

## **2.1-P03. Capabilities of an on-site inspection**

The authors will sketch the technical capabilities of a 10-person team operating a mobile lab and portable equipment against a nuclear anomaly that could be a contained underground nuclear explosion. Survey, including flight, airborne, and backpack, help locate an area for investigation, then in-situ survey and sample collections can find isotopic anomalies in concentration, location, and ratio. Where surface radionuclides are not evident, sub-surface noble gas (Xe and Ar) collection and mobile lab measurement can detect leakage from even well-contained nuclear tests. The authors will discuss the initial expectations vs realities of a 4-week field exercise.

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**Track Classification:** 2. Events and their characterization