

PERSONAL INFORMATION

Arturo Zenone



Bibliometric Indices: H-index: 8 – Citations: 344

CURRENT POSITION

- Researcher (Fixed-term contract) from October 1, 2023 at the Institute for the Study of Anthropogenic Impacts and Sustainability in the Marine Environment (IAS) – CNR, Palermo branch (Appointment letter Prot. No. 0276847 dated September 21, 2023, and subsequent extension).
- Technical Collaborator (VI level) since January 1, 2021, at the Department of Integrated Marine Ecology, Anton Dohrn Zoological Station, Sicily Marine Centre, PALERMO (Appointment letter Prot. 6882 dated December 15, 2020, Contract Prot. 136/2021 dated January 14, 2021) ON LEAVE.

EDUCATION AND TRAINING

April 4, 2014

- Second-Level Master's Degree - Master in Geoinformation and Geographic Information Systems in Support of Sustainable Land Management and Territorial Security.

Thesis: Indicator System Supporting Integrated and Sustainable Coastal Area Management.
Faculty of Engineering, University of Tor Vergata, Rome – Duration: 12 months – 60 credits.

April 16, 2008

- Specialist Degree - Marine Biological Resources (Class 6S - Grade: 110/110 cum laude - Registration No. CE2010164W01000017).

Thesis: Study of the Physiological Performance of Bivalve Mollusks: Potential Implications in Evaluating the Effects of Global Warming.
Faculty of Sciences MM.FF.NN., University of Palermo.

April 7, 2005

- Bachelor's Degree - Environmental Sciences (Registration No. CE2010019W01000015).

Thesis: Implementation of Mussel Farming Systems to Reduce Organic Load from Mariculture.
Faculty of Sciences MM.FF.NN., University of Palermo.

July 15, 1999

- High School Diploma - Scientific High School Diploma (Registration No. 0493797).

Santi Savarino Scientific High School, Partinico (PA).

PROFESSIONAL EXPERIENCE

Research Activities

- **Jun. 2018 – Dec. 2020:** Research grant as part of the project “Supporting environmental governance for the Posidonia oceanica sustainable transplanting operations – SEPOSSO” - LIFE16 GIE/IT/000761 (CNR-IAS, Prot. No. 0005813 dated 19.06.2018 replaced by Prot. No. 0006049 dated 22.06.2018).

Main activities: Evaluation of governance in different case studies, stakeholder interviews, stakeholder analysis, application of the Q methodology for evaluating transplant governance in Italy.

Duration: 30 months.

- **Feb. – Mar. 2019:** Visiting researcher at the Zoological Institute, Functional Morphology and Biomechanics, Christian-Albrechts-Universität, Kiel, Germany, under the supervision of Prof. S. Gorb.

Main activities: Microscopic analysis of *P. oceanica* root samples to assess root hair morphology, experiments on root hair adhesion capacity, development of a numerical model simulating root hair growth and adhesion capacity.

Duration: 2 months.

- **Dec. 2015 – Mar. 2018:** Research grant as part of the RITMARE project for CNR-IAMC Mazara del Vallo (CNR-IAMC, Prot. No. 0013014 dated 17.12.2015 and subsequent renewals).

Main activities: Development of systems for the collection, classification, and analysis of post-larval marine organisms. Application of innovative techniques (light traps) for sampling fish post-larvae. Design and execution of experiments with alien species.

Duration: 27 months.

- **Nov. – Dec. 2016:** Visiting researcher at the Centro Científico Tecnológico (CCT CENPAT – CONICET), Puerto Madryn, Chubut, Argentina (Letter from Dr. Javier E. Ciancio dated 12.12.2016, available in digital format).

Main activities: Technical support for research activities, both in the field and in the laboratory, on activity patterns and energy consumption of two fish species from the Patagonian coast. Development of data analysis routines (R Software) for high-frequency data collected with accelerometers.

Duration: 1 month.

- **Sep. 2016:** Visiting researcher at Lovén Center Kristineberg, University of Göteborg, Kristineberg, Sweden (Letter from Dr. Eduardo Infantes dated 8.11.2016, available in digital format).

Main activities: Flume experiments on the effects of hydrodynamics on the adhesion of *Posidonia oceanica* sprouts.

Duration: 0.5 months.

- **Jul. 2014 – Jul. 2015:** Scholarship on the themes of the Regional Observatory for Biodiversity at CNR-IAMC Capo Granitola (CNR-IAMC, Prot. No. 0007762 dated 18.7.2014).

Main activities: Collection and analysis of bibliographic data for the creation of the biodiversity portal, meta-analysis of data on the presence and distribution of Sicilian endemic species.

Duration: 12 months.

- **Jan. 2011 – Feb. 2012:** Project worker at CNR-IAMC Castellammare del Golfo TP, as part of the project “Non éxeo: Recovery, innovation, and promotion of an ancient fishing technique: fishing with pots” (Ass. to the Family, Sicilian Region, Action 7, “Youth protagonists of themselves and the territory,” project code G95E10000110001; [link](#)).

Main activities: Scientific dissemination on artisanal pot fishing, conceptualization and production of an educational video (“Non exèo,” 2012, 38 minutes), experimental fishing to evaluate the catch capacity of artisanal and industrial tools.

Duration: 13 months.

- **May 2009:** Visiting researcher at Bodega Bay Marine Laboratory, University of California Davis, San Francisco, CA, USA, under the supervision of Prof. Brian Helmuth (Letter from Prof. Brian Helmuth dated June 2009, available in digital format).

Main activities: Application of robo-mussels to intertidal communities to study the effects of climate change, mesocosm experiments on the physiological performance of bivalve mollusks under different thermal stress conditions.

Duration: 1 month.

- **Sep. 2008 – May 2009:** Visiting researcher at the Department of Biological Sciences, University of South Carolina, Columbia, USA, under the supervision of Prof. Brian Helmuth (Letter from Prof. Brian Helmuth dated June 2009, available in digital format).

Main activities: Design and implementation of a Heart Beat Rate detection system, mesocosm experiments on the physiological performance (HBR) of bivalve mollusks under different thermal stress conditions.

Duration: 7 months.

- **Jun. 2008:** Technical assistant for field activities and responsible for oceanographic equipment at CIRITA, Interdepartmental Research Center on Technology-Environment Interaction, University of Palermo (1 month, protocol not available due to archive discontinuation).

Main activities: Environmental characterization of areas within the AMP “Isola delle Femmine and Capo Gallo” using multiparametric probes, plankton nets, visual census activities, and video-photographic characterization.

Duration: 1 month.

- **Oct. – Nov. 2007:** Visiting researcher at SWIMS, University of Hong Kong, Hong Kong, CHINA, under the supervision of Prof. Gray A. Williams (No certificate issued).

Main activities: Analysis of organic matter in seawater samples, physiological performance analysis of marine gastropods.

Duration: 0.5 months.

- **Oct. 2006 – Aug. 2007:** Scientific collaboration contract, “Proposal for an integrated coastal management model of the Gulf of Castellammare through the use of modern soft farming techniques aimed at reducing mariculture impacts and integrating and developing the small-scale fishing sector” (POR No. 1999.IT.16.1.PO.011/4.17b/8.3.7/0053, University of Palermo, Dept. of Animal Biology “G. Reverberi,” Contract No. 15/06 dated 2.10.2016).

Main activities: Environmental characterization of transplant sites, growth of various mollusk and algae species to reduce trophic load, underwater sampling of farmed organisms, analysis of the growth of farmed organisms.

Duration: 10 months.

Research Support Activities

- **June 7–21, 2018:** Technical collaboration and support for research activities related to the bilateral Italy-Japan project titled "*Habitat choice and settlement of coral larvae of high latitude coral species under ocean acidification*", IAMC-CNR (Letter from Dr. F. Badalamenti, project manager, dated June 22, 2018, available in digital format). **Duration:** 15 days.
- **October – December 2016:** Technical collaboration and support for drafting the Local Management Plan of Co.Ge.P.A. "*Golfo di Castellammare*". IAMC-CNR (IAMC-CNR, Certificate no. 0003936 dated May 4, 2018). **Duration:** 3 months.
- **March 2015 – June 2016:** Technical collaboration and support for the project: "*Monitoring fishery resources and fishing: investigation of the movements of commercially and conservation-relevant marine species*", CNR-IAMC Capo Granitola (IAMC-CNR, Prot. no. 0009905 dated September 16, 2016). **Duration:** 15 months.
- **September 2014 – October 2015:** Technical collaboration and support for research activities on the "*Spatiotemporal distribution of megalopa catches of the alien crab *Percnon gibbesi* in western Sicily using light traps*", CNR-IAMC Castellammare del Golfo (CNR-IAMC, Prot. no. 0010560 dated November 3, 2015). **Duration:** 13 months.
- **June – July 2015:** Technical collaboration and support for research activities on the "*Habitat preference of megalopa of *Percnon gibbesi**", CNR-IAMC Castellammare del Golfo (CNR-IAMC, Prot. no. 0010558 dated November 3, 2015). **Duration:** 2 months.
- **2015:** Technical collaboration and support for the regional research project "*Monitoring the Local Management Plan for fishing in the Co.Ge.P.A. area of Trapani*". CNR-IAMC Castellammare del Golfo (CNR-IAMC Castellammare del Golfo, Prot. 166/GD/CM dated July 25, 2015).
- **April 2014 – May 2015:** Technical collaboration and support for the national research project RITMARE – Research activity SP2_WP1_AZ1_U002 – "*Ecology and study of the spatiotemporal dynamics of post-larval marine organisms of interest for fishing*". CNR-IAMC Castellammare del Golfo (CNR-IAMC, Prot. no. 0010561 dated November 3, 2015). **Duration:** 13 months.
- **2009–2011:** Collaboration on the project "*The impact of climate change on Mediterranean intertidal communities: losses in coastal ecosystem integrity and services – INTER-MED*", ERA-NET Joint Research Project with the University of Haifa (IL) and University of Dubrovnik (CR). Climate Impact Research Coordination for a Larger Europe (CIRCLE), European Commission (FP7 – Collaborative project), and Ministry of the Environment. Prof. G. Sarà, UNIPA project manager. **Duration:** 24 months.
- **2008–2010:** Collaboration on the project "*Coastal ecosystems - surviving at the edge: a multi-level assessment of the responses of sensitive marine areas to global warming and anthropogenic impacts*", Ministry of Education, University, and Research (MIUR) – Scientific and Technological Cooperation Projects under Italy-China agreements (FIRB Internationalization and MOST CHINA). [Prof. G. H. Williams, Coordinator and Scientific Manager; Prof. G. Sarà, UNIPA project manager]. **Duration:** 24 months.
- **2007–2009:** Effects of noise disturbance generated by boat traffic on marine communities in the "*Capo Gallo and Isola delle Femmine*" (PA) reserve (DINAUTIS). Ministry of the Environment. Prof. G. Sarà, UNIPA project manager. **Duration:** 24 months.
- **2006–2007:** Collaboration on the project "*Proposal for an integrated coastal management model of the Gulf of Castellammare through the use of modern soft farming techniques aimed at reducing impacts from mariculture and integrating and developing the small-scale fishing sector*". Prof. G. Sarà, UNIPA project manager, POR-Sicily 2000/2006 Measure 4.17b (Code 1999.IT.16.1.PO.011/4.17b/8.3.7/0053). **Duration:** 24 months.

Field Activities: Diving and Research Vessel Operations

- **April – June 2015:** Collaboration in underwater environmental characterization of the AMP *Isola delle Femmine and Capo Gallo* within the project "*Monitoring fishery resources and fishing: investigation of the movements of commercially and conservation-relevant marine species*" CNR-IAMC Capo Granitola (CNR-IAMC, Prot. No. 0007902 dated 27.7.2015). **Main activities:** Visual census, investigation of the distribution of the common spiny lobster (*P. elephas*), planning the placement of receivers for an ultrasonic telemetry study. **Duration:** 20 days.
- **May 12–14, 2015:** Participation in a research campaign aboard the vessel BIO4U as part of the project "*Development of a new methodological approach to study the recruitment dynamics of fish and crustaceans in the Kotor Bay*" (CNR-IAMC, Prot. No. 0000983 dated 03.12.2018). **Main activities:** Use of light traps for sampling post-larval organisms. **Duration:** 3 days.
- **2014–2015:** Participation in sea sampling campaigns of fish post-larvae and megalopa of *Percnon gibbesi* using light traps (CNR-IAMC, Prot. No. 0001031 dated 04.12.2018). **Main activities:** Development of a sampling system using light traps for collecting alien marine organisms in the post-larval stage. **Duration:** 30 days.

- **May 2014:** Onboard observer on fishing vessels for bluefin tuna fishing (Reg. CE 199/08 and 665/08), Oceanis srl, Ercolano (NA) (Contract dated 23.5.2014).

Main activities: Evaluation of the compliance of fishing operations, sampling of captured specimens and by-catch, validation of catch quantities. **Duration:** 10 days.

- **2011–2012:** Onboard observer on fishing vessels for bluefin tuna fishing (Reg. CE 199/08 and 665/08), UNIMAR, Rome (10-day embarkation—Assignment dated 11.05.2011 and 10-day embarkation—Assignment dated 29.05.2012).

Main activities: Evaluation of the compliance of fishing operations, sampling of captured specimens and by-catch, validation of catch quantities. **Duration:** 20 days.

- **July 29 – August 4, 2006:** Bansic '06 Oceanographic Campaign aboard the "Urania" vessel. CNR-IAMC Mazara del Vallo (CNR-IAS, Prot. No. 0001024 dated 03.12.2018).

Main activities: Water sample collection and analysis, mesozooplankton sampling, hydroacoustic data acquisition, database management. **Duration:** 7 days.

- **July 6–15, 2005:** Bansic '05 Oceanographic Campaign aboard the "Urania" vessel. CNR-IAMC Mazara del Vallo (CNR-IAS, Prot. No. 0001024 dated 03.12.2018).

Main activities: Water sample collection and analysis, mesozooplankton sampling, hydroacoustic data acquisition, database management. **Duration:** 10 days.

- **October 7–20, 2004:** Juvenile '04 Oceanographic Campaign aboard the "Dalla Porta" vessel. CNR-IAMC Mazara del Vallo (CNR-IAS, Prot. No. 0001024 dated 03.12.2018).

Main activities: Sampling of small pelagic fish species, mesozooplankton sampling, hydroacoustic data acquisition. **Duration:** 14 days.

University Teaching Activities

- **Academic Years 2006–2007–2008:** Laboratory assistant for the course "*Statistical Applications in Marine Biology*" (3 ECTS, code 01373) for the Marine Biology Degree Program (Trapani Campus). Faculty of MM.FF.NN., University of Palermo

(Prot. 887/III/13 dated February 6, 2006 - Prot. 2238/VII/1 dated April 11, 2007 - Prot. 3613/III/13 dated May 27, 2008).

Other Professional Activities

- **May 2022:** Instructor for an asynchronous e-learning training course organized by the Environmental Education and Training Area and the National Center for the National Laboratory Network, titled "*Normative and Methodological Tools for the Governance of Posidonia oceanica Transplants in Environmental Assessments (EIA and VINCA)*". ISPRA (5 days; Certificate dated June 30, 2022).
- **Dec. 2016:** Contract for professional services. **Main activities:** Marine biology expert, participation in drafting the Local Management Plan for Fishing (PGL), data entry and analysis for drafting the PGL for the Gulf of Castellammare (Sicily, Italy), planning and designing management measures. Co.Ge.P.A. Gulf of Castellammare (Castellammare del Golfo) (1 month; Contract dated December 2, 2016).
- **Dec. 2015 – Jan. 2016:** Collaboration contract for a study on "*Small-Scale Artisanal Fishing in the Special Protection Area of the Gulf of Castellammare (Sicily, Italy)*". **Main activities:** Development of a sampling plan through interviews and data collection on artisanal fishing landings, data analysis, report writing, and participation in the GFCM conference in Algiers. FIDGD (GFCM) - FAO (Rome) (10 days; PSA dated December 1, 2015).
- **Dec. 2014:** Local coordinator and operator for data collection activities for the project *Monitoring of large pelagic fishery for eastern Sicily*. **Main activities:** Coordination of the survey team and data collection on the socioeconomic characteristics of the studied fleet, landings data, and biometric parameters of collected samples. Krill Soc. Coop (1 month; Contract dated November 30, 2014).
- **Jul. 2014 – Dec. 2014:** Local coordinator and operator for data collection activities for the project *Recreational and Sport Fishing of Bluefin Tuna*. **Main activities:** Coordination of the survey team and data collection both in the field and from Coast Guard records. Krill Soc. Coop (28 days; Assignment letter dated July 17, 2014).
- **Feb. 2014 – Jun. 2014:** Local surveyor for the project WP1.1 "*F.E.P. Council Regulation No. 1198/2006 of July 27, 2006: Monitoring of Biological and Environmental Parameters as Part of Technical Assistance Actions for the former Directorate General for Maritime Fisheries and Aquaculture*". **Main activities:** Historical data collection and sampling. Krill Soc. Coop (4 months; Contract dated February 3, 2014).
- **Dec. 2013 – Mar. 2014:** Surveyor for data collection on coastal fishing landings (Southern Tyrrhenian Sea). CSR Pesca (Trapani). **Main activities:** Data collection on the socioeconomic characteristics of the studied fleet, landings data, and biometric parameters of collected samples. (3 months; Contract dated December 16, 2013).

- **Nov. 2013 – Dec. 2013:** Local coordinator and operator for data collection activities for the project *Monitoring of large pelagic fishery for eastern Sicily*. **Main activities:** Coordination of the survey team and data collection on the socioeconomic characteristics of the studied fleet, landings data, and biometric parameters of collected samples. Krill Soc. Coop (2 months; Contract dated October 30, 2013).
- **Oct. 2013:** Scientific expert for data collection activities for the project *Monitoring of large pelagic fishery for eastern Sicily*. **Main activities:** Sampling plan design, identification of the studied fleet, and validation of collected data. Krill Soc. Coop (15 days; Contract dated October 10, 2013).
- **Jun. – Jul. 2013:** Data collection for a research project (Contract MARE/2011/07 – Lot 3) aimed at analyzing the socioeconomic dimension of the fishing sector in four European regions: Scotland, Brittany, Galicia, and Sicily. **Main activities:** Data collection on the socioeconomic characteristics of the studied fleet through semi-structured interviews and database creation. Cosme srl (25 days; Assignment letter dated May 20, 2013).
- **Feb. 2013:** Collection of “local ordinances” from the Coast Guard, data on artificial barrier locations, aquaculture facilities, and other temporary or spatial restrictions on sea access to describe and define real fishing operations and integrate GIS developed under the FEP. **Main activities:** Data collection from the Coast Guard and database creation. Krill Soc. Coop (20 days; Assignment letter dated January 2, 2013).
- **Nov. 2012 – Dec. 2012:** Local coordinator and surveyor for data collection activities for the project: *Evaluating the effects of Marine Protected Areas and biological protection zones on fishery resources and fishing activities* (Marine Protected Areas of Plemmiro, Ciclopi Islands, and Pelagie Islands). **Main activities:** Coordination of the survey team and data collection on the socioeconomic characteristics of the studied fleet, landings data, and biometric parameters of collected samples, experimental fishing in reserve zones and external areas. Krill Soc. Coop (2 months; Contract dated October 30, 2012).
- **Aug. 2012:** Local coordinator and operator for data collection activities for the project *Monitoring of large pelagic fishery for eastern Sicily*. **Main activities:** Coordination of the survey team and data collection on the socioeconomic characteristics of the studied fleet, landings data, and biometric parameters of collected samples. Krill Soc. Coop (10 days; Letter dated August 1, 2012).
- **Aug. 2012:** Local coordinator and operator for data collection activities for the project *Recreational and Sport Fishing of Bluefin Tuna*. **Main activities:** Coordination of the survey team and data collection on the socioeconomic characteristics of the studied fleet, landings data, and biometric parameters of collected samples. Krill Soc. Coop (5 days; Letter dated August 1, 2012).

Here is the English translation of the provided text:

- **April 2011 – December 2012:** Data collection on coastal fishing landings (Southern Tyrrhenian Sea) for IREPA Onlus, Salerno (NA).

Main activities: Data collection on the socioeconomic characteristics of the studied fleet, landings data, and biometric parameters of collected samples.

Duration: 21 months (Assignment letters dated April 12, 2011, and June 18, 2012).

- **May 2012 – June 2012:** Coordinator and Operator for data collection for the project: *Evaluating the effects of Marine Protected Areas and biological protection zones on fishery resources and fishing activities* (Marine Protected Areas of Plemmiro, Ciclopi Islands, and Pelagie Islands).

Main activities: Sampling plan design and networking activities to ensure the project’s success.

Duration: 15 days (Assignment letter dated May 2, 2012).

- **November 2011 – December 2011:** Coordinator for preliminary information collection for the project: *Evaluating the effects of Marine Protected Areas and biological protection zones on fishery resources and fishing activities* (Marine Protected Areas of Plemmiro, Ciclopi Islands, and Pelagie Islands).

Main activities: Collection of preliminary information through semi-structured interviews and networking activities to ensure the project’s success.

Duration: 18 days (Letter dated November 3, 2011).

- **Academic Year 2008/2009:** Expert in managing suburban ecosystems and conserving natural emergencies (22 hours of teaching and laboratory activities).

Main activities: Classroom lectures using multimedia materials and laboratory activities.

IPSIA “E. Ascione,” Palermo (Prot. No. 498/C12 dated January 22, 2009).

Positions Held and Roles Performed

- **June 2021 – October 2023:** Delegate for managing the economic fund of the SZN Palermo headquarters (Delegation, Prot. No. 3196 dated June 24, 2021).
- **August 2021 – October 2023:** Responsible for the vehicles assigned to the Sicily Marine Centre (Service Order, Prot. No. 4208 dated August 25, 2021).
- **May 2022 – October 2023:** Responsible and point of contact for the laboratories of the SZN Sicily Marine Centre in Palermo (Provision No. 3 dated May 2, 2022).
- **May 2022 – October 2023:** Head of the “Marine Ecology and Fisheries” Functional Area of the SZN Sicily Marine Centre (Provision No. 3 dated May 2, 2022).
- **November 2022 – October 2023:** Safety Supervisor according to Legislative Decree 81/2008 for the SZN Palermo headquarters (Appointment, Prot. No. 6896 dated November 30, 2022).
- **October 2020 – Present:** Member of the working group “M.ORG.A.N. - Marine Organisms Aquaria and Network” of the Institute for the Study of Anthropogenic Impacts and Sustainability in the Marine Environment (CNR-IAS) (Institution Prot. No. 0003317/2020 dated October 14, 2020).
- **November 2019 – Present:** Member of the “*Scientific Underwater Operators Group*” of the Institute for the Study of Anthropogenic Impacts and Sustainability in the Marine Environment (CNR-IAS) (Institution Prot. No. 0006363/2019, Service Order Prot. No. 0006369/2019).
- **November 2017 – December 2020:** Full member of the technical-scientific staff of the joint Italy-Argentina laboratory (CAIMAR), Italian contact for the research line on activity patterns and energy consumption of marine organisms using tri-axial accelerometers (CNR-IAMC, Prot. No. 0011921 dated October 23, 2017).

Main activities: Validation of accelerometer use in the study of decapod crustaceans. Design and execution of experiments for studying marine organisms using tri-axial accelerometers. **Duration:** 49 months.

- **March 2008 – December 2020:** President and member of the Krill Soc. Coop., a company providing services for fishing, aquaculture, and scientific research support.
- **July 2009 – July 2014:** Consultant and project manager for various measures under the European Fisheries Fund. Krill Soc. Coop.
- **May 2008 – May 2012:** Member of the Board of Directors of the Fish Restocking Consortium of the Gulf of Castellammare (a private law entity under public control).
- **June 2012:** Member of the technical-scientific committee for the *Mare Nostrum* project of the Municipality of Trappeto (Project Code 1999.IT.16.1.PO.011/4.17/8.3.7/115) (1 month; Assignment dated May 25, 2011).

Personal Skills

Mother tongue

- Italian

Other languages

Language	Listening	Reading	Spoken Interaction	Spoken Production	Writing
English	C1	C1	B2	B2	B2
French	A2	A2	A2	A2	A2
Spanish	A2	A2	A2	A2	A2

Awards and Funded Projects

- **Mobility Project – Short-term Scientific Mission, COST Action: CA15216 (2019)**

Project: “Influence of roughness on *Posidonia oceanica* seedlings adhesion on hard substrate” (COST Action CA15216).

- **Mobility Project – Short Term Mobility Program, CNR (2016)**

Project: “Accelerometer techniques to investigate activities and behaviour of marine organisms” (CNR, Prot. No. 0061061 dated 14/09/2016).

- **KVA Grant, University of Gothenburg (2016)**

Project: “Influence of multiscale substrate complexity on *Posidonia oceanica* seedling anchorage ability and tolerance to hydrodynamic disturbance”, granted to Dr. Alagna, Dr. Badalamenti, and Dr. Zenone, KVA fund - IAMC-CNR (Italy) Application (Letter from the project manager dated November 8, 2016, available in digital format).

- **Research Project – Responsible and Beneficiary (2011)**

Project: “Non éxeo: Recovery, innovation, and promotion of an ancient fishing technique: fishing with pots”, funded by APQ Giovani Protagonisti di sé e del territorio, Regione Sicilia (€14,440; [link](#)).

- **Banco di Sicilia Degree Award, University of Palermo (2009)**

Award for the Specialist Degree Thesis titled: “Study of the physiological performance of bivalve mollusks: potential implications in evaluating the effects of global warming” (announced with D.R. No. 2744 dated May 30, 2008, Ranking Prot. No. 21773 dated March 19, 2009).

- **Mario Pasquini Award (2009)**

Third place for the Specialist Degree Thesis titled: “Study of the physiological performance of bivalve mollusks: potential implications in evaluating the effects of global warming” ([link to ranking](#)).

- **International Training Grant, University of Palermo (2008)**

Research project titled: “Study of physiological performance of mollusks in intertidal ecosystems to evaluate global warming” (University of Palermo, Decree 916/2008 dated February 29, 2008).

Here is the English translation of the provided text:

Diving Certifications

- **CEDIP-SIAS (2004):** Open Water Diver Certification
- **PADI (2004):** Advanced Open Water Diver Certification
- **CMAS (2013):** Freediving Certification (1st Degree)
- **ANIS (2024):** OXYGEN EMERGENCY PROVIDER Certification

Driving License

- **July 1998:** Driver’s License A and B
- **April 2022:** Certification for command and operation of recreational vessels within a 12-mile coastal navigation limit.

Scientific Publications in ISI Journals

1. Zenone, A., Giacalone, V. M., Martinez, M., Pipitone, C., Alagna, A., Infantes, E., ... & Badalamenti, F. (2025). *Stitching up *Posidonia oceanica* (L.) Delile anchorage scars using beach-cast seeds: Results of a six-year study.* **Biological Conservation**, 303(11103), 2. <https://doi.org/10.1016/j.biocon.2025.111032>
2. Ruocco, M., Lacorata, G., Palatella, L., Provera, I., Zenone, A., Martinez, M., Dattolo, E., Pazzaglia, J., Giacalone, V.M., Badalamenti, F., and Procaccini, G. (2024). *Movement ecology of a coastal foundation seagrass species: insights from genetic data and oceanographic modelling.* **Diversity and Distributions**, e13944. <https://doi.org/10.1111/ddi.13944> (Co-author).
3. Alagna, A., Giacalone, V.M., Zenone, A., Martinez, M., D’Anna, G., Buffa, G., Cavalca, C.J., Poli, A., Varese, G.C., Prigione, V.P., and Badalamenti, F. (2024). *Tannins and copper sulphate as antimicrobial agents to prevent contamination of *Posidonia oceanica* seedling culture for restoration purposes.* **Frontiers in Plant Science**, 15:1433358. <https://doi.org/10.3389/fpls.2024.1433358> (Corresponding author).
4. Pipitone, C., Badalamenti, F., D’Anna, G., Di Stefano, G., and Zenone, A. (2024). *On the occurrence of two lessepsian fishes in the southern Tyrrhenian Sea: filefish *Stephanolepis diaspros* and goatfish *Upeneus pori*.* **Turkish Journal of Zoology**, 48(7):5. <https://doi.org/10.55730/1300-0179.3203> (Last author).

5. Provera, I., Martinez, M., Zenone, A., Giacalone, V.M., D'Anna, G., Badalamenti, F., Marín-Guirao, L., and Procaccini, G. (2024). *Exploring priming strategies to improve stress resilience of Posidonia oceanica seedlings*. **Marine Pollution Bulletin**, 200:116057. <https://doi.org/10.1016/j.marpolbul.2024.116057> (Co-author).
6. Zenone, A., Kovalev, A., Badalamenti, F., and Gorb, S.N. (2024). *Natural rock roughness as a key parameter for optimizing seedling adhesion and restoration of the seagrass Posidonia oceanica in its native environment*. **Restoration Ecology**, e14084. <https://doi.org/10.1111/rec.14084> (First author).
7. Pipitone, C., Agnetta, D., Zenone, A., Giacalone, V.M., Badalamenti, F., Fiorentino, F., Rinelli, P., Sinopoli, M., Vega Fernández, T., and D'Anna, G. (2023). *When the Trawl Ban Is a Good Option: Opportunities to Restore Fish Biomass and Size Structure in a Mediterranean Fisheries Restricted Area*. **Sustainability**, 15(3):2425. <https://doi.org/10.3390/su15032425> (Co-first author).
8. Zenone, A., Badalamenti, F., Alagna, A., Gorb, S.N., and Infantes, E. (2022). *Assessing tolerance to hydrodynamic exposure of Posidonia oceanica seedlings anchored to rocky substrates*. **Frontiers in Marine Science**, 8:788448. <https://doi.org/10.3389/fmars.2021.788448> (First author).
9. Zenone, A., Pipitone, C., D'Anna, G., La Porta, B., Bacci, T., Bertasi, F., Bulleri, C., Cacciuni, A., Calvo, S., Conconi, S., Gravina, M.F., Mancusi, C., Piazza, A., Targusi, M., Tomasello, A., and Badalamenti, F. (2021). *Stakeholders' attitudes about the transplantation of the Mediterranean seagrass Posidonia oceanica as a habitat restoration measure after anthropogenic impacts: A Q methodology approach*. **Sustainability**, 13(21):12216. <https://doi.org/10.3390/su132112216> (First author).
10. Zenone, A., Filippov, A.E., Kovalev, A., Badalamenti, F., and Gorb, S.N. (2020). *Root hair adhesion in Posidonia oceanica (L.) Delile seedlings: a numerical modelling approach*. **Frontiers in Mechanical Engineering**. <https://doi.org/10.3389/fmech.2020.590894> (First and corresponding author).
11. Alagna, A., Zenone, A., and Badalamenti, F. (2020). *The perfect microsite: how to maximize Posidonia oceanica seedling settlement success for restoration purposes using ecological knowledge*. **Marine Environmental Research**. <https://doi.org/10.1016/j.marenvres.2019.104846> (Corresponding author).
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1. Vincenzo Maximiliano Giacalone, Fabio Badalamenti, Gaspare Buffa, Andrea Camedda, Giovanni D'Anna, Giuseppe De Lucia, Michele Gristina, Giorgio Massaro, Valeria Montalto, Alessandro Rinaldi, Arturo Zenone, Carlo Pipitone (2024). *Monitoring movements and behavior of the blue crab Callinectes sapidus: methodological and experimental approach*. **Biologia Marina Mediterranea**, 28(1): 212-215. (Co-author).

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3. Provera, I., Badalamenti, F., D'Anna, G., Giacalone, V.M., Marín-Guirao, L., Martinez, M., Zenone, A., and Procaccini, G. (2022). *Exploring priming strategies to improve stress tolerance and resilience of Posidonia oceanica seedlings*. **World**

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19. Lucia, V., D'Anna, C., Pacione, T., Paganelli, D., Zenone, A., Bertasi, F., Cacciuni, A., Bacci, T., & La Porta, B. (2022). *In-depth insights on methodological guidelines for preparing prescriptive frameworks in EIA provisions: environmental conditions structure for *Posidonia oceanica**. LIFE SEPOSSO (LIFE16 GIE/IT/000761), Rome.
20. La Porta, B., & Bacci, T. (Editors). (2022). *Manual for planning, implementation, and monitoring of *Posidonia oceanica* transplants*. LIFE SEPOSSO (LIFE16 GIE/IT/000761), Rome.

21. Bacci, T., & La Porta, B. (Editors). (2022). *Manual of techniques and operational procedures for Posidonia oceanica transplantation*. LIFE SEPOSSO (LIFE16 GIE/IT/000761), Rome.
22. D'Anna, G., Giacalone, V.M., Vega Fernández, T., Pipitone, C., Murenu, M., Muntoni, M., Di Stefano, G., Frongia, C., Carta, G., & Zenone, A. (2016). *Ecology and study of the spatiotemporal dynamics of marine organisms in the post-larval stage of interest for fishing*. Technical Report, December 2016.
23. Giacalone, V.M., Zenone, A., D'Anna, G., Buffa, G., Patti, C., Di Stefano, G., Pipitone, C., Badalamenti, F., & Gristina, M. (2016). *Monitoring fishery resources and fishing: investigation of movements of commercially and conservationally relevant marine species*. Technical Report, September 2016. DOI: [10.13140/RG.2.2.34896.71684](https://doi.org/10.13140/RG.2.2.34896.71684).
24. Sarà, G., Zenone, A., et al. (2007). *Proposal for an integrated management model of the coastal area of the Gulf of Castellammare using modern soft farming techniques aimed at reducing the impacts of mariculture and promoting the integration and economic development of the small-scale fishing sector*. Final Project Report, Project Code No. 1999.IT.16.1.PO.011/4.17b/8.3.7/0053.

Invited Seminars

1. **November 24, 2017:** "*Mechanisms of root adhesion in the Mediterranean seagrass Posidonia oceanica (L. Delile) on consolidated substrata*". Zoological Institute: Functional Morphology and Biomechanics, CAU, University of Kiel (Letter from Prof. S. N. Gorb dated November 28, 2018, available in digital format).
2. **December 9, 2016:** "*Accelerometers: a new tool to study circadian rhythms and activity of the European spiny lobster (Palinurus elephas, Fabricius, 1787)*". Centro Científico Tecnológico (CCT CENPAT – CONICET), Puerto Madryn, Chubut, Argentina (Letter from Dr. Javier E. Cianco dated November 27, 2018, available in digital format).
3. **September 30, 2016:** "*Posidonia oceanica dispersal, establishment, and resistance: a substrate complexity matter*". Seagrass Ecology Laboratory, Kristineberg Marine Station, University of Gothenburg (Letter from Dr. Eduardo Infantes dated November 8, 2016, available in digital format).

DICHIARAZIONE SOSTITUTIVA DI CERTIFICAZIONE (art. 46 e 47 D.P.R. 445/2000)

Il sottoscritto Arturo Zenone C.F. ZNNRTR80E22A176F nato a Alcamo il 22.5.1980 e residente a Trappeto, via Rinascita 69/A cap. 90040, consapevole che le dichiarazioni false comportano l'applicazione delle sanzioni penali previste dall'art. 76 del D.P.R. 445/2000 e ai sensi dell'art. 15 della Legge n° 183 del 12.11.11, dichiara che le informazioni riportate nel seguente curriculum vitae, redatto in formato europeo, corrispondono a verità. Il sottoscritto esprime il proprio consenso in merito al trattamento dei dati personali nel rispetto delle finalità e modalità di cui alla DLgs. 196/2003.

Trappeto, 01.03.2025

Arturo Zenone