

Alessia Marzo is an Environmental Engineering, PhD in Agricultural Engineering and a researcher in the AGR/08 (Agricultural hydraulics and watershed protection) sector at the Department of Agriculture, Food and Environment - University of Catania, where she has been carrying out her research activities since 2010. She has obtained the title of *Expert in the Subject* in the scientific disciplinary sector AGR/08 "Agricultural Hydraulics and Hydraulic-Forestry and received a scientific award by the National Research Council (CNR) – Institute for Agricultural and Forest Systems in the Mediterranean, Italy. During his years of university experience, he has published a more than 40 scientific papers mainly focused on the following topics: the reuse of wastewater in agriculture, natural wastewater treatment systems (constructed wetlands, lagooning, and storage reservoirs), the use of GIS software for processing environmental data, the application of new methodologies for modeling the hydraulic functioning and pollutant removal processes in subsurface flow constructed wetlands using the HYDRUS-2D software and the multi-component reactive transport module CW2D, the estimation of evapotranspiration in herbaceous plants within constructed wetland systems, the study of the hydraulics and hydrology of constructed wetlands, the assessment of clogging and its impact on the hydraulic behavior of constructed wetlands, and the evaluation of ecosystem services. Some of these publications have been carried out in collaboration with researchers from prestigious national and international universities and research centers.

She has been involved to prepare and carry out many national and international research projects such as:

- September 2022 – March 2026: The AGRITECH project, funded under the National Recovery and Resilience Plan (NRRP), Mission 4 Component 2 Investment 1.4 - Call for tender No. 3138 of 16/12/2021 of Italian Ministry of University and Research funded by the European Union – NextGenerationEU. It focuses on the use of enabling technologies for the sustainable development of agri-food production, with the aim of promoting the adaptation to climate change, the development of marginal areas, the resilience and multifunctionality of agricultural, forestry and livestock systems, the safety, quality, traceability and uniqueness of the agri-food supply chains, especially in areas with a territorial vocation.
- September 2023 – February 2028: CARDIMED - Climate adaptation and resilience demonstrated in the Mediterranean region. It is a project funded by the Horizon Europe Programme focused on boosting Mediterranean climate resilience through widespread adoption of Nature-based Solutions (NbS) across regions and communities.

Alessia Marzo has participated in over 40 national and international conferences, sharing her experience and promoting scientific collaboration. Dr. Alessia Marzo, in addition to her research, is

committed to disseminating knowledge, enabling her to achieve social impact. She has been interviewed by national radio stations, local TV channels, and newspapers. She has supervised doctoral dissertation, doctoral students and master's students. Dr.