






Paraskevi POULI

IESL-FORTH, PO BOX 1385, 
HERAKLION, CRETE, 71110, GREECE
+30 2810 39 1870 
ppouli@iesl.forth.gr 
Researcher Id: H-3448-2011 
orcid.org/0000-0002-9814-1981 

Senior Application Scientist at Foundation for Research and Technology Hellas, Institute of Electronic Structure and Laser (IESL-FORTH) since 2016/12

<https://www.iesl.forth.gr/en/people/pouli-paraskevi> and <https://phohs.iesl.forth.gr/>

Academic Positions

2016/12 – TO DATE

Senior Application Scientist / IESL-FORTH

2000/08 – 2016/11

Research Associate / IESL-FORTH

Research Interests and expertise

- Investigation of optimum laser cleaning strategies for diverse materials and conservation challenges
- Understanding and prevention of side effects upon laser cleaning, such as the discoloration (yellowing) phenomena, associated with IR irradiation of sensitive substrates, and the blackening of pigments
- Optimization of the cleaning process through the introduction of novel and prototype laser cleaning systems and methodologies, and
- Adaptation and use of appropriate monitoring and assessment techniques (i.e. spectral imaging, laser spectroscopy, interferometry, etc.) to ensure proper, efficient and safe laser conservation interventions.

Education

1995/10- 1999/12

Physics department / Loughborough University, UK

PhD thesis: “**Laser cleaning studies on stonework and polychromed surfaces**”, Supervisor: Prof. D.C. Emmony. The main thrust of the research was to thoroughly approach laser-matter interactions and to implement on-site laser cleaning. The surface effects of laser irradiation on polluted limestone and alabaster, as well as the laser-induced discoloration on medieval pigments, have been studied. OM, XRD, XPS and reflectance spectroscopy have been employed to compare laser cleaning to the established methods and identify alterations associated with the colour, surface and chemistry of pigments. The above studies lead to the wide-scale laser cleaning on the famous Lincoln Medieval Frieze.

1989/10-1995/10

Physics department / Aristotle Univ. of Thessaloniki, Greece

BSc. In Physics. Classification mark “Very Good” & grade point average 7.63/10.

1995/02-06

Erasmus Exchange Program / Università di Firenze, Italy

Courses on Optics and Applications of Coherent Optics at the Postgraduate School of the National Institute of Optics (CNR-INO) and on “La Scienza per la Conservazione dei Beni Culturali” (Science for the conservation of Cultural Heritage) a multidisciplinary course organized by the Univ. of Florence.

Academic prizes/awards/distinctions

- Chinese Embassy in Greece "**Outstanding Contribution Award**" on the occasion of the 50th anniversary of the establishment of diplomatic relations between China and Greece for the collaboration of the IESL-FORTH with the Palace Museum, to develop a joint laboratory in Beijing (22/9/2022)
- The IIC 2012 Keck Award, Acropolis Museum and IESL-FORTH "[Laser rejuvenation of Caryatids opens to the public at the Acropolis Museum: A link between ancient and modern Greece](#)"
- Scholarship sponsored by Lincoln Cathedral Fabric Fund to support the "Lincoln-Loughborough Romanesque Frieze Laser Research Project" (1998-99)
- A.G. Leventis, Foundation Educational Grant, Academic year 1997/98
- Awards to Women for Graduate Research 1997/98. British Federation of Women Graduates, Kathleen Hall Memorial Fellowship Fund. 1st prize (£ 1000)

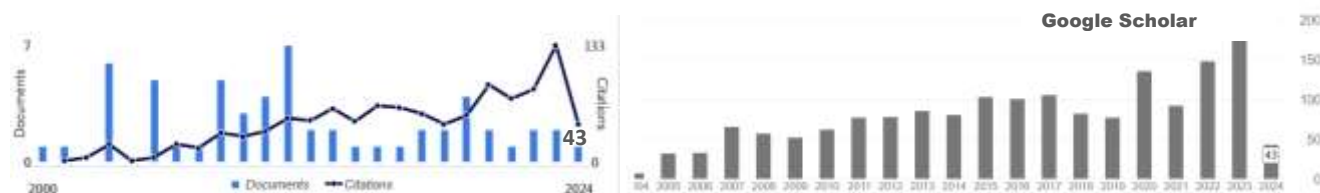
Academic record and citations metrics

- 42 articles in peer-reviewed scientific journals (4 invited), 2 patents
- 39 articles in international conference proceedings
- Contributor of invited chapters in 8 books
- Scientist-in-charge for 2 EC & 1 national funded research projects and 12 bilateral collaborations (**Total budget: >1,6 M€**)
- 8 invited talks in international conferences and workshops, 2 in national colloquiums, 1 poster awards

Citations metrics (as of April 10, 2024)

	Publications	Citations	h-index
Web of Science; H-3448-2011	56 (71 not indexed in Core collection)	985 (786 non-self)	21
SCOPUS (Author ID: 6602717375)	57	1065	22
Google scholar	120	1737	25 and h-10 factor: 44

Yearly Publication and Citation Records over the past 20 Years (Scopus & Google Scholar)



Academic Service

- Member of the International scientific committee of the [LACONA](#) (Lasers in the Conservation of Artworks) Conference Series (since 2009)
- Member of the organizing/scientific committee of CIDOC-ICOM 2018 "Provenance of Knowledge", YOCOCU2016, SCinTE 2015
- Co-Editor at the Proceedings of "[Lasers in the Conservation of artworks VIII](#)", CRC Press, Taylor and Francis Group, London (2011)
- Co-Editor at the Proceedings of "[Lasers in the Conservation of artworks XI](#)", Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika, Torun, Poland (2017), ISBN: 978-83-231-3875-4

Educational activities

- Thesis Supervision: **9** Undergraduate and **5** Postgraduate
- Coordinator of the OPTO-CH series of summer courses organized at IESL-FORTH since 2014
- Teaching Assistant, Physics Department, Loughborough University. Responsible for conducting and organising undergraduate laboratory experiments, 1997-1999
- Visiting Lecturer at
 - Interdepartmental Program of Post Graduate Studies "[Protection, Conservation and Restoration of Cultural Monuments](#)", Faculty of Engineering, AUTH, Greece
 - MSc: "Conservation of Cultural Heritage", "Advanced materials and conservation technologies" Dept. of Conservation of Antiquities & Works of Art, University of West Attica, Greece

Undergraduate thesis supervision

2024- to date	"AI-driven acoustic monitoring of laser cleaning interventions" Nikolas Raikidis, Undergraduate Thesis, Univ. of Crete, Department of Physics, GR, Supervisor: P. Pouli, G. Tserevelakis.
2022-2024	"Laser removal of stone biodeterioration and evaluation of its effectiveness by means of fluorescence spectroscopy (LED-induced fluorescence)" Nefeli Stamouli, Undergraduate Thesis, Univ. of Crete, Department of Physics, GR, Supervisor: P. Pouli.
2022-2023	"Studies to determine the etching depth upon laser cleaning of varnishes using light coherence techniques" , Anastasia Konstantinou, Undergraduate Thesis, Univ. of Crete, Department of Materials Science, GR, Supervisors: D. Papazoglou, P. Pouli.
2019-2021	"Laser-assisted restoration of cracks on glazed ceramics" , Nefeli Avgerou, Undergraduate Thesis, Univ. of Crete, Department of Chemistry, GR, Supervisors: D. Anglos, P. Pouli.
2018-2020	"Laser-Induced Fluorescence Spectroscopy to monitor the controlled laser ablation of aged varnish layers from paintings" Evdoxia itroulaki, Undergraduate Thesis, Univ. of Crete, Physics department, GR
2015-2016	"POLYGNOSIS": Educational Knowledge Web Platform & semantically linked Thesaurus on optical & laser-based techniques for Cultural Heritage analysis & diagnosis , Nikoleta Platia, Undergraduate Thesis, Technical Education Institute (TEI) of Athens, Conservation Dept, GR, Supervisors: M. Hatzidaki (TEI), P. Pouli (IESL-FORTH), C. Bekiari (ICS-FORTH)
2014-2015	Towards the understanding of the double wavelength laser cleaning in avoiding laser yellowing on stonework , Athanasia Papanikolaou, Undergraduate Thesis, Univ. of Crete, Physics department, GR, Supervisors: P. Pouli, C. Fotakis
2014-2015	Laser technology for the analysis and conservation of painted metal objects , Elpida Katopodi-Stamelou, Undergraduate Thesis, Technical Education Institute (TEI) of Athens, Conservation Department, GR, Supervisors: V. Argyropoulos (TEI), P. Pouli (IESL-FORTH)
2009-2011	The role of substrate upon the laser cleaning of artworks; a study on the laser assisted removal of conservation polymeric materials from different substrates , Sotiria Kogou, Undergraduate Thesis, Univ. of Crete, Physics department, GR, Supervisors: P. Pouli, C. Fotakis
2004	Laser Cleaning Studies on Wall Paintings , Elpida Dragasi, Undergraduate Thesis, Technical Education Institute of Athens, Conservation Department, GR, Supervisors: P. Pouli, C. Fotakis, N. Minos

MSc thesis supervision

2021-2023	Laser assisted thinning of aged varnish coatings on painted artworks; real-time monitoring of the laser ablation process and assessment of the treated surfaces , Evdoxia Dimitroulaki, Materials Science and Technology, Univ. of Crete, MST department, GR
2021-2022	Parametric study for the development of a methodology regarding the laser assisted removal of biological deposits from stone sculptures , Eleni Kourti, Interdepartmental Program of Post Graduate Studies "Protection, Conservation and Restoration of Cultural Monuments", Faculty of Engineering, Aristotle University of Thessaloniki
2017-2018	A Methodology for on-Site Study and Monitoring of Environmental Deposits in Cultural Heritage Monuments Using Laser-Based Techniques , Eleni Kalokairinou, Protection, Interdepartmental Program of Post Graduate Studies "Protection, Conservation and Restoration of Cultural Monuments", Faculty of Engineering, Aristotle University of Thessaloniki

2017-2018	Development of a Photoacoustic Monitoring system for the study of laser ablation processes upon the removal of encrustation from stonework , Athanasia Papanikolaou, MSc Photonics & Nanoelectronics, Univ. of Crete, Physics department, GR, Supervisors: P. Pouli, G. Tserevelakis
2011-2012	Laser assisted removal of industrial paints from wooden artefacts , Vaya Piteli M.Sc. in Protection, Conservation and Restoration of Cultural Monuments in Department of Architecture of Aristotle University of Thessaloniki, GR, Supervisors: P. Pouli, C. Fotakis

Thesis Examination Boards

2023/10	“Conservation of the Granite Cladding of the Sydney Harbour Bridge: A Comparison of Femtosecond and Nanosecond Laser Cleaning Approaches” , Julia Brand, Doctoral thesis, Supervisor: Prof. Alison Wain, University of Canberra, Australia
2023/01	“Degradation studies on different pigments and binders: new approaches to diagnostics in cultural heritage” , Francesca A. Pisu, Doctoral thesis, Supervisor: Prof. Daniele Chiriu, Università degli studi di Cagliari, Physics dept. Italy
2012	“Enhanced UV laser cleaning of glass surfaces and dehydroxylation of fused silica – mechanisms and techniques” Alanna Julia FERNANDES, doctoral thesis, Supervisor: prof. Deborah Kane, Macquarie University, Australia
2009	“Laser Modification of Biopolymers/ Procesos de Modificación Láser de Biopolímeros” , Solenne Gaspard, Doctoral thesis, Supervisor: prof. Marta Castillejo, Universidad Complutense De Madrid, Departamento de Química Física I, Facultad de Ciencias Químicas, Spain

OPTO-CH summer schools

2012 to date	Scientific Coordinator of the OPTO-CH series of summer courses organized at IESL-FORTH
June 2019	OPTO-CH 2019 meets POLITEIA II, summer course “Laser technologies in CH analysis, diagnosis and conservation; the POLITEIA II project”, Scientist-in-charge, 5 days with in-situ campaign, 20 participants
July 2018	OPTO-CH 2018 meets HERACLES, summer course “Laser technologies in CH analysis, diagnosis and conservation; the HERACLES project”, Scientist-in-charge, 5 days with in-situ campaign, 20 participants
June 2017	OPTO-CH 2017 training workshop “Laser technologies in Cultural Heritage analysis, diagnosis and conservation”, Scientist-in-charge, 6 days with in-situ campaign, 15 participants, <u>admittance fee applied</u>
June-July 2016	OPTO-CH 2016 Training workshop “Laser technologies in Cultural Heritage analysis, diagnosis and conservation”, Scientist-in-charge, 6 days with in-situ campaign, 16 participants, <u>admittance fee applied</u>
Nov.-Dec. 2015	OPTO-CH, Hermitage 2015 , Scientist-in-charge, 4 week training-by-research program on laser ablation applications on historic metal, 4 metal conservators from State Hermitage Museum, St Petersburg, RU
Sept.-Oct. 2015	OPTO-CH, Hermitage 2015 , Scientist-in-charge, 4 week training-by-research program for 4 ceramics and glass conservators from State Hermitage Museum, St Petersburg, RU
May 2015	OPTO-CH, Politeia 2015 Training workshop “Laser technologies in Cultural Heritage analysis, diagnosis and conservation”, Scientist-in-charge, 8 days with in-situ campaign, 15 participants
Sept.-Oct. 2014	OPTO-CH, Hermitage 2014 , Scientist-in-charge, 4 week training-by-research program for 6 metal conservators from State Hermitage Museum, St Petersburg, RU
July 2014	OPTO-CH 2014, Politeia-Cleaning “Laser technologies in Cultural Heritage conservation”, Scientist-in-charge, 1 week, 13 participants
June 2014	OPTO-CH 2014, Politeia-Analytical “Advanced laser technologies for analysis, diagnostics and conservation of Cultural Heritage materials and monuments”, 1 week, 13 participants, organisation
June 2014	Scientist-in-charge, 4 week training by research program, V. Athannasova (Bulgarian Academy of Sciences)
June 2012	“Advanced laser-based techniques in art conservation, diagnostics and analysis” A “Charisma” project training course and workshop, 29 participants
February 2005	«Lasers for the Preservation of Cultural Heritage» An educational training course organized by IESL-FORTH in the framework of the EU Marie Curie Early Stage Training (EST) ATHENA (GA: MEST-CT 2004-504067)

Invited Talks/Seminars/Workshops

- Invited lecture in the public event titled "Heritage science: A global driver for sustainability", Beijing 27 September 2023
- Invited lecturer in the Workshop entitled "**Laser Technology for Analysis and Conservation of Heritage Objects**", organized by the **Palace Museum, Beijing**, within the framework of the joint "China-Greece Belt and Road Joint Laboratory on Cultural Heritage Conservation Technology", Beijing, China 25-27 September 2023
- Invited lecture "Laser-assisted removal of unwanted over-layers from paintings; Principles, Cleaning Methodologies and Monitoring of the Process", Restoration of decorated surfaces of architecture and easel paintings, Academia di Belle Arti, Aquila, Italy, 19 May 2022
- Invited lecture "Laser-assisted removal of unwanted over-layers from paintings; Principles, Cleaning Methodologies and Monitoring of the Process", MSc course "KKV224 Conservation of Organic Materials II", INSTITUTIONEN FÖR KULTURVÅRD, GÖTEBORGS UNIVERSITET, Sweden, 20 May 2020
- [HERACLES Winter School 2019](#) organized in Perugia, Italy "Monitoring and Mapping of Deterioration Products on Cultural Heritage Monuments Using portable Imaging and Laser Spectroscopy instrumentation", 18-19 March 2019
- Palace Museum, invited lectures, Oct 2017
- ART – SCIENCE- MUSEUM, series of training seminars organized by the State Hermitage Museum and ITMO, St Petersburg, Ru, invited lecture, Feb 2017
- Laser Cleaning Workshop for Art & Architecture, organized by the University of Pennsylvania Graduate Program in Historic Preservation, USA, invited lecture. 6-7 Oct 2016
- 1st IPERION-CH Summer Doctoral School, organized in Madrid, Spain, by CSIC (CENIM - CSIC and Instituto de Química Física "Rocasolano"), in collaboration with IPCE (Instituto del Patrimonio Cultural de España), Museo Nacional del Prado and Geomateriales Programme, invited, July 2016

Projects and Funding

Income from Grants (Euro): approximately 1.684.000 as PI

EU Projects - Coordination/ Scientist in Charge

2016-19	Scientist-in-charge for IESL-FORTH in " HERACLES: HEritage Resilience Against Climate Events on Site " (H2020-DRS-11-2015-700395), IESL-FORTH budget: 333.250,00 €
2004-08	Scientist-in-charge for IESL-FORTH in " PROMET: Developing new analytical techniques and materials for monitoring and protecting metal artefacts from the Mediterranean region " (FP6-2002-INCO-MPC-1- 509126), IESL-FORTH budget: 665.298,00 €

National Projects - Coordination/ Scientist in Charge

2022-2024	ADELAIS-Agile and precise paintings conservation: A robotic-guiDEd scheme for handling and monitoring Laser-assisted removal of Aged varnishes- Theodore Papazoglou FORTH Synergy Grants 2022, IESL-FORTH budget: 40.000,00 €
2020-2023	CALLOS - Conservation of Athens Antiquities with Laser and Lidar Technologies open to Science and Public (MIS- 5056208, NSFR 2013-2020, Open Innovation in Culture), IESL-FORTH budget: 290.489,00 €
2009-to date	The Acropolis Museum , Greece. « Laser rejuvenation of Caryatids opens to the public at the Acropolis Museum: A link between ancient and modern Greece »
2015	Bilateral collaboration with the German Archaeological Institute in Athens and the Ephorate of Antiquities in Athens for the " Laser cleaning of Agathon Naikos at archaeological Museum of Kerameikos "
2013-2014	Bilateral collaboration 25 th Ephorate of Prehistoric & Classical Antiquities " Preliminary tests on the use of lasers for the cleaning of gypsum surfaces from the Knossos Archaeological site " (Ministry of Culture/NSRF 2007-13)
2008-2011	Collaboration with the Committee for the Preservation of the Acropolis Monuments: « Laser cleaning project of the Caryatids' porch » Acropolis of Athens, Greece, Erechtheion
2008-2010	Bilateral collaboration with the Archaeological Museum of Aiani and 30 th Ephorate of Prehistoric & Classical Antiquities " Laser cleaning at the Aiani archaeological Museum "
2006-2010	Collaboration with the Greek Ministry of Culture (A' EPKA, Organization for the building of the Acropolis Museum, Committee for the Preservation of the Acropolis Monuments-YSMA, etc.) " Laser cleaning project of the Parthenon, Athena Nike and Erechtheion sculptures currently kept in the Museum of the Athens' Acropolis "
2005-07	Scientist-in-charge for the Greece-Romania Joint Research and Technology Program « The influence of laser irradiation on the organic components of Historic manuscripts » in collaboration with Technical University "Gh. Asachi" Iasi, Romania
2002-2004	Scientist-in-charge for the Greek-Italian cooperation in the framework of joint research and technology programs 2001-2003 entitled « Development of optimized laser methodologies for stone cleaning » in collaboration with IFAC-CNR, Florence

Other International Projects and Collaborations

2016-to date	Bilateral collaboration between IESL-FORTH and the Conservation dept of the PALACE MUSEUM in CHINA in the framework of the Chinese Key R&D Program [国资发科[2020]249号] "Strategic Scientific and Technological Innovation Cooperation" Key Special Project for 2020 "One Belt One Road" Joint Laboratory Orientation Project: China-Greek Cultural Relics Protection Technology Joint Research, with the aim to organize a common Laser Technology Joint Laboratory on Cultural Heritage
2008-09	Scientist-in-charge for the bilateral collaboration with " Integrated Conservation Resources, Inc " (A. Trienens & G. Bournazian) for the project " St Trophime Cloister, Arles, France; on-site laser cleaning Campaign " funded by the World's Monument Fund

EU Projects - Participation

2020-24	Participation in the research team of “ IPERION-HS: Integrating Platforms for the European Research Infrastructure ON Heritage Science ” (H2020-INFRAIA-2019-1, under GA No. 871034)
2015- 18	Participation in the research team of “ IPERION-CH: Integrated Platform for the European Research Infrastructure ON Cultural Heritage ” (H2020-INFRAIA-2014-2015-654028)
2009- 14	Participation in the research team of “ CHARISMA: Cultural Heritage Advanced Research Infrastructures: Synergy for a Multidisciplinary Approach to Conservation/ Restoration ” (INFRA-2008-1.1.1 Bottom-up approach-228330)
2004-08	Participation in the scientific team of “ ATHENA- A Scientific Training for High Education Initiatives in Art Conservation ” Marie Curie Host Fellowships – EST (FP6-MEST-CT-2004-504067)

National Projects - Participation

2017-19	HELLAS-CH , “Synergy ELI - LASERLAB Europe, HiPER & E-RIHS.gr ”, (MIS 5002735) Major project on the National Research Infrastructures Roadmap. Co-ordinator: Prof. D. Charalambidis (FORTH), Team involvement: P. Pouli, D. Anglos
2017-2019	“ POLITEIA II- Advanced analytical, diagnostic, surveying and documentation technologies in Cultural Heritage II ”, “Action for the Strategic Development on the Research and Technological Sector”, (NSRF 2014-2020), MIS-5002478
2013-2015	“ POLITEIA- Advanced analytical, diagnostic, surveying and documentation technologies in Cultural Heritage ” “Action for the Strategic Development on the Research and Technological Sector”, (NSRF 2007-2013), MIS-448300
2012-14	« LACUNH- Development of a standard laser technology for cleaning evidence of Cultural and Natural Heritage », “Archimedes III” funded by the European Social Fund and Greek National Strategic Reference Framework (NSRF), coordinator Prof. G. Panagiaris TEI of Athens Dept. of conservation of antiquities and works of arts
2012-14	« COMASUCH, Sustainability and Compatibility of Advanced Materials and Technologies for The Protection of Cultural Heritage Monuments: Development of Investigation Criteria And Methodologies », THALES, funded by the European Social Fund and Greek National Strategic Reference Framework (NSRF), coordinator Prof. A. Moropoulou, NTUA
2005-07	“ MOBILART: Mobile Laser Art Conservation Laboratory ” (GSRT), Community support framework III, Operational Program Competitiveness, Axis 4– Measure 4.5, Support Infrastructures for long-term viability of research, technological growth and demonstration actions, ΟΠΣ99884
2004-07	“ The application of new technologies for the cleaning of archaeological and historical metal objects; investigation of the possibility of applying laser technology and electrolytic methods ” ARCHIMEDES II, European Social Fund and National Resources-(EPEAEK II), coordinator Prof. V. Argyropoulos, TEI of Athens Dept. of conservation of antiquities and works of arts
2003- 06	Deputy coordinator in “ LASTOR- Lasers for Stonework restoration ” (GSRT), Community support framework III, Operational Program Competitiveness, Axis 4 – Measure 4.5, Culture – Knowledge Intensive Tourism, Code Π14
2002	Development of a laser and a methodology for the cleaning of West Parthenon Frieze

TNA Activities

2024 April	ULF-FORTH-27277	Diagnose- laser cleaning of daguerreotypes , Diego Quintero, Jana Striova, CNR, Italy
2024 March	IPERION-HS FIX_203	LaCOxPaS “Laser Cleaning of Oxalate patinas on Painting Surfaces (LaCOxPaS)”, Ilaria Pecorelli, Chiara Cardinalli, Grazia de Cesare, Italy
2024 February	IPERION-HS FIX_150	EgGilWood “Removing dirt from Egyptian gilded wooden artefacts using Laser radiation” Mohamed Moustafa, Egypt
2023 November	IPERION-HS FIX_146	ByzWall “Laser assisted removal of candles’ soot and biodeterioration from Byzantine wall paintings; investigation of the optimal parameters and assessment of the cleaning result”, Ivi Hadjigeorgiou, Cyprus
2023 October	IPERION-HS FIX_120	ReGlaze “Restoration of historic ceramic tiles via glaze lacunae re-glazing using lasers”, Lurdes Esteves Brito, Silvia Pereira, Portugal
2023 July	IPERION-HS FIX_108	LASART “Laser cleaning of gilded and varnished artefacts”, Magda Iwanika, Anna Faron, Poland
2022 June	IPERION-HS FIX_26	LaMPaPlas “Laser on Modern Paints and Plastics”, Grazia deCesare, Academia di Belle Arti, Aquila, Italy

2022 May	IPERION-HS FIX_53	LASI "Laser-assisted removal of lacquer from silver alloy objects; investigation for optimum parameters and assessment of the result", Charlotta Bylund-Melin and Stavroula Golfomitsou, Göteborgs Universitet, Sweden
2017 2 weeks	ULF-FORTH- 002342	"Study of the interactions of laser radiation with vitreous and ceramic surfaces. Potentials on using lasers as restoration tools of historic ceramics (Azulejos)", Silvia R. Morais Pereira, LNEC, Portugal
2016 3 weeks	ULF-FORTH- 002211	"Non-linear microscopy for assessing photochemical modifications upon laser removal of varnishes used in paintings", Mohamed Oujja, SCIC, Spain
Nov. 2012, 4 weeks	ULF-FORTH- 001880	"DHSPI testing of laser-cleaned model fresco fragments for differentiating the possible photomechanical effects induced by the laser cleaning", Ivett Kisapati, Dr. Zs. Márton, University of Pécs, Institute of Physics, Hungary <u>PUBLICATION</u> : Holographic testing of possible mechanical effects of laser cleaning on the structure of model fresco samples, Zs. Márton, I. Kisapáti, Á. Török, V. Tornari, E. Bernikola, K. Melessanaki and P. Pouli, NDT&E INTERNATIONAL (2014)
March 2010, 2 weeks	ULF-FORTH- 001594	"Evaluation of structural modifications in laser-cleaned fresco fragments by means of holographic interferometry", Dr. Zs. Márton, I. Kisapati, University of Pécs, Institute of Physics, Hungary <u>PUBLICATION</u> : Laser cleaning of excavated fresco fragments; testing & optimization of laser parameters & structural monitoring by means of Digital Holographic Speckle Pattern Interferometry, Zs. Márton, I. Kisapáti, P. Pouli, E. Bernikola, V. Tornari, Lasers in the Conservation of Artworks - LACONA IX proceedings, eds D. Saunders, M. Strlic, C. Korenberg, N. Luxford and K. Birkholzer, Archetype publications Ltd, London, 59-66 (2013)
2008, 2 weeks	ULF-FORTH- 001360	"Cleaning of tarnishing on silver and silver gilded threads on silk textiles using laser in the UV and VIS range", Bodil Taarnskov, The National Museum of Denmark
2006, 2 weeks	ULF-FORTH- 001296	"Investigating and optimising the laser cleaning of archaeological metal finds" C. Korenberg, British Museum, UK <u>PUBLICATIONS</u> : <ul style="list-style-type: none"> • "Investigating and optimizing the laser cleaning of corroded iron", C. Korenberg, A.M. Baldwin, P. Pouli, 285-290 (2008). • "Investigating the laser cleaning of archaeological copper-alloys using different laser systems", C. Korenberg, A. Baldwin, P. Pouli, 291-296 (2008) <i>In the Proceedings of the 7th International Conference on Lasers in the Conservation of Artworks (LACONA VII), Eds. Castillejo et al., Taylor and Francis group, London</i>
2006 2 weeks	ULF-FORTH- 001120	"Laser technology for cleaning and restoring frescoes of the Monumental Cemetery of Pisa (Italy)", M. P. Colombini, A. Fedi, A. Andreotti, I. Bonaduce, University of Pisa <u>PUBLICATIONS</u> : <ul style="list-style-type: none"> • "Laser assisted removal of synthetic conservation materials from paintings using UV radiation of ns & fs pulse duration; morphological studies on model samples", P. Pouli, A. Nevin, A. Andreotti, P. Colombini, C. Fotakis, Ap.Surf.Sc., 255, 4955 (2009) • "Multianalytical Study of Laser Pulse Duration Effects in the IR Laser Cleaning of Wall Paintings from the Monumental Cemetery of Pisa" A. Andreotti, M. P. Colombini, A. Nevin, K. Melessanaki, P. Pouli, C. Fotakis, Laser Chemistry, vol. 2006, Article ID 39046 (2006)

Laser Cleaning projects

2010- 2021	<p>«<i>Laser rejuvenation of Caryatids opens to the public at the Acropolis Museum: A link between ancient and modern Greece</i>» <i>The Acropolis Museum, Greece</i></p> <p>A unique conservation project took place within the past decade at the Acropolis Museum, entailing the laser-assisted removal of unwanted material from the delicate surface of the Athens Acropolis Sculptures. Highlight of this interdisciplinary conservation effort is the laser treatment of Caryatids in situ at their exhibition site at the Acropolis Museum in an arrangement that brings the visitors of the Museum in contact with the conservation interventions that until now took place only inside restricted access laboratory environments. This exhibits a symbolic connection between ancient and modern Greece, which is open to public. In this context the Acropolis Museum and IESL-FORTH have been awarded the 2012 Keck Award by the International Institute for Conservation of Historic and Artistic Works (IIC) for their collaboration regarding the “<i>laser rejuvenation of Caryatids opens to the public at the Acropolis Museum: A link between ancient and modern Greece</i>”</p>
Feb. 2015	<p>Archaeological Museum of Kerameikos, Athens, Greece</p> <p>“Laser-assisted removal of surface deposits from Agathon burial monument and other sculptures exhibited at the Archaeological Museum of Kerameikos” in a collaborative effort between IESL-FORTH, the Deutsches Archäologisches Institut in Athens and the Ephorate of Antiquities of Athens”</p>
03/ 2009	<p>St Trophime Cloister, Arles, France. On-site laser cleaning campaign in collaboration with Amanda Thomas Trienens and Glenn Bournazian (Integrated Conservation Resources, Inc)</p>
2006- 10	<p>Acropolis of Athens, Greece, A’ Ephorate of prehistoric and classical antiquities, «<i>Laser cleaning project of the Parthenon, Athena Nike and Erechtheion sculptures currently kept in the Museum of the Athens’ Acropolis</i>»</p>
2008- 11	<p>Acropolis of Athens, Greece, Erechtheion, Committee for the Preservation of the Acropolis Monuments «<i>Laser cleaning project of the Caryatids’ porch</i>»</p>
2008-2010	<p>Archaeological Museum of Aiani and the 30th Ephorate of Prehistoric & Classical Antiquities (EPCA)</p> <p>“Removal of surface deposits from the sculptures of Aiani Archaeological Museum with laser irradiation in a collaborative effort between IESL-FORTH, the Archaeological Museum of Aiani and the 30th EPCA”</p>
8/2000- 2005	<p>Acropolis of Athens, Greece, Parthenon, Committee for the Preservation of the Acropolis Monuments, «<i>Application of laser technologies for the cleaning of the West Parthenon Frieze surface</i>». The project aimed to:</p> <ul style="list-style-type: none"> • study and establish the optimum laser parameters for the development of a laser cleaning methodology to suit the needs of the West Parthenon Frieze(8/2000- 4/2002) • the development of a prototype Nd:YAG laser system to carry out experiments on-site (6/2002- 3/2003) • the training of the conservators (3-5/2003) • the scientific and technical support of the whole laser cleaning project (8/2000- 2005).
2/2001- 3/2001	<p>Ancient Messene Excavation, Peloponnese, Greece</p> <p>Scientific and technical consultancy on a laser-cleaning project of a marble statue of the roman period with Q-switched IR radiation. In Collaboration with “Lithou Sintirissis”</p>
02-07/97	<p>Lincoln-Loughborough Romanesque Frieze Laser Research, UK</p> <p>Organised and carried out the research project in collaboration with the Works Department of Lincoln Cathedral towards a specialised application of laser cleaning on the famous Romanesque frieze. The aims were to increase knowledge on the field including analysis of the laser cleaned surfaces, comparison of the laser technique with the conventional ones, investigation on the feasibility of on-site application, preservation of polychromy and health and safety implementation.</p>
11/96	<p>St. Mary’s Parish Church, Nottingham, UK</p> <p>Laser cleaning trials on the internal decorative alabaster monuments. Collaboration with a private conservation company aiming at practical investigation of the laser cleaning technique and comparison with conventional cleaning methods.</p>
01/96	<p>Lincoln Cathedral, Lincolnshire, UK.</p> <p>Laser cleaning practice and training on the conventional methods of conservation of stone on site</p>

Participation in Conferences

18-19 NOV. 2022

China-Europe Forum on Conservation Science and Technology for Cultural Heritage- 2022 Seminar: Conservation for Museum Collections / Beijing, China- Hybrid

ORAL: Enlightening heritage objects and monuments with laser light; analysis, diagnosis and conservation, P. Pouli

12-16 Sept. 2022

LACONA 13- 13th International Conference on Lasers in the Conservation of Artworks / Florence, Italy

Posters:

1. "Methodology development for the successful removal of coexisting biofilms and black crusts on archaeological stonework using the 2wavelength laser cleaning approach", E. Kourti, A. Giakoumaki, K. Melessanaki, P. Pouli (3rd BEST POSTER AWARD)

2. "Laser-assisted removal of lacquer from silver alloy objects; investigation for optimum parameters and assessment of the result", Ch. Bylund-Melin, S. Golfomitsou, E. Dimitroulaki, K. Melessanaki, P. Pouli

3. "Heritage Annotator: A Tool for Documenting, Browsing and Exploring Culture Heritage Data", Petrakis K., Paterakis M., Angelakis D., Melessanaki K., Hatzigiannakis K., Giakoumaki A., Philippidis A., Siozos P., Sotiropoulou S. Pouli P., Bekiari C.

4. "Laser irradiation of modern paints and plastics: Research of the threshold limits of F with different lasers" G. De Cesare, E. Dimitroulaki, E. Kourti, K. Melessanaki, P. Pouli

Other presentations:

1. "Photoacoustic monitoring of UV laser ablation of aged varnish coatings on Heritage objects", G. J. Tserevelakis, K. Melessanaki, G. Zacharakis, P. Pouli

2. "Development of a hybrid portable instrument performing LED-Induced Fluorescence, LIBS and Diffuse Reflectance for an integrated study of varied surface layers/deposits on monuments", A. Giakoumaki, V. Piñon, K. Hatzigiannakis, M. Andrianakis, K. Melessanaki, P. Pouli and D. Anglos.

7 July 2022

Ημερίδα - SmartEye Η χρήση νέων τεχνολογιών στη διάχυση της αρχαιολογικής πληροφορίας/ Aristotle Univ. Of Thessaloniki-Hybrid

Other presentations: "CALLOS PROJECT: Ψηφιακή τεκμηρίωση και διάχυση στο ευρύ κοινό δεδομένων συντήρησης αρχαιοτήτων και έργων τέχνης", Αμπατζιόγλου Ε., Αυλωνίτου Λ., Κυροπούλου Δ., Ξηραδάκη Π., Τότου Γ., Ανάγνος Θ., Δελλής Σ., Παπαδόπουλος Ο., Πετράκης Κ., Αγγελάκης Δ., Χαραμή Λ., Γιακουμάκη Α., Μελεσανάκη Κ., Πουλή Π.

21-22 Dec. 2021

Launching Ceremony of Joint Laboratory Construction & Opening Ceremony of China-Greece Belt and Road Joint Laboratory on Cultural Heritage Conservation Technology / China-Hybrid

ORAL: "Laser cleaning principles and challenges", P. Pouli

20-21 Dec. 2021

«Ψηφιακό Αποσφράγισμα Αγιωνύμων νήσων» / Cyprus- hybrid

Εκκλησιαστικός πολιτιστικός πλούτος μεθοδολογίες ψηφιακής αποτυπωσης και βελτιστοποιήσεις (Διάχυση καινοτομιών επιτευγμάτων του έργου INTERREG V-A Ελλάδα-Κύπρος 2014-2020)

ORAL: "Μη επεμβατικές οπτικές και φασματοσκοπικές μεθοδοι με λειζερ για τη χημική ανάλυση και τη διαστρωματική μελέτη πινακων και τοιχογραφιών", P. Pouli

13-15 Dec. 2021

TMM-CH 2021, 2nd Int. Conference on transdisciplinary multispectral modelling and cooperation for the preservation of cultural heritage / Athens, Greece- hybrid

ORAL: “Opening laser laboratories physically and digitally to the public; challenges and prospects”, P. Pouli, D. Anglos, Ch. Bekiari, C. Vasiliadis

ORAL: “OPTO-CH summer courses on laser analysis, diagnosis and conservation of Heritage objects and Monuments; content, experiences and future prospects”, P. Pouli, K. Melessanaki, D. Anglos, A. de Tagle

Other presentations: “A multi- and interdisciplinary methodological approach for monitoring Cultural Heritage Built Assets: the HERACLES experience”, A. Siatou, G. Alexandrakis, P. Pouli, A. Curulli, E. Kavoulaki, Sn. Knezic, G. Padeletti

20-23 Sept 2021

12th International Conference on Instrumental Analysis Modern Trends and Applications / Thessaloniki, Greece- Hybrid

Poster: Development of a portable LED-IF instrument for the characterisation of biodeterioration on monuments, A. Giakoumaki, V. Piñon, K. Melessanaki, K. Hatzigiannakis, P. Pouli, and D. Anglos

14-15 May 2021

ΣΣΑΕΤΤΕ - Δημερίδα Συντηρητές σε Ψηφιακό Περιβάλλον / Athens, Greece- Hybrid

Other presentations: “DIAGNOSIS - POLYGNOSIS: προτυπα τεκμηρίωσης αναλυτικών διαδικασιών και εργαλεία ψηφιακής διαχείρισης ερευνητικών δεδομένων με τεχνικές laser σε μνημεία και έργα πολιτιστικής κληρονομιάς”, Δ. Αγγελάκης, Ε. Πατεράκης, Κ. Πετράκης, Χ. Μπεκιάρη, Σ. Σωτηροπούλου, Π. Πουλή, Κ. Μελεσανάκη, Κ. Χατζηγιαννάκης, Π. Σιώζος

9-12 Oct. 2019

7ο Συμπόσιο Αρχαιομετρίας της ΕΑΕ, Αρχαιολογία - Αρχαιομετρία 30 Χρόνια μετά / Athens, Greece

Other presentations: IPERION-CH.gr: Καινοτομικές μέθοδοι, τεχνικές και εργαλεία με εφαρμογές στην ανάλυση, διάγνωση, τεκμηρίωση, μελέτη, προστασία και ανάδειξη αρχαιολογικών αντικειμένων, έργων τέχνης, ιστορικών μνημείων και αρχαιολογικών χώρων. Δ. Άγγλος, Π. Πουλή, Σ. Σωτηροπούλου

Oct. 2018

TMM-CH 2018, Athens, Greece, 1st Int. Conference on Transdisciplinary Multispectral Modelling and Cooperation for the Preservation of Cultural Heritage / Athens, Greece

ORAL: “Monitoring and mapping of deterioration products on CULTURAL Heritage monuments using imaging and laser spectroscopy”, P. Pouli, K. Hatzigiannakis, K. Melessanaki, A. Philippidis, O. Kokkinaki, E. Kalokairinou, P. Siozos, E. Politaki, A. Psaroudaki, A. Dokoumetzidis, E. Katsaveli, E. Kavoulaki, V. Sithiakaki.

Sept. 2018

LACONA 12- 12th International Conference on Lasers in the Conservation of Artworks / Paris, France

ORAL: “Restoration of Historic Glazed Ceramics by Means of Laser Irradiation”, P. Pouli, K. Hatzigiannakis, S. Pereira, E. Polychronaki, E. Bernikola, K. Melessanaki, J. Mimoso.

Other presentations:

1. “Monitoring laser-assisted removal of aged varnish from paintings with laser-induced fluorescence spectroscopy a critical discussion on its potential” E. Dimitroulaki, P. Pouli, O. Kokkinaki, K. Melessanaki, M. Daugherty, K.J. vanden Berg
2. “Listening to Laser Light Interactions with Objects of Art: a Novel Photoacoustic Diagnosis Approach”, G. Tserevelakis, A. Dal Fovo, M. Tsagkaraki, I. Vrouvaki, P. Siozos, K. Melessanaki, R. Fontana, P. Pouli, G. Zacharakis

Posters:

1. “The Sound of Laser Ablation Photoacoustic Monitoring for the Understanding of IR and UV Laser Cleaning Mechanisms” A. Papanikolaou, G. Tserevelakis, K. Melessanaki, G. Zacharakis, P. Pouli
2. “Portable Laser Analysis for the in-Situ Characterization and Monitoring of Environmental Deterioration on Stone Monuments; a Challenge Within Heracles Project”, P. Pouli, A. Filippidis, K. Melessanaki, O. Kokkinaki, P. Siozos, E. Kalokairinou, E. Kavoulaki, E. Politaki, A. Psaroudaki, K. Hatzigiannakis.

FEBR. 2017

ART – SCIENCE- MUSEUM / series of seminars organized by the State Hermitage Museum and ITMO, St Petersburg, Russia

➤ **INVITED TALK:** *Enlightening the glory of Cultural Heritage objects and monuments; laser analysis, diagnosis and conservation*

Sept. 2016

LACONA 11, 11th International Conference on Lasers in the Conservation of Artworks/ Cracow, Poland

ORAL: “Building comprehensive management systems for handling and disseminating information recorded upon laser analysis, diagnosis and conservation, P. Pouli, D. Anglos, M. Doerr, Ch. Bekiari.

Other presentations:

1. “Non-linear microscopies for the assessment of photochemical modifications upon laser removal of varnishes used in paintings”, M. Castillejo, M. Oujja, S. Psilodimitrakopoulos, E. Carrasco, G. Filippidis, A. Selimis, A. Philippidis, M. Sanz, P. Pouli.
2. “Towards the understanding of the two wavelength laser cleaning in avoiding yellowing on stonework”, A. Papanikolaou, K. Melessanaki, A. Philippidis, P. Siozos, K. Hatzigiannakis, P. Pouli
3. “Analytical studies to investigate the safeguarding of the original surfaces upon laser cleaning interventions at the Athens Acropolis monuments” G. Frantzi, K. Frantzikinaki, A. Panou, E. Papakonstantinou, A. Maridaki, P. Pouli, C. Fotakis

June 2016

Polymer and Organic Chemistry Conference 2016, Int. Conference organized by the Chemistry dept., Univ. of Crete / Crete, Greece

ORAL: Laser-assisted removal of aged and/or deteriorated polymeric over-layers from paintings; recent research, practical issues and prospects, P. Pouli, K. Melessanaki, A. Selimis

Poster: Laser conservation of contemporary art; removal of retouching layers and stains from modern paintings and plastic supports, K. Melessanaki, P. Pouli, G. de Cesare

Nov 2015

SCinTE - Science in Technology 2015, Int. Conference organized by the TEI of Athens / Athens –Greece

ORAL: Development of a standard laser technology for cleaning evidence of proteinaceous Cultural and Natural Heritage, A. Papanikolaou, K. Melessanaki, A. Alexandropoulou, K. Giannaras, A. Karambotsos, E. Karantoni, E. Malea, S. Rapti, N.A. Stefanis, Y. Facorellis, S. Boyatzis, P. Pouli and G. Panagiaris

May 2015

Conservation of cultural Heritage, challenges and Reviews, Int. Conference organized by the TEI of Athens (Conservation dept.) and the Ministry of Culture (Directorate of Conservation)/ Athens, Greece

➤ **ORAL INVITED:** Laser cleaning pollution crusts from the Athens Acropolis sculptures and monuments; principles of operation and development of methodology.

Dec 2014

Conservators at Risk, Athens, Colloquium organized by the Greek Association of Professional Conservators or Antiquities and Works of art / Athens, Greece

➤ **ORAL INVITED:** “Laser radiation for the analysis and conservation of artworks and Cultural Heritage Monuments; Safety and good practice guide/ Η ακτινοβολία λέιζερ στη μελέτη & συντήρηση έργων τέχνης & μνημείων πολιτισμικής κληρονομιάς Ασφάλεια και ορθή χρήση”, P. Pouli

June 2014

LACONA X, 10th International Conference on Lasers in the Conservation of Artworks / Sharjah, UAE

➤ **ORAL INVITED:** *“Two wavelength laser cleaning; fine tuning the operative parameters for various materials and conservation challenges”*, P. Pouli

Posters:

1. Non-linear imaging microscopy modalities as innovative diagnostic tools for Cultural Heritage studies, G. Filippidis, M. Mari, L. Kelegkouri, K. Melessanaki, P. Pouli, C. Fotakis
2. “Laser assisted removal of dark cement crusts from the mineral gypsum (selenite) architectural elements from the peripheral monuments of the archaeological site of Knossos”, G. Grammatikakis, K. Demadis, K. Melessanaki, P. Pouli.
3. “Laser technology for the analysis and conservation of painted metal objects”, E. Katopodi, V. Argyropoulos, M. Florou, K. Melessanaki, A. Filippidis, V. Papadakis, P. Siozos, P. Pouli.
4. “Holographic evaluation of the structural condition of laser-cleaned model fresco samples”, Zs. Márton, I. Kisapáti, V. Tornari, E. Bernikola, K. Melessanaki, E. Tsiranidou, K. Hatzigiannakis, P. Pouli.

June 2013, 25-26

Workshop “New techniques for the non-invasive investigation of the surface and sub-surface structure of heritage objects”, Nicolaus Copernicus University / Toruń, Poland

➤ **ORAL INVITED:** *Laser tools in cultural heritage science and conservation; non-invasive analysis and management of cleaning interventions.*

June 2013, 27-28

Charisma Training on application of Optical Coherence Tomography (OCT) to structural analysis, Nicolaus Copernicus University / Toruń, Poland

➤ **ORAL INVITED:** Laser ablation monitoring with OCT, P. Pouli, K. Melessanaki, M. Iwanicka, Ł. Ćwikliński, P. Targowski

May 2013

6th Symposium of the Hellenic Society for Archaeometry / Athens, Greece

ORAL: Laser technology for diagnosis, analysis and conservation of Cultural Heritage objects and monuments: Recent advances and forthcoming challenges P. Pouli, K. Melessanaki, V. Tornari, D. Anglos, C. Fotakis.

Sept. 2011

LACONA IX, 9th International Conference on Lasers in the Conservation of Artworks / London, UK

ORAL:

1. “Studies of the affected region in the laser cleaning of polymeric coatings”, P. Pouli, A. Selimis, S. Kogou, G. J. Tserevelakis, G. Filippidis and C. Fotakis
2. “Real-time monitoring of laser cleaning using Digital Holographic Speckle Pattern Interferometry” E. Bernikola, K. Melessanaki, P. Pouli, K. Hatzigiannakis and V. Tornari

Other presentations:

1. “Wavelength and pulse duration effects on laser induced changes on raw pigments used in painting practices”, M. Oujja, P. Moreno, M. Sanz, E. Rebollar, S. Kogou, P. Pouli and M. Castillejo
2. “Laser cleaning of excavated fresco fragments; testing and optimization of laser parameters and structural monitoring by means of Digital Holographic Speckle Pattern Interferometry”, Zs. Márton, I. Kisapáti, P. Pouli, E. Bernikola, V. Tornari

Posters:

1. “Laser Removal of hard burial encrustation from ceramic shreds using Er:YAG and Nd:YAG laser irradiation”, S. Kogou, S. Chlouveraki, P. Pouli and C. Fotakis
2. “A high spatial and spectral resolution imaging system for the analysis of Cultural Heritage objects”, V. Papadakis, I. Orphanos, S. Kogou, K. Melessanaki, P. Pouli

Nov 26-28, 2010

Works of Art and Conservation Today 2010/ Thessaloniki, Greece

➤ **ORAL INVITED:** Laser cleaning of Cultural Heritage objects and Monuments; from laboratory investigations to real case applications

Sept. 2009

LACONA VIII, 8th International Conference on Lasers in the Conservation of Artworks / Sibiu, Romania

ORAL: "THE ROLE OF THE SUBSTRATE IN THE LASER CLEANING PROCESS; A STUDY ON THE LASER ASSISTED REMOVAL OF POLYMERIC CONSOLIDATION MATERIALS FROM VARIOUS SUBSTRATES", P. POULI, S. KOGOU, A. SELIMIS, S. GEORGIU, C. FOTAKIS

Other presentations:

1. "Analysis of wavelength and pulse duration laser effects on tempera paints", M. Oujja, S. Perez, P. Pouli, C. Fotakis, M. Castillejo
2. "Laser cleaning studies for the removal of sulphide from tarnished silver and gilt silver threads in silk textiles", B. Taarnskov, P. Pouli, J. Bredal-Jørgensen
3. "Laser assisted removal of lining glues from easel paintings", A. Chavalier-Menu, K. Melessanaki, E. Bernikola, V. Tornari, P. Pouli, C. Fotakis
4. "Laser cleaning of burial encrustation and aged protective coating on Egyptian leather; optimization of working conditions", A.A. Elnaggar, P. Pouli, M.A. Fouad, A. Nevin, G.A. Mahgoub

Posters:

1. "Laser cleaning of modern paintings; using model probes for the in depth assessment of laser induced modifications", P. Vounisiou, A. Selimis, K. Melessanaki, P. Pouli, G. Filippidis, C. Beltsios, S. Georgiou & C. Fotakis
2. "The Laser cleaning project of the architectural sculptures of the Acropolis Monuments", C. Vasiliadis, M. Gavrinotis, E. Maniadaki, G. Totou, P. Pouli, C. Fotakis
3. "A spectral imaging methodology for determining in-situ the optimum cleaning level of stonework", V. Papadakis, A. Loukaiti, P. Pouli
4. "The application of laser cleaning to the contemporary paintings", G.de Cesare, P. Vounisiou, K. Melessanaki, P. Pouli, C. Fotakis

June 2009

EMRS 2009 / Strasbourg, France

Posters:

1. "The use of model probes for assessing in depth modifications induced during the laser cleaning of modern paintings", P. Vounisiou, A. Selimis, K. Melessanaki, P. Pouli, G. Filippidis, C. Beltsios, S. Georgiou and C. Fotakis
2. "Wavelength and pulse duration effects on laser induced changes on unvarnished aged tempera paints", M. Oujja, S. Perez, P. Pouli, C. Fotakis, M. Castillejo

June 2009

SPIE 2009/ Munich, Germany

Poster:

"In-depth assessment of modifications induced during the laser cleaning of modern paintings", A. Selimis, P. Vounisiou, George J. Tserevelakis, K. Melessanaki, P. Pouli, G. Filippidis, C. Beltsios, S. Georgiou, C. Fotakis

April 2009

TechnArt 2009 / Athens, Greece

Posters:

1. A new spectral imaging approach for the in-situ assessment of the cleaning intervention on stonework, A. Loukaiti, V. Papadakis, P. Pouli
2. «Model probes for assessing in depth modifications induced during laser cleaning of modern paintings», P. Vounisiou, A. Selimis, K. Melessanaki, P. Pouli, G. Filippidis, C. Beltsios, S. Georgiou, C. Fotakis

Nov. 2008

“IRON”, Conservation colloquium organized by the archaeological Museum of Thessaloniki / Thessaloniki, Greece

➤ **ORAL INVITED:** Laser technology in the conservation of iron objects

Sept. 2007

LACONA VII, 7th International Conference on Lasers in the Conservation of Artworks / Madrid, Spain

ORAL INVITED: “Wavelength and pulse duration effects in the laser cleaning of Cultural Heritage Objects”, P. Pouli

Posters:

1. “Laser Cleaning Of Stonework: Effect Of Laser Irradiation And Analysis Of Crusts”, M. Oujja, P. Pouli, C. Fotakis, B. Hermosín, C. Sáiz-Jiménez, C. Domingo, M. Castillejo
2. “Laser cleaning of corrosion layers from the surface of engraved historic iron objects; preliminary studies and application on real objects”, P. Pouli, C. Fotakis, A. Siatou, V. Argyropoulos
3. “UV laser assisted removal of intractable synthetic polymers from the surface of wall paintings”, A., MP Colombini, A. Nevin, P. Pouli, C. Fotakis
4. “Investigating and optimising the laser cleaning of corroded iron”, C. Korenberg, A. Baldwin and P. Pouli
5. “Laser cleaning studies to remove dust from a taxidermy Paradisaeidae black bird”, E. Karantoni, E. Malea, K. Melessanaki, P. Pouli
6. “Preliminary study on laser assisted removal of past conservation polymeric materials from archaeological bone”, H. Delaunay, C. Korenberg, C. Ward, K. Melessanaki, A. Nevin and P. Pouli
7. “Investigating the laser cleaning of archaeological copper-alloys using different laser systems”, C. Korenberg, A. Baldwin, P. Pouli

June 2007

EMRS 2007/ Strasbourg, France

ORAL:

“Mechanistic studies of the laser assisted removal of synthetic conservation materials from wall paintings”, P. Pouli, A. Nevin, A. Andreotti, P. Colombini, C. Fotakis

Poster:

“Wavelength and pulse duration effects in the laser assisted removal of corrosion layers from historic iron alloys”, P. Pouli, C. Fotakis, A. Siatou, V. Argyropoulos

June 2006

Laser Optics 2006, Workshop “Lasers in the Preservation of Cultural Heritage”/ St.-Petersburg, Russia

Posters:

1. “Multi-analytical study of the Laser Pulse Duration Effect in the IR laser-cleaning of the Monumental Cemetery Wall paintings of Pisa”, A. Andreotti, M. P. Colombini, A. Nevin, K. Melessanaki, P. Pouli, C. Fotakis
2. “Ultrafast pulse lasers in cleaning applications of artefacts”, L. Bartoli, P. Pouli, G. Bounos, S. Georgiou, C. Fotakis
3. “A comprehensive study for the laser cleaning of corrosion layers on metallic objects of cultural value”, A. Siatou, V. Argyropoulos, P. Pouli

June 2006

HWC – 2006, Conference on Heritage, Weathering and Conservation Conference / Madrid, Spain

Poster: “The coloration effect associated with laser cleaning of stonework; a comprehensive study on its origins and evaluation of the suggested preventing methodologies”, P. Pouli, G. Totou, C. Fotakis, S. Gaspard, M. Oujja, M. Castillejo, C. Domingo

Sept. 2005

LACONA VI, 6th International conference on Lasers in the Conservation of Artworks / Vienna, Austria

ORAL:

1. "femtosecond laser cleaning of painted artefacts; is this the way forward?", P. Pouli et al
2. "A comprehensive study of the coloration effect associated with laser cleaning of pollution encrustations from stonework", P. Pouli et al.

Other presentations

1. "Laser cleaning studies on wall paintings;a preliminary study of various laser cleaning regimes", E.Dragasi et al.
2. "The Cleaning of the Parthenon West Frieze by Means of Combined Infrared and Ultraviolet Radiation", K. Frantzikinaki, G. Marakis, A. Panou, C. Vasiliadis, E. Papakonstantinou, P. Pouli, Th. Ditsa, V. Zafirooulos, C. Fotakis

Posters:

1. "the coloration effect due to infrared laser cleaning of pollution encrustations from monuments; model study and quantitative definition on simulated samples" G. Totou, P. Pouli, C. Fotakis
2. "Laser pulse duration effects for the cleaning of wall paintings", A. Andreotti, M.P. Colombini, A. Nevin, K. Melessanaki, P. Pouli, C. Fotakis (**BEST POSTER AWARD**)
3. "Removal of Simulated Dust from Water-Based Acrylic Emulsion Paints by Laser Irradiation at IR, VIS and UV Wavelengths", M. Westergaard, P. Pouli, C. Theodorakopoulos, V. Zafirooulos, J. Bredal-Jørgensen, U. Staal Dinesen
4. "Laser cleaning of stone stucco and plaster ornamental reliefs, the Benaki Islamic Art Collection", Y. Doganis, A. Galanos, P. Pouli

12-17/06/2005

17th International Conference on Photonics in Europe / Munich, Germany

Posters:

1. "The potential of femtosecond lasers for the cleaning of painted artefacts"
2. «A comprehensive study of the coloration effect associated with laser cleaning of pollution encrustations from stonework»

27/06/2004- 02/07/2004

10th International Congress on Deterioration and Conservation of Stone, ICOMOS / Stockholm Sweden

ORAL: "The combination of ultraviolet and infrared laser radiation for the removal of unwanted encrustation from stonework; a novel laser cleaning methodology

SepT 2003, 15 – 18

LACONA V, 5th International Conference on Lasers in the Conservation of Artworks / Osnabrueck, Germany

ORAL: "Pollution encrustation removal by means of combined ultraviolet and infrared laser radiation: The application of this innovative methodology on the surface of the Parthenon West Frieze",

Poster: "Laser cleaning studies of hard insoluble aluminosilicate crusts on Minoan (LM IIIC) pottery shreds"

OCT 2002, 4-6

5th International meeting for the Restoration of the Acropolis Monuments / Athens, Greece

ORAL: «the combined use of IR and UV laser pulses for sculpture cleaning; the application of this innovative methodology on the surface of the Acropolis monuments and sculptures»

SEPT 01, 11-14

LACONA IV, 4th International Conference on Lasers in the Conservation of Artworks / Paris, France

ORAL: "Studies towards a thorough understanding of the laser induced discoloration mechanisms of medieval pigments"

Poster: "Laser cleaning of inorganic encrustation on excavated objects: evaluation of the cleaning result by means of multi-spectral imaging"

April 99, 26-29

LACONA III, 3rd International Conference on Lasers in the Conservation of Artworks / Florence, Italy

ORAL: "The effect of Nd:YAG laser radiation on medieval pigments".

April 97, 23-25

LACONA II, 2nd International Conference on Lasers in the Conservation of Artworks / National Museums & Galleries on Merseyside, Liverpool, UK

ORAL: "Laser Cleaning of Internal and External Ecclesiastical Stonework"

July 96, 9-13

OWLS IV, 4th International Conference on Optics Within Life Science / Munster, Germany

Poster: "Laser cleaning with Nd:YAG".

4-6/10/95

LACONA I, 1st International Workshop on Lasers in the conservation of artworks / Heraklion, Greece

Participant,

Organised by the physics department, University of Crete in collaboration with the Foundation of Research and Technology, Institute of Electronic Structure and Lasers (FORTH-IESL).