# Integration of technological Solutions for Imaging, Detection, and Digitisation of hidden Elements in artworks



## PROJECT DETAILS

Funding Programme:
7th Framework Programme (FP7)
Sub-Programme:
Information and communication technologies (ICT)
Funding Scheme:
Small or medium-scale focused research project
Project Reference:
600849;
UE-13-INSIDDE-600849
Project Duration:
36 Months (From 2013-01-01 to 2015-12-31)
Total Project Value:
€ 3.643.065
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€ 2.897.106
Funding to UniOvi:
€ 621.400

Website:
http://www.insidde-fp7.eu/

## PROJECT DESCRIPTION

Because cultural heritage is one of the most valuable assets of our continent, European institutions are strongly committed with its conservation and protection, but also with its worldwide diffusion through the utilization of digital technologies. In this context, INSIDDE (INtegration of cost-effective Solutions for Imaging, Detection, and Digitisation of hidden Elements in paintings) project as an innovative solution for capturing, imaging, and digitizing unknown details of paintings and 3D artworks by means of terahertz technology in a unique approach, with the purpose of going beyond our present knowledge and adding value to the cultural content. A versatile, easy to configure and affordable prototype – working in different frequency bands within the THz region – will provide a complete set of images of the paintings and sealed objects, revealing complementary information about its hidden features – such as underlying contents, pigment/substance identification, brushstroke texture, defects – through various processing techniques. The resulting enriched images and 3D models will be exploited in two manners: integrating them into the professional knowledge-sharing platform European and developing an innovative smartphone application based on Augmented Reality. Although curators and art researches will benefit from our works, the key of INSIDDE lies in improving the experience of visitors at European museums and through the internet by increasing the digital resources at their disposal, leading to a more attractive interaction. Experts from academia, technological research centers, SMEs and end-users with large experience collaborating in international research projects constitute a well-balanced consortium, in which the participation of museums definitely plays an irreplaceable role and makes the difference between theoretical and applied results.

## UNIOVI TEAM

Samuel Ezechiel Ver-Hoeye [1]
versamuel@uniovi.es
Miguel Fernández García [1]
fernandezgmiguel@uniovi.es

[1] Department of Electrical, Electronic,
Computers and Systems Engineering

## PROJECT PARTNERS

Project Coordinator
**Treelogic Telemática y Lógica Racional
para la Empresa Europea S.L., Spain**

Spain
**Fundación ITMA
Universidad de Oviedo**
Italy
**Consiglio Nazionale Delle Ricerche**
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**Regionalen Istoricheski Muzei - Stara
Zagora**
Germany
**Doerner Institut, Bayerische
Staatsgemäldesammlungen**
Netherlands
**Technische Universiteit Delft**
Belgium
**3D Dynamics BVBA**