PERSONAL DETAILS

Full name: Georgia Charalampous

Date of birth: 28/01/1990

Address: I. Kapodistriou 30A, 73133, Chania, Crete

Tel: 6994918071

Email: geoch@ig.forth.gr



EXPERIENCE

Postdotoral researcher

(from September 2025)

Supervisor: Ioannis V. Yentekakis

Institute of Geoenergy, FORTH

Interreg Research Project "BLUEQ- Applied Solutions for Monitoring Coastal Habitats and Quantifying Blue Carbon Storage: An Integrated Approach for Sustainable Ecosystem Management".

Researcher and communication manager-contribution to financial project management and dissemination activities.

Research Associate

(July 2022-March 2025)

Project Coordinator: Emmanuel Stamatakis

Institute of Geoenergy, FORTH

European Research Project "TWINN2SET- Twinning to Sustainable Energy Transition".

- Participation in world-class online courses (MOOCs) paired with practical courses using modelling software on Energy Transition, Geothermal systems and Subsurface Gas systems.
- ➤ Short-term visit (2-week) at the IFPEN premises to participate in the study for the characterization of hydrogenotrophic microbes using cultivation methods and molecular biology techniques.
- Microbial analysis (DNA extraction) of samples collected from geothermal location in Greece (Aidipsos), interpretation of results and writing of reports.
- Attend annual meetings and summer schools.

Research Associate

(July 2022-March 2025)

Principal Investigator: Nicolas Kalogerakis

Institute of Geoenergy, FORTH

H.F.R.I Research Project "X-PRESS- EXtreme environments: High PRESsure Sampling and experimentation system for deep-sea hydrocarbon releases" (National Project)".

- Execution of high pressure, hydrocarbon degradation experiments using the X-PRESS high pressure sampling and experimentation system.
- Microbial analysis of samples and data collection.
- > Writing of manuscripts and project reports.

Research Associate

(September 2021-June 2022)

Principal Investigator: Eleftheria Antoniou

Technical University of Crete

H.F.R.I Research Project "DEEPSEA-Bioremediation of hydrocarbon releases in Deep Sea (National Project)".

- ➤ Design and execution of experiments involving the incubation of deep marine microbial communities under high pressure conditions in the presence of hydrocarbons.
- Monitoring of deep microbial community succession during hydrocarbon degradation experiments.
- Analysis of results, writing of publications and project reports.

Research Associate

(June 2019-August 2021)

Principal Investigator: Evangelia Gontikaki

Technical University of Crete

H.F.R.I Research Project "HEALMED-Determination of the self-healing capabilities of the Eastern Mediterranean Sea from accidental deep-sea oil releases (National Project)".

- ➤ Participation in high pressure experiments using deep collected marine microbial communities to address their hydrocarbon degradation potential.
- ➤ Involvement in microbiological sample analysis and data collection (DNA extraction for 16S rRNA and metagenomics, dissolved organic carbon, flow cytometry).
- Dissemination of results, writing of manuscripts and project reports.

Research Associate

(Apr 2016- Mar 2019)

Principal Investigator: Nicolas Kalogerakis

Technical University of Crete

European Research Project (Horizon 2020) "INMARE-Innovative screening and expression platforms to discover and use the functional protein diversity from the sea".

- ➤ Participation in protocol design and execution of experiments for separation and purification of laccase enzyme from marine fungi.
- ➤ Sample analysis (cell biomass, laccase activity) and data collection
- Writing project reports, attend project meetings and dissemination of results.

European Research Project "KILL*SPILL-Integrated Biotechnological Solutions for Combating Marine Oil Spills".

> Participation in microbiological analysis.

European Research Project "WATER4CORPS Integrating bio-treated wastewater with enhanced water use efficiency to support the Green Economy in EU and India".

> Participation in the production and separation of enzymes.

Postgraduate researcher

Supervisor: Kostas Tokatlidis University of Glasgow, Scotland

EDUCATION

PhD in Chemical and Environmental Engineering

(2020-2024)

(Oct 2014-Oct 2015)

Technical University of Crete

<u>Dissertation:</u> Microbial communities of the Eastern Mediterranean Sea and their hydrocarbon degradation capability

Master's Degree in Protein Biotechnology

(2012-2014)

Department of Biology, University of Crete

Grade: 9.43

Bachelor's Degree in Biology

(2007-2012)

Department of Biology, University of Crete

Grade: 6.66

Graduate of Agios Georgios High School

(2005-2007)

Larnaca, Cyprus *Grade: 18 and 9/12*

ATTENDANCE IN CONFERENCES OVER THE LAST 10 YEARS

15-17 October 2024

3rdInternational Electronic Conference on Diversity

Oral Online

30-02 December 2023

10thconference of Mikrobiokosmos

Poster Larissa, Greece

19-23 September 2022

ISMET8 - International Society for Microbial Electrochemistry and Technology

Participation Chania, Greece

12-17 June 2022

8th Bioremedation conference

Oral & Poster (Flash Oral)

Chania, Greece

16-18 December 2021

9th conference of Mikrobiokosmos

Poster Athens, Greece

8-11 June 2021

Poster Online

25-28 June 2018

Poster

7th Bioremedation conference Chania. Greece

ISMOS 8th conference

7-9 April 2017

Poster

7thconference of Mikrobiokosmos

Athens. Greece

PUBLICATIONS

- G. Charalampous, K.A. Kormas, E. Antoniou, N. Kalogerakis, E. Gontikaki . Distinct Communities of Bacteria and Unicellular Eukaryotes in the Different Water Masses of Cretan Passage Water Column (Eastern Mediterranean Sea). *Current Microbiology*. 2024; 81,381. https://doi.org/10.1007/s00284-024-03906-3
- G. Charalampous, E. Fragkou, N. Kalogerakis, E. Antoniou, E. Gontikaki. Diversity links to functionality: Unravelling the impact of pressure disruption and culture medium on crude oilenriched microbial communities from the deep Eastern Mediterranean Sea. *Marine Pollution Bulletin.* 2024; 202. https://doi.org/10.1016/j.marpolbul.2024.116275
- E. Antoniou, E. Fragkou, G. Charalampous, D. Marinakis, N. Kalogerakis, E. Gontikaki. Emulating Deep-Sea Bioremediation: Oil Plume Degradation by Undisturbed Deep-Sea Microbial Communities Using a High-Pressure Sampling and Experimentation System. *Energies.* **2022**; 15(13). https://doi.org/10.3390/en15134525
- G. Charalampous, E. Fragkou, K.A. Kormas, A.B. De Menezes, P.N. Polymenakou, N. Pasadakis, N. Kalogerakis, E. Antoniou, E. Gontikaki. Comparison of Hydrocarbon-Degrading Consortia from Surface and Deep Waters of the Eastern Mediterranean Sea: Characterisation and Degradation Potential. *Energies*. 2021; 14(8). https://doi.org/10.3390/en14082246
- P. Kritsiligkou, A. Chatzi, G. Charalampous, A. Mironov, CM. Grant, K. Tokatlidis.
 Unconventional Targeting of a Thiol Peroxidase to the Mitochondrial Intermembrane Space Facilitates Oxidative Protein Folding. *Cell Rep.* 2017;18(11).

 https://doi.org/10.1016/j.celrep.2017.02.053

LANGUAGES

- Greek (native)
- English (advanced)-IGCSE certificate, University of Cambridge

SKILLS

Technical and Laboratory Skills

Microbial Cultures

Molecular Biology (PCR, DNA extraction)

Biochemistry (protein/enzyme purification)

Bioinformatics (analysis of 16S rRNA and metagenomic sequencing results in the R environment)

Analytical and Data skills

Interpretation of experimental results, statistical analysis Research Methodology Critical thinking

Communication and soft skills

Scientific writing Verbal communication

Teamwork/Collaboration