



Rathgen-Forschungslabor
 Staatliche Museen zu Berlin

Workshops

Plasma Cleaning and Innovative Nanostructured Coatings for Conservation



Tuesday & Wednesday 2 - 3 September

Sammlung Scharf-Gerstenberg,
 Nationalgalerie, Staatliche Museen zu Berlin

About the project:

Research area: ENV-NMP.2011.3.2.1-1

Development of advanced compatible materials and techniques and their application for the protection, conservation and restoration of cultural heritage assets.

Project start date: 2011-11-01

Duration: 36 months

Project cost: 2.83 million euro

EU project funding: 2.13 million euro

About the partners:

The PANNA team combines the know-how of conservation companies and of research centres with the expertise of technology partners on new materials and applications.

Research centres:

- Veneto Nanotech, Italy
- Istituto per l' Energetica e le Interfasi, Italy
- Rathgen Forschungslabor, Staatliche Museen zu Berlin
- University of Antwerp, Conservation Studies, Belgium

Technology SMEs:

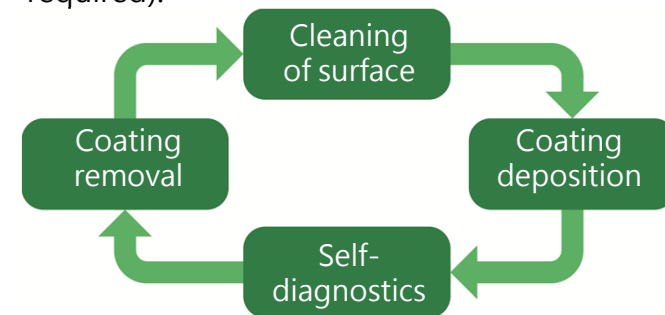
- Chemstream bvba, Belgium
- Nadir srl, Italy

Conservation SMEs:

- Centre for Conservation of Art Works, Bulgaria
- Lorenzon Costruzioni srl, Italy,
- Botega' Z, Bulgaria

Summary:

A "full-life protocol" was developed based on plasma cleaning; application of coatings against future degradation; re-treatment (if required).



The plasma torch can be used to:

- Reduce tarnished layers on silver
- Remove graffiti from stone
- Remove soot from mural paintings
- Remove aged varnishes from paintings
- Enhance re-treatability of siloxane coatings on marble

Moreover, a new generation of protective coatings has been developed. Due to their super hydrophobicity, effectiveness indicator and plasma removability, they represent ideal protection against future degradation.

What you will learn about:

- Plasma
- Protective coatings
- The possibilities of plasma cleaning
- Evaluation of cleaning methods

For whom?

- Heritage professionals and policymakers
- Independent conservators-restorers
- Science students and researchers
- Lecturers in human and natural sciences
- Museum curators and staff
- Everyone involved in cultural heritage

Date:

2 – 3 September, 2014

Time:

From 9 am until 5 pm

Organisation:

Veneto Nanotech

Rathgen Forschungslabor, Staatliche Museen zu Berlin

Location:

Remise of the Sammlung Scharf-Gerstenberg, Nationalgalerie, Staatliche Museen zu Berlin
Spandauer Damm 7
14059 Berlin

Cost:

Free of charge

Participants:

Maximum 30

Registration is mandatory:

S.Tesche@smb.spk-berlin.de

General contacts:

www.panna-project.eu
info@venetonanotech.it

9 – 9:30 am	Registration	9 – 9:30 am	Registration
9:30 – 10 am	Welcome Introduction	9:30 – 10 am	Welcome Introduction
10 – 10:30 am	What is plasma cleaning?	10 – 10:30 am	What are coatings?
10:30 – 11 am	Cleaning of Daguerreotypes	10:30 – 11 am	Full life protocol
11 – 11:30 am	Break	11 – 11:30 am	Break
11:30 – 12 am	Graffiti removal	11:30 – 12 am	Pallazo Ducale
12 – 12:30 am	Removal of soot on wall paintings	12 – 12:30 am	Coatings on silver or pottery
12:30 am – 2 pm	Lunch break	12:30 am – 2 pm	Lunch break
2 – 2:30 pm	Removal of old restorations from fresco paintings	2 – 2:30 pm	Treatment of icons
2:30 – 3 pm	Break	2:30 – 3 pm	Break
3 – 5 pm	Plasma Cleaning demonstration at Rathgen Research Laboratory	3 – 5 pm	Plasma Cleaning demonstration at Rathgen Research Laboratory

1st day: theory

- Possibilities and limitations of currently used cleaning techniques
- Last developments in plasma cleaning

2nd day: case-studies

- How coatings protect heritage objects
- How chemicals and plasma technology can modify the properties of coatings