Klytaimnistra Katsara - Curriculum vitae

Personal data

Name: Klytaimnistra Katsara

Studies: Materials Science and Technology, M.Sc Chemistry

Nationality: Greek

e-mail: clytokatsara@gmail.com

Education

| 03/2019 | M.Sc. | Institute : | University of Crete, Biochemistry, Chemistry department |
|---------|---|-------------|--|
| | | | "Postgraduate General Program of Chemistry department, |
| | | | Field of study in Biochemistry". Supervisor: Prof. D. Ghanotakis |
| | | | M.Sc. dissertation : "Study of lymphoma cell lines before and after Nutlin-3a induced wild type (wt) p53-activation by Raman spectroscopy" GPA 8,17 – "Very Good" |
| 11/2016 | B. Materials Science and Technology | Institute : | University of Crete, Materials Science and Technology department Supervisor: Prof Anna Mitraki Thesis : "A study of self-organization of porphyrins, linked with the diphenylalanine peptide" GPA 7,74 – "Very Good" |
| 7/2016 | Music Diploma in Piano | Institute : | Conservatory "Music Horizons" of Kostas Gaetanos, Athens (Greece) |

Work experience

- Active working member in **BIONDT LAB** (Institute of Molecular Biology and Biotechnology, FORTH) which focuses on the non destructive testing of bio-materials http://biondt.gr/
- Research Assistant-laboratory technician in European Program H2020-MSCA-RISE-2019 entitled "PANTHEON", IMBB, from 01/08/2020 to 31/01/2021 and from 01/02/2021 to 31/07/2021
 - ✓ organization and management
 - ✓ experimental Raman, FT-IR and UV/VIS spectroscopy of biological materials
- Research Assistant-laboratory technician in Program NFFA-Nanoscience Foundries and Fine Analysis Europe, IESL, from 01/2020 to 08/2020
 - ✓ experimental Raman, FT-IR and UV/VIS spectroscopy of biological materials
- Training as Research Assistant-laboratory technician in Institute of Molecular Biology and Biotechnology (IMBB) Foundation for Research and Technology Hellas (FORTH), from 09/2019 to 01/2020
- Internship, Laboratory assistant in "DODECA LABS IKE" LABORATORY OF CHEMICAL & MICROBIOLOGICAL ANALYSES, Rhodes (Greece), from 03/07/2019 to 06/09/2019
- **Lab member** in Institute of Molecular Biology and Biotechnology (IMBB) Foundation for Research and Technology Hellas (FORTH), in Michalis Aivaliotis group, Heraklion (Greece), from 01/2018 to 03/2019
- Laboratory Assistant in Biochemical undergraduate labs, University of Crete, Chemistry department, Heraklion (Greece), from 02/2018 to 05/2018
- **❖ Laboratory Assistant** in Analytical Chemistry undergraduate labs, teaching Ultraviolet/Visible Spectrophotometry experiment, University of Crete, Chemistry department, Heraklion (Greece), from 09/2017 to 12/2017
- Lab member in laboratory of Inorganic Chemistry, University of Crete, Chemistry department, Heraklion (Greece), from 2015 to 12/2016
- Lab member in laboratory of Biomaterials, Materials Science and Technology department, Heraklion (Greece), from 09/2015 to 10/2016

Research interests

Interdisciplinary research interests ranging between Materials Science and Chemistry to Spectroscopy of Biomolecules, Biochemistry, food and water analysis.

Specifically,

- Raman spectroscopy analysis of biomaterials (especially cell biomolecules, plant tissues, cheese samples, DNA samples etc)
- FT-IR (ATR) spectroscopy analysis of biomaterials.
- Drug delivery systems such as Nutlins related to p53 pathway.
- Detection and analysis of microorganisms in food and water.
- Self-assembling of peptide domains and observation by Scanning electron microscope (SEM).
- Measurements of electrical conductivity, pH, nitrate/ammonium/chlorine ions, and free/total chlorine in pools.

Publications in refereed journals

- **0.1** Klytaimnistra Katsara^{1,2}, Konstantina Psatha¹, George Kenanakis³, Michalis Aivaliotis¹ and Vassilis M. Papadakis^{1,*}, "Subtyping on live lymphoma cell lines by Raman spectroscopy", under preparation
- **0.2** Klytaimnistra Katsara¹, George Kenanakis², and Vassilis M. Papadakis^{1,*}, "Polyethylene migration from food packaging on cheese detected by Raman and Infrared (ATR/FT-IR) Spectroscopy", **under preparation**

Distinctions - Awards

❖ Financial Grand for participation in 69th Panhellenic Conference of the Hellenic Society of Biochemistry and Molecular Biology with **Poster presentation**: "Study of lymphoma cell lines after Nutlin-3a induced wild type (wt) p53-activation by Raman spectroscopy", 25/11/2018, Larisa, Greece

Presentations in international scientific conferences

- O1. Oral presentation: "Study of lymphoma cell lines before and after Nutlin-3a induced wild type (wt) p53-activation by Raman spectroscopy" in the 21th Congress of Chemistry for Graduate Students, by the Department of Chemistry, University of Crete, 16/05/2019, Heraklion Greece
- 02. Poster presentation: "Study of lymphoma cell lines after Nutlin-3a induced wild type (wt) p53-activation by Raman spectroscopy", 69th Panhellenic Conference of the Hellenic Society of Biochemistry and Molecular Biology, 23/11/2018, Larisa, Greece

Technical/Research skills

- Raman Spectroscopy measurements and Data Analysis of lymphoma cells (and biological materials in general).
- ❖ FT-IR (ATR) spectroscopy measurements of materials in general.
- Management skills
- Ultraviolet-Visible Spectrophotometry of drinkable and pool water.
- Food/water chemical and microbiological analysis based on specific protocols according to ISO 17025:2017 (food sample measurements, homogenization with Stomacher, agar cell cultures preparation, Vidas, Titration electrical conductivity, pH, NTU turbidity, Vacumm filtering).
- Self-assembling of peptide domains for hydrogel formations, observation and analysis using Scanning Electron Microscopy
- Critical Point Drying and D.C. Magnetron Sputtering of biological structures.
- Liquid Chromatography, TLC, Distillation
- Protein Digestion

Computer knowledge

- ❖ Global Intermediate C Informatics Certificate by "GLOBAL CERT" (Microsoft® Office, Windows)
- Vellum Global Educational Services International Diploma in IT Skills Proficiency (Microsoft® PowerPoint)
- Good knowledge of Origin 9 Data Analysis software
- Adequate knowledge of ChemBioDraw

Basic knowledge of Fortran Programming Language

Foreign language(s)

- ENGLISH: CERTIFICATE IN ENGLISH TOEIC (Test of English for International Communication) LOWER (B2), 17/12/2016
- ENGLISH: CERTIFICATE IN ENGLISH- CAMBRIDGE ESOL ENTRY LEVEL 3 (B1), 05/2008
- FRENCH: DIPLOME D'ETUDES EN LANGUE FRANCAISE DELF A2 (MINISTERE EDUCATION NATIONALE), 10/07/2009

Other skills-participations

- Certificate of training in "Adult Educator training", accredited by "Information Technologies Institute", CERTH, duration 200 hours, from 04/05/2020 to 04/08/2020
- Certificate of training in "Medicinal plants. From traditional and popular medicine, in science", accredited by "Training and Lifelong Learning Centre", University of Crete and Crete Museum of Medicine, duration 70 hours, 01/2020
- Certificate of attendance in the 21th Congress of Chemistry for Graduate Students, by the Department of Chemistry, University of Crete, from 15/05/2019 to 17/05/2019
- Certificate of attendance in the 69th Panhellenic Conference of the Hellenic Society of Biochemistry and Molecular Biology, Hotel Imperial, Larisa, from 23/11/2018 to 25/11/2018
- Certificate of attendance in the 20th Congress of Chemistry for Graduate Students, by the Department of Chemistry, University of Crete, from 25/06/2018 to 27/06/2018
- Certificate of attendance in the 19th Congress of Chemistry for Graduate Students, by the Department of Chemistry, University of Crete, from 2/05/2017 to 4/05/2017
- ❖ Web Seminar "PREPARATION OF PERFUMES and SPIRITUAL OILS, HERBS, PHARMACEUTICAL AROMATIC PLANTS", accredited by "EOPPEP", duration 18 hours, from 11/2016 to 01/2017
- Driving license B, 09/2017
- Latin dance presentations, 2012-present

Recommendation letters can be given by

Vasilis Papadakis, Postdoctoral cooperating Researcher, Foundation for Research and Technology - Hellas (FORTH),

e-mail: vassilis_papadakis@imbb.forth.gr, phone number:2810 39 1267

- Ganotakis Dimitris, Professor at University of Crete, e-mail: ghanotakis@chemistry.uoc.gr, phone number: 2810 393634
- ❖ loannis Achladiotis, Agronomist/MSc Animal breeding and Husbandry, DODECANESIAN LABS P.C. General Manager, johnachladiotis@gmail.com