

S8B: New Approaches to Building on Heritage and Culture Session

Towards a Competence Centre for the Conservation, Preservation and Valorization of Cultural Heritage

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The Cyprus Institute

A European institution with an **international** environment, for the **Eastern Mediterranean & Middle East** based in Cyprus.

A research, educational and Innovation institution suited to a **knowledge economy**, taking advantage of the Cyprus «**gateway**» niche.

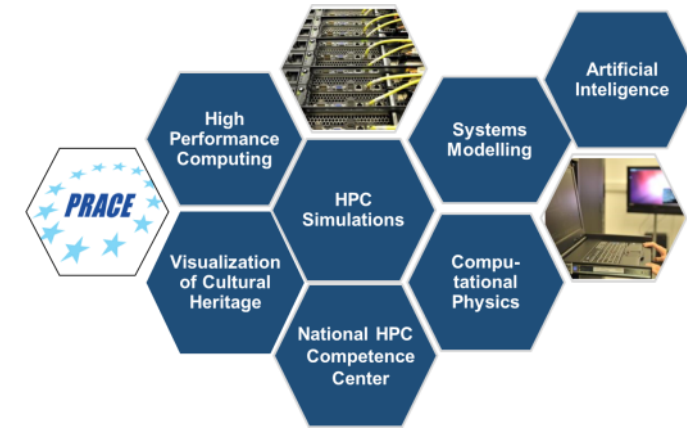
A non-governmental, non-profit institution devoted to the **public benefit** and for advancing peace and prosperity in the region, using **Science and Technology**.



Science and Technology in Archaeology and Cultural Heritage Research Center (STARC)



Climate and Atmosphere Research (CARE-C)



Computation-based Science and Technology Research Center (CaSToRC)



Energy, Environment and Water Research Center (EEWRC)



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MISSION

ADVICE:

- Research and cutting-edge digital technologies on the preservation, conservation and sustainable promotion of **monuments and sites**.
- Report on the most valuable initiatives, experiences and **best practices** across Europe and **internationally**.

SUPPORT:

- Promote a **holistic and multidisciplinary approach** to the conservation of CH.
- Facilitate coordination between Heritage Agencies and CH Institutions and initiatives.
- Build an effective **partnership** to promote the conservation and valorization of CH.
- Enable the **take up and transfer** of research project results by the CH sector.

SERVICE:

- Define **training and upskilling programs** for cultural heritage institutions, operators and professionals.
- Develop **consultancy, guidelines and protocols** on the use of **digital technologies** for CH management.

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INTERESTS

Anthropic and Natural Risks



Climate Change



Illicit trafficking of Cultural Heritage

Landscape Heritage



Monuments



Artefacts



Sites

Valorization

Sustainable tourism



Education



Musealization



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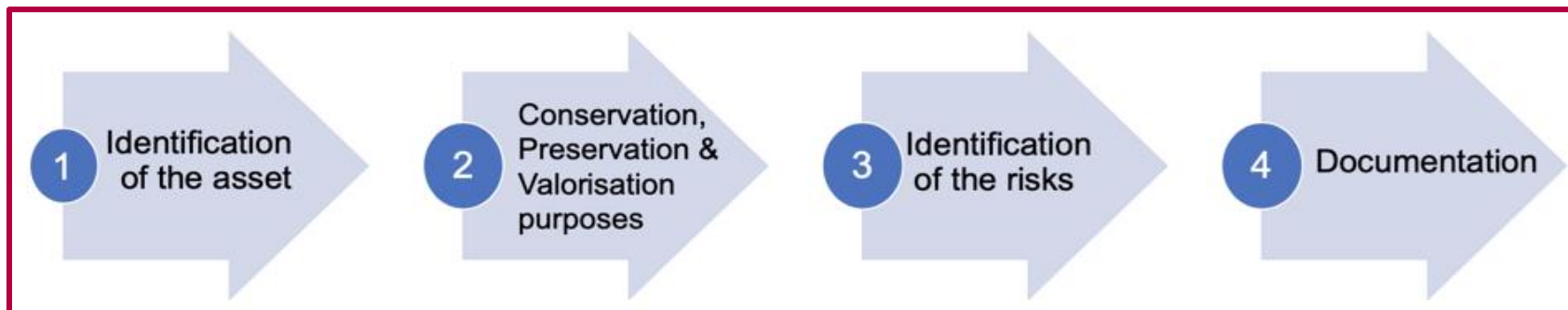
APPROACH

Identification of a CH asset and its **CONSERVATION, PRESERVATION** and **VALORIZATION** needs

Implementation of a **MAP OF ALL KINDS OF RISKS** which can damage Cultural Heritage assets

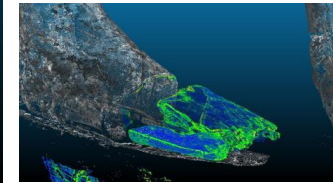
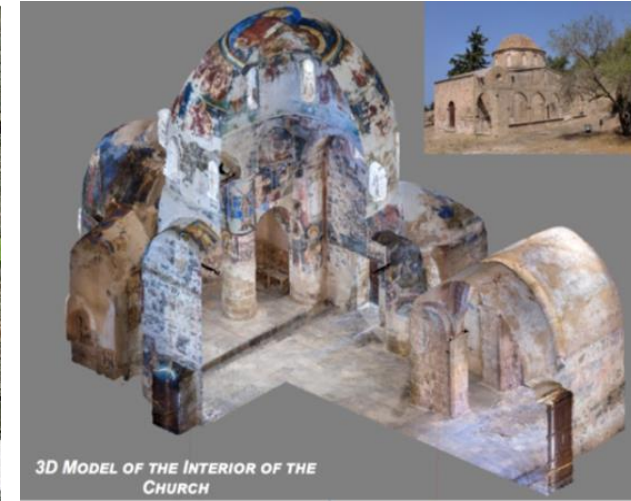
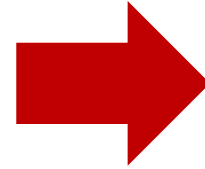
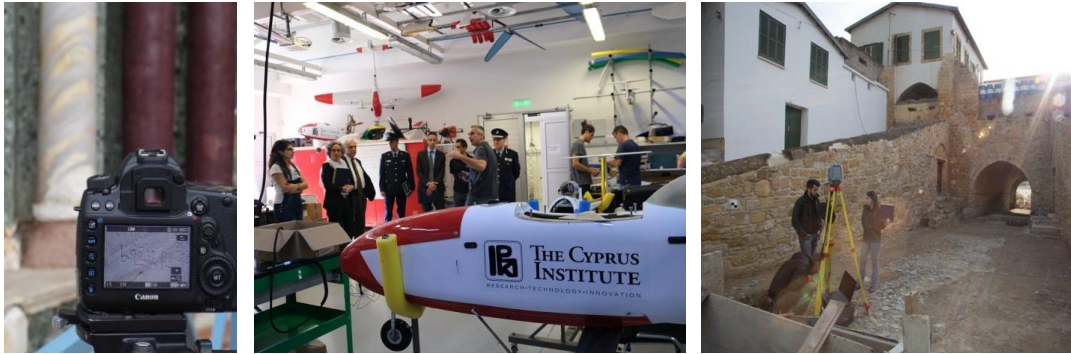
Mitigation strategies: **DIGITAL APPROACH** and cutting-edge **TECHNOLOGIES**

Cultural Heritage assets addressed as the sum of their **TANGIBLE** and **INTANGIBLE ASPECTS** within their natural and anthropic environment.



Digital approach and technologies

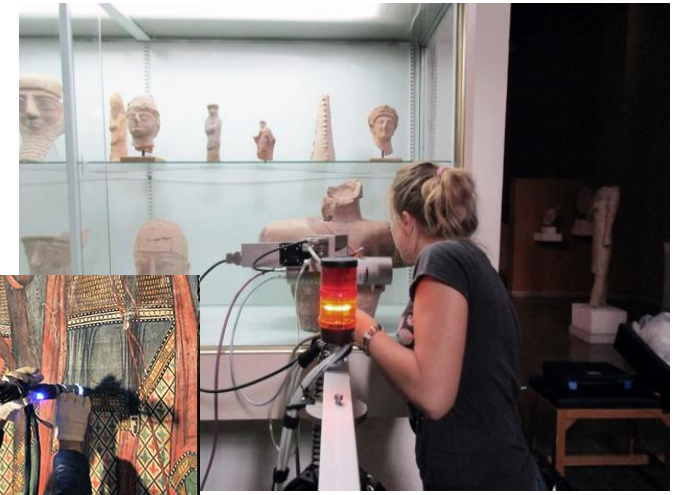
- Different techniques according to the asset's type, including landscapes, sites, buildings and artefacts (photogrammetry, terrestrial laser scanner, optical scanner, Unmanned Aerial Vehicles (UAV) documentation)



Digital approach and technologies

Non-invasive chemical-physical investigations:

- Digital microscopy
- Fiber-Optic Reflectance Spectroscopy (FORS)
- X-Ray Fluorescence spectroscopy (XRF)
- Fourier-Transform Infrared spectroscopy(FTIR)
- Infrared Reflectography (IRR)
- Multi-sensor XRF-FORS-PL scanner
- Geo-physical investigation
- Dendrochronology



Data management



Digital Ancient Cypriot Literature



Cypriot Antiquities in Foreign Museums: The Pittas Registry



Cypriot Medieval Coins: History and Culture

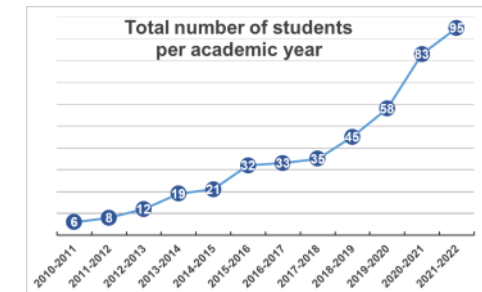


The Art of Theodore Apsevdís in Cyprus



- Data interoperability
- CH infrastructures for integration

Cultural Heritage and Society



Commercialization

- o Use of an integrated set of services for art characterization, empowering a network of providers to increase the quality of their data and services
- o Creation of a unique digital object, embedding all available information on the object

Education

Doctoral Programs

- o PhD in Computational Sciences
- o PhD in Energy, Environment & Atmospheric Sciences
- o PhD in Science & Technology in Cultural Heritage

Master's Programs

- o MSc/MPhil in Environmental Sciences
- o MSc in Simulation and Data Sciences
- o MSc Digital Cultural Heritage

THANK YOU!

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The Alexandria Necropolis project: The Ptolemaic tombs of Shatby

