

# International Day of Women and Girls in Science

WEBINAR

## 2<sup>nd</sup> edition Conservation-Restoration of Cultural Heritage

11th February 2026



LINK TO TEAMS

RESEARCH EVENT IN THE FRAMEWORK OF THE R+D PROJECTS:



SCIENTIFIC COORDINATION:



UPV COORDINATION:



DESIGN BY VÍCTOR MARNA & ÁNGEL GARCÍA & DIANA QUINTANA

## Program

13.45-14.00h

Introduction

Laura FUSTER LÓPEZ

Instituto U. de Restauración del Patrimonio - UPV (Spain)

14.00-14.20h

“Heritage Science beyond the science lab”

Annette S. ORTIZ MIRANDA

Walters Art Museum (USA)

14.20-14.40h

“Teaching Science to Conserve: a Scientific Way to Look at Cultural Heritage in Conservation Training Programs”

Laura OSETE-CORTINA

Instituto U. de Restauración del Patrimonio - UPV (Spain)

14.40-15.00h

“Empirical Solutions to Biodeterioration Based on Observation: the Truth is Out There”

Patricia SANMARTÍN SÁNCHEZ

CRETUS, Centre for Cross-disciplinary Research in Environmental Technologies, Univ. Santiago de Compostela (Spain)

15.00-15.20h

“The Mechanics of Delamination in Oil Paintings”

Dorien WESTERT

Technical University of Eindhoven (The Netherlands)

15.20-15.40h

“When Paint Layers Let Go: How Humidity and Pigment Type Affects Delamination in Oil Paintings”

Siv KROGSGAARD JESPERSEN & Cecil K. ANDERSEN

Royal Danish Academy (Denmark)

15.40-16.00h Break

16.00-16.20h

“One Painting, Multiple Narratives: Uncovering Layer-Specific Crack Patterns through MBI and Portable Optical Microscope”

Candela BELENGUER-SALVADOR

Instituto U. de Restauración del Patrimonio - UPV (Spain)

16.20-16.40h

“Shades of Green in Edvard Munch's Atelier: an Insight into Green Oil Paints at the Munch Museum”

Arianna ABBAFATI

Università Ca' Foscari (Italy)-Munch Museet (Norway)

16.40-17.00h

“Illuminating Picasso's Early Period: A Preliminary Study of Yellow through Non-Invasive Imaging”

Irene SAMANIEGO-JIMENEZ

Instituto U. de Restauración del Patrimonio - UPV (Spain)

17.00-17.20h

“Selective Cleaning with Nanostructured Materials in Conservation Practice”

Soraya ALCALÁ

Museum of Fine Arts Houston (USA)

17.20-17.40h

“How and what we study to better conserve archaeological bones”

Lucía López-Polín

Institut Català de Paleocologia Humana i Evolució Social (IPHES/CERCA, Tarragona, Spain)

17.40-18.00h

“Conserving Plastics in Collections: From Scientific Research to Practice”

Anna LAGANÀ

Getty Conservation Institute (USA)

18.00h

Closing

Debra L. WESTALL

American Space Valencia - UPV (Spain)

\*Time zone is Central European Time (Madrid, Paris, Berlin, Denmark)

## Speakers



Soraya Alcalá is Head of Paintings Conservation at the Museum of Fine Arts, Houston, where she oversees the treatment and research of paintings across the collection. Trained in cultural heritage conservation at the University of Barcelona and the University of Pisa, she brings both scientific foundation and a global perspective in cultural heritage conservation to her work. Her international career includes positions at renowned institutions such as the American Museum of Natural History, the Victoria and Albert Museum, the National Museum of Art of Catalonia, and the Opera della Primaziale Pisana. In addition to her institutional roles, Soraya operated a successful private conservation studio in New York for nearly a decade, working with a wide range of museums, galleries, and private collectors. Her research centers on innovative cleaning methods, particularly gel-based systems, and materials analysis.



Dorien Westert is a PhD candidate at Eindhoven University of Technology (TU/e). Her research focuses on delamination and fracture mechanics in oil paintings on canvas, advancing the understanding of mechanical behaviour in multi-phase paint systems. Before starting her PhD, she conducted archaeometallurgical research on archaeological iron swords at the Dutch Cultural Heritage Agency (RCE) and Delft University of Technology (TU Delft), where she obtained her MSc in Materials Science and Engineering. This work included neutron diffraction measurements carried out at the ISIS Neutron and Muon Source in the UK. Dorien's interdisciplinary background includes a BSc in Molecular Life Sciences from Wageningen University and Research (WUR) and a minor in Art Conservation and Restoration from the University of Amsterdam (UvA).



Candela Belenguer-Salvador is a PhD student in Conservation and Restoration of Cultural Heritage at the Universitat Politècnica de València (UPV). She has completed several research training internships at the Royal Institute for Cultural Heritage (KIK-IRPA, Belgium) and IFAC-CNR (Italy), where she specialized in non-invasive analytical techniques such as MA-XRF and Raman Spectroscopy, FORS, as well as micro-invasive methods including SEM-EDX and FTIR-ATR. Her PhD research examines the canvas paintings from the Anglada-Camarasa collection of the “la Caixa” Foundation (Palma de Mallorca, Spain). Through the application of non-invasive analytical methods, including multiband imaging (MBI) and micro-MBI, colorimetry, and fiber optic reflectance spectroscopy (FORS), her work seeks to characterize degradation processes, gain insight into the artist's materials and working practices, and support a renewed assessment of Anglada-Camarasa's significance within the artistic context of his time.



Arianna Abbafati is a Conservation Scientist from Italy. Graduated in 2021 at Università La Sapienza di Roma and with a master's degree achieved at Università Ca' Foscari di Venezia in 2025. During her studies she had the possibility to perform various traineeships in several European institutions: National Gallery of Sofia (Bulgaria) in 2022, Munch Museum (Oslo, Norway) in 2024 and Universitat Politècnica de València (Spain) in 2025. Her master thesis focused on the study of modern industrial oil paint tubes preserved at the Munch Museum. The project focused on the documentation, characterisation and assessment of alteration and degradation processes of green paint formulations belonged to Edvard Munch. She is now continuing in the research field of modern and contemporary art, working as scientist and laboratory technician in the research project “CRACK” at Universitat Politècnica de València.



Laura Fuster-López, PhD, Professor, Dept. Conservación y Restauración de Bienes Culturales, Universitat Politècnica de València (UPV), Spain. Fuster-López graduated from UPV in Fine Arts (Conservation and Restoration of Cultural Heritage) in 1999. In 2006 she received a PhD with honors in Conservation and Restoration of Cultural Heritage after completing an Internship at Istituto Centrale per il Restauro (Rome) and the Smithsonian Center for Materials Research and Education (USA), among others. Fuster-López has been teaching canvas paintings conservation since 2005 at UPV, and she has given specialized workshops on the structural behavior of paintings in several international training programs and research institutions. Her current research focuses on the mechanical and dimensional properties of easel paintings as well as environmental effects on their stability and preservation, being currently the project leader in two national research projects. She is the Chair of the European Network for Conservation Restoration Education since 2023. (https://encore-edu.org)



Debra Westall is an Associate Professor in the Department of Applied Linguistics at the Universitat Politècnica de València (UPV) since 2017, where she teaches analytical methods and physico-chemical fundamentals applied to cultural heritage. As a senior laboratory technician at the Institute for Heritage Restoration, she has conducted more than 350 technical-scientific studies on heritage materials. She has taken part in 14 R&D projects, published over 50 articles in peer-reviewed scientific journals, and supervised numerous academic projects, some of them award-winning. Her teaching is distinguished by methodological innovation, formally recognised at institutional level. She served as laboratory manager at CLAR Rehabilitación (2006-2009) and acts as a reviewer for specialist journals in chemistry and conservation-restoration.



Anna Laganà is a Principal Research Specialist at the Getty Conservation Institute (GCI) - Science Department - where she leads the Preservation of Plastics Project dedicated to advancing the conservation of plastic heritage objects. She graduated as a modern and contemporary art conservator from the Istituto Centrale per il Restauro in Rome. Since then, her work and scientific research have focused on plastics, particularly on developing treatments for these materials. With over twenty years of experience, Anna has published extensively and led international workshops on plastics conservation. Before joining GCI, she coordinated the Contemporary Art Conservation Laboratory at the Centro Conservazione Restauro “La Venaria Reale”, worked as a researcher at the Cultural Heritage Agency of the Netherlands, and lectured at the University of Amsterdam, where she coordinated the Postgraduate Program in Modern and Contemporary Art Conservation. Since 2020, she has served as Coordinator of the ICOM-CC Modern Materials and Contemporary Art Working Group.



Patricia Sanmartín-Sánchez is a Ramón y Cajal Researcher of the Analysis and Conservation of Biodiversity Group (ACBiodiv) at CRETUS - Centre for Cross-disciplinary Research in Environmental Technologies, University of Santiago de Compostela (USC, Spain). She holds a degree in Chemistry from the USC (2004) and a PhD awarded in 2012 (Cum laude with Honors). Her research focuses on the microbiology of stone cultural heritage and the development of environmental technologies for its conservation. She has secured competitive research funding on a continuous basis. She has carried out her research activity at leading universities such as the USC, Milan, Harvard, and Oxford. Up to April 2025, she has participated in 23 publicly funded research projects and 47 R&D contracts, acting as principal investigator in 21 of them. She has served as scientific director of the “CromaLux” project and has been awarded national and regional projects of excellence.



Lucía López-Polín is a junior postdoctoral researcher at the Institut Català de Paleocologia Humana i Evolució Social (IPHES/CERCA, Tarragona, Spain). She holds bachelor's degrees in Archaeology (Universitat Complutense de Madrid, 1997) and in Conservation and Restoration (ESCRBC, 1997). She began her professional career with a scholarship focused on the Atapuerca materials (1997-2000) and has remained actively involved in this research project ever since. From 2003 onwards, she has worked as a conservator and preparator at IPHES, contributing to research at the Atapuerca sites and numerous other archaeological and paleontological contexts. Her expertise is particularly focused on bone remains and lithic materials from Plio-Pleistocene sites, including Barranc de la Boella (La Canonia, Tarragona), Camp dels Ninots (Caldes de Malavella, Girona), Tossal de la Font (Castelló), La Cansaladeta (Tarragona), and Santa Ana (Càceres). Her work encompasses the full conservation process, from on-site excavation to laboratory treatment. In addition, she advises excavation teams on conservation techniques and coordinates the work of other conservators in both field laboratories and at IPHES.



Irene Samaniego Jiménez is a PhD candidate in Conservation and Restoration of Cultural Heritage at the Universitat Politècnica de València. She has completed postgraduate studies in advanced technologies for Cultural Heritage documentation (Universidad Nacional de Educación a Distancia) and in the diagnosis and authentication of works of art (Universitat de València), specializing in image-based methods for cultural heritage documentation. She also completed a Master's degree in Architectural Conservation (Universidad del País Vasco), focusing on non-destructive and portable analytical techniques. Her current doctoral research focuses on the analysis and study of the Museo Picasso collection in Barcelona through the use of non-invasive imaging approaches.



Aurora Cairoli is a PhD student in Heritage Science (National PhD) working at Ca' Foscari University of Venice in collaboration with Sapienza University of Rome. She has graduated at the University of Milan in Conservation Science and collected different experiences in conservation studies abroad (Poland, Portugal, Argentina). The focus of her research is in Painted Villages, with a focus on the efficacy and the durability of conservation interventions applied on these artworks and their interactions with the environmental context.



Dr. Annette S. Ortiz Miranda is the conservation scientist at The Walters Art Museum, where she leads the museum's scientific analysis laboratory. Prior to joining the Walters, she served as a postdoctoral researcher at Northwestern University's Center for Scientific Studies in the Arts in Chicago and as a conservation scientist at the National Gallery of Denmark (SMK). Her research focuses on the identification and characterization of artists' materials and techniques, as well as the study of their degradation processes. In addition to her role at the Walters, Dr. Ortiz Miranda actively contributes to the field through multiple leadership roles. She serves on the Board of Governors of the Centro de Conservación y Restauración de Puerto Rico (CENCOR), is the elected Assistant Chair of the Research and Technical Studies (RaTS) group of the American Institute for Conservation (AIC), and is part of the leadership of the Art, Archaeology & Conservation Science group within the American Ceramic Society (ACerS).



Laura Osete Cortina holds a PhD in Chemistry and has been an Associate Lecturer at the Universitat Politècnica de València (UPV) since 2017, where she teaches analytical methods and physico-chemical fundamentals applied to cultural heritage. As a senior laboratory technician at the Institute for Heritage Restoration, she has conducted more than 350 technical-scientific studies on heritage materials. She has taken part in 14 R&D projects, published over 50 articles in peer-reviewed scientific journals, and supervised numerous academic projects, some of them award-winning. Her teaching is distinguished by methodological innovation, formally recognised at institutional level. She served as laboratory manager at CLAR Rehabilitación (2006-2009) and acts as a reviewer for specialist journals in chemistry and conservation-restoration.



Siv A. Jespersen is a research assistant at the Royal Academy - Institute of Conservation. She has a background in traditional craftsmanship as a sailmaker and has since completed both her bachelor's and master's degrees at the Institute of Conservation in Copenhagen. She has professional experience as a conservator at the National Museum of Denmark. Her current work focuses on the study and documentation of the physical and mechanical properties of paint layers exposed to fluctuating climatic conditions, aiming to improve the understanding of material behaviour in complex structures and to support the development of evidence-based thresholds for storage and preventive conservation strategies.



Cecil Krarup Andersen is an associate professor in the Paintings Conservation Program at the Royal Danish Academy, Architecture, Design and Conservation in Copenhagen, Denmark. She earned her PhD in 2013 from the same institution, specializing in the structure and mechanics of paintings. Her research focuses on artistic techniques, mechanical behavior, and the impact of structural conservation treatments on long-term stability. She has contributed to projects involving the monitoring of collections and simulation of degradation scenarios, combining hands-on experience with scientific inquiry. Cecil's work bridges conservation practice and research, advancing our understanding of how and why objects degrade. Her interdisciplinary approach supports the development of effective strategies for safeguarding heritage collections in changing conditions.