

# RelicS 2021

**1<sup>st</sup> International Conference on Relic Studies**  
**24 — 26 NOV 2021**

**Keynote Speakers**  
**Carlos Evaristo**  
**Georges Kazan**  
**Massimiliano Ghilardi**

**BOOK OF ABSTRACTS**

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**1<sup>st</sup> International Conference on Relic Studies**

**Universidade Católica Portuguesa**

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**Book of Abstracts**

## 25 November: Scientific Studies and Conservation Perspectives

### Session II

Chair: Gabriela Sánchez Reyes

## MATERIAL CHARACTERIZATION OF AN 18TH-CENTURY ROMAN MARTYR' RELIQUARY: THE CASE STUDY OF SAINT *FORTUNATO* FROM *GUIMARÃES*, PORTUGAL

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### Abstract

The Roman Catholic Church encouraged the manufacture of life-size reliquaries simulating human bodies to worship and display the bones exhumed from Rome's catacombs (*corpi santi*) of the allegedly early martyrs of Christianity. Embraced by the Baroque aesthetic, this type of devotional receptacle began to be produced in the late 17th-century and rapidly spread throughout Western Christendom. Portugal was no exception. Between the 18th and the second half of the 19th centuries, dozens of convents, churches, and oratories received the simulated bodies of those *saintly heroes*. In the last four years, the first author's doctoral research has focused on the historical and scientific study of this typology of reliquaries in Portugal.

While establishing a national inventory, the study of historical documentation has shown the Roman origins of the sacred bones, their religious value, and

the popular devotions associated with them. As for the scientific research it has highlighted the manufacturing techniques and materials adopted by pious craftsmen. This work aims to present the analytical results on the simulacrum of Saint *Fortunato* Martyr from *Guimarães*. This simulacrum was produced during the papacy of Pius VI (1775-1799) as several other simulacra inventoried in Portugal and abroad. A batch of analytical techniques that included Optical Microscopy (OM), Fourier-Transform InfraRed Spectroscopy (FT-IR), High-Performance Liquid Chromatography coupled with Diode Array Detection and Mass Spectrometry (HPLC-DAD-MS), and Scanning Electron Microscopy and X-Rays Microanalysis (SEM/EDX) were utilized for morphological evaluation and chemical compositional analysis of fibres, dyes and metal threads. The results will provide new data for the material characterization of 18th-century life-size Roman martyrs' simulacra.

**Keywords:** Relics cult, Simulacrum, Saint *Fortunato* Martyr, Material characterization, Metal thread.

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**Joana Palmeirão** is currently a Ph.D. Student in Conservation and Restoration of Cultural Heritage in School of Arts at the Universidade Católica Portuguesa in Oporto, Portugal, with a research fellowship granted by FCT (SFRH/BD/124061/2016). Member of the Research Center for the Science and Technology of Arts (CITAR), member of the editorial board of the Portuguese *Digital Journal of Studies in Conservation and Restoration* (ECR) at the same University, and member of the HERCULES Laboratory at the University of Évora, Portugal. She holds a Master's degree in Conservation and Restoration of Cultural Heritage and a College degree in Art – Conservation and Restoration, both at UCP. She holds a fine arts degree at the Faculty of Fine Arts of the University of Oporto. Member and consultant of the International Crusade for Holy Relics / The Apostolate for Holy Relics (ICHR) since 2016. The author is recently involved in several publications related to her research interests.

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Over that period, she was involved in interdisciplinary research work using different analytical techniques in order to study of diverse range of materials such as paper documents, photography and mural paintings presenting different pathologies. Her main research interests are Material Science and Chemistry applied to Cultural Heritage.

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