

Technical Meeting on Nuclear Forensics: From National Foundations to Global Impact

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IMPLEMENTATION OF TRADITIONAL FORENSICS METHODS AND PROCEDURES WITHIN THE NUCLEAR FORENSICS LABORATORY OF ROMANIA

When conducting a criminal investigation in which nuclear or other radioactive material is present, an important role will be played by the application of traditional forensic methods in analyzing the evidences contaminated with radionuclides.

Fingerprints found on the contaminated evidence can lead to the identification of the perpetrators by using the judicial or law enforcement national fingerprint databases. An effective tool in supporting criminal investigations by providing information on the fingerprints consists in cyanoacrylate vapor method.

In order to implement the traditional method of developing latent fingerprints on non-porous surfaces at the Romanian National Nuclear Forensics Laboratory (NNFL-RO), the Lumicyano substance was evaporated inside a two-chamber Plexiglas system equipped with gloves, electric hot plate, humidifier and defumigator. Special humidity conditions were established for this method.

This paper describes the experimental setup, the lesson-learned and good practices on implementing this method on non-porous surfaces using Lumicyano.

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