

Dissemination to the general public of innovative techniques for the study and analysis of Cultural Heritage objects

he PROTEAS project is the outcome of the collaboration between two Institutes of the Foundation for Research and Technology - Hellas (FORTH), the Institute of Computer Science (ICS) and the Institute of Electronic Structure and Laser (IESL), the Institute of Nuclear and Particle Physics (INPP) of the National Centre for Scientific Research (NCSR) "Demokritos", the National Gallery - Alexandros Soutsos Museum (NG-ASM) and two companies, Printec SA and up2metric P.C.

The aim of the project was to develop a comprehensive instrumentation and the corresponding methodology for the conservation and study of oversized paintings, as well as to create an Open Access Laboratory for the in-situ, open to experts and the public, study and conservation of large paintings with the use of innovative technologies.



https://proteas-openlab.nationalgallery.gr

Open Access Laboratory



ΠΡΩΤΕΑΣ OPEN-LAB



Technologies.

The technologies developed in the PRO-TEAS project are pioneering at international level and their promotion will contribute decisively to their establishment for the design and maintenance of large (or even conventional) projects, both in Greece and internationally.

The research team of PROTEAS aspires to make a decisive contribution to the dissemination to the general, but also to the specialized, public of innovative techniques for the study and analysis of Cultural Heritage objects, as well as the complex processes and stages required in order to preserve a work of art, through modern projection and dissemination technologies, and face-to-face actions.



Innovations

Innovative low-cost robotic devices and advanced software based on machine vision, which will allow: (a) digital mapping of the painting, and (b) easy and accurate approach to the entire surface of the painting.

Modern analytical devices for the non-invasive and comprehensive analysis of the painting materials:

(a) Fluorescence imaging for the study of pigments, (b)
Fluorescence spectroscopy for the analysis of varnishes,
(c) Ultrastructural Reflectography for the detection of
draft drawings/underdrawings, and (d) X-ray fluorescence
for the elemental characterization of materials.

A Digital Documentation Platform for recording, managing, comparing - synthesizing and displacing analytical data.

Integrated interface software: (a) to control and synchronize all robotic and spectroscopic devices, (b) to record the data, and (c) to display and manage the data.









PROTEAS Open-Lab



NATIONAL GALLERY ALEXANDROS SOUTSOS MUSEUM **EVRIPIDIS KOUTLIDIS FOUNDATION**

Address: Vas. Konstantinou Street 50 GR-116 34, Athens, Greece Guided tours and school visits Email: openlab@nationalgallery.gr









National Gallery Alexandros Soutsos Museum

The National Gallery was founded in 1900; yet its institutional Since May 2021, the National Gallery-Museum of Alexandros age of 120 does not reflect its actual age, which is determined Soutsou has welcomed visitors to its recently refurbished buildby the treasures in its collections. And these treasures belong ing. The new building complex, with its roots in the heritage of mainly to modern Greek art - which is of the same age as mod- Greek modernism, is a contemporary cultural landmark in the ern Greece itself, for they were born, evolved, and matured in heart of Athens. After the long absence of the main building of parallel. In this respect, the National Gallery can and should be the National Gallery from the cultural life of Athens due to the seen as an exemplary institution for national self-awareness. expansion projects, the new facility aims to spread its work With this in mind, the museological study sought to highlight through an energetic connection between the urban and the the interrelationship between art and the Greek society and museum experience. history.

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Open Access Laboratory - National Gallery Alexandros Soutsos Museum



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PROTEAS OPEN-LAB

Advanced System for collection and management of analytical data for documentation and conservation of large-scale paintings in an open access laboratory



Open Access Laboratory

The Open Access Laboratory of the National Gallery Alexandros Soutsos Museum is the result of the project PROTEAS, which was implemented in the framework of the action RESEARCH - CRE-ATE - INNOVATE and was co-funded by the European Regional Development Fund (ERDF) of the European Union and national resources through the Competitiveness, Entrepreneurship & Innovation Programme (EPANEK). Project code: T2EDK-02428, 2020-2023.



