


PERSONAL INFORMATION Valentina Mazzurco Miritana

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 Department of Energy Technologies and Renewable Sources
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F | Date of birth 15/06/1982 | Italian nationality

Enterprise	University	EPR
<input type="checkbox"/> Management Level	<input type="checkbox"/> Full professor	<input type="checkbox"/> Research Director and 1st level Technologist / First Researcher and 2nd level Technologist / Principal Investigator
<input type="checkbox"/> Mid-Management Level	<input type="checkbox"/> Associate Professor	<input checked="" type="checkbox"/> Level III Researcher and Technologist
<input type="checkbox"/> Employee / worker level	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level/ Technical collaborator	<input type="checkbox"/> Researcher and Technologist of IV, V, VI and VII level / Technical collaborator

WORK EXPERIENCE

July 2023 – present

Permanent Researcher

ENEA-Casaccia, via Anguillarese 301, 00123 Rome, Italy

Bioenergy, Microbial ecology, Ecology, Microbial community, Biotechnology, Organic waste valorization, Fermentation, Anaerobic Digestion, Bioaugmentation and biostimulation strategies, Rumen ecosystem

April 2023 –July 2023

Temporary Researcher

ENEA – Casaccia Research Centre – Rome, Italy

Bioenergy, Microbial ecology, Ecology, Microbial community, Biotechnology, Organic waste valorization, Fermentation, Anaerobic Digestion, Bioaugmentation and biostimulation strategies, Rumen ecosystem

October 2021 – April 2023

Post-doct

CNR- National Research Council - IRET- Research Institute on Terrestrial Ecosystems. Research project: BIOCHAR LATIUM -Project, CUP J85F21000410002 has been funded by Lazio Region within POR FESR Lazio 2014-2020 programme.

February 2019-October 2021

Research fellow

AZeRO Antibiotics Project "Evaluation of the Presence of Antibiotics in Animal Wastes and Digestate from Biogas Plants: Study of Strategies for their Removal" Prot. N.ro 85-2017-15065 Research Group Projects - CNR-IRSA and ENEA Knowledge and cooperation for a new development model", in implementation of Regional Law n. 13 of 04 August 2008 and of the Regional Strategic Programme for Research, Innovation and Technology Transfer 2017-2020.

EDUCATION AND TRAINING

- June 2017 PhD in Ecology and Management of Biological Resources - Study of microbial communities involved in the process of anaerobic digestion and energy valorization of waste lignocellulosic biomass.
La Tuscia University of Viterbo
- October 2012 Master's degree in Diversity in Biological Systems (Biological Sciences (6/S)) 110/110.
University of Tuscia, Viterbo – Italy
- July 2024 Training “QuantStudio5 Smart Start Orientation”
- November 2019 International workshop on Exotic Flow Cytometry
- October 2016 7th International course in Microbial Ecology (ICME7) “Publishing dos and don'ts for Microbial Ecologists” MicrobEco, CT, Italy
- June 2012 Course of “Stereomicroscopy and Microscopy” Zeiss, Germany

WORK ACTIVITIES

Academic activity

- 2023 - Present Lectures and seminars for master's degree courses on the topics of biotechnological processes for biomass energy valorization, microbial ecology and biochar application
- 2017 - Present Training of students for master's theses, PhD students, research fellows
- 2017 - Present Participation in experimental and educational activities

PERSONAL SKILLS

- Mother tongue(s)** **Italian**
- Other language(s)** **English**
- Digital skills European informatics passport – EIPASS

ADDITIONAL INFORMATION
Main Publications

Total number of publications in peer-review journals: 16 Total number of citations in Google Scholar: 290 H index in Google Scholar: 10

1. Massaccesi, L., Nogués, I., Mazzurco, V. M., Passatore, L., Zacchini, M., Pietrini, F., ... & Marinari, S. (2024). Short-term effects of biochar and compost on soil microbial community, C and N cycling, and lettuce (*Lactuca sativa* L.) yield in a Mediterranean environment. *Applied Soil Ecology*, 199, 105411.
<https://doi.org/10.1016/j.apsoil.2024.105411>
2. Policastro, G., Ferraro, A., Miritana, V. M., Massini, G., & Fabbricino, M. (2023). Fermentative hydrogen production enhancement by microbial community selection and enrichment through biostimulation. *Fuel*, 355, 129396.
<https://doi.org/10.1016/j.fuel.2023.129396>
3. Mazzurco Miritana, V., Gaetani, A., Signorini, A., Marone, A., & Massini, G. (2023). Bioaugmentation Strategies for Enhancing Methane Production from Shrimp Processing Waste through Anaerobic Digestion. *Fermentation*, 9(4), 401.
<https://doi.org/10.3390/fermentation9040401>
4. Nogue I., Mazzurco Miritana V*, Passatore L., Zacchini M., Peruzzi E., Carloni S., Pietrini F., Marabottini R., Chiti T., Massaccesi L., Marinari S. 2023. Biochar soil amendment as carbon farming practice in Mediterranean environment. *Geoderma Regional* e00634.
<https://doi.org/10.1016/j.geodrs.2023.e00634>
5. Miritana, V. M., Patrolecco, L., Barra Caracciolo, A., Visca, A., Piccinini, F., Signorini, A., Rosa S., Grenni P., Garbini G.L., Spataro F., Rauseo J. & Massini, G. (2022). Effects of Ciprofloxacin Alone or in Mixture with Sulfamethoxazole on the Efficiency of Anaerobic Digestion and Its Microbial Community. *Antibiotics*, 11(8), 1111.
<https://doi.org/10.3390/antibiotics11081111>
6. Caracciolo, A. B., Visca, A., Rauseo, J., Spataro, F., Garbini, G. L., Grenni, P., Mariani L.; Mazzurco Miritana V., Massini G. & Patrolecco, L. (2022). Bioaccumulation of antibiotics and resistance genes in lettuce following cattle manure and digestate fertilization and their effects on soil and phyllosphere microbial communities. *Environmental Pollution*, 315, 120413.
<https://doi.org/10.1016/j.envpol.2022.120413>
7. Visca A., Rauseo J., Spataro F., Patrolecco L., Grenni P., Massini G., Mazzurco Miritana V., Barra Caracciolo A. (2022). Antibiotics and antibiotic resistance genes in anaerobic digesters and predicted concentrations in agroecosystems. *Journal of Environmental Management*, 301, 113891.
<https://doi.org/10.1016/j.jenvman.2021.113891>
8. Ferraro, A., Massini, G., Mazzurco Miritana, V., Panico, A., Pontoni, L., Race, M., Rosa, S., Signorini, A., Fabbricino, M., Pirozzi Francesco. (2021). Bioaugmentation strategy through enriched inocula to enhance PAHs anaerobic degradation in contaminated soils. *Chemosphere*, 130091.
<https://doi.org/10.1016/j.chemosphere.2021.130091>
9. Visca, A., Barra Caracciolo, A., Grenni, P., Patrolecco, L., Rauseo, J., Massini, G., Mazzurco Miritana, V., & Spataro, F. (2021). Anaerobic Digestion and Removal of Sulfamethoxazole, Enrofloxacin, Ciprofloxacin and Their Antibiotic Resistance Genes in a Full-Scale Biogas Plant. *Antibiotics*, 10(5), 502.
<https://doi.org/10.3390/antibiotics10050502>
10. Lembo, G., Rosa, S., Mazzurco Miritana, V., Marone, A., Massini, G., Fenice, M., & Signorini, A. 2021. Thermophilic Anaerobic Digestion of Second Cheese Whey: Microbial Community Response to H₂ Addition in a Partially Immobilized Anaerobic Hybrid Reactor. *Processes*, 9,1, 43.
<https://doi.org/10.3390/pr9010043>
11. Ferraro, A., Massini, G., Mazzurco Miritana, V., Rosa, S., Signorini, A., Fabbricino, M. (2020). A novel enrichment approach for anaerobic digestion of lignocellulosic biomass: Process performance enhancement through an inoculum habitat selection. *Bioresource Technology*, 313, 123703.
<https://doi.org/10.1016/j.biortech.2020.123703>
12. Mazzurco Miritana, V., Massini, G., Visca, A., Grenni, P., Patrolecco, L., Spataro, F., Rauseo, J., Garbini, G., Signorini, A., Rosa, S., Barra Caracciolo, A. (2020). Effects of sulfamethoxazole on the microbial community dynamics during the anaerobic digestion process. *Frontiers in Microbiology*, 11, 2221.
<https://doi:10.3389/fmicb.2020.537783>
13. Barra Caracciolo, A., Visca, A., Massini, G., Mazzurco Miritana, V., Patrolecco, L., Grenni, P. (2020). Environmental Fate of Antibiotics and Resistance Genes in Livestock Waste and Digestate from Biogas Plants. *World Health*, 21, 23.
<https://doi:10.3772/ESPRAM.20201>
14. Ferraro A., Massini G., M. Miritana V., Signorini A., Race M., Fabbricino M. (2019). A simplified model to simulate bioaugmented anaerobic digestion of lignocellulosic biomass: Biogas production efficiency related to microbiological data. *Science of the Total Environment*
<https://doi.org/10.1016/j.scitotenv.2019.07.051>
15. Ferraro, A., Dottorini, G., Massini, G., Miritana, V. M., Signorini, A., Lembo, G., & Fabbricino, M. (2018). Combined bioaugmentation with anaerobic ruminal fungi and fermentative bacteria to enhance biogas production from wheat straw and mushroom spent straw. *Bioresource Technology*, 260, 364-373.
<https://doi.org/10.1016/j.biortech.2018.03.12818> Patriarca, C., De Luca, E., Felici, C., Lona, L.,
16. Mazzurco Miritana, V., Massini, G. (2016). Bio-production of Hydrogen and Methane Through Anaerobic Digestion Stages. In *Enriched Methane* (pp. 91-109). Springer, Cham.

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Rome, 15 April 2024

Valentina Mazzurco Miritana