

# **OPTO-CH summer courses on laser analysis, diagnosis and conservation of Heritage objects and monuments; content, experiences and future prospects**

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**Abstract.** OPTO-CH summer courses were initiated by IESL-FORTH a decade ago with the aim to disseminate the potential of using lasers and optical technologies for the study and restoration of Heritage objects and monuments. Despite a number of exceptional applications and case studies the use of lasers as conservation, analytical and diagnostic tools was rather sporadic due to lack of training opportunities and thus this series of training activities were designed so to bridge this gap.

OPTO-CH courses combine lectures from experts with practical demonstrations and hands-on experimental sessions that enable participants to get a real feeling on how to use a number of advanced optical tools for analysis and characterisation of materials and surfaces. Field experiments on-site at selected monuments in Crete demonstrate the applicability of the techniques in practice while special lectures by invited speakers, in-line with the thematic of each course are also foreseen.

In this communication, the experience gained from the organization of eight summer schools during the past 9 years will be presented. The development of an active community informed on the advantages offered by laser technology in the CH field as well as on their handling, good practice guidelines and limitations as a result of this out-reaching activity will be discussed with emphasis to ongoing collaborations and common initiatives. Finally future plans and prospects will be also presented.

**Keywords:** laser analysis and conservation, summer courses, hands-on demonstrations.

**THEMATIC:** Novel Educational Approach for the Preservation of Cultural Heritage