



Contribution ID: 160

Type: Oral

Research and conservation of cultural heritage using nuclear methods at IFIN-HH

Monday, 31 August 2015 15:00 (15 minutes)

“Horia Hulubei” Institute of Physics and Nuclear Engineering (IFIN-HH), Bucharest-Magurele, has been involved in activities regarding the study and preservation of national cultural heritage for decades. Initially starting with simple individual initiatives, today, the institute has solid connections with dozens of musea, universities, other research institutes involved in the study the preservation of national cultural heritage. Very diverse in types, methods and instrumentation, our activities may be classified mainly in: analyses using various techniques, especially nuclear and atomic ones, gamma irradiation treatments and radiocarbon dating, plus different combinations of the above. Two tandetron accelerators of 3 and 1 MV and an industrial type gamma-irradiator are the largest installations used. Through the collaborations that we have, our researchers may expand the institute’s activities also to using equipment from abroad. On a national level, IFIN-HH is also the promoter of modern methods of physics and chemistry concerning cultural heritage, as well as a renowned international leader in such activities. I will review the methods used, the installations and show a few examples from our latest activities in the area.

Primary author: TRACHE, Livius (IFIN-HH)

Co-authors: CONSTANTINESCU, Bogdan (IFIN-HH); SIMION, Corina (IFIN-HH); PONTA, Cornelius (IFIN-HH); GHITA, Dan Gabriel (IFIN-HH); STANCULESCU, Ioana (IFIN-HH); SAVA, Tiberiu (IFIN-HH); MOISE, Valentin (IFIN-HH)

Presenter: TRACHE, Livius (IFIN-HH)

Session Classification: Nuclear Physics Applications I