



### Collaboration on

#### Nuclear Forensics

#### Objectives

- The proposed activities will promote and foster nuclear forensic capabilities both at MTA EK and with the IAEA Division of Nuclear Security by providing access to technical facilities important for nuclear forensics implementation with a focus on Central Europe, outreach to the Member States in addition to advances in nuclear science in the portfolio of a leading research institution.

#### Main Activities of the Collaboration

- Development of nuclear forensic analytical non-destructive and destructive methods and interpretative capabilities for a robust nuclear forensics examination which can be shared with the Member States to include approaches for the development of a national nuclear forensics library.
- Coordination and cooperation, outreach, introductory and advanced methodologies training, written guidance and confidence building measures in nuclear forensics with access to a leading nuclear forensics laboratory.
- Research and development in nuclear forensics that can be shared with the Member States to feature the unique capabilities at MTA EK:
  - 1) High resolution gamma ray spectrometry (new detectors, age dating and uranium quantification in unknowns),
  - 2) Development of new methods and techniques for origin assessment utilizing analysis of different type of nuclear materials and radiological sources and
  - 3) Identification of priority nuclear forensics signatures using analysis of confiscated nuclear and other radioactive materials.

#### Related IAEA Projects

- Project 3000158: Nuclear forensics assistance aimed at enhancing Member States capabilities 'to assist States to undertake a nuclear forensics examination in support of investigations involving nuclear or other radioactive material out of regulatory control, and to identify the origin and history of such material supporting law enforcement investigations and nuclear security vulnerability assessments.'

#### Designation period

2016-2020



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