

LAQV WEBINARS

November 12, 2025

Title: *Analytical Characterization as a Tool for the Active and Preventive Conservation of Painted Photographs and Mixed Media Photographic Artworks*



Élia Roldão

Research Group of CHARM | Cultural Heritage and Responsive Materials Research Group, LAQV-REQUIMTE, Department of Conservation and Restoration, Universidade NOVA de Lisboa, Portugal
e.roldao@fct.unl.pt

Abstract:

This presentation highlights the crucial role of analytical characterization—using optical microscopy, X-ray fluorescence (XRF), infrared (FTIR), and Raman spectroscopies—in establishing new methodologies for the active and preventive conservation of photographic artworks. Through the systematic study of painted photographs and mixed-media photographic pieces, the analytical results provided fundamental insights into the materials, stratigraphy, and degradation phenomena involved, enabling the definition of tailored conservation strategies.

These strategies included the development of safe and effective chemical cleaning protocols using hydrogels, as well as the design of preventive storage and display systems adapted to the specific needs of the materials identified. The research outcomes had a direct impact on the preservation and valorization of significant artworks: notably, the exhibition of a long-unseen work by Ernesto de Sousa, kept in storage for over two decades, and the presentation of previously unknown works by Helena Almeida at the internationally renowned Frieze 2025 art fair.

Applying the same analytical and methodological framework, it was also possible to reveal the materials and techniques employed by Brazilian colorists in the production of two hand-painted portraits,

More details here: <https://laqv.requimte.pt/gazette/>

LAQV WEBINARS

confirming their photographic substrates—a key finding for understanding hybrid artistic practices that bridge photography and painting.

Overall, this research underscores how the integration of scientific analysis with conservation practice not only safeguards the physical integrity of complex photographic artworks but also contributes to their historical understanding and renewed visibility.

Short Bio

Élia Roldão is an Assistant Professor in the Department of Conservation and Restoration and a researcher at LAQV-REQUIMTE, both at the NOVA School of Science and Technology, Universidade NOVA de Lisboa. She holds a Ph.D. in Conservation and Restoration of Cultural Heritage (2018) from FCT NOVA.

Since 2000, she has been actively engaged in the conservation and restoration of photographs, with her research focusing on the development of innovative and sustainable strategies for the preservation of photographic materials in both public and private collections. In recent years, her work has been particularly dedicated to mixed-media photographic artworks, exploring their material complexity and conservation challenges.

She has been a team member and researcher in five funded projects (three national and two European) dedicated to the preservation and conservation of photographic heritage, where she had the privilege of collaborating with multidisciplinary teams across scientific and cultural institutions.

Since 2011, she has lectured at several leading Portuguese universities (FCT NOVA, Universidade Católica Portuguesa, and Universidade Lusófona). Currently, at DCR NOVA, she teaches Photo-documentation, Diagnosis and Conservation of Photographic Materials, and Conservation and Restoration of Photographs, and supervises Master's and Ph.D. theses in the field of photographic conservation and restoration.

Acknowledgements: This work was financed by national funds from FCT - Fundação para a Ciência e a Tecnologia, I.P., under the scope of the project UID/50006/2023 of the Associate Laboratory for Green Chemistry - LAQV REQUIMTE.