IAEA Workshop on Innovative Approaches of Accelerator Science and Technology for Sustainable Heritage Management

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Peruvian cultural heritage material characterization, achievements during the last twenty years

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Peru is a country worldwide recognized for its rich cultural tradition and heritage, spanning from monumental architecture as ancient as several thousand years to historical building, objects and documents corresponding to the colony and republican periods (XV to XIX centuries).

In this context archeologists, historians and conservators face a hard work dealing with a large variety of materials, manufacturing techniques and degradation agents that must be identified and characterized to rescue and adequately conserve this invaluable cultural heritage, which includes materials as raw earth, straw, textiles, human and animal mummies, pottery, metals and jewelry, wood, paintings and documents.

Approximately twenty years ago, with the help of IAEA, we started an ambitious plan to develop nuclear analytical techniques to give support to other characterization techniques generally used in the field and in the conservation workspace, giving emphasis to capacity building in students and professionals working in this marvelous field.

In this presentation we summarize the work, achievements and difficulties faced in the last two decades, relevant to the themes proposed to the workshop, and the most outstanding necessities to manage with the huge work to properly characterize and identify materials and techniques used by ancient crafters as well as to conserve our cultural heritage.

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