

TITOLO PROGETTO:

NANOFORART - Nano-materials for the conservation and preservation of movable and immovable artworks

PROGRAMMA DI FINANZIAMENTO: 7 FP - COOPERATION

RESPONSABILE SCIENTIFICO: Prof. Antonio Marcomini

STRUTTURA (Dipartimento/Centro) : DIPARTIMENTO DI SCIENZE AMBIENTALI,

INFORMATICA E STATISTICA

DATI FINANZIARI:

Costo Complessivo del Progetto	Finanziamento Europeo Complessivo Assegnato	
€ 3.759.429	€ 2.914.676	

SINTESI PROGETTO:

The main objective of the NANOFORART proposal is the development and experimentation of new nano-materials and responsive systems for the conservation and preservation of movable and immovable artworks. While the progress in material science has generated sophisticated nanostructured materials, conservation of cultural heritage is still mainly based on traditional methods and conventional materials that often lack the necessary compatibility with the original artworks and a durable performance in responding to the changes of natural environment and man-made activities. The main challenge of NANOFORART is the combination of sophisticated functional materials arising from the recent developments in nano-science/technology with innovative techniques in the restoration and preventive conservation of works of art, with unprecedented efficiency. The research activity will be focused on the development of manageable methodologies, based on nanosized structures and with a low environmental impact. The main tasks include the production of dispersions of nanoparticles, micellar solutions, microemulsions and gels, in order to offer new reliable pathways to restore and preserve works of art by combining the main features and properties of soft and hard-matter systems for cultural heritage conservation and preservation. In the second part of the project great importance will be given to technology transfer to SMEs that will play an important role in the standardization of applicative protocols, in the up-scale and commercialization of technology and in the evaluation of the eco-toxicity of nano-materials. A fundamental part of the project is also related to the role of end-users. Important museums, such as the National Museum of Anthropology and History of Mexico City and the National Museum of Denmark, will validate the technology and the methods developed in the first part of the project, and provide training activities and dissemination of the developed techniques.

Inizio Attività (previsione)	Fine Attività (previsione)	
01/01/2011	30/11/2014	

PARTENARIATO

1	CONSORZIO INTERUNIVERSITARIO PER LO SVILUPPO	Italia	Coordinatore
	DEI SISTEMI A GRANDE INTERFASE		
2	UNIVERSITY COLLEGE LONDON	UK	Partner
3	MORANA RTD DOO	Slovenia	Partner
4	CENTRE DE RECHERCHE ET DE RESTAURATION DES	Francia	Partner
	MUSEES DE FRANCE		
5	MINISTERIO DE CULTURA	Spagna	Partner
6	BIRKBECK COLLEGE - UNIVERSITY OF LONDON	UK	Partner
7	INSTITUTO NACIONAL DE ANTROPOLOGIA E HISTORIA	Messico	Partner
8	MBN NANOMATERIALIA SPA	Italia	Partner
9	CHEVALIER AURELIA	Francia	Partner
10	UNIVERSITA CA' FOSCARI VENEZIA	Italia	Partner
11	GEMA ART GROUP AS	Repubblica Ceca	Partner
12	SIT TRANSPORTES INTERNACIONALES S.L.	Spagna	Partner
13	NATIONALMUSEET	Danimarca	Partner
14	ZFB ZENTRUM FUR BUCHERHALTUNG GMBH	Germania	Partner
15	UNIVERZITA PARDUBICE	Repubblica Ceca	Partner

SITO INTERNET: http://www.csgi.unifi.it/