

**Valeria Mezzanotte**  
CURRICULUM VITAE

Professional positions and achievements:

1981: Master Degree in Agricultural Sciences

1985-1988: PhD in Sanitary Engineering at Politecnico di Milano

1989-91: Post-doctoral fellowship on Treatment and reclamation of wastewaters from textile dyeing industry at Politecnico di Milano

1993-2019: Researcher at Department of Earth and Environmental Sciences at Università degli Studi di Milano Bicocca

1997-2019: Professor in charge for the course of Environmental Impact Assessment for the Post-graduate Program in Sciences and Technologies for Environment and Landscape

2004-2005: Lecturer on Environmental Impact Assessment for the II level Master in Integrated Strategic Planning for the Development of Architectural Resources at Politecnico di Milano.

2005-2006 to 2011-2012: Contract Professor for Applied Ecology for the MSc degree in Analysis and Management of Natural Resources at Università degli Studi dell'Insubria (Varese).

2012: Lecturer on Management of sewage sludge at Notre Dame University in Beirut (Lebanon)

2015-present: Lecturer on Wastewater Treatment and management for the I level Master Program in Water Resource Management in International Development Aid at Università degli Studi di Milano Bicocca

2017: Achievement of National Academic Qualification as Associate Professor (sector 05/C1 Ecology)

2019-present: Lecturer on Integrated environmental assessment for the II level Master Program in Sustainable Development Jobs at Università degli Studi di Milano Bicocca

2019-present: Associate Professor of Ecology at Università degli Studi di Milano Bicocca, responsible for the courses of Environmental Impact Assessment and Applied Ecology

Research interests: Water pollution and recovery, wastewater treatment, conventional biological and chemical processes for wastewater treatment, microalgae for wastewater treatment, disinfection, re-use of treated effluents, environmental assessment, protection and use of water resources, recovery strategies for riverine environments under multiple stressors, ecological flows.

Principal investigator of:

- UNIMIB research unit in the project “Sviluppo di biosensori per il controllo dei processi di depurazione acque”(“Biosensors for the control of wastewater treatment processes”, COFIN 2000, National Coordinator Prof. Alberto Rozzi), title of the unit project: “Uso di biosensori e caratterizzazione della biomassa batterica per la valutazione dell'attività biologica in sistemi di depurazione, in particolare bio-carboni attivi” (“Use of biosensors and characterization of bacterial biomass to assess biological activity in wastewater treatment systems, with special reference to bio-activated carbons”), 2001-2003.

- UNIMIB research unit in the project “Disinfezione e ossidazione per la potabilizzazione ed il riuso delle acque: sottoprodotti e fenomeni di ricrescita batterica” (“Disinfection and oxidation for drinking water and re-use of wastewaters: chemical by-products and bacterial re-growth”, COFIN 2001, Coordinatore Nazionale Prof. Costantino Nurizzo, title of the unit project: “Development of innovative methods to evaluate the efficiency of different disinfection techniques on bacterial and viral indicators”), 2002-2004

- UNIMIB research unit in the project “Sostenibilità del Torrente Lura: un progetto pilota di gestione integrata e partecipata” (“Sustainability of Lura stream: a pilot project of integrated and participated management”, FONDAZIONE CARIPL0, 2005), 2005-2007

- UNIMIB research unit and scientific coordinator in the project “Trattamento mediante fitodepurazione per l'affinamento delle acque depurate e per la salvaguardia ambientale del corpo

idrico recettore: sperimentazione a scala pilota e applicazione progettuale per una gestione integrata e partecipata” (“Constructed wetland for polishing secondary effluents and protecting the receiving waterbody: pilot scale testing and design for an integrated and participated management”, FONDAZIONE CARIPOLO, 2005), 2007-2009.

- UNIMIB research unit in the project “Tutela e uso delle risorse idriche nel bacino del Livescia nell’ambito dell’alto Lura. Un progetto pilota di gestione partecipata” (“Protection and use of water resources in the Livescia basin, within the Lura watershed. A pilot project of integrated management”, FONDAZIONE CARIPOLO, 2006), 2007-2009.

- UNIMIB research unit in the project “Utilizzo di biofiltri naturali per la depurazione civile e industriale” (“Use of natural biofilters for civil and industrial wastewater treatment”, FONDAZIONE CARIPOLO, 2011).

- “Integration of microalgal based processes in wastewater treatment (IMAP)” (FONDAZIONE CARIPOLO, 2015), 2016-2018.

- UNIMIB research unit in the project “IL POLO DELLE MICROALGHE -Le Microalghe per il trattamento e la valorizzazione di reflui e sottoprodotti agro-zootecnici e caseari” (“Microalgae for the treatment and valorization of agro-farming and dairy wastewaters”, Bando Emblematico Maggiore, FONDAZIONE CARIPOLO, 2015), , 2016-2019

- UNIMIB DISAT research unit in the project Perform Water (Regione Lombardia, 2017), Grant to DISAT, 2017-2020

- UNIMIB research in the project “A microbe-based value chain: TREATment and valorisation of texTILE wastewater - (TRETILE)” (Integrated research on industrial biotechnologies and bioeconomy, FONDAZIONE CARIPOLO, 2017), 2018-2020.

Scientific chair of the following projects and activities funded by different institutions:

2000: Characterization of wastewaters from chemical and pharmaceutical industry (Air Liquide Italia)

2001-2002: Chemical and biological oxidation of wastewaters from chemical and pharmaceutical industry (Air Liquide Italia)

2003: Starting of biological denitrification of drinking water in Prato (FI)(Severn Trent)

2004: Application of MARTINA biotitration system for testing toxicity on microalgae (Ecotox)

2005-2008: Strategies for studying, protecting and recovering the aquatic environment of Serio river (BG) (Amministrazione Provinciale di Bergamo)

2006: Pilot scale ozonation of sewage sludge (Lura Ambiente)

2009-2012: Development of monitoring protocols and recovery strategies for riverine environments under multiple pressures in Regione Lombardia (ARPA, 2009)

2010-2016: Experimental studies to define Ecological Flow in the upper part of Serio river (Enel, Pozzi Electa, IRF, Vallalta, 2010)

2012: Studies for the integrated requalification of Morla stream (BG) (Comune di Bergamo, 2012).

2013-2015: Evaluation of the quality of ecosystems in some tributaries to Lake Ceresio and Lake Maggiore (CIPAIS, 2013)

2018 – Comparative environmental analysis of conventional and no-dig technologies for the rehabilitation of water and wastewater pipes (MM, 2018).

2018 – Monitoring plan to assess the impacts of the withdrawal regime defined from a previous experimental research on Serio river (Enel Green Power, Pozzi Electa, IRF, Vallalta)

2018 – Monitoring of the efficiency of the constructed wetland built to treat the effluents from the CSO in Villaguardia (CO) (Colline Comasche SrL, 2018)

Scientific Institution and Association membership:

- International Water Association,

- ORGAGEC,

- International Scientific Board of IMU (Intelligences des Mondes Urbains).

- SIte (Società Italiana di Ecologia)

- EABA (European Algal Biomass Association)
- AISAM Italia (Associazione Italiana per lo Studio e le Applicazioni delle Microalghe)

Teaching and tutorial activity:

1993 - present: Besides the university courses indicated in the previous paragraph, V.Mezzanotte has been lecturer in many Specialization courses and Masters organised by Politecnico di Milano ad Università degli Studi di Milano Bicocca on different topics in the fields of wastewater treatment, applied ecology and environmental impact assessment.

1986- present: Advisor of 8 PhD (Environmental Sciences) thesis, about 100 Master thesis (Environmental Sciences and Technologies and 200 Bachelor thesis (Land and Environmental Sciences).

External reviewer of: Several Bachelor and Master thesis in Environmental Engineering (Politecnico di Milano), 5 PhD thesis at ENTPE/INSA (Ecole Doctorale n.206 Chimie, Procédés, Environnement) of Lyon (France), 1 in Industrial Engineering (Università degli Studi di Padova), 1 in Forestry and Natural Sciences at University of Western Finland, Kuopio, 1 in Science and Engineering at University of Flinders, Australia

Tutorial activity for: 12 Fellowship holders and grant holders at DISAT, Università degli Studi di Milano

Scientific referee for several international Journals as:

- ELSEVIER: Algal Research, Chemosphere, Desalination, Environmental Pollution, Journal of Bioscience and Bioengineering, Journal of Cleaner Production, Journal of Environmental Management, Journal of Hazardous Materials, Science of the Total Environment, Water Science and Technology, Biosystems Engineering
- MDP: International Journal of Environmental Research and Public Health
- SPRINGER: Environmental Science and Pollution Research
- PLOS ONE
- TAYLOR & FRANCIS: Ozone Science and Technology
- AIDIC: Chemical Engineering Transactions
- MDPI: Water, Sustainability

Guest Editor for a Special Issue of Water (MDPI) entitled "Integration of Microalgal Based Processes in Wastewater Treatment (2019-2020)

Publications:

V. Mezzanotte authored or co-authored more than 90 scientific papers, including research papers on ISI journals (67), on Italian journals (28) and book chapters (9), and 108 presentations or posters at national and international congresses.

Bibliometric Indicators

Total Citations: 1001

H-index: 19

(source Scopus 19/01/2021)

Other activities:

Collaboration to the development of the Plans for Water Management for the provinces of Bergamo (2007), Sondrio (2008-2009), and Lecco (2016) and to several Strategic Environmental Assessments for province and municipal plans.