



Contribution ID: 391

Type: Oral

The Radiography in the Service of the Preservation of the Moroccan Historical Heritage

Thursday, 27 April 2017 18:00 (15 minutes)

Abdeslam BENSITEL¹, Rachad ALAMI¹, Khadija BOURCHOUK²

¹Division of Instrumentation & Industrial Applications, CNESTEN (Centre National de l'Énergie, des Sciences & des Techniques Nucléaires), Rabat, Morocco
Ab.bensitel@gmail.com

²Musée Archéologique de Rabat, Division des Musées, Direction du Patrimoine Culturel Marocain, Ministère de la Culture, Rabat, Morocco.

Abstract

The Moroccan historical heritage is extremely rich and varied. The history more than millennium of Morocco bequeathed us objects of the heritage going of the prehistoric and antique Art to the Amazighe and Arab-Islamic art by way of Greco-Roman period.

Numerous objects of the Moroccan heritage suffer from a doubtful state of preservation even critic in certain cases.

It is consequently indispensable to develop and to apply techniques of examination, characterization and analysis of the oeuvres of art or the Moroccan cultural heritage, constituent materials of these works, to know the mechanisms of their elaboration, their evolution and/or degradation and establish recommendations with the aim of their restoration and of their preservation.

For that purpose, we privilege the non-destructive methods, without contact (when possible), without sampling. Among these methods, some make use of the X-rays and the gamma. These methods, the only ones or associated with other techniques are applied to very diverse works and materials of all kinds, any origin and any age.

The application of the X radiography in numerous pieces of the Archaeological Museum of Rabat, in particular the statue of Ptolémée (marble), a Roman ceremonial helmet (bronze), a pyxidium with relief (bone) so allowed:

- To estimate the area and the extent of the damages undergone by these objects;
- To contribute to a better knowledge of the techniques of manufacturing by the artists having realized these works as well as the previous restorations made on the studied pieces;
- The assistance-advice for the benefit of the curators and the restorers for the establishment of specific methodologies of restoration to every type of object.

The radiography also allows the contribution to the establishment of detailed identification sheets of valuable museum pieces, particularly those being often the object of loans between museums.

Keywords: Radiography, archeology, marble, bronze, bone

Country/Organization invited to participate

Morocco

Primary author: Mr BENSITEL, Abdeslam (National Center of Energy Sciences and Nuclear Techniques (CNESTEN), Morocco)

Co-author: Mr ALAMI, Rachad (National Center of Energy Sciences and Nuclear Techniques (CNESTEN), Morocco)

Presenter: Mr ALAMI, Rachad (National Center of Energy Sciences and Nuclear Techniques (CNESTEN), Morocco)

Session Classification: B14

Track Classification: RADIATION TECHNOLOGIES FOR MEASUREMENT - 01