Theofania Xanthouli

Address: 10, Aisxylou Street, Alexandroupolis, P.C. 68133, Greece

Mobile phone: +30 6955388150

Email: xanthouli.theof@gmail.com | LinkedIn: Theofania Xanthouli

Date of Birth: 15/07/2002

Nationality: Greek

Personal Profile

Currently in the fifth and final year of my undergraduate studies in the Physics Department of University of Crete. In the process of completing the Bachelor's thesis at the Photonics for Heritage Science (PhoHS) group of the Institute of Electronic Structure and Laser (IESL) at the Foundation for Research and Technology Hellas (FORTH). I hold a strong academic background on Optics and Photonics, Condensed Matter Physics, Quantum Structure of Matter, Electron Microscopy, Material Science and Differential Equations, as well as an extensive experimental experience in the laboratories of the Physics Department and in IESL, also participating in the ongoing experimental activities of PhoHS.

Education

University of Crete (09/2020 – 06/2025)

- · Department of Physics, School of Sciences
- · Bachelor Degree in Physics (240 ECTS)
- https://www.physics.uoc.gr/en/content/undergraduatestudies
- Expected Degree Grade: 7/10 "Very Good" (Expected Award date: 07/2025)

3rd General Lyceum of Alexandroupolis (09/2017 – 06/2020)

· Diploma of General High school | Stream: Natural Sciences

· Diploma Grade: 19.8/20 "Excellent" (Award date: 23/06/2020)

Training courses/ Seminars

| Fall 2024 | "Laboratory of Laser and Modern Physics", | IESL-FORTH, |
|--------------------|---------------------------------------------------------------|------------------------|
| | weekly presentations by the researchers of IESL-FORTH, | Heraklion, Greece |
| | on their ongoing research in the laboratories | |
| <u>Spring 2023</u> | "Advanced Physics Laboratory 1- Modern Physics" | Physics Department, |
| | | UoC, Heraklion, Greece |
| Fall 2022 | "Physics Laboratory 3- Optics" | Physics Department, |
| | | UoC, Heraklion, Greece |
| Spring 2022 | "Physics Laboratory 2- Electricity" | Physics Department, |
| | | UoC, Heraklion, Greece |
| <u>Spring 2021</u> | "Physics Laboratory 1- Mechanics & Thermodynamics" | Physics Department, |
| | | UoC, Heraklion, Greece |
| 10/2021 | "A MUSE on Mount Olympos: Deciphering the formation | Physics Department, |
| | history of nearby galaxies with integral-field spectroscopy", | UoC, Heraklion, Greece |
| | lecture by Prof. Tim de Zeeuw at astrophysics | |
| Fall 2020 | "Topics in Modern Physics 1", | Online |
| | weekly seminars in topics of contemporary physics | |

Work Experience – Voluntary Work

- · 09/2024 ongoing: Research for Bachelor's thesis in IESL-FORTH
- Thesis titled "Laser ablation studies of organic materials used to support the paintings' canvases; wax-resin, rabbit glue, and zinc oxide in oil"

The project focuses on determining optimal laser parameters for the effective and safe laser-assisted removal of unwanted wax-resin adhesive from the back side of a painting canvas.

- Materials studied: Wax-resin, Zinc white oil preparation, Rabbit skin glue
- Skills acquired:
 - Independent operation and handling of laser systems (QS Nd:YAG (1064nm/532nm) and KrF/ArF Excimer (248/193 nm)),
 - Analytical investigation and assessment of the irradiated surfaces (optical Microscopy-OM, Scanning Electron Microscopy- SEM, Spectrometers for fluorescence, absorbance and transmittance measurements, Fourier-transform infrared spectroscopy –FTIR).
- <u>10/2024- ongoing:</u> Laboratory assistant in the Photonics for Heritage Science (<u>PhoHS</u>) group of IESL-FORTH in the context of laser cleaning/ablation activities (operation of laser systems, collection and elaboration of data and assessment of the results).
- · 27/09/2024: Researchers Night 2024 | Heraklion, Crete
 - Communication with the public about past and current projects of the Photonics for Heritage Science (PhoHS) group of IESL-FORTH

Participation in Conferences

<u>02/25</u> – abstract submitted to <u>TECHNART 2025</u> under the title "*A novel based approach for wax-resin lining adhesive*" by Ilaria Pecorelli, Theofania Xanthouli, Sofia Carletti, Kristalia Melessanaki, Grazia DeCesare, Paraskevi Pouli.

Other skills / interests

Language proficiency:

- Greek: Native
- English: IELTS band 8 (02/2025), Cambridge CPE Grade B 219/230 (05/2018)
- *German:* C1 Goethe: grade 81.75/100 (03/2025), B2 Goethe: grade 80.5/100 (03/2017)

Computer skills: MS Office, Linux operation (basic level), C programming language (basic level), Origin **Social Activities** | **Hobbies:** Volunteerism in the student team (O.F.E.A.K) responsible for organizing blood-donation events across the campus of the University of Crete, Arts (dance, theatre, crafts), Reading, Travelling, Video editing.