ANASTASIA GIAKOUMAKI

PERSONAL INFORMATION



- Nationality: Greek
- Date of birth: 17.01.1979
- Place of Birth: Athens, Greece
- E-mail: annie.giakoumaki@gmail.com, agiakoumaki@iesl.forth.gr
- Research gate webpage:
 https://www.researchgate.net/profile/Anastasia Giakoumaki/?ev
 = hdr xprf
- Linkedin webpage: https://www.linkedin.com/in/anastasia-giakoumaki-b34358b0/

EDUCATION

2004 - 2008 Ph. D. in Materials Science and Technology

"Development of spectroscopic laser instrumentation for the characterization and analysis of materials in archaeological objects and artworks"

Department of Materials Science and Technology, University of Crete, Greece

2002 - 2003 M. Sc. in Protection of monuments - Materials and Techniques of Conservation (9.16/10)

School of Architecture, National Technical University of Athens, Greece

1997 - 2002 **Diploma in Chemical Engineering** (7.87/10)

School of Chemical Engineering, National Technical University of Athens, Greece

EXPERIENCE

- September 2020 present: Experienced Research Assistant, Institute of Electronic Structure and Laser, Foundation for Research and Technology, Greece
- June 2014 August 2020: Senior application scientist, Applied Photonics Ltd, UK R&D in laser spectroscopy for the analysis and characterisation of materials. Conduction of feasibility studies including literature reviews and experimental investigations on the use of LIBS in a wide range of applications. Preparation of technical reports. Optical analytical systems mechanical assembly and optical alignment and optimisation. Generation of application notes, technical notes, presentations, product datasheets. Company's website upgrade. Support of existing customers with LIBS method development. Interaction with hardware and software engineers to improve system user experience and to enhance hardware/software features.
- August 2011 May 2014: Contracted Post-Doctoral Researcher, University of the Basque Country, Department of Analytical Chemistry, Spain.
 Experimental investigations using spectroscopic techniques, like LIBS, Raman, XRF and IR for the analysis and characterisation of materials in archaeology and art. Study of their deterioration products for their effective conservation.
- March July 2011: Contracted Post-Doctoral Researcher, Laser Centre, Polytechnic University of Madrid, Spain Fundamental laser plasma studies

- September 2009 April 2010: Marie Curie Post-Doctoral Fellow, University of Murcia, Laboratory of Optics, Spain
 - Experimental investigations of non-linear imaging techniques (two-photon excitation fluorescence and second harmonic generation) for the study of ocular tissues.
- June 2004 February 2009: Researcher with scholarship, Foundation for Research and Technology - Institute of Electronic Structure and Laser, Crete, Greece
- Spring semesters 2005 2008: Teaching assistant, Laboratory of General Chemistry (Department of Materials Science and Technology-University of Crete)
- Spring semester 2005: Teaching assistant, Laboratory of "Methods for the production of soft matter" (Department of Materials Science and Technology-University of Crete)
- Winter semester 2004: Teaching assistant, Laboratory of Physics I (Department of Materials Science and Technology-University of Crete)
- November 2003 May 2004, Scientific collaborator, School of Chemical Engineering NTUA (Department of Materials Science and Technology)
 Studies on the use of building materials compatible with historic masonries for their conservation/preservation
- July August 2001, Trainee, Electronic Parts & Components (EPCOS), Deutschlandsberg, Austria
 - Research on the manufacture of piezoelectric materials
- July August 2000, Trainee, Bundesanstalt f
 ür Materialforschung und –pr
 üfung Berlin, Germany
 Metallographic research of aluminium alloys

LANGUAGES

- Greek native speaker
- German fluent (Kleines Deutsches Sprachdiplom)
- English fluent (First Certificate in English, 5 years English resident)
- Spanish fluent (5 years Spanish residency)
- French basic (lessons during 6 years of high school)

COMPETENCIES AND ACHIEVEMENTS

- 28 publications in international scientific journals, books and conference proceedings
- 39 oral and poster presentations in international scientific conferences
- Reviewer in scientific journals (Journal of Raman Spectroscopy and Spectrochimica Acta, Part B, Applied Spectroscopy)
- Laser Safety Workshop attendance (National Physical Laboratory-Training Personnel Competency Standard 2015, UK)
- Member of the Technical Chamber of Greece
- Informatics knowledge: Microsoft Office, Origin, Internet, Autocad 2D
- Participated in campaigns for the in situ analysis of archaeological objects and works of art in various countries, like Greece, Italy, Spain, Syria and Jordan
- Tutor of the Master Thesis of Estefanía Calparsoro: "Deterioration of construction stone materials induced by atmospheric contaminants: blackening" (University Master in restoration and integrated management of the constructed heritage of the University of the Basque Country UPV/EHU)
- Member of the committee of the Ph.D. thesis of Julene Aramendia Gutierrez: "Analytical diagnosis of the conservation state of weathering steel exposed to urban atmospheres", Department of Analytical Chemistry, University of the Basque Country
- Participated in the organization of seminars and schools: Winter school and Annual Meeting of Myeuropia European Project (18-20/01/2010 Murcia Spain), Training course through the ATHENA European Project- Lasers for the preservation of cultural heritage

- (07-11/02/2005, Heraklion, Greece) and the Advanced study course ITECOM-Innovative technologies and materials for the conservation of monuments (08-20/12/2003, Athens, Greece)
- Attented courses of Optics in the Spring Semester of 2007, Spectroscopy in the Winter Semester of 2006 and Materials Analysis in the Spring semester of 2005 (University of Crete)
- Volunteer work in the administrative department of the International Association for the Exchange of Students for Technical Experience (IAESTE)
- Car licence, Sailing licence, mandolin, theatre, pilates, contemporary dance

AWARDS

- Post-graduate fellowship of the Greek State Scholarships Foundation (2004-2008)
- Second prize on poster presentation under the subject "Spectroscopic analysis using a hybrid LIBS – Raman system", A. Giakoumaki, I. Osticioli., D. Anglos in the "Euro-Mediterranean Symposium on Laser-Induced Breakdown Spectroscopy - EMS-LIBS 2005" Aachen, Germany (6–9 September 2005)
- Third prize on poster presentation under the subject "A survey over the capabilities of LIBS in the quantification of archaeological copper alloys", A. Giakoumaki, A. Doridot, L. Robbiola, D. Anglos in the "Laser-Induced Breakdown Spectroscopy 2008" Berlin, Germany (22-26 September 2008)

RESEARCH PROJECTS

- Spanish project "Análisis de pinturas prehistóricas al aire libre. 4D Arte Rupestre" financed by the Secretary of the State of Culture of the Ministry of Education, Culture and Sports of the Spanish Government 26/11/2013- 15/03/2014, Total cost: 3200 €
- DEMBUMIES, Deterioration of Stone Construction Materials induced by Urban Ambient Contaminants (DEMBUMIES) Financing institution: Spanish Ministry of Economy and Competitiveness (MINECO), Construction Program, (ref. BIA2011-28148) Duration: January 2012 December 2014, Total cost: 191.180 €
- Grupo consolidado of the University of the Basque Country
- Spanish project US12/16 with collaboration with the Museum of Fine Arts of Bilbao for the "Transference and implantation of a non-destructive analysis methodology for the evaluation of the conservation state of pieces of Japanese art with high content of metallic alloys-TIMEJAM"
- Spanish national project FIS2010-14926 "Photonic technologies for the study of the eye and vision" of the Department of Physics of the University of Murcia, Spain
- International project PROMET (PROtection of METals), Innovative conservation approaches for monitoring and protecting ancient and historic metals collections from the Mediterranean basin, 6th Framework funded project under the contract number: FP6-2002-INCO-MPC-1
- Greek national project LASTOR (LAsers for STOnework Restoration), Framework III.
 Operational program "Competitiveness", GSRT / 2003-2006 Contract number: ΕΠΑΝ 4.5.1_Π14
- Special actions: Analytica Pompeiana Universitatis Vasconicae, APUV2011, Reference: AE11/27, Duration: 1- 30 of September 2011
- Special action: Campaign for the analysis of rock paintings on abrigos of the Iberian Peninsula. Duration: 9-11 of May 2012

REFERENCES

1. Prof. Demetrios Anglos, Institute of Electronic Structure and Laser, Foundation for Research and Technology – Hellas (IESL-FORTH), P.O. Box 1527, GR-711 10 Heraklion, Greece, +30 2810391154, anglos@iesl.forth.gr

- 2. Prof. Pablo Artal, Director of Laboratorio de Optica (Departamento de Física), Universidad de Murcia, Campus de Espinardo (Edificio CiOyN), 30071 Murcia, Spain, +34 868 887224, pablo@um.es
- 3. Prof. A. Moropoulou, School of Chemical Engineering, National Technical University of Athens, Iroon Polytechneiou 9, Zografou 15780, Athens, Greece, +30 2107723276, amoropul@central.ntua.gr
- 4. Prof. Juan Manuel Madariaga, Department of Analytical Chemistry, The University of the Basque Country (UPV/EHU), Barrio Sarriena s/n 48940 Leioa, Spain, +34 94 601 2707, juanmanuel.madariaga@ehu.eus
- 5. Dr. Andrew I. Whitehouse, Applied Photonics Ltd, Unit 8 Carleton Business Park, Carleton New Road BD23 2DE Skipton, UK, +44 1756 708900, andy.whitehouse@appliedphotonics.co.uk