

# Radioisotope Production and Radiation Technology

## Objective

*To strengthen Member State capability to produce radioisotope products and radiopharmaceuticals and to apply radiation technology, thus contributing to improved health care, sustainable industrial development and cleaner environment in Member States.*

## International Symposium on Trends in Radiopharmaceuticals

The International Symposium on Trends in Radiopharmaceuticals, held in Vienna, attracted over 450 professionals from 94 countries to discuss cutting edge advancements in the production of radioisotopes and radiopharmaceuticals. The symposium highlighted trends in the development of new radiopharmaceuticals and efficient production of therapeutic radioisotopes, and emphasized the need to address regulatory issues and education.

Among the tools and resources launched during the symposium was a new Agency database, the Directory of Cyclotrons used for Radionuclide Production in Member States, that includes information on more than 1300 cyclotrons active in the production of medical radioisotopes in 76 countries on 5 continents. An innovative Medical Isotope Browser web tool was also launched. The new tool will be used to study production routes for medical isotopes that may significantly contribute to the development of radioisotope production and radiopharmaceuticals of high clinical significance. Steps were taken towards establishing a network to support career advancement for female professionals in the radiopharmaceutical sciences, including an event on the margins of the symposium that addressed the challenges and opportunities for women in the field.

## Assessing Civil Structures to Save Lives

Non-destructive testing (NDT) is a crucial tool for assessing the integrity of buildings and infrastructure during the recovery stage after a natural event, such as an earthquake. In November, two Agency experts were deployed to Albania following a 6.4 magnitude earthquake to assist in the evaluation of infrastructure and provide training on NDT (Fig. 1). The Agency is working to identify NDT centres in Member States for a global network of emergency preparedness and response centres to enable rapid response to similar events in the future.

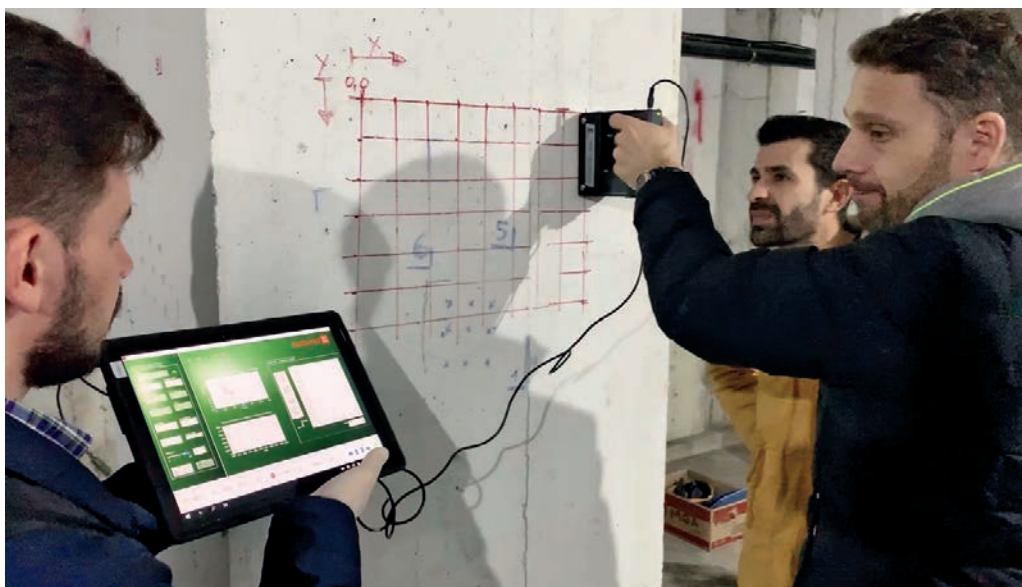


FIG. 1. Inspection of structures in Albania using NDT equipment.

The Agency worked with Member States to develop radiation-source-free NDT methods using muon radiography. At a Technical Meeting on Non-destructive Testing Using Muon Radiography: Present Status and Emerging Applications, held in Vienna, experts focused on developing industrial applications of muon radiography and tomography, and identified topics to be covered through a future CRP.