

***A study of materials and techniques used in the production of early-Christian  
Cypriot mosaics, with a special emphasis on artificial materials***

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A number of monuments in Cyprus are well known for their magnificent floor mosaics such as the ones at the site of Nea Paphos which are listed among the UNESCO World Heritage Sites. The most famous pavements date to the Roman Imperial period (2nd and 3rd centuries AD) but mosaics from the Hellenistic (late 4th - 1st centuries BC) to the early Byzantine (5th - 7th centuries AD) periods have been found on the island. Early Christian churches in Cyprus, as in other parts of the eastern Mediterranean, used to be elaborately decorated with such costly floor pavements and wall mosaics. However, due probably to the fact that fewer examples of wall mosaics have survived in a good state of preservation, in comparison to the floor mosaics, they have received until recently less attention than their floor counterparts.

Indeed, with the exception of a few examples (such as the one in the apse of Panagia Angeloktistos at Kiti), most of what remains is mainly in the form of loose tesserae and detached fragments left unstudied after their excavation. The relative neglect of the Early Christian wall mosaics in Cyprus has resulted in our limited understanding of the technology of their production. Nevertheless, these fragments and detached tesserae can be studied to provide information about the making process and the origin of the raw materials. Recent developments in the field of analytical techniques allow scientists to better characterise the materials used for making such wall decoration with minimum sampling. For the first time, a holistic technological study of the materials used for the production of these wall mosaics was initiated. Five sites were chosen for this study: the seaside basilica of Kourion, the basilica on the acropolis of Amathous, the basilicas of Polis tis Chrysochous, the basilica of Yeroskipou Ayioi Pente, and the basilicas of Kalavastos Kopetra. Both the glass tesserae and the plasters of the preparatory layers (plaster) were studied by a range of complementary analytical techniques. Plaster was found to be probably of local origin. Glass tesserae were found to be typical of the early Byzantine period, both for the bulk glass composition, and for the opacifying technology, and to be made from materials contemporaneous with the sites, without using any recycled material. Finally, differences of bulk glass composition correlated with the colour of the tesserae hint for the existence of colour-specific secondary workshops, as was hypothesised by other studies.