

## Audience

Participants should comprise nuclear and forensic scientists, nuclear security event responders, law enforcement officials; prosecutors, nuclear regulators, nuclear security specialists and managers, those responsible for policies and plans for nuclear forensics and radiological crime scene management as well as other subject matter experts involved in the conduct of a nuclear forensics examination and formulation of conclusions involving an investigation of a nuclear security event. Participants should have awareness and understanding of the role of nuclear forensics as a preventive and response measure to criminal or intentional unauthorized acts involving nuclear or other radioactive material out of regulatory control.

## Registration

The meeting is envisioned to be in-person, with the possibility of remote connection.

Registration (submission of Form A through a competent national authority) is available through the InTouch+ Platform.

## Language

The working language of the conference will be English.

## Venue

The event will be held at the Vienna International Centre (VIC) where the IAEA's Headquarters are located.

## Technical Meeting Secretariat

### Scientific Secretary

#### Ms. Eva Kovacs-Szeles

Unit Head, Crime Scene Management and Nuclear Forensics  
Materials out of Regulatory Control Section  
Division of Nuclear Security  
IAEA Department of Nuclear Safety and Security  
Tel.: +43 1 2600 26248  
Email: [NFCP@iaea.org](mailto:NFCP@iaea.org)

### Administrative coordinator

#### Ms. Nicola Vorhofer

Division of Nuclear Security  
IAEA Department of Nuclear Safety and Security  
Tel.: +43 1 2600 24696  
Fax: +43 1 26007  
Email: [NFCP@iaea.org](mailto:NFCP@iaea.org)



# Technical Meeting on Nuclear Forensics

*From national foundations  
to global impact*

## Introduction

The Technical Meeting on Nuclear Forensics will build on the outcomes of the prior IAEA Technical Meeting on Nuclear Forensics, which took place in April 2019. The meeting will address recent statements in the General Conference Resolutions supporting the development and widest possible implementation of nuclear forensics and radiological crime scene management among Member State partners. The meeting will include plenary sessions with keynote speakers, as well as parallel technical sessions on:

- Legal Framework and Response Framework;
- Signature Research on Isotopic Composition and Age Dating;
- Novel Techniques and Applications; Laboratory Capabilities;
- Capability Development and Sustainability;
- International Exercises and Cooperation;
- Analytical Methods for Examination on Radioactive and Nuclear Materials;
- Radiological Crime Scene Management.

## Objectives

The objective of the meeting is to focus on the application of nuclear forensics in response to incidents involving nuclear and other radioactive materials out of regulatory control, and to demonstrate links to radiological crime scene management, and support to potential judicial proceedings. Another important objective is to highlight States' experience in utilizing nuclear forensics for the prevention and response to criminal

or intentional unauthorized acts involving nuclear or other radioactive material out of regulatory control.

The Technical Meeting programme will consist of an opening session, plenary sessions, technical sessions, interactive poster presentations, interactive content sessions, side events, mini exercises and a closing session.

## Main topics

The Technical Meeting will focus on the following topical areas:

### 1. Nuclear Forensics Capacity Building

- Lessons Learned and New Virtual Initiatives for Nuclear Forensics Capacity Building considering the pandemic
- New Technologies, R&D and Signature Research in Nuclear Forensics
- Newcomers in Nuclear Forensics: Minimum Technical and Scientific Required Capabilities
- Case Studies on Nuclear Forensics Capacity Building in Member States

### 2. Nuclear Forensics as a National Responsibility

- Integration of Nuclear Forensics in a National Response Framework
- Good Practices in Establishing a Nuclear Forensics Legal Framework
- Application of Self-Assessment Tools for Assessing a National Nuclear Forensics Capability
- Benefits and Considerations in Establishing a National Nuclear Forensics Library

### 3. Nuclear Forensics Sustainability and Cooperation

- Virtual Partnerships: Building and Maintaining National and International Relationships
- Human Resource Development in Nuclear Forensics
- Sustaining a National Nuclear Forensics Capability: Challenges and Considerations
- Inter-laboratory Exercises and International Cooperation on Nuclear Forensics

### 4. The Intertwined Nature of Nuclear Forensics and Radiological Crime Scene Management

- Development of Emerging Technologies in Radiological Crime Scene Management
- Uses and Applications of Virtual Training for Radiological Crime Scene Management
- Novel Approaches to Categorization for Radiological Crime Scene Management
- Case Studies for Radiological Crime Scene Management

Individual plenary sessions will be arranged consistent with the four themes. In addition, an opening session will emphasize the role of nuclear forensics in the context of requirements from investigating authorities.

The programme also includes an activity titled 'Nuclear Forensics Drama Theatre' in the form of a 'mock trial', demonstrating how to answer questions at a court as an expert witness.

A video-projected live-play demonstration will showcase good practices in responding to and managing radiological crime scenes.