

Analytical characterization of the palette and painting techniques of Jorge Afonso, the great 16th century Master of Lisbon painting workshop

 Volume 184, 3 September 2013 ISSN 0368-1429

SPECTROCHIMICA ACTA

PART A: MOLECULAR AND BIOMOLECULAR SPECTROSCOPY

Editors:

JILL BOWMAN
JAMES D. COO
JAMES R. DURR
BONNIE TILL, (in Memoriam)

WALTER NEVEILLE
President of the Royal Society

JOY KEN
Editor, China

NOA TALIPOPOV
Executive, India

On-line Access via www.elsevier.com/locate/spectro

To appear in: *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*

Received date: 15 September 2017

Accepted
date: 4 December 2017

Please cite this article as: Vanessa Antunes, António Candeias, José Mirão, Maria L. Carvalho, Cristina Barrocas Dias, Ana Manhita, Ana Cardoso, Maria J. Francisco, Alexandra Lauw, Marta Manso , Analytical characterization of the palette and painting techniques of Jorge Afonso, the great 16th century Master of Lisbon painting workshop. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Saa(2017), doi:[10.1016/j.saa.2017.12.027](https://doi.org/10.1016/j.saa.2017.12.027)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Analytical characterization of the palette and painting techniques of Jorge Afonso, the great 16th century Master of Lisbon painting workshop

Vanessa Antunes^{a,b,*}, António Candeias^{c,d}, José Mirão^d, Maria L. Carvalho^b, Cristina Barrocas Dias^d, Ana Manhita^d, Ana Cardoso^d, Maria J. Francisco^e, Alexandra Lauw^f, Marta Manso^{b,g}

^a ARTIS-Instituto História da Arte, Faculdade de Letras, Universidade de Lisboa (ARTIS-FLUL), Alameda da Universidade, 1600-214 Lisboa, Portugal; vanessahantunes@gmail.com.

^b LIBPhys-UNL, Laboratório de Instrumentação, Engenharia Biomédica e Física da Radiação, Departamento de Física, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, 2829-516, Caparica, Portugal; luisa.carvalho@fct.unl.pt, marta974@gmail.com.

^c Laboratório José de Figueiredo, Direção-Geral do Património Cultural (LJF-DGPC), Rua das Janelas Verdes 37, 1249-018 Lisboa, Portugal; candeias@uevora.pt.

^d Laboratório HERCULES, Escola de Ciências e Tecnologia, Universidade de Évora, Largo Marquês de Marialva 8, 7000-676 Évora, Portugal; jmirao@uevora.pt, cmbd@uevora.pt, anacm@uevora.pt, anamacardoso@yahoo.com.

^e Museu de Setúbal - Balneário Dr. Paula Borba 2900 -120, Setúbal, Portugal; mjfrancisco5@gmail.com.

^f Centro de Estudos Florestais, Instituto Superior de Agronomia, Tapada da Ajuda, Universidade de Lisboa, 1349-017 Lisboa, Portugal; alexandra.lauw@gmail.com.

^g Faculdade de Belas-Artes, Universidade de Lisboa, Largo da Academia Nacional de Belas-Artes, 1249-058 Lisboa, Portugal

* Corresponding author: vanessahantunes@gmail.com, (+351) 217 920 000

ABSTRACT

In this work, a study on a set of paintings from the most significant altarpiece assigned to Master Jorge Afonso (c. 1470-1540) painting workshop is presented. This altarpiece is composed by fourteen paintings made to the church of Convento de Jesus, in Setúbal, Portugal, and was made circa 1517-19/1530, according to art-history. This set of paintings is compared to one of the other most important Portuguese altarpieces from the 16th century: the panels of the Round Church of the Convento de Cristo, in Tomar, made circa 1510-1515.

The aim of this study is to characterize the wooden support, pigments, ground layers materials and technique used in Jorge Afonso workshop by means of complementary analyses. A dendrochronological approach was made in order to corroborate (or not) the historical date initially assigned. Infrared photography (IRP) and reflectography (IRR) allowed the study of the underdrawing technique and macro photography (MP) was used to recognize overlapping layers technique. Cross-sections from the paintings were examined by optical microscopy (OM), and analyzed by μ -X-ray diffraction (μ -XRD), Energy Dispersive X-ray Fluorescence spectroscopy (EDXRF), Scanning Electron Microscopy with Energy Dispersive X-ray Spectroscopy (SEM-EDS), micro-Raman spectroscopy (μ -Raman), micro-Fourier Transform Infrared spectroscopy (μ -FTIR), Pyrolysis Gas Chromatography Mass Spectrometry (py-GC/MS). The characterization of the palette and ground layers and the study of the overlapping of paint layers brought a new insight of the adopted painting techniques by the most important group of painters working in Portugal in the 16th century - the Lisbon workshop, led by Master Jorge Afonso.

Download English Version:

<https://daneshyari.com/en/article/7670208>

Download Persian Version:

<https://daneshyari.com/article/7670208>

[Daneshyari.com](https://daneshyari.com)