

CHEDAR - Cultural Heritage Digitalization and Reconstruction

coordinated by Università degli Studi di Firenze in partnership with Consiglio Nazionale delle Ricerche - Istituto di Scienze del Patrimonio Culturale, Istituto Centrale per il Restauro, Istituto Superiore per le Industrie Artistiche di Firenze, Accademia di Belle Arti di Carrara, Università degli Studi della Tuscia, Università degli Studi di Cassino e del Lazio Meridionale, Università degli Studi Roma Tre, Università Campus Bio-Medico di Roma, Sapienza Università di Roma.

CHEDAR is a new research and higher education centre dedicated to the safeguarding and valorisation of wider Mediterranean heritage. It develops digital strategies to address risks and strengthen resilience. It activates a network of experts and institutions to foster inclusive projects, transfer skills, and promote innovation.

PRESENTATION OF THE PROJECT **CHEDAR** **CULTURAL HERITAGE DIGITALIZATION** **AND RECONSTRUCTION** **MEDITERRANEAN HERITAGE IN THE** **DIGITAL ERA: FACING RISKS AND** **BUILDING SUSTAINABILITY**

Panel 1: Reimagining Heritage
– Reproduction, Creativity, and
Accessibility in Museums and Cultural
Tourism

Panel 2: (Un)Faithful Twins – Culture
Between Memory and Simulation

Workshop 1: Heritage Explorers –
A Playful Journey into Mediterranean
Culture

Workshop 2: Capture It, Print It –
Making Cultural Heritage Tangible

Workshop 3: Brancacci Point of View
– Immersive Encounters with Italian
Masterpieces

Workshop 4: Digitally Reviving the Grotta
degli Animali – Where Immersion Meets
Monitoring

Workshop 5: Mediterranean Depths –
A Submerged World of Culture

10:00 – 11:30

**OFFICIAL PRESENTATION &
INSTITUTIONAL CONTRIBUTIONS**

OPENING REMARKS

Mario Vattani, Ambassador,
Commissioner General for Italy at Expo
2025 Osaka

**FROM EXPO 2020 DUBAI TO EXPO
2030 RIYAD**

Paolo Glisenti, CHEDAR Strategic
Advisor

**PRESENTATION OF THE CHEDAR
PROJECT**

Grazia Tucci, CHEDAR Director –
Università degli Studi di Firenze

LUISS – The Campus Project

Raffaele Marchetti, Campus Project
Director – LUISS

Video Message

Stefania Giannini, UNESCO Assistant
Director-General for Education

**Digital Technologies for Cultural
Heritage Disaster Prevention**

Hirofumi Ikawa, Senior Cultural
Properties Specialist, Cultural
Resources Utilization Division,
Agency for Cultural Affairs, Japan

**Architectural digital documentation
and education in Japan**

Rumi Okazaki, Shibaura Institute of
Technology, Tokyo

**Envisioning Cultural Heritage
Digitization Through Global
Collaboration**

Ona Vileikis, Head of Documentation
Unit, Department of Culture and Tourism
– Abu Dhabi; Secretary-General, CIPA
Heritage Documentation

Institutional Greetings

Licia Ronzulli, Vice President of the
Italian Senate



11:30 – 12:30 | THEMATIC PANEL 1

REIMAGINING HERITAGE – REPRODUCTION, CREATIVITY AND ACCESSIBILITY IN MUSEUMS AND CULTURAL TOURISM

This panel explores how 3D digital data, acquired through advanced geomatic techniques, can serve as a foundation for creative industries. By transforming accurate heritage documentation into immersive experiences, new pathways open for accessibility, education, and sustainable cultural tourism. Experts from academia, research, and media production discuss innovative models to enhance the value and engagement of heritage assets.

Moderator: Paolo Glisenti, CHEDAR Strategic Advisor

Participants:

Grazia Tucci, CHEDAR Director, Università degli Studi di Firenze,
Gaetano Malandrino, Accademia di Belle Arti di Carrara
Ivana Cerato, Consiglio Nazionale delle Ricerche - Istituto di Scienze del Patrimonio Culturale,
Matthew Pullicino, Stargate Studios Malta.

12:30 – 13:30 | THEMATIC PANEL 2

(UN)FAITHFUL TWINS – CULTURE BETWEEN MEMORY AND SIMULATION

This panel investigates how digital twins, supported by diagnostic analyses and mobile laboratories, can be used to inform restoration and risk mitigation strategies for cultural heritage. With climate change increasingly threatening tangible heritage, the conversation will focus on how digital simulations can preserve memory, while supporting real-world interventions.

Moderator: Paolo Glisenti, CHEDAR Strategic Advisor

Participants:

Matteo Greco, Consiglio Nazionale delle Ricerche - Istituto di Scienze del Patrimonio Culturale,
Alessandro Conti, Università degli Studi di Firenze,
Luigi Oliva, *Giorgio Sobrà*, Istituto Centrale per il Restauro,
Ona Vileikis, Department of Culture and Tourism - Abu Dhabi, Cultural Resources Utilization Division,
Ikawa Hirofumi, Agency for Cultural Affairs - Japan.



14:30 – 15:30 WORKSHOPS (PARALLEL SESSIONS)

WORKSHOP 1

HERITAGE EXPLORERS – A PLAYFUL JOURNEY INTO MEDITERRANEAN CULTURE

Led by Accademia di Belle Arti di Carrara

This interactive workshop, designed for children aged 8 to 11, introduces the CHEDAR project and the importance of preserving cultural heritage across the Mediterranean.

Through games, storytelling, and creative activities, young participants will explore how monuments, artworks, and traditions tell the story of our shared past. The experience fosters curiosity and awareness about cultural identity, memory, and sustainability in a playful and age-appropriate way.

WORKSHOP 2

CAPTURE IT, PRINT IT – MAKING CULTURAL HERITAGE TANGIBLE

Led by GeCo Lab (Università degli Studi di Firenze)

A hands-on experience in which participants use mobile devices or tablets to digitally capture a small object and follow the complete workflow to 3D printing.

A practical introduction to photogrammetry, documentation, and digital materialization of cultural assets.



15:30 – 17:00 IMMERSIVE WORKSHOPS (PARALLEL SESSIONS)

WORKSHOP 3:

BRANCACCI POINT OF VIEW – IMMERSIVE ENCOUNTERS WITH ITALIAN MASTERPIECES

**Led by Consiglio Nazionale delle
Ricerche - Istituto di Scienze
del Patrimonio Culturale**

An experiential workshop blending Italian artistic heritage with immersive technology. Using XR sensors, participants will explore the Church of Santa Maria del Carmine and the Brancacci Chapel, stepping into the works of Masaccio and Masolino through storytelling and interactive gameplay.

Each session includes a 5-minute immersive visit and a 20-minute gaming segment, with up to 5 players per round.

WORKSHOP 4:

DIGITALLY REVIVING THE GROTTA DEGLI ANIMALI: WHERE IMMERSION MEETS MONITORING

**Led by Consiglio Nazionale delle
Ricerche - Istituto di Scienze del
Patrimonio Culturale and Geco Lab
– Università degli Studi di Firenze**

This workshop presents an interdisciplinary approach combining immersive technologies and environmental monitoring to enhance cultural heritage experiences. Through VR headsets, users can explore

a 3D reconstruction of the Grotta degli Animali in Florence.

Integrated with the Sennse sensor platform, the system displays real-time temperature and humidity data from the grotto's three basins directly in the VR environment, enriching the user experience not only visually, but also cognitively and interactively.

The model supports digital accessibility, conservation, and monitoring, offering a replicable solution for other historic sites.

WORKSHOP 5:

MEDITERRANEAN DEPTHS – A SUBMERGED WORLD OF CULTURE

Led by Istituto Centrale del Restauro

This workshop dives into the Mediterranean's submerged cultural heritage, showcasing how digital tools—such as underwater photogrammetry, 3D reconstruction, and immersive technologies—enable new forms of documentation, risk assessment, and storytelling.


Participants will explore innovative methods for revealing, preserving, and sharing the hidden treasures of the sea.

OSAKA 30 AUGUST 2025

Also participating:

Adele Meucci, Alessandro Conti, Daniela Maria Palamà, Daniele Guerrini, Damiana Luzzi, Erica Isabella Parisi, Fabiana Di Ciaccio, Federica Bonifazi, Francesco Valentino Taurino, Gaetano Malandrino, Giorgio Sobrà, Ivana Cerato, Laura Travaglini, Lidia Fiorini, Luigi Oliva, Matteo Greco, Simone Vairo

 <https://chedarproject.org>

 info@chedarproject.org

 [@chedarproject](https://www.instagram.com/chedarproject)

 [@Chedar Project](https://www.facebook.com/ChedarProject)

 [chedar-project](https://www.linkedin.com/company/chedar-project)

 [@ChedarProject](https://www.youtube.com/@ChedarProject)



 CHEDAR is supported by



CIPA
Heritage
Documentation



FONDAZIONE
CHANGES



Protection and Conservation of
Cultural Heritage Against Climate
Changes, Natural and Anthropic Risks