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CTBT: SCIENCE AND TECHNOLOGY CONFERENCE

Identifying, controlling and preventing cross contamination in the OSI field laboratory - Risk Assessment Cross Contamination Tool (RACC)

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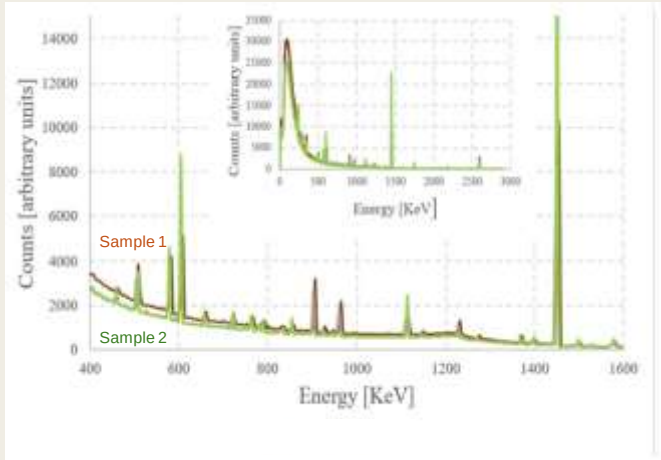
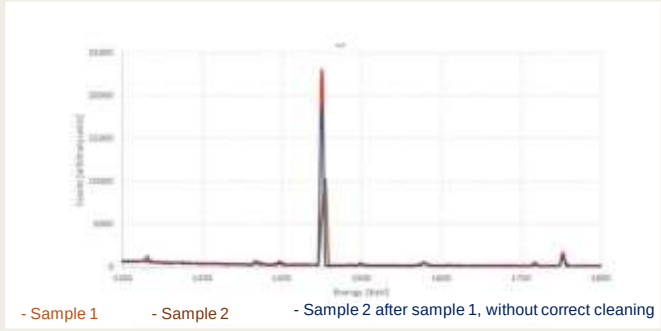
Cross contamination is the unintentional transfer of foreign substances, such as microbes, chemicals, or other materials, from one object or sample to another within a laboratory setting. This contamination can lead to compromised results, affect the integrity of experiments or tests.
In the case of CTBTO refers to the inadvertent transfer of radioactive or environmental samples and other substances between equipment, samples, and areas, which could compromise data integrity, particularly in the case of OSI.

It is caused by the inadvertent transfer of foreign material to evidence, which can happen through human error. Other causes include failure to clean or replace gloves, tools, and other equipment regularly leads to transfer. Storing different samples in close proximity can result in unintended mixing. The unintended introduction of extraneous from OSI..
Improper cleaning of sample holders, measuring instruments, containers or any other device used to acquire spectra can lead to erroneous or misleading results. This point is completely generalizable to any type of analysis acquired during an OSI





- Sample 1 - Sample 2 - Sample 2 after sample 1, without correct cleaning

Necessity of “good practices” protocols

1. Sampling Planning
2. Instrument Status and Calibration
3. Preparation and use of containers
4. Sample Collection and Storage
5. Laboratory Analysis
6. Quality Control and Traceability