RESEARCH DIVISION:	**Laser Interactions and Photonics**
ACTIVITY NAME:	Diagnostic Methodologies and Instrumentation/ Photonics for Heritage Science
Group members (number):	**Scientific staff:** e.g. 3/3, **postdocs:** 2/3, **PhDs:** -/1, **MScs:** -/1, **technicians:** 1/3. TOTAL: 6 / 11

PERSONAL INFORMATION

Surname, Name:	**ANGLOS, Demetrios** **Nationality:** Greek
Researcher unique identifier:	Google Scholar : https://scholar.google.com/citations?user=5MZsDa0AAAAJ&hl=de ResearcherID: A-2548-2014 (http://www.researcherid.com/rid/A-2548-2014)
URL for web site:	Prof. Anglos Demetrios | IESL-FORTH

CURRENT POSITION (S)

09/2016 – present:	Professor, Department of Chemistry, University of Crete

PREVIOUS POSITIONS

09/2009 - 09/2016	Associate Professor, Department of Chemistry, University of Crete
04/2005 - 09/2009	Principal Researcher, IESL-FORTH
11/2001 - 04/2005	Associate Researcher, IESL-FORTH
03/2001 - 12/2015	Technical Manager, Ultraviolet Laser Facility, IESL-FORTH
1999 - 2001	Research Scientist, IESL-FORTH
1995 - 1999	Post-doctoral Research. Fellow, IESL-FORTH

EDUCATION

1989-1994	PhD, Physical Chemistry, Cornell University, USA Thesis: Photoinduced intrapeptide electron transfer involving novel donor and acceptor amino acids: A triplet state approach
1986-1989	MSc, Physical Chemistry, Cornell University, USA
1980-1985	BSc, Chemistry, University of Athens, Greece

RESEARCH INTERESTS:	Laser spectroscopic techniques in materials analysis – Applications in Heritage Science Molecular and nanoparticle photophysics and photochemistry – Photonic sensing applications
RESEARCH FUNDING:	approx. 2.4 M€ as PI (since 2010)

PUBLICATIONS IN INTERNATIONAL REFEREED JOURNALS

Nr. of published papers: 107 **Nr. of patents:** -

Journal Distribution: Spectrochim. Acta B (13), Appl. Spectosc. (8), Appl. Phys. A (8), Appl. Surf. Sci. (6), Anal. Bioanal. Chemistry (4), J. Arch. Sci. (4), Analytical Chemistry (2).

Nr. of keynote and invited talks in conferences/summer schools/workshps/colloquia: 25 Invited (conferences)

Nr. of citations (C) and h-factor: C = 4660, h = 40 (Researcher ID) and C = 6585, h = 43 (google scholar)

Awards: - -

SHORT TERM GOALS

1 Introducing micro-LIBS instrumentation in archaeological and paleontological research for obtaining rapid elemental imaging of stones, hard tissues etc.

2 Developing protocols based on fluorescence, SERS and NMR spectroscopy for the screening and analysis of bio-organic residues in historical and archaeological contexts.

LONG TERM GOALS

1 Establishing, in the field of heritage science, efficient analytical methods based on molecular and/or atomic spectroscopies coupled to mobile instrumentation

2 Working towards a European Research Infrastructure for Heritage Science

RESEARCH HIGHLIGHTS

1 P. Siozos et al "Application of laser-induced breakdown spectroscopy and neural networks on archaeological human bones for the discrimination of distinct individuals", J. Arch. Science: Reps, **35**, 102769 (2021); doi.org/10.1016/j.jasrep.2020.102769

2 G. Flouda et al "Materials analyses of stone artifacts from the EBA to MBA Minoan Tholos Tomb P at Porti, Greece (Crete), by means of Raman spectroscopy: Results and a critical assessment of the method", J. Arch. Science: Reps, **32**, 102436 (2020); doi.org/10.1016/j.jasrep.2020.102436

3 N. Hausmann et al “Extensive elemental mapping unlocks Mg/Ca ratios as climate proxy in seasonal records of Mediterranean limpets”, Scientific Reports, **9**:3698 (2019); doi.org/10.1038/s41598-019-39959-9

4 O. Kokkinaki et al “Assessing the type and quality of high voltage composite outdoor insulators by remote LIBS analysis: A feasibility study”, Spectrochimica Acta Part B **165**, 105768 (2020); doi.org/10.1016/j.sab.2020.105768

5 Klini et al “Low Energy Pulsed Laser Excitation in UV Enhances the Gas Sensing Capacity of Photoluminescent ZnO Nanohybrids”, Sensors, **19**, 5490 (2019); doi:10.3390/s19245490)

6 K. Marmatakis et al “Elemental and molecular analysis of metal containing biomolecules using laser induced breakdown spectroscopy and sonic spray ionization mass spectrometry: A step towards full integration and simultaneous analysis”, Spectrochimica Acta Part B **126**, 103-109 (2016); doi: 10.1016/j.sab.2016.10.020

7 L. Bertrand et al “Mitigation strategies for radiation damage in the analysis of ancient materials”, *TrAC* **66**, 128-45 (2015); doi: 10.1016/j.trac.2014.10.005

a. Klini et al “ZnO−PDMS Nanohybrids: A Novel Optical Sensing Platform for Ethanol Vapor Detection at Room Temperature” *J. Phys. Chem C* **119**, 623-31 (2015); doi: 10.1021/jp506632d

8 A.B. Bourlinos et al "Surface Functionalized Carbogenic Quantum Dots" *Small* **4**, 455-458 (2008); doi:10.1002/smll.200700578

9 V. Piñon et al "Double pulse LIBS with femtosecond laser pulses" C. Fotakis, G. Nicolas D. Anglos, *Spectrochimica Acta Part B* **63**, 1006-10 (2008)