

## **AMAZON CERAMICS AND THEIR COLOR PALETTE - THE USE OF ION BEAM ANALYSIS TO DETERMINE THE PIGMENTS**

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Despite of the knowledge and discussion of polychrome ceramics in the Amazon for more than half a century, their material characterization still needs further studies and analysis. The characterization of these ceramics continues to be guided, in most cases, exclusively by the aesthetic aspect (macroscopic) and not by their technological characteristics (microscopic).

In other words, descriptions of polychrome ceramics are often restricted to observing the presence or absence of engobes and/or paints with color mainly determined as white, red and black.

The aim of this work was to characterize the pigments and their use in ceramic decoration in order to collaborate in the identification of specific technological choices made by different cultures and to investigate the variability of materials present that are so characteristic of Amazonian ceramics and their polychromies.

Therefore, archeometric analyzes (PIXE and SEM) were used on a set of polychrome fragments from four archaeological sites in the Central and Northern Amazon region associated with the Polychrome Tradition of the Amazon - Tauary, Conjunto Villas, Vila Nova II and Hatahara. The proposed analysis with ion beams comes from the better ability to separate the pictorial layers and thus better study the manufacturing technology of this set of ancient ceramic fragments. Measurements were performed with proton beams in the particle accelerator of the Institute of Physics of the University of São Paulo and elements such as P, K, Ca, Ti, Fe and Mn were identified in the different pigments and their correlations will be discussed.