

## Preface

Materials and technologies used in the creative artistic process or in the manufacture of historically relevant objects evolve with time reflecting the knowledge and uses of the society at the historic moment in which these works were created. Scientific research on Cultural Heritage, both for the study of its material aspects and for designing restoration and conservation strategies, faces a diversity of challenges due to the complexity and intrinsic value of the substrates and objects and their past history of exposure to degrading agents and to the passage of time. Fast developing laser systems and advanced optical techniques offer new solutions for Conservation scientists and provide answers to the challenges of Conservation Science. In this field, the international conference series LACONA, Lasers in the Conservation of Artworks, has been established as a reference meeting point for conservators, end users and scientists. LACONA series started in 1995 in Heraklion, (Greece) being followed every two years by editions in Liverpool (Great Britain), Florence (Italy), Paris (France), Osnabrück (Germany) and Vienna (Austria). The last edition, the 7th International Conference on Lasers in the Conservation of Artworks, LACONA VII, was celebrated in Madrid (Spain), 17–21 September, 2007 at the headquarters of Consejo Superior de Investigaciones Científicas (CSIC) the main research institution in Spain.

This Volume of Proceedings of LACONA VII presents a selection of contributions on both emerging and well established applications of laser systems and techniques to real Conservation problems. Innovative Approaches in Laser Cleaning and Analysis are presented together with Analytical Techniques and Portable Laser Systems for Remote and On-Site Applications. A substantial number of contributions to this Volume deal with Laser Cleaning of monuments and sculptures, paintings and polychromes, metal objects and documents and textiles. Also included are developments on Structural Diagnosis, Monitoring, Imaging and Documentation of artworks.

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LACONA VII Chair,  
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