

CV Barbara Marras

Barbara Marras holds a Master's degree in Chemistry (2003) and has been a member of the Laboratory of Environmental Hygiene at the University of Cagliari since 2004. Over the years, she has specialized in passive sampling techniques for the environmental monitoring of metals and organic compounds. Her work involves the use of Diffusive Gradients in Thin Films (DGT) for metals, and Polar Organic Chemical Integrative Samplers (POCIS), Silicone Rubber (SR), and Semipermeable Membrane Devices (SPMD) for organic contaminants.

She has participated in numerous national and international projects, including the INTERREG ATLANTIC project "*New Tools for the Monitoring of Water Quality in Marine Waters*" (MONITOOL), as well as several INTERREG Italy-France projects such as AER NOSTRUM, SEDRIPORE, SICOMAR, and MOMAR. Additionally, she contributed to the RAS L. 7/2007 project "*Priority Anthropogenic Pressures and Pollutants in Marine Protected Areas of Sardinia*," which aimed to conduct ecotoxicological assessments for improved area management.

In addition to her research, since February 2023, she has been working as a Technical Officer at the Department of Medical Sciences and Public Health at the University of Cagliari. In this role, she manages departmental laboratories, supports teaching and scientific research, and oversees waste disposal procedures, including the RENTRI platform for waste traceability. Since the 2023/2024 academic year, she has also served as a Contract Lecturer at the Faculty of Medicine and Surgery at the University of Cagliari, teaching "*Environmental Hygiene*" and "*Advanced Methods in Environmental Hygiene*" in the degree programs for Health Assistance and Prevention Techniques in the Environment and Workplaces.

Her extensive experience in contaminant analysis across various matrices (water, organisms, sediments), using techniques such as Atomic Absorption Spectroscopy (AAS) and Gas Chromatography-Mass Spectrometry (GC-MS), has resulted in the publication of 25 scientific papers in specialized journals, focusing on environmental contamination, marine pollution, and ecotoxicology.

Publications

1. Rodríguez J.G., Guesdon S., Amouroux I., et al. (2024). Metal concentrations in transitional and coastal waters measured by passive (Diffusive Gradients in Thin-films) and spot sampling: MONITOOL Project Dataset. *Data in Brief*, 53.
2. Amouroux I., Gonzalez J-L., Guesdon S., et al. (2023). A new approach to using Diffusive Gradient in Thin-films (DGT) labile concentration for Water Framework Directive chemical status assessment. *Environmental Sciences Europe*, 35:29.
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4. Caetano M., Correia dos Santos M.M., Rosa N., et al. (2022). Metals concentrations in transitional and coastal waters by ICPMS and voltammetry analysis of spot samples and passive samplers (DGT). *Marine Pollution Bulletin*, 179, 113715.

5. Rodríguez J.G., Amouroux I., Belzunce-Segarra M.J., et al. (2021). Assessing variability in the ratio of metal concentrations measured by DGT-type passive samplers and spot sampling in European seawaters. *Science of the Total Environment*, 783, 147001.
6. Bersuder P., Amouroux I., Belzunce-Segarra M.J., et al. (2021). Concurrent sampling of transitional and coastal waters by Diffusive Gradient in Thin-films (DGT) and spot sampling for trace metals analysis. *MethodsX*, 8, 101462.
7. Montero N., Atzori M., Marras B., et al. (2021). Trace metal levels in the edible tissues of sea cucumbers (*Holothuria tubulosa* and *Holothuria polii*) from Sardinia (Western Mediterranean). *Italian Journal of Food Safety*, 10:9576.
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11. Regan F., White B., Nolan M., et al. (2019). Passive sampling techniques for monitoring metals in transitional and coastal waters in the Atlantic region. *OCEANS 2019 - Marseille*, pp. 1-6, doi: 10.1109/OCEANSE.2019.8867564.
12. Schintu M., Marrucci A., Marras B., et al. (2018). Passive sampling monitoring of PAHs and trace metals in seawater during the salvaging of the Costa Concordia wreck (Parbuckling Project). *Marine Pollution Bulletin*, 135, 819-827.
13. Bettoschi A., Marrucci A., Marras B., et al. (2018). Arsenic speciation in marine sediments: A comparison between two sequential extraction procedures. *Soil and Sediment Contamination*, 27(8), 723-735.
14. Coroneo V., Carraro V., Marras B., et al. (2017). Presence of Trihalomethanes in ready-to-eat vegetables disinfected with chlorine. *Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment*, 34, 12, 2111-2117.
15. Moschino V., Schintu M., Marrucci A., et al. (2017). An ecotoxicological approach to evaluate the effects of tourism impacts in the Marine Protected Area of La Maddalena (Sardinia, Italy). *Marine Pollution Bulletin*, 122, 1-2, 306-315.
16. Abdelrhman K.F.A., Bacci G., Marras B., et al. (2017). Exploring the bacterial gut microbiota of supralittoral talitrid amphipods. *Research in Microbiology*, 168, 74-84.
17. Schintu M., Marrucci A., Marras B., et al. (2016). Heavy metal accumulation in surface sediments at the port of Cagliari (Sardinia, western Mediterranean): Environmental assessment using sequential extractions and benthic foraminifera. *Marine Pollution Bulletin*, 111, 1-2, 45-56.
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19. Schintu M., Marrucci A., Marras B., et al. (2014). Passive sampling technologies for the monitoring of organic and inorganic contaminants in seawater (Book Chapter). In: *Current Environmental Issues and Challenges*, pp. 217-237.
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22. Buosi C., Cherchi A., Ibba A., et al. (2013). Preliminary data on benthic foraminiferal assemblages and sedimentological characterisation from some polluted and unpolluted coastal areas of Sardinia (Italy). *Bollettino della Società Paleontologica Italiana*, 52, 1, 35-44.

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