

Curriculum Vitae

Kalogianni Despina

Dr. D. Kalogianni obtained her Diploma in Chemistry in 2001 and her Ph.D. in 2006 from the Department of Chemistry, University of Patras, Greece. She has worked as postdoctoral researcher during 2006-2014. She worked at the Dept. of Organic Farming, Technological Educational Institute of Ionian Islands, Argostoli, Cephallonia, Greece as Scientific Associate (2007-2009), as Lab Associate at the Dept. of Mechanical Engineering, Technological Educational Institute of Patras (2009-2010) and as part-time Lecturer at the Departments of Chemistry and Pharmacy, University of Patras (2008-2012). In 2014 she was appointed full-time Lecturer of Analytical Chemistry with emphasis in Nanotechnology at the University of Patras. She participated in Erasmus+ Staff Mobility program for teaching/training at the ETH Zürich, Switzerland, University Degli Studi Firenze, Italy, University of Bari Aldo Moro, Italy and Siberian University, Russia. She supervised 6 Master Theses and 17 4th Year Diploma Theses. She was a member of the examination committee of 4 PhD Theses and 9 MSc Theses. She participated in 7 funded research projects and she has co-organized 2 international scientific conferences. She has 23 publications (4 under review) in peer-reviewed international scientific journals with h-index 10, 425 citations, 34 National/International Conference presentations and 1 patent. She is a member of the European Federation for the Science and Technology of Lipids (Euro Fed Lipid) and a reviewer in the scientific journals 'Microchimica Acta', 'Analytical and Bioanalytical Chemistry', 'Analytical Letters', 'Sensors' 'Food Chemistry', 'Food Analytical Methods', 'Cells', 'Applied Sciences' and 'Journal of Chemical Technology & Biotechnology'.



HONORS/AWARDS

1. Selection of the proposal under the Erasmus+ Program for staff International mobility for teaching. Attainment of bilateral agreement between the University of Patras, Greece and Harvard Medical School, Boston, USA.
2. Selection of the proposal under the Erasmus+ Program for staff International mobility for teaching. Attainment of bilateral agreement between the University of Patras, Greece and Siberian Federal University, Russia.
3. Poster Award, 9th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", 20-24 September 2015, Kalamata, Greece.
Christopoulou S, **Kalogianni DP**, Karaïskou S, Ioannou PC and Christopoulos TK
"A chemiluminescent assay for the detection of allergens in foodstuffs"
4. Preference of the following project (among the first 21 better projects) in a Hellenic Competition of Applied Science and Innovation.
Petrakis EC, Trantakis IA, Kalogianni DP and Christopoulos TK. "Screening for Unknown Mutations by a Bioluminescent Protein Truncation Test with Homogeneous Detection"
5. Elected to participate in the "59th Meeting of Laurates".
The Meeting was dedicated in Chemistry and was held on 2009 at Lindau, Germany. The aim of these Meetings is the transfer of knowledge among different scientific generations. A number of 608 young scientists all around the world was elected, while 8 participants had Greek origin.

GREEK PATENTS

Patent Application **Title:** "Method of multiplex quantitative analysis of nucleic acids sequences by exponential amplification in the presence of competitors" - 18/07/2007

RESEARCH ACTIVITY

ANALYTICAL METHODS AND BIOSENSORS IN NUCLEIC ACIDS ANALYSIS
NANO- AND MICROT TECHNOLOGY IN NUCLEIC ACIDS AND PROTEIN ANALYSIS

Book Chapters

1. Invited review article “Cytometric Bead Arrays”, Encyclopedia of Life Sciences (eLS), Wiley online library, submitted.
2. Chapter 24. Rapid detection methods for online monitoring of vinegar fermentations (an overview of existing and research trends for rapid detection and online monitoring of vinegar fermentations) of the book “Advances in Vinegar Production”, in preparation.
3. Co-author in Lab notes, Laboratory of Instrumental Methods of Analysis, Department of chemistry, University of Patras (2016-today).

ORIGINAL PUBLICATIONS

1. Bougadi E, **Kalogianni DP***.
“Paper-based DNA biosensor for food authenticity testing”. Submitted to Food Chemistry.
2. Kalligosfyri PM, Sevastou A, Kyriakou IK, Tragoulias SS, **Kalogianni DP**, Christopoulos TK.
“Smartphone-Based Chemiluminometric Quantitative Competitive Polymerase Chain Reaction”. Submitted to Analytical Chemistry.
3. Christopoulou NM, **Kalogianni DP**, Christopoulos TK.
“Olive Oil Production Residues as Source of Fluorescent Carbon Nanodots”. Submitted to Analytical and Bioanalytical Chemistry.
4. Sevastou A, Tragoulias SS, **Kalogianni DP**, Christopoulos TK.
“Chemiluminometric assessment of milk pasteurization using a conventional digital camera as detector”. Submitted to Analytical and Bioanalytical Chemistry.
5. Magiati M, Myridaki V, Christopoulos TK, **Kalogianni DP***
“Lateral flow test for meat authentication with visual detection”. Food Chemistry **2019** 274: 803-807.
Impact factor 2017: 4.946
Αναφορές: 1
6. Magiati M, Sevastou A, **Kalogianni DP***.
“A fluorometric lateral flow assay for visual detection of nucleic acids by a common digital camera”.
Microchimica Acta **2018** 185(6): 314
Impact factor 2017: 5.705
Αναφορές: 1
7. Christopoulou S, Karaïskou, **Kalogianni DP***.
“Microbead-based simultaneous fluorometric detection of three nut allergens”.
Microchimica Acta **2018** 185 (1): 13
Impact factor 2017: 5.705
Αναφορές: 1
8. Magiati M, Kyriakopoulou XI, **Kalogianni DP***.
“Immobilization of bovine serum albumin on polytetrafluoroethylene for application as a potential solid support for biosensor development with visual detection”.
Analytical Letters **2018** 51 (13): 1-12
Impact factor 2017: 1.206
Αναφορές: 1

- 9. Kalogianni DP***
“DNA-based analytical methods for milk authentication: A review”.
European Food Research and Technology **2018** 244(5): 775–793
Impact factor 2017: 1.919
- 10. Kalogianni DP, Kalligosfyri PM, Kyriakou IK, Christopoulos TK.**
“Advances in microRNA analysis”.
Analytical and Bioanalytical Chemistry **2018** 410(3): 695-713 (Προσκεκλημένο άρθρο)
Impact factor 2017: 3.307
Αναφορές: 8
- 11. Kyriakou IK, Mavridis K, Kalogianni DP, Christopoulos TK, Ioannou, PC, Scorilas A.**
“Multianalyte quantitative competitive PCR on optically encoded microspheres for an eight-gene panel related to prostate cancer”.
Analytical and Bioanalytical Chemistry **2018** 410(3): 971-980 (Προσκεκλημένο άρθρο)
Impact factor 2017: 3.307
Αναφορές: 2
- 12. Kounelli ML, Kalogianni DP*.**
“A sensitive DNA-based fluorometric method for milk authenticity of dairy products based on spectrally distinct microspheres”.
European Food Research and Technology **2017** 243(10): 1773-1781
Impact factor 2017: 1.919
Αναφορές: 3
- 13. Spyrou EM, Kalogianni DP, Tragoulias SS, Ioannou PC, Christopoulos TK.**
“Digital camera and smartphone as detectors in paper-based chemiluminometric genotyping of single nucleotide polymorphisms”.
Analytical and Bioanalytical Chemistry **2016** 408(26):7393-7402
Impact factor 2017: 3.307
Αναφορές: 12
- 14. Kalogianni DP, Bazakos C, Boutsika LM, Targem MB, Christopoulos TK, Kalaitzis P, Ioannou PC.**
“Olive oil DNA fingerprinting by multiplex SNP genotyping on fluorescent microspheres”.
Journal of Agricultural and Food Chemistry **2015** 63(12):3121-3128
Impact factor 2017: 3.412
Αναφορές: 12
- 15. Sapountzi EA, Tragoulias SS, Kalogianni DP, Ioannou PC, Christopoulos TK.**
“Lateral flow devices for nucleic acid analysis exploiting quantum dots as reporters”.
Analytica Chimica Acta **2015** 864:48-54
Impact factor 2017: 5.123
Αναφορές: 21
- 16. Kalogianni DP, Boutsika LM, Kouremenou PG, Christopoulos TK, Ioannou PC.**
“Carbon Nano-Strings as Reporters in Lateral Flow Devices for DNA Sensing by Hybridization”.
Analytical and Bioanalytical Chemistry **2011** 400(4): 1145-1152
Impact factor 2017: 3.307
Αναφορές: 25

- 17.** Petrakis EC, Trantakis IA, **Kalogianni DP** and Christopoulos TK
“Screening for Unknown Mutations by a Bioluminescent Protein Truncation Test with Homogeneous Detection”.
Journal of the American Chemical Society (JACS) **2010** 132(14): 5091-5095
Impact factor 2017: 14.357
Αναφορές: 4
- 18.** **Kalogianni DP**, Litos IK, Ioannou PC, Christopoulos TK.
“Dipstick-type biosensor for visual detection of DNA with oligonucleotide-decorated colored polystyrene microspheres as reporters”.
Biosensors and Bioelectronics **2009** 24(6): 1811-1815
Impact factor 2017: 8.173
Αναφορές: 23
- 19.** Elenis DS, **Kalogianni DP**, Glynou K, Ioannou PC and Christopoulos TK.
“Advances in Molecular Techniques for the Detection and Quantification of Genetically Modified Organisms”.
Analytical and Bioanalytical Chemistry **2008** 392(3): 347-354
Impact factor 2017: 3.307
Αναφορές: 113
- 20.** **Kalogianni DP**, Elenis DS, Christopoulos TK and Ioannou PC.
“Multiplex Quantitative Competitive Polymerase Chain Reaction based on a Multianalyte Hybridization Assay performed on spectrally encoded microspheres”.
Analytical Chemistry **2007** 79(17): 6655-6661
Impact factor 2017: 6.042
Αναφορές: 19
- 21.** **Kalogianni DP**, Bravou V, Christopoulos TK, Ioannou PC, Zoumbos N
“Dry-Reagent Disposable Dipstick Test for Visual Screening of Seven Leukemia-Related Chromosomal Translocations”.
Nucleic Acids Research **2007** 35: e23
Impact factor 2017: 11.561
Αναφορές: 21
- 22.** **Kalogianni DP**, Goura S, Hanos M, Skoutelis A, Aletras AJ, Christopoulos TK, Panagiotopoulos E.
“Dry reagent dipstick test combined with 23S rRNA PCR for molecular diagnosis of bacterial infection in arthroplasty”.
Analytical Biochemistry **2007** 361(2): 169-175
Impact factor 2017: 2.275
Αναφορές: 50
- 23.** **Kalogianni DP**, Koraki T, Christopoulos TK, Ioannou PC.
“Nanoparticle-based DNA biosensor for visual detection of genetically modified organisms”.
Biosensors and Bioelectronics **2006** 21(7): 1069-1076
Impact factor 2017: 8.173
Αναφορές: 107

- 1. Invited lecture. Kalogianni DP**
“Nanotechnology in DNA analysis”
18th “Medicinal Chemistry” Conference, 30-31 October 2017, Patras, Greece
- 2. Polychronaki G, Sofouli A., Stathakarou G, Kalogianni DP***, Bazakos C, Christopoulos TK, Kalaitzis P.
“Discrimination of olive varieties based on SNP genotyping and HRM analysis”
10th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", 17-21 September 2017, Heraklion, Crete, Greece
- 3. Kalogianni DP.** “DNA-based Methods for Detection of Allergens in Foodstuffs”
17th “Medicinal Chemistry” Conference, 29-31 August 2016, Spetses, Greece
- 4. Kyriakou IK, Mavridis K, Kalogianni DP, Ioannou PC, Christopoulos TK, Scorilas A**
“Development of Ultrasensitive Molecular Methodology for the Identification and Evaluation of New Prostate Cancer Molecular Markers”. 17th “Medicinal Chemistry” Conference, 29-31 August 2016, Spetses, Greece
- 5. Kalogianni DP, Bazakos C, Boutsika LM, Targem MB, Christopoulos TK, Kalaitzis P, Ioannou PC**
“A high-throughput SNP-genotyping method based on fluorescent microspheres for olive oil varietal identification”. «9th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", 20-24 September 2015, Kalamata, Greece».
- 6. Myridaki VM, Kyriakou IK, Kalogianni DP, Ioannou PC, Christopoulos TK**
“DNA-based meat authenticity testing by a multianalyte fluorometric method”
«9th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", 20-24 September 2015, Kalamata, Greece».
- 7. Spyrou EM, Kalogianni DP, Tragoulias SS, Ioannou PC, Christopoulos TK**
“Chemiluminometric biosensor for genotyping of single-nucleotide polymorphisms in methylenetetrahydrofolate reductase (MTHFR) gene”. «9th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", 20-24 September 2015, Kalamata, Greece».
- 8. Kyriakou IK, Mavridis K, Kalogianni DP, Ioannou PC, Christopoulos TK, Scorilas A**
“Multianalyte assay for prostate cancer-related gene quantification by hybridization on fluorescent microspheres”. «9th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", 20-24 September 2015, Kalamata, Greece».
- 9. Plenary Lecture: Kalogianni DP**
“Quantum dots in biosensing”. «XVI International Symposium on Luminescence Spectrometry ISLS 2014: Fundamentals and Applications», 24-27 September, Rhodes, Greece
- 10. Kyriakou IK, Mavridis K, Kalogianni DP, Ioannou PC, Christopoulos TK, Scorilas A**
“Multiplex Quantitative Competitive PCR using Fluorescent Microspheres”
«XVI International Symposium on Luminescence Spectrometry ISLS 2014: Fundamentals and Applications», 24-27 September, Rhodes, Greece
- 11. Giannakopoulos A, Kyriakou IK, Tasis D, Kalogianni DP, Papagelis K, Ioannou PC, Christopoulos TK**
“Graphene-based DNA sensing”
«XVI International Symposium on Luminescence Spectrometry ISLS 2014: Fundamentals and Applications», 24-27 September, Rhodes, Greece
- 12. Kalogianni DP, Dracopoulou M, Chrousos GP and Christopoulos TK**
“High-throughput genotyping method for CYP21A2 gene, based on a multiple primer extension reaction and hybridization on spectrally encoded microspheres”
«5th International Conference on Instrumental Methods of Analysis - Modern Trends and Applications», Patras, Greece, September 30 - October 4, 2007.
- 13. Christopoulos TK, Ioannou PC, Kalogianni DP, Glynou K**
“Nanoparticle-based biosensor for rapid visual detection of DNA by hybridization”
«4th International Conference on Instrumental Methods of Analysis - Modern Trends and Applications», Iraklion Crete, Greece, October 2-6, 2005.

POSTER PRESENTATIONS AT INTERNATIONAL CONFERENCES

1. Bougadi E, **Kalogianni DP***
“Paper-based DNA biosensor for visual detection of milk adulteration”
2nd European Biosensor Symposium EBS2019, 18-21 February 2019, Florence, Italy.
2. Magiati M, Myridaki VM, Christopoulos TK, **Kalogianni DP***
“Lateral flow assay for meat authentication with visual detection”
2nd European Biosensor Symposium EBS2019, 18-21 February 2019, Florence, Italy.
3. Polyhronaki T, Tsiaka T, Lantzouraki DZ, Sotiroudis GT, Kalogianni DP, Sinanoglou VJ, Zoumpoulakis P
“Implementation of high energy techniques for the optimized recovery of phenolic compounds from industrial peach by-products”. 11th Aegean Analytical Chemistry Days (AACD2018), 25-29 Sept 2018, Chania, Crete, Greece.
4. Christopoulou S, Kalogianni DP, Karaïskou S, Ioannou PC, Christopoulos TK
“A chemiluminescent assay for the detection of allergens in foodstuffs”
«9th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", 20-24 September 2015, Kalamata, Greece».
5. Kounelli M, Kalogianni DP, Ioannou PC, Christopoulos TK
“Authentication tests for milk products based on a chemiluminometric hybridization assay”
«9th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", 20-24 September 2015, Kalamata, Greece».
6. Giannakopoulos A, Kyriakou IK, Tasis D, Kalogianni DP, Papagelis K, Ioannou PC, Christopoulos TK
“Graphene oxide-based sensing system for detection of double-stranded DNA”
«9th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", 20-24 September 2015, Kalamata, Greece».
7. Sapountzi EA, Christopoulos TK, **Kalogianni DP**, Ioannou PC and Tragoulias SS
“Lateral flow devices exploiting quantum dots as reporters that enable confirmation of target DNA sequence”. «12th Eurasia Conference on Chemical Sciences», Corfu, Greece, April 16-21
8. **Kalogianni DP**, Litos IK, Ioannou PC and Christopoulos TK
“DNA biosensor based on latex colored particles for visual detection of specific DNA sequences”
«5th International Conference on Instrumental Methods of Analysis - Modern Trends and Applications», Patras, Greece, September 30 - October 4, 2007.
9. **Kalogianni DP**, Elenis DS, Ioannou PC and Christopoulos TK
“Multiplex Quantitative Competitive Polymerase Chain Reaction based on a Multianalyte hybridization assay on a suspension of fluorescent microspheres”. «5th International Conference on Instrumental Methods of Analysis - Modern Trends and Applications», Patras, Greece, September 30 - October 4, 2007.
10. **Kalogianni DP**, Elenis D, Christopoulos TK, Ioannou
“Double quantitative competitive PCR and hybridization assay in a suspension of microspheres”
«5th Aegean Analytical Chemistry Days», Thessaloniki, Greece, October 5-8, 2006.
11. **Kalogianni DP**, Zoumbos N, Christopoulos TK
“Development of three dimensional microarrays of DNA and proteins”
«4th International Conference on Instrumental Methods of Analysis - Modern Trends and Applications», Iraklion Crete, Greece, October 2-6, 2005.
12. **Kalogianni DP**, Koraki T, Christopoulos TK, Ioannou PC
“Nanoparticle-Based Dry-Reagent Strip Test for the Detection of Genetically Modified Organisms by DNA Hybridization”. «1st International Greek Biotechnology Forum», Athens, Greece, June 10-12, 2004.

ORAL PRESENTATIONS AT NATIONAL CONFERENCES

1. **Kalogianni DP**, Bazakos C, Boutsika LM, Targem MB, Christopoulos TK, Kalaitzis P, Ioannou PC
“Olive oil fingerprinting by high-throughput SNP-genotyping based on fluorescent microspheres”
«6th Greek Lipids Forum» Athens, 11-12 June 2015.

2. **Kalogianni DP**, Boutsika L, Bazakos C, Christopoulos TK, Kalaitzis P.
Development of DNA-based Olive Oil Authenticity Tests. « 5^ο Ελληνικό Φόρουμ Επιστήμης και Τεχνολογίας Λιπιδίων (Greek Lipid Forum)». Αθήνα 29 - 30 Μαρτίου 2013, Χαροκόπειο Πανεπιστήμιο.
3. **Invited speech: Kalogianni DP**
“Optical detection of specific DNA and RNA sequences via nanoparticle-based dipstick tests”
«12^ο Conference of Medicinal Chemistry», Patras, 11-15 April 2011
4. **Invited speech: Kalogianni DP**
“Multianalyte determination of DNA sequences and proteins using spectrally distinct microspheres”
«8^ο Hellenic Conference of Clinical Chemistry – Clinical Biochemistry», Patras, 2-3 October 2009.
5. **Kalogianni DP**, Koraki T, Christopoulos TK, Ioannou PC
“Nanoparticle-Based Dry-Reagent Strip Test for the Detection of Genetically Modified Organisms by DNA Hybridization”. «1st Hellenic Conference of Biotechnology and Food Technology », Athens, Greece, March 31–April 2, 2005.

POSTER PRESENTATIONS AT NATIONAL CONFERENCES

1. Kalligosfyri PM, **Kalogianni DP**, TK Christopoulos
“Expression and purification of recombinant photoprotein aequorin”.
22nd Hellenic Conference in Chemistry, 2-4 December 2016, Thessaloniki, Greece.
2. Sapountzi EA, Christopoulos TK, **Kalogianni DP**, Ioannou PC and Tragoulias SS
“Lateral flow devices exploiting quantum dots as reporters that enable confirmation of target DNA sequence”. «1^ο Conference of Pharmaceutical Sciences» Athens, Greece, April 27-30
3. **Kalogianni DP**, Christopoulos TK, Ioannou PC
“Nanoparticle-Based DNA Biosensor for Visual Detection of Genetically Modified Organisms”
«1st Conference of Biosciences», Patras, Greece, May 19-20, 2005.
4. **Kalogianni DP**, Goura S, Hanos M, Skoutelis A, Aletras AJ, Christopoulos TK, Panagiotopoulos E
“Rapid method for molecular diagnosis of bacterial infection in prosthetic joint implant and osteosynthetic material”. «1st Conference of Biosciences», Patras, Greece, May 19-20, 2005.