

CREATING AN ARTISTIC WOOL RUG WITH A DOUBLE IMAGE IN THE VISIBLE AND NEAR-INFRARED SPECTRA

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ABSTRACT

Years of research (since 2014) of the properties of colour twins based on InfraredArt theory the recording in the visible (V) and near-infrared (NIR) spectra, allowed the image to be depicted in two spectral ranges. Continued work in the field of InfraredArt painting led to the idea in 2022 of applying this artistic method to creating an artistic wool rug with a double (dual) image. This was made possible through collaboration with designers and technologists at the company reGalerija in Zabok. After numerous attempts, black pigments were found that allowed a hidden image to be created in the rug or tapestry in the NIR range. This discovery revealed the possibilities of light absorption response in wool material and in the NIR spectrum, as is visible in the IR reflectography (IRR) images. The colour pigment research, conducted using the InfraredArt method, resulted in the discovery of a new method of making rugs with double images that respected the colours/dyes/pigments in NIR. This type of rug with a hidden image in the IR range, made based on a double IR image template, is unique and the first such known work in the world. It hides a riddle or secret, or hidden information in the strands of wool, because apart from the abstract image, visible to the naked eye, it also contains an invisible, achromatic woven image with a figurative motif in the same layer.

Keywords: colour twins, double painting, infrared rug, IR camera, InfraredArt theory

INTRODUCTION: INVESTIGATION OF COLOR TWIN ON A WOOL CARPET IN COLLABORATION WITH REGALERIA

We introduce the technology of dyeing wool threads in the infrared spectrum to create colour twins for the purpose of executing double images on carpets. The long-term cooperation of reGaleria with fine artists in the production of carpets based on the model of their works of art was an incentive for Dijana Nazor Čorda to cooperate. At the beginning of July 2021, she approached the director of reGaleria Anđelko Švaljek with a proposal to make a carpet. After the discussion and the presentation of the exhibition catalogue [1,2], the cooperation was realized. In agreement with the textile designer Helena Bacinger Škrlec and later with the designer Karmen Telišman, it was decided to make a carpet in wool based on the picture "Invisible Guardians 1".