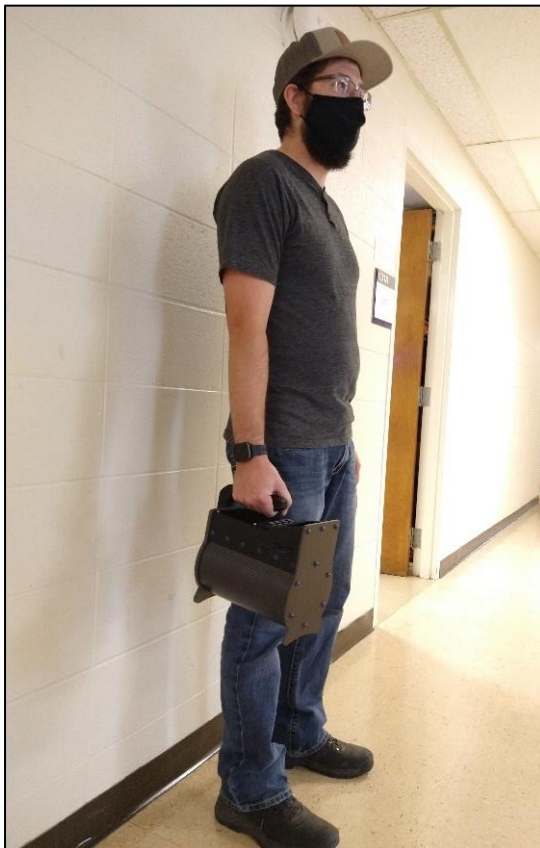
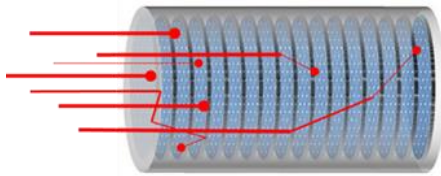


Neutron Radiation Identifier (NRID)

A Neutron Spectrometer / Dosimeter

NRID Instrument Technology Overview

Handheld instrument that is self-contained utilizing Microstructured Semiconductor Neutron Detectors (MSNDs) incorporated into HDPE moderator for increased fast-neutron sensitivity. This technology provides a neutron spectrometer for remote neutron detection, more accurate neutron dosimetry, and localization CONOPS. Identification of neutron source through the practice of measuring the neutron energy emission spectrum, and as a result, better dosimetry.



NRID TECHNICAL CAPABILITIES

- ✓ Search, Locate, and Identify neutron radiation sources.
- ✓ State of the Art solid-state MSND neutron sensors.
- ✓ Differentiate industrial neutron source, e.g., ^{252}Cf , AmBe, from WMD neutron source.
- ✓ 8-hour operation time with 4x rechargeable 18650 batteries.
- ✓ On-board data storage.
- ✓ Fully sealed for environmental protection (IP65).
- ✓ Temp. Range: -20°C to 55°C .
- ✓ Mass: 12 lbs.
- ✓ $1:10^{-7}$ gamma-ray rejection.

Maturity

- ✓ Field testing currently underway.
- ✓ Small quantities currently in development and early production.
- ✓ 2015 R&D 100 award

CONTACT US

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