

Nuclear Forensics Bilateral Cooperation between Canada and the United States

Canada and the United States view nuclear forensics as an integral component of a State's nuclear security architecture and an important capability for responding to events involving nuclear or radioactive material outside of regulatory control (MORC). Both countries maintain a robust system of nuclear material security, accountancy and control that is augmented by a wide range scientific and technical capabilities and infrastructure to support the nuclear forensics mission.

Through ongoing collaboration, Canada and the United States are working together to advance technical nuclear forensics in several key areas. These include radiochronometry, development and production of certified reference materials, stable isotope signatures, data analytics and concepts for national nuclear forensics libraries (NNFLs). Although each country has its own unique approach to the radioactive and nuclear material characterization, analysis and data assessment to support nuclear forensics investigations, technical exchanges have been mutually beneficial for advancing both programs. This is particularly important given the large shared border between Canada and the United States, and thus the possibility that an incident may involve both countries.

As a result of this collaboration, Canada and the United States have confidence in each other's scientific and technical nuclear forensics data analysis and provenance assessment processes, thereby contributing to stronger cross-border nuclear security. Furthermore, Canada and the United States share common objectives in promoting and supporting nuclear forensics capacity building around the world through various multilateral organizations and initiatives. The bilateral collaboration between Canada and the United States has positioned both countries to effectively jointly engage the international nuclear forensics community of practice through the development and delivery of capacity building initiatives and products that ultimately seek to strengthen the security of nuclear materials worldwide.

This paper will present an overview of the collaborative activities between Canada and the United States aimed at advancing technical nuclear forensics, as well as the joint activities aimed at promoting and supporting nuclear forensics capacity building around the world through various multilateral organizations and initiatives.

Gender

Male

State

Canada

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