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| Εικόνα που περιέχει άτομο, γυαλιά, γυναίκα, αναζήτηση  Περιγραφή που δημιουργήθηκε αυτόματα | **THEODORA IOANNOU*** Msc in Bioanalysis-Pharmaceutical Analysis, Dep. Of Chemistry, Aristotle University of Thessaloniki
* BSc in Chemistry, Aristotle University of Thessaloniki
* Trainee of ESMB
* Erasmus student at the Laboratory of Marine Biochemistry and Ecotoxicology, Trapani, University of Palermo (Italy)
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 **My background**

I studied Chemistry at the Aristotle University of Thessaloniki and during the final year of my studies I had chosen the field of Analytical-Environmental Chemistry with my undergraduate thesis focused on automated analytical techniques in water samples. In Greece I had a two-month traineeship at the Veterinary Hospital of Greek Army in which I worked with HPLC, SPE and ICP-MS instrumentations, water analysis in routine level and before my work there is completed, I started searching other organizations in order to gain more experience in laboratory work.

I found ESMB through internet and directly contact prof. Hellio to get a permission for a traineeship. I chose the laboratory of Marine Biochemistry and Ecotoxicology in Trapani with prof. Messina as supervisor. My first Erasmus project was about the isolation and evaluation of bioactive compounds from marine, extremophiles and halophyles species, with focus on halophyles species of *Calendula,* by extraction with different solvents from chemical to supercritical solvents. Since joining the lab, I worked with state-of-the art equipment and gained experience in biochemical/chemical assays like, DPPH, total phenol content, reducing power. This traineeship gave the chance to be a co-author of a research paper.

Finishing my placement through ESMB I returned in Greece to continue my studies on Master level and decided to return at the laboratory of Marine Biochemistry to do my dissertation again through Erasmus+ program.

**My research project for Msc Thesis at the Laboratory of Marine Biochemistry and Ecotoxicology**

The project of my Msc thesis was focused on the evaluation of lipid profile, antioxidant productivity and biochemical markers in marine microalgae strains under different nutritional strategies. During my stay in the lab, for six months, I worked on:

1) the maintenance and cultivation of microalgae, 2) extraction of bioactive compounds from microalgae and evaluation of bioactive properties *in vitro*, 3) quantification of fatty acid profile, 4) evaluation of molecular switches of key-enzymes of central metabolic pathways associated with lipid metabolism and photosynthesis.

At the laboratory of prof. Messina I had the chance to work with state-of-the-art instrumental and molecular techniques and among these I delve deeply into microalgal metabolism and biochemistry. Through this work I will also be a co-author of a research paper and posters. Furthermore, I had the chance to participate in seminars, virtual workshops and learn even more about marine sciences.

I am grateful that I’ve met and worked with professor Messina. She is the one that always gives me purpose, motivation to continue further in research, by assigning so interesting research projects. I really enjoyed both times my stay in Sicily and the chance I had to make so many friends from worldwide.

Be much obliged to ESMB board and specifically to professor Claire Hellio, who firstly allowed me to do a traineeship through ESMB and gave me the chance to gain more experience and research activities in diverse areas of bioscience.