





Laser Techniques in Artworks Conservation: physical fundamentals and case studies.

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Abstract: The state of the art of laser technologies in conservation of Cultural Heritage is continuously growing around the world. Laser and opto-electronic techniques came in restoration in more than 40 years ago. This approach was first proposed by American physicist J.F.Asmus. The validation of advanced laser cleaning techniques has been extensive and diffused in many European countries, USA, Canada and Australia, especially for stone and metals. Laser-based diagnostics have also specialised their tasks toward material analysis, defects detection and multidimensional documentation. Laser and optical methods successfully monitor deterioration effects. Active dissemination of lasers in museum work resulted in establishment of separated scientific field LACONA (Lasers for Artworks Conservation).

This lecture presents an overview of most important case studies connected with the use of laser techniques in Cultural Heritage preservation. The works, in which scientists of the St.Petersburg Electrotechnical University have been involved, are concerned with laser cleaning of stone monuments and well as with use of 3D laser scanning for documentation and non-contact replication of sculptural monuments.

Fecha: Viernes 1 Diciembre

Hora: 14:30 hs