Contribution ID: **192** Type: **Poster**

Characterization of Tupiguarani Tradition archaeological ceramics from Espirito Santo, Brazil, applying neutron activation and multivariate statistical analyses

Thursday, 22 April 2010 12:00 (20 minutes)

The Portuguese settlers arrived in the coast of the Brazilian State of Espírito Santo in sixteenth century and built several "Missões Jesuíticas"(Jesuitical Missions). In spite of living within the Mission and been catechized, the Indians, Tupiguarani Tradition, kept on producing traditional handcraft, as the decorated ceramic, however, they introduced European elements during the production to the decoration.
The archaeological interventions carried out along the coast of Espírito Santo, found the Tupiguarani Tradition vestiges, where the main evidence is a pretty ceramic with the occurrence of plastic and painted decoration. The ceramic presents high archaeological value among the vestiges. It is a material very resistant to time and to the natural conditions in the surrounding areas. Its chemical composition, once determined, can help understand the connection between the past and the present. Therefore, archaeology can fill the gap between ancient population and modern society elucidating the evidences found in archaeological sites.
The main purpose of this paper was to contribute to the understanding of the Tupiguarani Tradition occupation in this region. During the research expeditions, many sherds were found in 13 archaeological sites in the study area. Inside this context, seventy ceramic fragments were analyzed by neutron activation technique, k0-standardization method, at CDTN/CNEN using the TRIGA MARK I IPR-R1 nuclear reactor, in order to characterize their elemental composition. The results were treated with multivariate statistic analyses - Cluster and Principal Components Analysis –and discussed. This study is part of the Coordinated Research Project CRP BRA 14798, supported by the IAEA.

Primary author: Ms FARIA, Gleikam (Post-Graduation in Radiation, Mineral and Material Science and Technology, Nuclear Technology Development Centre / Brazilian Commission for Nuclear Energy, Belo Horizonte, Brazil)

Co-authors: Ms JACOME, Camila (Cooperative of Entrepreneurs for Cultural Actions, COOP. CULTURA, Belo Horizonte, Brazil); Dr RIBEIRO, Loredana (Cooperative of Entrepreneurs for Cultural Actions, COOP. CULTURA, Belo Horizonte, Brazil); Dr MENEZES, Maria Angela (Nuclear Technology Development Centre / Brazilian Commission for Nuclear Energy, Division for Reactor and Analytical Techniques, Belo Horizonte, Brazil); Dr JAĆIMOVIĆ, Radojko (Jožef Stefan Institute, Department of Environmental Sciences, Ljubljana, Slovenia)

Presenter: Dr MENEZES, Maria Angela (Nuclear Technology Development Centre / Brazilian Commission for Nuclear Energy, Division for Reactor and Analytical Techniques, Belo Horizonte, Brazil)

Session Classification: Poster Session - Nuclear Analytical Methods 2

Track Classification: Nuclear Analytical Methods