

Preserving Europe's cultural heritage for the benefit of future generations

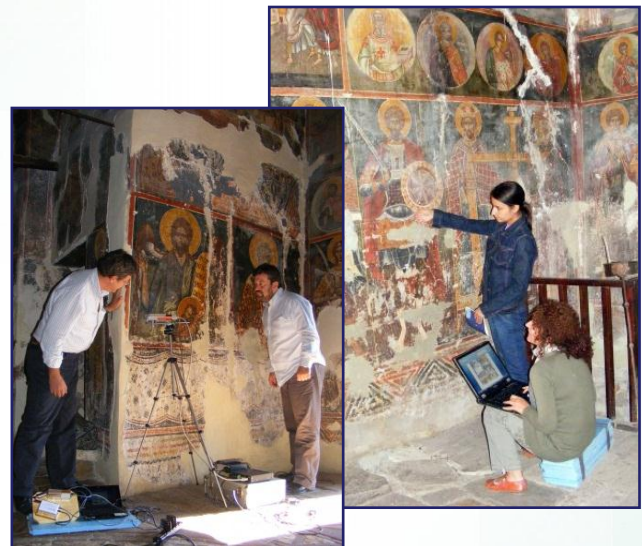
The challenge...

Cultural heritage, or the artefacts and attributes of a group or society that are inherited from past generations and maintained for the future, includes objects such as buildings, monuments, books and paintings. Cultural heritage is a driver for tourism and is important to the economic competitiveness of Member States in the European region. However, environmental threats driven by climate change, including acidification, air pollution and erosion, are placing Europe's cultural heritage in danger. In addition, many artefacts are not stored under the right conditions; they may become infected with biological contaminants that can destroy them. The sustainable management and preservation of Europe's unique and irreplaceable cultural resources is a key challenge for the region.

The project...

Through a regional technical cooperation (TC) project, the IAEA provided training to specialists from nuclear science and conservation institutions in the region on the application and integration of different nuclear techniques for characterization and preservation of cultural heritage artefacts. With the aim of enhancing and transferring technical knowledge and skills, the project offered participants unique networking opportunities, encouraging cooperation and creating synergies.

Targeted expert guidance, tools and reference materials were provided to support the study of cultural heritage artefacts, including conservation, restoration, provenancing, dating and authenticity verification. The project helped to optimize irradiation and analytical techniques in the region and establish harmonized methodologies.



Conservators and scientists examining XVI century wall paintings from the church of Saint Mary Blachernae, Berati Castel, Albania.

The impact...

The regional TC project triggered a significant increase in the number and types of cultural heritage artefacts analysed and treated in all 18 participating Member States. Procedures ranged from the disinfection of wooden churches and ancient books in Romania, to the characterization of jewellery (by X ray fluorescence), woven cloth and coins housed at the Shirvanshah Palace in Azerbaijan.

Collaboration between nuclear specialists and conservators was consolidated at the national and regional levels and the basis was laid for partnerships with strategic national and international partners, such as UNESCO. Overall, the project was an important step towards the sustainable management of cultural heritage artefacts in Europe, contributing to enhanced cultural tourism and accelerated socioeconomic development in the region. The cross-stakeholder and cross-sectoral nature of the project is an example of 'good practice' within the TC programme.