

Education

09/2020 - 07/2022

Postgraduate Student / School of Medicine, Department of Computer Science, Department of Material Science and Technology, School of Electrical and Computer Engineering, and the Foundation for Research and Technology-Hellas (FORTH) / Crete / Biomedical Engineering / Grade: 8.85/10.00

01/06/2019 - 31/07/2019

Internship / Quality Control Analyst / Chemical and Biopharmaceutical Laboratories, CBL Patras S.A.

2015 - 2020

Bachelor degree / Department of Biology / University of Patras / Grade: 8.33/10.00

2012 - 2015

Graduate of 2nd High School of Nafpaktos / Grade: 19.1/20.0

Academic Work

03/2022 – Present Day

Research assistant / “Design and fabrication of a portable molecular diagnostic platform with heating capabilities for the amplification of nucleic acids and the detection of the products using a smartphone” / Biosensors Laboratory, Dept. of Biology, University of Crete / Foundation for Research and Technology-Hellas (FORTH)/ Institute of Molecular Biology and Biotechnology (IMBB) / Supervisor: Prof. Electra Gizeli

07/2021 - 02/2022

Master Thesis / “Development of a portable acoustic platform for the molecular diagnosis at the point-of-care” / Biosensors Laboratory, Dept. of Biology, University of Crete / Grade: 10.0/10.0 / Supervisor: Prof. Electra Gizeli

07/2018 - 06/2019

Diploma Thesis (bachelor) / “Lipid content estimation through electrical conductivity analysis in the yeast cells of *Yarrowia lipolytica*” / Laboratory of Microbiology / Dept. of Biology / University of Patras / Grade: 10.0/10.0 / Supervisor: Prof. George Aggelis

Foreign Language Skills

English

06/2020

- Certificate of Proficiency in English (ECPE) / University of Michigan (Level C2)

05/2012

- Pearson Test of English General (Level 3) / Pass with Merit

Information Technology Skills

- Microsoft Office (Word, PowerPoint, Excel)
- IBM SPSS Statistics
- GIS, within the framework of the course «Ecology II»
- Origin Lab
- R Project for Statistical Computing, within the framework of the course «Special Botany Courses»
- Virtual Studio Integrated Development Environment (IDE)
- Arduino Integrated Development Environment (IDE)
- Python, C++, Visual Basic
- FreeCAD 3D modeler, SolidWorks
- EasyEDA, PCB design & circuit simulator
- Sony Vegas Pro
- Adobe Illustrator

Skills & Abilities

Microbiological Cultures

- Preparation of liquid and solid media for microorganism cultivation (yeasts, bacteria, fungi)
- Conducting experiments concerning microorganism cultivation on liquid and solid substrates

Microbiological techniques

- Gram staining (Gram +/-)
- Endospore staining (Malachite green)
- Intracellular lipid droplets staining (Nile red)
- Observation of the morphology of microorganisms by optical microscope
- Observation of intracellular, neutral lipid droplets by fluorescence microscope
- Photometric analysis (3,5-dinitrosalicylic acid method/DNS)

Specialized microbiological techniques

- Determination of dry cell mass
- Extraction of intracellular lipids from microbiological cultures (Folch method)
- Purification and fractionation of total lipids into neutral lipids, sphingolipids, phospholipids and glycolipids
- Trans-esterification of lipids

Analytical Techniques

- High Performance Liquid Chromatography (HPLC)
- Gas Chromatography (GC)
- Quartz Crystal Microbalance with Dissipation monitoring (QCM-D)

Techniques of Biochemistry and Molecular Biology

- Polymerase Chain Reaction (PCR)
- Loop-Mediated Isothermal Amplification (LAMP)
- Electrophoresis
- Enzyme-linked Immunosorbent Assay (ELISA)

Quality control

- Microbial testing and detection of heavy metals and nitrate ions in water samples
- Microbial control of sterile areas, personal and pharmaceutical products
- Quality evaluation of nutrients and microorganisms by suppliers

Engineering skills

- Radio frequency (RF) circuit design and analysis
- Printed circuit board (PCB) design and testing
- Surface acoustic wave (SAW) device design, fabrication and substrate/waveguide optimization
- Programming of open-source microcontrollers for various applications
- Design and fabrication of 3D printed prototypes
- Electronic circuits prototyping and analysis

Attendance of Conferences/Meetings

22/07/2022 - 24/07/2022

Participation at Scientific Illustration Masterclass for Life Scientists, Virtual Edition, “Training in Basic and Advanced Tools of Adobe Illustrator CC”, Workshop Facilitator: Dr. Arne Fabritius.

17/02/2022 - 18/02/2022

Attendance of online conference “The 2nd International Electronic Conference on Biosensors”.

20/10/2021 - 3/11/2021

Attendance of online seminars on special topics regarding “Regulatory Systems, Patent Drafting and IPR Management, Design and Execution of Clinical Trials, Ethics in Science and Medicine and Entrepreneurship”, Biomedical Engineering MSc program, FORTH/TUC/University of Crete.

13/07/2020 - 17/07/2020

Attendance of online seminars “Demokritos 55th Summer School”, Institute of Nuclear & Particle Physics, N.C.S.R. “Demokritos”.

06/2020

Attendance of online seminars “Clinical Engineering and Medical Technology during the Coronavirus pandemic”, ELEVIT.

08/12/2019 - 10/12/2019

14th Conference of the Hellenic Society for Computational Biology and Bioinformatics (HSCBB19), Conference Center of the FORTH Institute of Chemical Engineering Sciences, Patras, Greece.

18/03/2018

Participation at the One-Day conference “Our brain”, Conference and Cultural Centre of the University of Patras, Greece.

30/10/2018 - 31/10/2018

18th Conference of Medical Chemistry “Medical Chemistry: Design & Development of Pharmaceutical Products”, Archaeological Museum of Patras, Greece.

28/04/2017 - 30/04/2017

Participation at NASA'S international space apps challenge 2017, Team: Aviat-ions, Project Title: “Calculate and visualize the radiation exposure for an actual or hypothetical polar, or near-polar flight”, Athens, Greece.
Link: <https://2017.spaceappschallenge.org/challenges/warning-danger-ahead/mayday-mayday-mayday/teams/aviat-ions>

22/03/2016

One-Day conference “5th Medical Meeting for undergraduate students”, Byzantino Hotel, Patras, Greece.