

TECHNOLOGICAL FEATURES OF APULIAN RED FIGURED POTTERY

A. Mangone¹ -- L. Giannossa¹ -- A. Ciancio³ -- R. Laviano² -- A. Traini¹

¹*Dipartimento di Chimica, Università di Bari, via Orabona 4, 70126 Bari, Italy*

²*Dipartimento Geomineralogico, Università di Bari, via Orabona 4, 70126 Bari, Italy*

³*Soprintendenza Archeologica della Puglia, 70122 Bari, Italy*

Apulian red-figured pottery samples, dating back to the 5th and 4th centuries BC, from sites among the most relevant in central and northern Apulia - Monte Sannace (Gioia del Colle), Altamura, Conversano and Botromagno (Gravina), Canosa and Arpi - have been characterized from the physical-chemical, mineralogical and morphological points of view. Scanning Electron Microscopy, X-Ray Diffraction, X-ray photoelectron Spectroscopy and Atomic Spectroscopy investigations have been carried out on the ceramic body, red decorated area and black gloss of the objects, with the aim of outlining the technological features and of defining the nature of coatings and decorations. All 5th century objects, irrespective of sites, show the same features: fine texture of the ceramic body, red figures saved from the ceramic paste and black gloss painted directly on the ceramic body. As regards the 4th century objects, some show similar features to the 5th century ones, however others are characterized by the coarse texture of their ceramic body and different technological expedients to obtain red decorations. The analytical results make it possible to distinguish different production technologies of red figured Apulian vases used at different sites in Apulia during the 4th century BC. These results add significant details to our knowledge on the production technology of one of the most important examples of pottery handcraft production in Magna Grecia of the 4th century BC. Moreover, the investigation has looked on the nature of the white and yellow overpaints. In fact, although the predominant colours of Attic and Apulian red figured vases are black and red, the potters made use of a limited range of additional colours. Among these, white and yellow are the most commonly used. The analytical results on the white “pigment” highlight the presence of meta-kaolinite, that allow us to hypothesize the use of kaolinite as raw material and its application on the vase before firing. Yellow pigment shows transitional characteristics between black gloss and white pigment (texture, sintering degree and chemistry) and analytical results are consistent with data reported in the literature from what yellow was obtained mixing the suspension of a very fine clay used for black gloss with kaolinite in 25/75 weight ratio.