

IVAN THEOFILOS PETSIMERIS

Curriculum Vitae

1. Personal information

Date of Birth: 16/08/1999

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Place of Residence: Mytilene

2. EDUCATION AND TRAINING

2021 B.Sc. in Oceanography and Ichthyology
Department of Oceanography and Marine Biosciences, University of the Aegean, Mytilene, Greece)

Bachelor's Thesis:

Current-induced bedforms on the continental shelf of southern Euboea, Greece.

2023 M.Sc. Coastal Management
Department of Oceanography and Marine Biosciences, University of the Aegean, Mytilene, Greece)

Master's Thesis:

Characteristics and possible formation mechanisms of submarine craters in the coastal area of Lesbos Island.

2024 Erasmus placement (International Internship)
GEOMAR Helmholtz Centre for Ocean Research, Kiel (Germany)

Description:

Analysis of Autonomous Underwater Vehicle (AUV) seabed imagery from a polymetallic manganese nodule study area in the Pacific Ocean.
Creation of orthophotomosaics using photogrammetry (Metashape)

2026 PhD Candidate:
Dissertation Topic: "Evaluation of underwater sand deposits in the North Aegean and their role as a coastal protection measure in the context of climate change."
Supervisor: Dr Thomas Hasiotis
Department of Oceanography and Marine Biosciences, University of the Aegean, Mytilene, Greece)

3. Professional Experience

2021-Present **Member, Laboratory of Coastal Morphodynamics, Management and Marine Geology**
Department of Oceanography and Marine Biosciences, University of the Aegean. Participation in research projects funded through the Research Committee of the University of the Aegean (ELKE), including:

- Field data collection

- Data processing and analysis
- Laboratory analysis of sediment samples and sediment cores
- Preparation of project deliverables and technical reports

- 2021 Akti Engineering I.K.E. - Marine and Land Surveying Services
Participated in the geophysical, geotechnical and offshore survey for the Lavrio–Euboea submarine power cable project. Responsibilities included:
- Processing Side Scan Sonar (SSS), Multibeam Echo Sounder (MBES), and Sub-bottom Profiler (SBP) datasets
 - Production of maps and seabed imagery
 - Inspection and processing of geotechnical samples

4. Participation in research projects.

(Through research contracts funded by the Research Committee of the University of the Aegean)

- 2021-2023 BEACHTECH: Coastal erosion caused by climate change: assessment and effective mitigation measures for tourist areas of the North Aegean and Cyprus.
(Principal Investigator: T. Hasiotis)
- 2021 Multiple use of space for Island clean Autonomy (MUSICA).
(Principal Investigator: E. Lilas)
- 2022 Geophysical survey for the construction of new port infrastructures in Armenistis, Ikaria
(Principal Investigator: T. Hasiotis)
- 2022-2023 AEGIS+ : Επέκταση της ερευνητικής υποδομής "Παρατηρητήριο Παράκτιου Περιβάλλοντος"
(Principal Investigator: V. Zervakis)
- 2023 Study on shoreline changes at **Afenteli Beach**, Skala Eresou, over the last fifteen years.
(Principal Investigator: T. Hasiotis)
- 2023 Marine geophysical and geotechnical survey for the laying of submarine power cables between Kastelorizo-Ro and Kastelorizo-Strongyli (Akti Engineering).
(Principal Investigator: T. Hasiotis)
- 2023 Mapping of marine habitats and biodiversity around Gyalí Island (LAVA S.A.)
(Principal Investigator: T. Hasiotis)
- 2024 Geophysical and geotechnical marine survey for the laying of XLPE 150 kV submarine power cables between Thrace-Limnos, Limnos-Lesvos and Lesvos-Skyros (Akti Engineering).
(Principal Investigator: T. Hasiotis)

2024	Offshore geological and geotechnical Desktop Study for fixed-bottom offshore windfarms in regions of Alexandroupoli and Samothraki (Akti Engineering) (<i>Principal Investigator: T. Hasiotis</i>).
2024	Geodatabase construction to support ground models in areas of offshore windfarms development (HEREMA). (<i>Principal Investigator: T. Hasiotis</i>)
2025	Geotechnical analysis of sediment cores for HEDNO submarine interconnections between Serifos–Sifnos and Serifos–Kythnos. (<i>Principal Investigator: T. Hasiotis</i>)
2025	Evaluation of the geologic basement depth based on geophysical investigations in the Kokkari (Samos) fishing shelter (Northern Aegean Region) (<i>Principal Investigator: T. Hasiotis</i>)
2025	Coordinated and adaptive monitoring of biodiversity change in ` Mediterranean rocky ecosystems.– (CAMBioMed) (<i>Principal Investigator: S. Katsanevakis</i>)
2025-2026	ECO-BEACHTECH: Addressing coastal erosion and flooding of beaches of touristic and ecological importance through environmentally friendly methods, in the context of climate change (<i>Principal Investigator: T. Hasiotis</i>)
2025	Evaluation and analysis of marine geophysical datasets for the Prinos CO ₂ storage project. (<i>Principal Investigator: T. Hasiotis</i>)
2026	Geophysical survey for the feasibility study of the Apollo CO₂ marine infrastructure at Revithoussa. (<i>Principal Investigator: T. Hasiotis</i>)

5. PUBLICATIONS

A. International and Greek Scientific and Technical Journals

A1. Evagorou E., Hasiotis T., **Petsimeris I.T.**, Monioudi I., Andreadis O., Chatzipavlis A., Christofi D., Kountouri J., Stylianos N., Mettas Ch. Velegraikis A., Hadjimitsis D., (2025). A holistic high resolution remote sensing approach for mapping coastal geomorphology and marine habitats. *Remote Sensing*, 17, 1437. <https://doi.org/10.3390/rs17081437>.

A2. Chatzistratis, D., Chatzipavlis, A. E., Monioudi, I. N., Velegrakis, A. F., Andreadis, O. P., Psarros, F., & **Petsimeris, I. T.** (2025). *Surf and swash zone dynamics from high-frequency observations at a microtidal low-energy dissipative beach. Journal of Marine Science and Engineering*, 13(5), 861. <https://doi.org/10.3390/jmse13050861>

A3. Sini M., Pistevos J., Bosmali A., Manoliou A., Nikolaou A., Pitarra G., **Petsimeris I.T.**, Andreadis O., Hasiotis T., Mazaris D., Katsanevakis S., (2025). Multimodal Remote Sensing of Octocoral Populations and Anthropogenic Impacts in a Natura 2000 Site (NE Aegean Sea, Greece). *Remote sensing*, submitted.

A4. Karsiotis P., Hasiotis T., **Petsimeris I.T.**, Manoutsoglou E., Andreadis O., (2025). Late Quaternary evolution and internal structure of an insular semi-enclosed embayment, Kalloni Gulf, Greece. *Quaternary*, 8, 74, <https://doi.org/10.3390/quat8040074>.

A5. Pistevos J., Nikolaou A., **Petsimeris I.T.**, Pitarra G., Greggio N., Andreadis O., Hasiotis T., Mazaris A., Katsanevakis S., (2026). First documented black seabream (*Spondyliosoma cantharus*) nesting aggregation in the Mediterranean Sea. *Environmental Biology of Fishes*, 109:15 <https://doi.org/10.1007/s10641-025-01792-7>.

B. Conference proceedings with full-text peer review

B1. **Petsimeris I.T.**, Hasiotis T., Missias S., Poulos A. and Konstantopoulou S., (2022). Geomorphology of the current-swept South Evia Shelf, Greece. *Marine and Inland Waters Research Symposium*, Porto Heli, Argolida, Greece, 16-20 September 2022, pp. 585-589.

B2. Lioupa V., Poulos A., **Petsimeris I.T.**, Andreadis O. Hasiotis T. and Velegrakis A., (2022). An unusual coastal depression at eastern Lesvos Island – assuming possible formation mechanisms. *Marine and Inland Waters Research Symposium*, Porto Heli, Argolida, Greece, 16-20 September 2022, pp. 617-621.

B3. **Petsimeris I.T.**, Oikonomou A., Poulos A., Andreadis O., Lioupa V. and Hasiotis T., (2023). Seabed conditions in the embayment of Agia Efimia (Kefalonia) 2 years after the Mediane IANOS. 2nd International Conference International Scientific Conference on Design and Management of Harbor Coastal and Offshore Works, Thessaloniki, Greece, May 24-27, 2023, Full Papers Proceedings Vol. II, 231-235.

B4. Poulos A., Andreadis O., **Petsimeris I.T.**, Chtouris N., Hasiotis T., Kokoromytis A. and Karamaniolas D., (2023). Boomer subbottom profiler: also valid for distinguishing habitat boundaries during port geological surveys? – An example from Armenistis coastal zone in Ikaria Island. 2nd International Conference International Scientific Conference on Design and Management of Harbor Coastal and Offshore Works, Thessaloniki, Greece, May 24-27, 2023, Full Papers Proceedings Vol. II, 173-177.

B5. Lioupa V., Hasiotis T., **Petsimeris I.T.**, Poulos A. Andreadis O., Manoutsoglou E., (2023). Isolated small depressions in shallow waters: common and odd structures with challenging formation mechanisms. 5th Euro-Mediterranean Conference for Environmental Integration, 2-5 October 2023, Rende (Cosenza), Italy (in press).

B6. Tzafaridi V., **Petsimeris I.T.**, Hasiotis T., (2024). Evaluation of habitat distribution and human imprints around an insular open-pit, Gyalí Island, Southeast Aegean Sea. *Proc. SPIE 13212*, Tenth International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2024), 1321208; <https://doi.org/10.1117/12.3034785>.

B7. Oikonomou A., Hasiotis T., **Petsimeris I.T.**, Poulos, A., Andreadis O., Manoutsoglou E., Lioupa V. (2024). Seabed morphology and habitat distribution in Moudros Bay (Greece) using a hydro-acoustic and ground-truthing dataset. *Hydromedit 2024* (5th International Congress on Applied Ichthyology, Oceanography & Aquatic Environment), 30 May – 2 June, Mytilene, Greece, Book of proceedings, 297-301.

B8. Tzafaridi M. V., **Petsimeris I.T.**, Oikonomou A., Hasiotis T., Andreadis O., Poulos A. (2024). Marine habitat mapping and shallow geomorphology around Gyalí Island. *Hydromedit 2024* (5th International Congress on Applied Ichthyology, Oceanography & Aquatic Environment), 30 May – 2 June, Mytilene, Greece, Book of proceedings, 292-296.

B9. Hasiotis T., **Petsimeris I.T.**, Chtouris N.K., Andreadis O., Velegrakis A., and Mettas C., (2024). Marine sand borrows in western Cyprus: Distribution and potential prospects. In: Phillips, M.R. Al-Naemi, S., and Duarte, C.M. (eds.), *Coastlines under Global Change: Proceedings from the International Coastal Symposium (ICS) 2024* (Doha, Qatar). *Journal of*

Coastal Research, Special Issue No. 113, pp. 80-84, Charlotte (North Carolina), ISSN 0749-0208.

B10. Lioupa V., **Petsimeris I.T.**, Karsiotis P., Papavasileiou F., Poulos A., Andreadis O., Manoutsoglou E., Hasiotis T., (2025). Sensing underwater landscape off coastal cities: Implications for better management strategies. Eleventh International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2025), 17-19 March, Paphos, Cyprus. Proc. of SPIE, 1381602, <https://doi.org/10.1117/12.3072401>.

B11 **Petsimeris I.T.**, Hasiotis T., Karsiotis P., Andreadis O., (2026). Delineation of Geological Basement and Marine Geohazards Using Subbottom Sensing Technology at Kokkari, Samos Isl., Greece. Book of Abstracts, 12th International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2026), p. 94.

B12 Karambas Th, Hasiotis T., Loizidi M., **Petsimeris I.T.**, (2026). Coral Bay: A test bed for nature-based solutions against beach erosion. Book of Abstracts, 12th International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2026), p. 112-113.

6. Personal Skills

- Πιστοποίηση αγγλικής γλώσσας επίπεδο Lower Michigan (ECCE, B2)
- Δίπλωμα Οδήγησης A2 και B
- Άδεια κυβερνήτη Ιστιοπλόου
- Άριστη γνώση χρήσης υπολογιστών και Microsoft office (Word, Excel, Power point κλπ.)
- Άριστη γνώση Γεωγραφικών Συστημάτων Πληροφοριών (GIS)
- Άριστη γνώση προγράμματος επεξεργασίας ηχοβολιστικών δεδομένων (SonarWiz, PDS)
- Άριστη γνώση προγραμμάτων φωτογραμμετρίας (Metashape, Colmap, Cloudcompare,)
- Καλή γνώση γλώσσας προγραμματισμού R
- Καλή γνώση Octave-MATLAB
- Καλή γνώση προγραμμάτων υδρακουστικής (Raven-Lite, Ishmael)
- Καλή γνώση σχεδιαστικού προγράμματος AutoCAD
- Καλή γνώση προγράμματος επεξεργασίας δορυφορικών δεδομένων (SNAP)
- Καλή γνώση προγραμμάτων επεξεργασίας εικόνων (Darktable)