

PERSONAL INFORMATION

Fabio Masi

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Date of birth 08.05.1963 | Nationality Italian

WORK EXPERIENCE

98–Present **Partner, R&D manager, Technical Director, process expert for wastewater treatment**

IRIDRA S.r.l., Florence (Italy)

Project co-author for over 450 detailed designs of constructed wetlands for wastewater treatment and reuse (often as project manager).

Coordinator of several research projects related to natural wastewater treatment.

Most relevant works:

- 1) Constructed Wetlands wastewater Treatment plant for the villages Figline, Palazzone, Ponte a Rigo, for wastewater from thermal buildings and for the tertiary treatment of S.Casciano dei Bagni's activated sludge plant – Municipality of San Casciano dei Bagni
- 2) Constructed wetland system for the treatment of urban wastewater from the village of Olle (Savona) 200 p.e. – Municipality of Finale Ligure – Project Manager
- 3) Constructed wetland systems for the treatment of urban wastewater from the municipality of Dicomano (Florence) (3600 p.e.) – Designer
- 4) Constructed wetland system for the touristic village “Borgo Villa Saletta” (450 p.e.), Municipality of Palaia (Pisa) – Project Manager
- 5) Guidelines for the application of constructed wetland systems in the territory of ATO 3 Tuscany – Co-ordinator and consultant
- 6) Constructed wetland systems for winery wastewater: Cecchi Winery – Castellina in Chianti (SI); Ornellaia Winery – Bolgheri (LI)
- 7) Preliminary analysis for the application of constructed wetland systems in the territory of ATO 6 – Ombrone – Tuscany - Co-ordinator and consultant
- 8) Constructed wetland system for the treatment of municipal wastewater from the villages of Marciola and Mosciano (Florence) 60 and 130 p.e. – Municipality of Scandicci – Project Manager
- 9) Removal of Nitrogen and Phosphorus by Constructed Wetlands and natural based solutions in the Venice Lagoon watershed – rivers: Dese, Sile, Vernise, Zermason, Zero, Peseggiana - Project manager
- 10) National guidelines for planning of constructed wetlands for civil and municipal wastewater treatment (APAT – CTN) – Co-author
- 11) EC FP5 Project EVK1-CT-2000-00071 “SWAMP – Sustainable water management and Wastewater Purification in Tourism Facilities” – Project Designer and Project Manager for IRIDRA - Countries involved: Austria, Germany, Italy, Latvia, Lithuania Budget: 1.084.559,00 €**
- 12) Constructed Wetlands system for leachates treatment at the Rovigo province landfill site for municipals waste - Project manager
- 13) Study on the application of natural systems for treatment of Combined Sewer Overflows in the territory under the competence of Po River Authority (Milan province) - Project designer and Project manager – since 2007
- 14) Consultancy for the local application of the Emilia Romagna Regional Water Protection Plan in the Rimini and Bologna provinces – Consultant
- 15) Project Designer and Project Manager for the World Bank + Global Environment Facility Project: Ministry of Environment – Realisation of a wastewater treatment plant by Constructed wetlands for Soroca City (28000 pe) – Moldova – since 2007 to 2011

- 16) Constructed Wetlands system for leachates tertiary treatment at the Quito city landfill site for municipal waste (Ecuador) - Project manager – Project Manager and designer - since 2008
- 17) Constructed Wetlands system for the treatment of domestic wastewater of the village of Chorfech (750 pe), Tunis, Tunisia. – Project Manager and Designer
- 18) Constructed wetland system for Combined Sewer Overflow treatment for the Municipality of Gorla Maggiore (Varese – Italy) – Project Designer – since 2009
- 19) Project Designer and Project Manager for the World Bank Project: Ministry of Environment – Realisation of a wastewater treatment plant by Constructed wetlands for Orhei City (22000 pe) – Moldova – since 2010 to 2013
- 20) EC LIFE+ Project WATACLIC - Water Against Climate Change – Project Manager for IRIDRA – since 2010 to 2012
- 21) Constructed Wetland systems for greywater treatment of small hamlets aimed to reuse for fodder production - Hebron Governorate, West Bank, and Gaza strip, Palestine (oPT) as consultant for Oxfam IT (projects financed by FAO and EC-ECHO) – Project Designer and Project Manager - since 2011 to 2012
- 22) Design of wastewater constructed wetland treatment plant in Sarra - 3500 p.e. (Nablus) and rehabilitation of constructed wetland in Hajja - 3300 p.e. (Qalqilya) – Palestine – WWTP start-up and staff training for GVC/PHG/UAWC (project financed by EC Food Protection)- Project Designer and Project Manager – since 2011 to 2012
- 23) Monitoring and final evaluation of 2 Cooperation Projects for water and sanitation implementations in Ethiopia funded by ATO Venice through the NGO “Civiltà dell’acqua”.
- 24) Sustainable domestic Water Use in Mediterranean Regions (SWMED BI/2.1/548 – EC ENPI CBC Med PROGRAMME) - Consultant – since 2011 to 2015
- 25) FP7 ENV.2012.6.6-1 SME Project “NaWaTech-EU Part - Natural Water Systems and Treatment Technologies to cope with Water Shortages in Urbanised Areas in India” – Project Manager for IRIDRA – since 2012 to 2015 . Countries involved: Germany, Spain, Italy, India – Budget: 1.778.589,41 €**
- 26) FP7 ENV. ENV.2012.6.2-1 Collaborative project “OpenNess- Operationalisation of natural capital and ecosystem services: from concepts to real-world applications – Project Manager for IRIDRA – since 2013 to 2017 – Countries involved: all EC (32 partners) – Budget: 8,999,193. €**
- 27) HYDROUSA - grant agreement n. 776643 Call: H2020-CIRC-2-2017 - Water in the context of circular economy - Project title: “Demonstration of water loops with innovative regenerative business models for the Mediterranean region” - Project Manager for IRIDRA – since 2018 to 2023 – Countries involved: Greece, Austria, Egypt, France, Germany, Italy, Spain, United Kingdom
- 28) PAVITR - grant agreement n. 821410 Call: SC5-12-2018: EU-India Water Cooperation - Project title: “Potential and Validation of Sustainable Natural & Advance Technologies for Water & Wastewater Treatment, Monitoring and Safe Water Reuse in India” - Project Manager for IRIDRA – since 2019 to 2023 – Countries involved: Germany, Austria, Denmark, India, Italy, Spain
- 29) NAWAMED – grant agreement n. A_B.4.1_0290 Call: ENI CBC MED Sea Basin Programme 2014-2020 – Project title: “Nature Based Solutions for Domestic Water Reuse in Mediterranean Countries” - Project Manager for IRIDRA – since 2019 to 2023 – Countries involved: Italy, Tunisia, Jordan, Malta, Lebanon.
- 30) JRC/IPR/2019/MVP/0640 - Nature-based solutions for climate change adaptation and water pollution in agricultural regions - services supporting the synthesis and dissemination of results. JRC/IPR/2019/OP/0394 Lot 2 - Treatment of wastewater sludge or manure from livestock (TSM) in a continental environment - JRC/IPR/2019/OP/0394 Lot 5 - Landscape elements against diffuse sources of pollution due to fertilizers and/or pesticides (LDP) in a continental environment - JRC/IPR/2019/OP/0394 Lot 6 - Landscape elements against diffuse sources of pollution due to fertilizers and/or pesticides (LDP) in a Mediterranean environment - European Commission - DG Joint Research Centre - Directorate Sustainable Resources – Unit D.2: Water and Marine Resources - Project Manager for IRIDRA – since 2019 to 2021
- 31) COST Action CA17133 – “Implementing nature based solutions for creating a resourceful circular city” - Management Committee member representing Italy since 2018 to 2022.

- 14–16 **Expert evaluator**
MWH Development Bank, Manila (Philippines)
Contract No. 136706-SO-100306-REC-11 “Bio-Environmental Engineering Design Consultant for Wastewater Drainage and Flood Protection” the project “Second Integrated Urban Environmental Management in the Tonle Sap Basin Project” (Cambodia)
- 16 **Visiting Professor**
Institute of Oceanology of the Polish Academy of Sciences (IO PAN)
Sopot, Pomeranian District, Poland (2 months contract, lecturing on NBS, writing papers about North Atlantic and Arctic monitoring campaigns for water quality at different depths and locations)
- 14–16 **Expert evaluator**
MWH International, Brussels (Belgium)
Technical support for evaluation and revision of the proposals submitted to the European Commission for the LIFE environment Programme (LIFE+ 14)
- 12–14 **Expert evaluator**
AGRECO G.E.I.E., Brussels (Belgium)
Technical support for evaluation and revision of the proposals submitted to the European Commission for the LIFE environment Programme (LIFE+ 12, 13)
- 12–14 **Consultant / Constructed Wetland Expert**
COSPE ONLUS (NGO) on behalf of Cuban Government – National Farmers Association
“DCI – FOOD /2010/242-591 – CUBA” – Identification of Sustainable Water Management strategies and alternative water sources for a sustainable development of the local agricultural and zotechnical practices in Las Tunas e Bajamo provinces.
- 11 **Consultant / Constructed Wetland Expert**
European Commission - Joint Research Centre - Institute for Environment and Sustainability, Ispra (Italy)
Assessment of construction costs of artificial wetlands for the monetary valuation of nitrogen retention by freshwater ecosystems
- 07–10 **Consultant / Constructed Wetland Expert**
Turkish National Research Center and Isparta Province
Consultancy for the design of Agricultural and Highway Runoffs Treatment plants by using Natural Treatment Technologies in Sapanca Lake's Basin.
- 05–07 **Consultant / Constructed Wetland Expert**
Turkish National Research Center and Isparta Province
Consultancy for the design of Domestic Wastewater Treatment plants by using Natural Treatment Technologies in Egirdir Lake's Hoyran Basin (Pupa Creek).
- 05 **Consultant / Constructed Wetland Expert**
Marmara Research Center, Tubitak (Turkey)
Teacher at the “Technical training on constructed wetlands design and operations” – Internal specialization course financed by the World Bank – 3 days intensive course.

01–03 Consultant

Ambiente Italia Srl – Research Institute, Milano (Italy)

Environmental and social impact evaluation for the SOLVAY factory in the Rosignano Solvay (Leghorn) chemical pole.

99 Consultant / Constructed Wetland Expert

The Egyptian Environmental Affairs Agency and, by extension the PMU, WADY EL RAYAN (Egypt)

The main threat to the effective long-term protection of Wadi El Rayan Natural Protectorate is the rapid development within its boundaries of uncontrolled economic activities. These include a rapidly expanding aquaculture sector. The Egyptian Environmental Affairs Agency and, by extension the PMU, was mandate to monitor environmental issues within the protectorate. The aim of the mission was to assess the feasibility of constructed wetland technology as a treatment system for the discharged water of fish farms and to set up a monitoring strategy to evaluate changes in wetland ecosystem.

99–00 Project Manager and Consultant

Municipality of La Spezia (SP), La Spezia (Italy)

Evaluation of the damages on the surrounding environment caused by the ENEL thermoelectric central of Vallegrande (SP).

93–98 Consultant for environmental chemistry - Responsible of the wastewater treatment sector

IRIS Sas – Strategies for the Environment

Consultant for the EC in 1993, through the IRIS S.a.s. and the TEAM group of Rome in the evaluation and monitoring of projects in the EC programme LIFE.

Constructed wetlands for wastewater treatment: process selecting and dimensioning, monitoring, research organisation

Most relevant projects:

- 1) Design, supervision of works and monitoring of a Constructed wetland system for wastewater secondary treatment – Gorgona Island - 350 p.e. Premio Carnia '97
- 2) River restoration in urban environment using constructed wetlands for water purification - Tor Bellamonaca Stream (Rome) - 500 p.e.
- 3) Design and supervision of works of a Constructed wetland treatment plant for urban wastewater (900 p.e.) in Montecarotto (Ancona)

Design and supervision of works for a Constructed wetland system for the tertiary treatment of a wastewater treatment plant (60,000 p.e.) in Jesi (Ancona)

94 Consultant

Ambiente Italia Srl – Research Institute in collaboration with ALT (Ambiente e Lavoro Toscana), Milano (Italy)

EC LIFE Project “Environmental accounting and environmental management on hydrographical basins of Elsa and Egola rivers”

94-10 Consultant and member of the Scientific Executive Board

European Commission on behalf of ALT onus

Health safety of workers, environmental monitoring and auditing, environmental impact assessment, waste management

Most relevant works:

- 1) Consultant for the evaluation of environmental damages originated by the explosion of the

polymerisation reactor of the MAS factory in Pistoia in 1994-95

2) Consultant for the Municipality of Montopoli (Pisa) in air quality and wastewater treatment plant impact evaluation

3) Consultant for Environment Protection Agency of Tuscany (ARPAT) in 1997-98 in monitoring of industries with high risk of significant accident

4) Project Designer and Project Manager for ALT in the project: Zer0-m “Sustainable concepts towards a zero outflow municipality”. European Commission Europe Aid Co-operation Office – MEDA Program - Contract n° ME8/AIDCO/2001/0515/59768 since 2003 till 2009. Cooperation actions in Turkey, Egypt, Tunisia, Morocco. Application of Sustainable Water Management on small-medium scale settlements. Design and realisation of Technological Demonstration Centers in the 4 countries and some pilot plants in full scale (Chorfech village wastewater treatment plant, Tunisia, Sekem farm water cycle and wastewater treatment, Cairo, Egypt).

93–97 **Researcher**

University of Florence – Dept. of Environmental Analytical Chemistry, Florence (Italy)

Determination of trace organic pollutants in some kinds of water, air (VOC) and aerosols, using prevalently GC-FID, GC-ECD, GC-MS, HPLC-UV, HPLC-DAD

91–92 **Environmental and analytical chemist**

PANTA S.a.s. – Analytical Lab., Florence (Italy)

Water, wastewater, air, soil analysis, waste management and environmental auditing

EDUCATION AND TRAINING

94–96 **Ph.D.**

EQF level 6

University of Florence – Public Health, Epidemiology and Environmental Analytical Chemistry Dept., Florence (Italy)

Research on organic micropollutants in aerosols and gaseous phase, transfer of pollutants at air/water interface, micropollutants analyses in sea water, riverine water and wastewater.

83–96 **M.Sc. in Chemistry**

EQF level 5

University of Florence – Faculty of Chemistry, Florence (Italy)

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C1
Spanish	A2	A2	A2	A2	A1
Portuguese	A1	A2	A1	A1	A1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
[Common European Framework of Reference for Languages](http://www.cedefop.europa.eu/en/files/quest_doc/2008/08/12/20080812_01_en.pdf)

Job-related skills

Expert in Environmental Chemistry, Environmental Analytical Chemistry, Water Chemistry, Wastewater treatment with a particular specialisation in the use of Constructed Wetlands for Water Pollution Control, Nature Based Solutions, Green Infrastructures, Environmental Accounting, Auditing and

Assessment.

Author of numerous national and international articles about environmental and analytical chemistry and about constructed wetlands applications for wastewater treatment and sustainable water management.

Lecturer and speaker in numerous university, public and NGO organised conferences, courses and seminars in environmental chemistry, water and air pollution, wastewater natural treatment, Ecosan, nutrients recovery, EIS. Collaborator in some university research projects (see Annex 1).

ADDITIONAL INFORMATION

Memberships

- Italian Council of Chemists
- Tuscany Chamber of Professional Chemists
- International Water Association (IWA)
- Italian Chemical Society (SCI)
- Italian National Institute for Bioarchitecture (INBAR)
- Cultura & Progetto Sostenibili
- Ambiente e Lavoro Toscana ONLUS (ALT)
- Italian River Restoration Center (CIRF)
- Legambiente ONLUS - Rome

Publications

Publications (peer reviewed):

1. Desideri P.G., Lepri L., Checchini L., Santianni D., Masi F., Bao M., "Organic compounds in Antarctic sea-water and pack-ice", *International Journal of Environmental Analytical Chemistry*, 61, 319-330, 1995.
2. Lepri L., Desideri P.G., Cini R., Masi F., van Erk M.S., "Transport of organochlorine pesticides across the air/sea interface during the aerosol process", *Analytica Chimica Acta*, 317, 149-160, 1995.
3. Lepri L., Del Bubba M., Masi F., "Reversed phase planar chromatography of enantiomeric compounds on microcrystalline cellulose triacetate (MCTA)", *Journal of Planar Chromatography*, 10, 108-113, 1997.
4. Masi F., Lepri L., Del Bubba M., Sacco C., Lo Nostro A., Comodo N., "Organic chemicals and microbial facies of liquid aerosols from a wastewater treatment plant", *Annali di Chimica*, 89, 231-248, 1999.
5. Masi F., Martinuzzi N., Loisel S., Peruzzi P., Bacci M., "The tertiary treatment pilot plant of Publisser (Florence - Tuscany): a multistage experience", *Water Science & Technology*, vol. 40, n. 3, 195-202, 1999.
6. Lepri L., Masi F., Del Bubba M., Cini R., Udisti R., "Particle size distribution of organic compounds in aqueous aerosols collected from above sewage aeration tanks", *Aerosol Science & Technology*, vol. 32, n. 5, 404-412, 2000.
7. Conte G., Martinuzzi N., Giovannelli L., Pucci B., Masi F. "Constructed wetlands for wastewater treatment in central Italy", *Water Science & Technology*, vol. 44, n. 11-12, 339-343, 2001.
8. Masi F. and Martinuzzi N., "Constructed Wetlands for the Mediterranean countries: hybrid systems for water reuse and sustainable sanitation", *Desalination*, Vol. 215, pp. 44-55, 2007.
9. Masi F., Martinuzzi N., Bresciani R., Giovannelli L. and Conte G., "Tolerance to hydraulic and organic load fluctuations in constructed wetlands". *Water Science & Technology*, 56, 3, 39-48, 2007.
10. Masi F., "Constructed wetlands for decentralized wastewater treatment". *Water, Waste and Environmental Research*, 7, 1-2, pp: 25-38, 2007.
11. Masi F., "Water reuse and resources recovery: the role of Constructed Wetlands in the Ecosan approach", *Desalination*, Vol. 246, pp. 27-34, 2009.
12. Scheumann R., Masi F., El Hamouri B., Kraume M., "Greywater treatment as an option for effective wastewater management in small communities", *Desalination and Water Treatment*, 4, 33-39, 2009.

13. Masi F., El Hamouri B., Abdel Shafi H., Baban A., Ghrabi A., Regelsberger M. "Treatment of segregated black/grey domestic wastewater by Constructed Wetlands in the Mediterranean basin: the Zer0-m experience", *Water Science & Technology*, 61, 1, 97-105, 2010.
14. Ghrabi A., Bousselmi L., Masi F., Regelsberger M., "Constructed wetland as a low cost and sustainable solution for wastewater treatment adapted to rural settlements: the Chorfech wastewater treatment pilot plant", *Water Science & Technology*, 63, 12, 3006-3012, 2011.
15. Gunes K., Tuncsiper B., Masi F., Ayaz S., Leszczynska D., Findik Hecan N. and Ahmad H., "Construction and maintenance cost analyzing of constructed wetland systems", *Water Practice & Technology*, vol 6, n 3, doi:10.2166/wpt.2011.043, 2011.
16. Conte G., Bolognesi A., Bragalli C., Branchini S., De Carli A., Lenzi C., Masi F., Massarutto A., Pollastri M. and Principi I. "Innovative Urban Water Management as a Climate Change Adaptation Strategy: Results from the Implementation of the Project "Water Against Climate Change (WATACLIC)" . *Water*, 4(4), 1025-1038; 2012.
17. Meyer D., Molle P., Esser D., Troesch S., Masi F., Dittmer U. "Constructed Wetlands for Combined Sewer Overflow Treatment—Comparison of German, French and Italian Approaches". *Water*; 5(1):1-12, 2013.
18. Masi F., Caffaz S. and Ghrabi A., "Multi-stage constructed wetlands systems for municipal wastewater treatment", *Water Science & Technology*, 67, 7, 1590-1598, 2013.
19. Gunes K., Oktar B., Ayaz S., Gunay A. S., Ozden G., Disbudak K., Senduran C., Dikerler T., Metin E., Masi F., Kaya B., Turkben L. "Large scale constructed wetland implementation projects in Turkey in salt lake special environmental protection area". *Desalination and Water Treatment*, 5, 1-10, 2013. DOI:10.1080/19443994.2013.791779.
20. Gajewska M., Józwiakowski K., Ghrabi A., Masi F., Impact of Influent Wastewater Quality on Nitrogen Removal Rates in Multistage Treatment Wetlands, *Environmental Science and Pollution Research*, 10/2014. DOI: 10.1007/s11356-014-3647-4
21. Masi F., Bresciani R., Munz G., Lubello C., "Evaporation-Condensation of Olive Mill Wastewater: comparison of condensate treatment by SBR and Constructed Wetlands", *Ecological Engineering*, 80, 156-161, 2015..
22. Masi F., Rochereau J., Troesch S., Ruiz I., Soto M., "Wineries wastewater treatment by constructed wetlands: a review", *Water Science & Technology*, 71, 8, 1113-1127, 2015.
23. Wu S., Wallace S., Brix H., Kusch P., Kipkemoi Kirui W., Masi F., Dong R., Treatment of industrial effluents in constructed wetlands: Challenges, operational strategies and overall performance, *Environmental Pollution*, 201, 107–120, 2015.
24. Gunes K., Tuncsiper B., Drizo A., Masi F., Ayaz S., Tufekci H., Constructed and riverine wetlands design considerations for domestic and agricultural diffuse pollution treatment - a case study from Turkey. *Desalination and Water Treatment*, DOI: 10.1080/19443994.2015.1048534, 2015.
25. Masi F., Vertical Flow Constructed Wetlands—Eco-engineering Systems for Wastewater and Sludge Treatment (2014), *Ecological Engineering*, DOI: 10.1016/j.ecoleng.2015.06.039, 2015.
26. Ben Saad M., Bousselmi L., Masi F., Ghrabi A., A new approach for local waste water management sanitation case study of rural school (Chorfech 24), *Water Practice & Technology*; 10(3):474. DOI:10.2166/wpt.2015.054, 08/2015.
27. Masi F., Bresciani R., Rizzo A., Edathoot A., Patwardhan N., Panse D., Langergraber G., Green walls for greywater treatment and recycling in dense urban areas: a case-study in Pune, *Journal of Water, Sanitation and Hygiene for Development*, 6 (2) 342-347; DOI: 10.2166/washdev.2016.019, 2016.
28. Liqueste C., Udias A., Conte G., Grizzetti B., Masi F., Integrated valuation of a nature-based solution for water pollution control. Highlighting hidden benefits. *Ecosystem Services*, 22, 392-401, ISSN 2212-0416, <http://dx.doi.org/10.1016/j.ecoser.2016.09.011>, 2016.
29. Masi F., Rizzo A., Bresciani R., Conte G., Constructed Wetlands for Combined Sewer Overflow treatment: ecosystem services at Gorla Maggiore, Italy, *Ecological Engineering*, 98, 427–438, doi:10.1016/j.ecoleng.2016.03.043, 2017.
30. Masi F., Rizzo A., Martinuzzi N., Wallace S. D., Van Oirschot D., Salazzari P., Meers E., Bresciani R., Up-flow anaerobic sludge blanket and aerated constructed wetlands for swine wastewater treatment: a pilot study, *Water Science & Technology*, 76, 1, 2017, 68-78; DOI: 10.2166/wst.2017.180.
31. Masi F., Bresciani R., Martinuzzi N., Cigarini G., Rizzo A., Large scale application of French Reed Beds: municipal wastewater treatment for a 20,000 inhabitant's town in Moldova, *Water Science & Technology*, 76, 1, 2017, 134-146; DOI: 10.2166/wst.2017.188.

32. Barton D., Kelemen E., Dick J., Gómez-Baggethun E., Martín-Lopez B., Jacobs S., Hendriks C.M.A., Termansen M., García-Llorente M., Primmer E., Dunford R., Harrison P., Turkelboom F., Saarikoski H., van Dijk J., Rusch G.M., Palomo I., Yli-Pelkonen V., Carvalho L., Baró F., Langemeyer J., van der Wal J.T., Mederly P., Priess J., Luque S., Berry P., Santos R., Odee D., Martínez Pastur G., García Blanco G., Saarela S.R., Silaghi D., Pataki G., Masi F., Vădineanu A., Mukhopadhyay R., Lapola D.. (Dis) integrated valuation: narrowing the gap between ES appraisals and governance support. *Ecosystem Services*, 29, Part C, 529-541, DOI: 10.1016/j.ecoser.2017.10.021, 2018.
33. Rizzo A., Bresciani R., Martinuzzi N., Masi F.. French Reed Bed as a solution to minimize operational and maintenance costs of wastewater treatment from small settlement: an Italian example. Special Issue: Advances in the Economic Analysis of Residential Water Use, *Water*, 10(2), 156; doi:10.3390/w10020156, 2018.
34. Langergraber G. and Masi F., Treatment wetlands in decentralised approaches for linking sanitation to energy and food security, *Water Science & Technology*, available online 27 November 2017, 77, 4, 859-860, wst2017599; DOI: 10.2166/wst.2017.599, 2018.
35. Masi F., Rizzo A. and Regelsberger M., The Role of treatment wetlands in new circular economy, resource oriented, and ecosystem services paradigms, *Journal of Environmental Management*, available online 7 December 2017, in press; DOI: 10.1016/j.jenvman.2017.11.086.
36. Rizzo A., Bresciani R., Masi F., Boano F., Revelli R., Ridolfi L., Role of constructed wetlands used to treat combined sewer overflow in urban runoff management. *Journal of Hydrology*, 560, 150-159, DOI: 10.1016/j.jhydrol.2018.03.020, 2018.
37. Senduran C., Gunes K., Topaloglu D., Dede O. H., Masi F., Kucukosmanoglu O.A., Mitigation and treatment of pollutants from railway and highway runoff by pocket wetland system; A case study, *Chemosphere*, 204, 335-343, ISSN 0045-6535, <https://doi.org/10.1016/j.chemosphere.2018.03.201>, 2018.
38. Kasprzyk M., Obarska-Pempkowiak H., Masi F., Gajewska M., Possibilities of Phoslock® application to remove phosphorus compounds from wastewater treated in hybrid wetlands, *Ecological Engineering*, 122, 84-90, DOI: 10.1016/j.ecoleng.2018.07.020, 2018.
39. Masi F., Rizzo A., Bresciani R., Martinuzzi N., Wallace S.D., Van Oirschot D., Macor F., Rossini T., Fornaroli R., Mezzanotte V., Lessons learnt from a pilot study on residual dye removal by an aerated treatment wetland, *Science of the Total Environment*, 648, 144-152, 2019.
40. Boano F., Caruso A., Costamagna E., Ridolfi L., Fiore S., Demichelis F., Galvão A., Piscoiro J., Rizzo A., Masi F., A review of nature-based technologies for greywater treatment: applications, hydraulic design, and environmental benefits, *Science of the Total Environment*, available online November 2019, DOI: 10.1016/j.scitotenv.2019.134731.
41. Rizzo A., Bresciani R., Martinuzzi N., Masi F., Online Monitoring of a Long-Term Full-Scale Constructed Wetland for the Treatment of Winery Wastewater in Italy, *Applied Sciences*, 10, 2, pp. 555, 2020 DOI: 10.3390/app10020555.
42. Oral H. V., Carvalho P., Gajewska M., Ursino N., Masi F., van Hullebusch E. D., Kazak J. K., Exposito A., Cipolletta G., Andersen T. R., Finger D. C., Simperler L., Regelsberger M., Rous V., Radinja M., Buttiglieri G., Krzeminski P., Rizzo A., Dehghanian K., Nikolova M., Zimmermann M.; A review of nature-based solutions for urban water management in European circular cities: a critical assessment based on case studies and literature. *Blue-Green Systems*, 1, 932, 2020. doi: <https://doi.org/10.2166/bgs.2020.932>.
43. Rizzo A., Tondera K., Pálffy T.G., Dittmer U., Meyer D., Schreiber C., Zacharias N., Ruppelt J.P., Esser D., Molle P., Troesch S., Masi F., Constructed wetlands for combined sewer overflow treatment: A state-of-the-art review, *Science of the Total Environment* (2020), <https://doi.org/10.1016/j.scitotenv.2020.138618>.

Books:

1. Masi F., "Il quadro italiano della fitodepurazione", in "Lezioni di Architettura Bioclimatica", Collana Manuali n. 53, Alinea Ed., Firenze, 201-207, 2000.
2. Ferrari S., Spaggiari R., Garuti G., Romagnoli F., "La fitodepurazione: manuale tecnico divulgativo per una gestione sostenibile delle acque", a cura di Floriana Romagnoli, supervisione scientifica a cura di Fabio Masi, pubblicato da Comune di Reggio Emilia – Assessorato Ambiente e Verde, Reggio Emilia, 2000.
3. Masi F., Ed. "Fitodepurazione", collana "I Quaderni del Parco", Parco Nazionale delle Foreste Casentinesi, Monte Falterona, Campigna, 2001.

4. Boz B., Goltara G., Polazzo A., Masi F., "Aree Umide e Fitodepurazione nella Regione Veneto", pubblicazione a cura di Regione del Veneto – Giunta Regionale – CIRF (Centro Italiano Riqualificazione Fluviale), Padova, 2004.
5. Pucci B., Masi F., Conte G., Martinuzzi N., Bresciani R., "Linee Guida per la Progettazione e Gestione di Zone Umide Artificiali per la Depurazione dei Reflui Civili", a cura di M. Mazzoni, APAT – ARPAT, Firenze, 2005.
6. Regelsberger M., Bahlo K., Conte G., Ebeling B., Masi F., Mitterer-Reichmann G., Platzer C., Regelsberger B., Urtane L., Wach G., "Guidelines for Sustainable Water Management in Tourism Facilities", ISBN 3-901425-99-3, published by Arbeitsgemeinschaft Erneuerbare Energie GmbH, Gleisdorf, 2005.
7. Masi F. et al., "Tecniche di depurazione seminaturali", in: "La riqualificazione fluviale in Italia. Linee guida, strumenti ed esperienze per gestire i corsi d'acqua e il territorio." A. Nardini, G. Sansoni (curatori) e coll., CIRF (Centro Italiano Riqualificazione Fluviale), Mazzanti editore, Mestre, pp. 553-579, 2006.
8. Masi F., "Enhanced denitrification by an hybrid HF-FWS CW in large scale wastewater treatment plant (Jesi)", in "Wastewater Treatment, Plant Dynamics and Management in Constructed and Natural Wetlands", by Jan Vymazal (Ed.), Springer, NY, , ISBN: 978-1-4020-8234-4, 2008.
9. Masi F., Martinuzzi N., "Sustainable Sanitation by Constructed Wetlands in the Mediterranean countries: experiences in small/medium size communities and tourism facilities", in "Efficient Management of Wastewater, Its Treatment and Reuse in Water Scarce Countries", Al Baz, Ismail; Otterpohl, Ralf; Wendland, Claudia (Eds.), Springer, NY, ISBN: 978-3-540-74491-7, 2008.
10. Masi F., Nivala J. (eds.), Wetland Systems for Water Pollution Control. Proceedings of the 12th International Conference on Wetland Systems for Water Pollution Control, organised by International Water Association, in Venice, Italy. Palombi Editori, San Giovanni Valdarno, Italy. ISBN: 978-88-6060-300-5, 2010.
11. Bresciani R. and Masi F., "Manuale pratico di fitodepurazione", Terra Nuova Edizioni, 2013. ISBN-13: 978-8866810025.
12. Masi F., Bresciani R., Bracali M., "A new concept of Multi-Stage Treatment Wetland for winery wastewater treatment: long-term evaluation of performances", in "The Role of Natural and Constructed Wetlands in Nutrient Cycling and Retention on the Landscape", Vymazal Jan (Ed.), Springer, 189-203; ISBN: 978-3-319-08176-2, 2014.
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14. Nicolics S., Hewitt D., Pophali G.R., Masi F., Panse D., Labhasetwar P.K., Application of the NaWaTech Safety and O&M Planning Approach Re-Use Oriented Wastewater Treatment Lines at the Ordnance Factory Ambajhari, Nagpur, India, in the book "Natural and Constructed Wetlands: Nutrients, heavy metals and energy cycling and flow", Vymazal Jan (Ed.), Springer International Publishing, pp 147-163, DOI 10.1007/978-3-319-38927-1_12, ISBN 978-3-319-38926-4, 2016.
15. Masi F., Rizzo A. and Bresciani R.. Treatment of Wineries and Breweries Effluents using Constructed Wetlands, in "Constructed Wetlands for Industrial Wastewater Treatment", Alexandros I. Stefanakis (Editor), John Wiley & Sons, pp. 95-104, ISBN 1119268346, 9781119268345, 2018.
16. Masi F., Rizzo A., Bresciani R., Vayenas V. D., Akratos C. S., Tekerlekopoulou A.G., Stefanakis I. A., Olive Mill Wastewater Treatment in Constructed Wetlands, in "Constructed Wetlands for Industrial Wastewater Treatment", Alexandros I. Stefanakis (Editor), John Wiley & Sons, pp. 165-174, ISBN 1119268346, 9781119268345, 2018.
17. Regelsberger M., Masi F., Langergraber G. Chapter 2 – Why use treatment wetlands?. In Wetland Technology, Practical Information on the Design and Application of Treatment Wetlands, 1st ed.; Langergraber, G., Dotro, G., Nivala, J., Rizzo, A., Stein, O.R., Eds.; Scientific and Technical Report No. 27; IWA Publishing: London, UK, 2019; pp. 5-9.
18. Masi F., Rizzo A., Regelsberger M., Indoor wetlands for greywater treatment and reuse. In Wetland Technology, Practical Information on the Design and Application of Treatment Wetlands, 1st ed.; Langergraber, G., Dotro, G., Nivala, J., Rizzo, A., Stein, O.R., Eds.; Scientific and Technical Report No. 27; IWA Publishing: London, UK, 2019; pp. 79-82.
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20. Rizzo A., Masi F., Multi-stage wetlands. In *Wetland Technology, Practical Information on the Design and Application of Treatment Wetlands*, 1st ed.; Langergraber, G., Dotro, G., Nivala, J., Rizzo, A., Stein, O.R., Eds.; Scientific and Technical Report No. 27; IWA Publishing: London, UK, 2019; pp. 122-125.

21. Pistocchi, A., Husemann, J., Masi, F. and Nanu, C. editor(s), *Wastewater treatment in the Danube region: opportunities and challenges*, EUR 30106 EN, Publications Office of the European Union, Luxembourg, 2020, ISBN 978-92-76-16429-6 (online), 978-92-76-16428-9 (print), doi:10.2760/220413 (online), 10.2760/16723 (print), JRC115606.

22. Masi F., Bresciani R., Rizzo A., Panse D., College of Engineering Pune Hostel Campus: an Indian Experience of sustainable wastewater treatment and reuse, in "Circular Economy and Sustainability, Volume 2, 1E", Stefanakis A. (Ed.), Elsevier, in press, 2020.

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1. Masi F., Martinuzzi N., Loïselle S., Peruzzi P., Bacci M., "*The tertiary treatment pilot plant of Publiiser (Florence - Tuscany): a multistage experience*", Conference Proceedings of the 6th IAWQ International Conference on Wetland Systems for Water Pollution Control, pp. 400-411, Aguas de Sao Pedro, Sao Paulo (BR), Settembre 1998.

2. Masi F., Martinuzzi N., Loïselle S., Bacci M., "*The treatment plant of Gorgona Island (Leghorn - Tuscany): constructed wetlands for wastewater reuse*", Conference Proceedings of the IAWQ 2^o International Conference on Advanced Wastewater Treatments, Recycling and Reuse, Milano, vol. 2, 1051-1055, 1998.

3. Del Bubba M., Checchini L., Lepri L., Griffini O., Tabani F., Masi F., "*Use of subsurface horizontal (SF-h) flow wetland experimental plant for the treatment of an effluent from a wastewater conventional treatment plant*", Conference Proceedings of the IAWQ 2^o International Conference on Advanced Wastewater Treatments, Recycling and Reuse, Milano, vol. 2, 1055-1059, 1998.

4. Lepri L., Masi F., Lubello C., Verlicchi P., Valeri R., Ciatti L., Dettori P., Masotti L., "*Water reuse in Prato*", Conference Proceedings of the IAWQ 2^o International Conference on Advanced Wastewater Treatments, Recycling and Reuse, Milano, vol. 2, 821-831, 1998.

5. Masi F., Bendoricchio G., Conte G., Garuti G., Innocenti A., Franco D., Pietrelli L., Pineschi G., Pucci B., Romagnoli F., "*Constructed wetlands for wastewater treatment in Italy: State-of-the-art and obtained results*", Conference Proceedings of the IWA 7th International Conference on Wetland Systems for Water Pollution Control, Orlando (USA), 979-985, 2000.

6. Del Bubba M., Lepri L., Garuti G., Masi F., "*Evidence of nitrogen removal by submerged flow constructed wetlands in Italy*", Conference Proceedings of the IWA 7th International Conference on Wetland Systems for Water Pollution Control, Orlando (USA), 253-260, 2000.

7. Pucci B., Conte G., Martinuzzi N., Giovannelli L., Masi F., "*Design and performance of a horizontal flow constructed wetland for treatment of dairy and agricultural wastewater in the "Chianti" countryside*", Conference Proceedings of the IWA 7th International Conference on Wetland Systems for Water Pollution Control, Orlando (USA), 1433-1436, 2000.

8. Conte G., Martinuzzi N., Giovannelli L., Masi F., Pucci B., "*Constructed wetlands for wastewater treatment in central Italy*", Conference Proceedings of the IWA 7th International Conference on Wetland Systems for Water Pollution Control, Orlando (USA), 869-872, 2000.

9. Masi F., "A survey of constructed wetlands in Italy as low-cost wastewater technologies", proceedings of the International Conference on "Small Wastewater Technologies and Management for the Mediterranean Area", CENTA (Centro de las nuevas tecnologías del aguas), Sevilla, Spain, Keynote Presentations, 2002, 95-112.

10. Masi F., Conte G., Martinuzzi N. and Pucci B., "Winery high organic content wastewater treated by constructed wetlands in mediterranean climate", Conference Proceedings of the IWA 8th International Conference on Wetland Systems for Water Pollution Control, Arusha (TZ), vol.1, 274-282, 2002.

11. Masi F., "SWAMP: a sustainable approach for water management and wastewater purification in tourism facilities", Conference Proceedings of the IWA Leading Edge Conference on "Sustainability in the water sector", Venice (IT), 68-70, 2002.

12. Masi, F., Conte, G., Lepri, L., Martellini, T., Del Bubba, M. "Endocrine Disrupting Chemicals (EDCs) and Pathogens removal in an Hybrid CW System for a Tourist Facility Wastewater Treatment and Reuse". Proceedings of the 9th IWA International Conference on Wetland Systems for Water Pollution Control, Avignon (Francia), vol. 2, pp. 461-468, 2004.

13. Regelsberger, M., Bahlo, K., Eglite, A., Wach, G., Masi, F., Reichmann- Mitterer, G., Gasiunas, V., Strusevicius, Z. "SWAMP project: obtained results in five countries (Austria, Germany, Italy, Lithuania, Latvia)". Proceedings of the 9th IWA International Conference on Wetland Systems for Water Pollution Control, Avignon (Francia), vol. 2, pp. 721-728, 2004.
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15. Masi F., Giovannelli L., Cortés V., Innocenti A. and Pucci B., "Reed bed treatment systems as an affordable and reliable opportunity for solving sanitary emergencies in developing countries with tropical climate", Proceedings of the 10th IWA International Conference on Wetland Systems for Water Pollution Control, Lisbon (Portugal), vol. 2, pp. 1124, 2006.
16. Santoro E. and Masi F., "Removal of polyphenols and their interaction with organic matter catabolism in a treatment wetland for winery wastewater", Proceedings Wetpol2009.
17. Nicolics, S., Masi, F., Pophali, G.R., Patwardhan, N., Satish, S., Labhasetwar, P.K., Doyle, L., Langergraber, G., Safety planning approach for ensuring long-term operation of resources-oriented systems. In: Zhou, Q., Zhai, J., (Eds.), Conference Proceedings 14th IWA Specialized Group Conference on "Wetland systems for Water Pollution Control", 12-16 October 2014, Shanghai, China, pp.43-53.

Other publications (not peer reviewed):

1. Masi F., Bacci M., "Fitodepurazione e sistemi naturali di depurazione - Esperienze e prospettive in Toscana", Atti della 1° Conferenza sullo stato dell'ambiente in Toscana, organizzata da Regione Toscana, Firenze, Novembre 1995.
2. Paci B., Masi F., "Stato dell'ambiente (aria, acqua, territorio) nel comprensorio del cuoio", Atti del seminario su "Il distretto industriale conciario: dalle emergenze ambientali allo sviluppo sostenibile locale", organizzato dall'associazione Ambiente e Lavoro - sez. Toscana, San Miniato (PI), Ottobre 1996.
3. Masi F., Pucci B., Conte G., "Depurazione naturale: risanare le acque e il territorio spendendo meno", in "Ambiente Italia 1998 - rapporto sullo stato del Paese e analisi del ciclo delle acque" - Rapporto annuale di Legambiente, a cura dell'Istituto Ambiente Italia, Edizioni Ambiente Srl, Milano, 1998.
4. Conte G., Masi F., Pucci B., "Disinquinati al naturale", La Nuova Ecologia, **6**, 56-57, 1998.
5. Masi F., Pucci B., "Impianti di fitodepurazione di Gorgona (LI), Spannocchia (SI) e Pentolina (SI)", Atti del Corso di Specializzazione in "Sistemi di fitodepurazione", FAST Milano, 2000.
6. Masi F., "Indagine preliminare sui rendimenti degli impianti italiani di fitodepurazione per fonti di inquinamento puntuale". Atti del Convegno "La fitodepurazione: applicazioni e prospettive", organizzato da ARPAT (Agenzia Regionale per la Protezione Ambientale della Toscana), Volterra (Pisa), pp 90-108, 2003.
7. Masi F., "Endokrin aktive Stoffe in Pflanzenkläranlagen". *Erneuerbare Energie*. Publikation der Arbeitsgemeinschaft Erneuerbare Energie. n 2, pp 14-16, 2004.
8. Masi F., Martinuzzi N., Gardenti M., "Tecniche di fitodepurazione per lo smaltimento idrico in edilizia sostenibile", Ambiente Risorse Salute, n. 106, pp. 31-35, 2005.
9. Masi F., "Constructed Wetlands", in Sustainable Water Management, journal of the EU project "Sustainable Concepts towards a Zero Outflow Municipality" (Zer0-M), n 1, pp. 19-23, 2005.
10. Coppini E. and Masi F., "Pilot-scale constructed wetlands (horizontal subsurface flow and free water system) for tertiary treatment in a textile wastewater treatment plant", Newsletter n.31, Specialist Group on Use of Macrophytes in Water Pollution Control, International Water Association, pp. 24-30, 2006.
11. Masi F., "Fitodepurazione delle acque", Vignevini: Rivista italiana di viticoltura e di enologia, ISSN 0390-0479, n. 33, (7-8), pp. 75-77, 2006.
12. Masi F., "La gestione del ciclo delle acque e le nuove tecniche di depurazione", Acqua&Aria, BE-MA ed., n. 5, 2006.
13. Masi F. and Martinuzzi N., "Constructed Wetlands for the Mediterranean countries: proposal of a hybrid system's optimised design for water reuse and sustainable sanitation", in Sustainable Water Management, journal of the EU project "Sustainable Concepts towards a Zero Outflow Municipality"

(Zer0-M), n 1, pp. 14-18, 2007.

14. Masi F., Bertin F., Dei Svaldi M., Frazzarin V., Boschini E., "Fitodepurazione del percolato di discarica", Recycling, anno XI n.52, pp. 123-129, 2007.

15. Masi F., El Hamouri B., Abdel Shafi H., Baban A., Ghrabi A., Regelsberger M., "Outline of constructed wetlands in Zer0-m", in Sustainable Water Management, journal of the EU project "Sustainable Concepts towards a Zero Outflow Municipality" (Zer0-M), n 2/2008, pp. 36-39, 2008.

16. Sheuman R., Masi F., El Hamouri B., Kraume M., "Greywater treatment as an option for effective wastewater management", in Sustainable Water Management, journal of the EU project "Sustainable Concepts towards a Zero Outflow Municipality" (Zer0-M), n 2/2008, pp. 11-15, 2008.

17. Hussein I. Abdel-Shafy, Martin Regelsberger, Fabio Masi, Christian Platzter and Mohamed A. El-khateeb, "Constructed Wetland in Egypt", in Sustainable Water Management, journal of the EU project "Sustainable Concepts towards a Zero Outflow Municipality" (Zer0-M), n 3/2008, pp. 10-14, 2008.

18. La Notte A., Maes J., Thieu V., Bouraoui F., Masi F., Biophysical assessment and monetary valuation of ecosystem services. Scenario analysis for the case of water purification in Europe. 01/2013; DOI:10.2788/72082 Publisher: Publications Office of the European Union, ISBN: 987-92-79-27799-3.

19. Sullivan C., Masi F., Effective Sanitation in Developing Regions, Sustainable Sanitation Practice, 18, 01/2014, 5-8.

20. Meyer D., Molle P., Esser D., Troesch S., Masi F., Tondera K., Pinnekamp J., Dittmer U., Constructed Wetlands for Combined Sewer Overflow Treatment, Sustainable Sanitation Practice, 18, 01/2014, 21-24.

21. Pophali, G.R.; Sahu, N.; Khilnani, A.; Kaur, H.; Yadav, S.; Labhasetwar, P.K.; Bresciani, R.; Masi, F.; Meinhold, K.: Domestic Wastewater Treatment and Reuse in Ordnance Factory Ambajhari, Nagpur. Sustainable Sanitation Practice 25, 12-16, 2016.

22. Masi, F.; Bresciani, R.; Winkelmeier, P.; Pophali, G.R.; Khilnani, A.; Sahu, N.; Kaur, H.; Labhasetwar, P.K.; Yadav, S.; Nagarnaik, P.: Wastewater Treatment and Reuse for Irrigation in an Urban Park: the Dayanand Park Treatment Wetland System in Nagpur. Sustainable Sanitation Practice 25, 17-20, 2016.

23. Patil, S.; Edathoot, A.; Patwardhan, N.; Bresciani, R.; Panse, D.; Masi, F.: Natural and Cost Effective Way of Treating Domestic Wastewater with Reuse in Non-Potable Purposes: The College of Engineering Pune (COEP) Hostel Campus Case Study. Sustainable Sanitation Practice 25, 21-27, 2016.

24. Masi, F.; Rizzo, A.; Bresciani, R.; Edathoot, A.; Patwardhan, N.; Panse, D.: Greywater Treatment and Reuse in a Municipal Office in Pune by Vertical Gardens. Sustainable Sanitation Practice, 25, 28-33, 2016.

Presentations Lecturer (138 teaching events) and speaker (109 events) in numerous university, public and NGO organised conferences, masters, courses and seminars in environmental chemistry, water and air pollution, wastewater natural treatment (Constructed Wetlands), nature based solutions, sustainable urban drainage, sustainable water management, Ecosan, EIS. Collaborator in some university research projects.

Conferences **Keynote speaker in the following international conferences:**

Masi F., "A survey of constructed wetlands in Italy as low-cost wastewater technologies", International Conference on "Small Wastewater Technologies and Management for the Mediterranean Area", organized by CENTA (Centro de las nuevas tecnologias del aguas), Seville, March 2002.

Masi F., "A Multi-stage Constructed Wetland system for the wastewater treatment of a medium size municipality (3500 inhabitants) in Central Italy", MEDA Water International Conference on "Sustainable Water Management", organized by Zer0-m project (CERTe, AEE Intec, partners), Tunis, March 2007.

Masi F., "Water reuse and resources recovery: the role of Constructed Wetlands in the Ecosan approach", International Conference on "Multifunction of wetland systems", organized by University of Padua, IWA Italian national committee, Padua, June 2007.

Masi F., "Constructed Wetlands for decentralised wastewater treatment", International Symposium: "Community-led management of river environment", organised by Kaprimo Project (Adelphi Research GmbH, ECCA-Nepal, partners), Kathmandu, August 2007.

Masi F., "Constructed wetlands in small/medium size communities and tourism facilities: design

optimisation aimed to the effluent reuse and nutrients recovering”, International Conference on “Small Wastewater Technologies and Management for the Mediterranean Area”, organized by CENTA (Centro de las nuevas tecnologías del aguas), Seville, November 2007.

Masi F. et al., “Segregated black/grey domestic wastewater treatment by constructed wetlands in the Mediterranean basin: the Zero-m experience”, 11th International Conference on Wetland Systems for Water Pollution Control, organised by International Water Association (IWA), Indore, India, November 2008.

Masi F., “Technologies for urban sustainable water and wastewater management: domestic sector” in the Workshop “Sustainable water management (SWM) in urban areas”, EC LIFE Project Wataclac (LIFE08/INF/IT/308) – Bucharest, September 2012.

Masi F., “Technologies for urban sustainable water and wastewater management: domestic sector” in the Workshop “Sustainable water management (SWM) in urban areas” EC LIFE Project Wataclac (LIFE08/INF/IT/308) – Heraklion, October 2012.

Masi F., “Constructed wetlands in warm and hot climate countries: new developments”, 1st International WATERBIOTECH Conference “Biotechnology For Africa’s Sustainable Water Supply”, National Research Center (NRC), Cairo, Egypt, October 2012.

Masi F. et al., “Multi-stage constructed wetlands systems for municipal wastewater treatment”, 13th International Conference on Wetland Systems for Water Pollution Control, organised by International Water Association (IWA), Perth, Australia, November 2012.

Masi F. et al., “Winery wastewater treatment by constructed wetlands: a review”, 14th International Conference on Wetland Systems for Water Pollution Control, organised by International Water Association and Tonjii University, Shanghai, China, October 2014.

Masi F., “Wetland Systems for Water Pollution Control”, SWMED Final Conference: Sustainable water use in Mediterranean Regions, organised by CERTE, Tunis, Tunisia, February 2015.

Masi F. "Integration of ecosystem services in urbanized areas: natural systems for sustainable water management and sanitation" at ISOLA Bangalore 2016 “Expanding the blue revolution”, Indian Society of Landscape Architects, January 2016.

Masi F., “Role of treatment wetlands in resource oriented, small sanitation systems” at the joint conferences “13th IWA Specialized Conference on Small Water and Wastewater Systems” & “5th IWA Specialized Conference on Resources-Oriented Sanitation”, IWA - National Technical University of Athens, Athens, 14-17 September 2016.

Masi F., “Sustainable rainwater management in the city”, Smart Metropolia Congress, Session: Climate Changes and the safety of metropolitan infrastructures, Gdansk, November 2016.

Masi F., “Sistemi di depurazione naturale per la tutela dei laghi e delle acque di transizione”, workshop on “Sistemi di fitodepurazione applicati alla riqualificazione dei corpi idrici naturali”, organised by Alghero delegation of Institut d’Estudis Catalans, December 2016.

Masi F., “Concepts and case studies (“new water” production, biomass production)” in the Workshop “Role of nature-based systems in decentralised approaches for linking sanitation to energy and food security”, IWA International Resources Recovery Conference 2017, Columbia University, New York, 5-9 August 2017.

Masi F., “Treatment wetlands applications in India and Italy”, in the Workshop “Treatment Wetlands for Water Body Rejuvenation”, CDD Society and BORDA, Bangalore, India, 4-8 December 2018.

Masi F., “Constructed wetlands: A multi-benefit, nature-based solution for current and future environmental and social challenges”, Constructed Wetland Association Annual Conference 2019, Birmingham, United Kingdom, 16 July 2019.

Scientific Committee member in the following international conferences:

Conference “La fitodepurazione: applicazioni e prospettive”, organised by ARPAT (Agenzia Regionale per la Protezione Ambientale della Toscana), Volterra (Pisa), June 2003.

WAT3R: Rational, Recycling and Reuse, MEDA WATER International Conference on Sustainable Water Management, Rational Water Use, Wastewater Treatment and Reuse, Marrakech, June 2006.

MEDA Water International Conference on “Sustainable Water Management”, organized by Zer0-m project (CERTe, AEE Intec, partners), Tunis, March 2007.

International Conference on “Multifunctions of wetland systems”, organized by University of Padua, IWA Italian national committee, Padua, June 2007.

International Conference on “Small Wastewater Technologies and Management for the Mediterranean

Area”, organized by CENTA (Centro de las nuevas tecnologías del aguas), Seville, November 2007.

Workshop sur le “Developpement Durable dans le bassin Mediterranien”, organized by Association Scientifique d’Appui à la Recherche et à l’Innovation Technologique, Sousse, Tunisia, March 2009.

12th International Conference on Wetland Systems for Water Pollution Control, organised by International Water Association, Venice, Italy, October 2010 (Chairman).

International Conference of Integrated Water Management, organised by Environmental Technology Centre, Murdoch University, Perth, Western Australia, February 2011.

13th International Conference on Wetland Systems for Water Pollution Control, organised by International Water Association, Perth, Australia, November 2012.

14th International Conference on Wetland Systems for Water Pollution Control, organised by International Water Association and Tonjii University, Shanghai, China, October 2014.

SWMED Final Conference: Sustainable water use in Mediterranean Regions, organised by CERTE, Tunis, Tunisia, February 2015.

International Conference on Innovations in Sustainable Water and Wastewater Treatment Systems (ISWATS), Department of Science & Technology, Government of India, jointly organized by India - EU Science & Technology Research Collaboration Projects, Nagpur, India, April 2016.

15th International Conference on Wetland Systems for Water Pollution Control, organised by International Water Association, Gdansk, Poland, September 2016.

EWA Spring Conference 2017 “Sanitation approaches and solutions and the sustainable development goals”, organised by European Water Association (EWA), and APESB (Portuguese Association for Sanitary and Environmental Engineering) in cooperation with CERIS-IST-UL (Centre for Civil Engineering Research and Innovation for Sustainability of Instituto Superior Técnico, University of Lisbon), May 2017.

International IWA conference on sustainable solutions for small water and wastewater treatment systems (S2small2017), organised by IMT Atlantique, GEPEA, IWA and ASTEE, Nantes, France, October 2017.

First international scientific conference on ecological and environmental engineering, organised by University of Life Sciences in Lublin, Poland, June 2018.

16th International Conference on Wetland Systems for Water Pollution Control, organised by International Water Association, Valencia, Spain, October 2018.

8th International WETPOL (Wetland Pollutant Dynamic and Control) Symposium, organised by Aarhus University, Aarhus, Denmark, June 2019.

International Scientific Conference “10th Forum of Ecological Engineering”, organised by Lublin University of Technology, Kazimierz Dolny, Poland, September 2019.

16th International IWA Specialised Conference on Small water and wastewater systems, organised by Murdoch University, Perth, Australia, December 2019.

9th International WETPOL (Wetland Pollutant Dynamic and Control) Symposium, organised by BOKU University, Wien, Austria, September 2021.

17th International Conference on Wetland Systems for Water Pollution Control, organised by International Water Association, Kasetsart University, Bangkok, Thailand, November 2022.

Honours and awards

- Carnia Alps Award for Green Projects with the Gorgona Island Penitentiary Constructed Wetland Treatment System Project in 1997;
- Mention as best scientific contribution in the EMWater Project Regional Conference “Efficient Management of Wastewater, its treatment and reuse in the Mediterranean Countries”, Amman, Jordan, November 2006 with the paper and invited oral communication: Masi F., Martinuzzi N. “Sustainable Sanitation by Constructed Wetlands in the Mediterranean countries: experiences in small/medium size communities and tourism facilities”.
- Mention in the Award 2007 of the Italian Forum on Water Saving and Conservation with the Preganziol Social Housing Project (segregation of black and grey wastewater, treatment by constructed wetlands and reuse); the “SHE” EC Project, in which Preganziol is one of the Italian pilot sites, has recently received the National Award 2007 of the Energy Globe Award (the world award for sustainability).
- Mention in the 2010 Award “Eco-efficient Tuscany” for the project “Multistage Constructed Wetland

treatment for the winery Cecchi & F., Castellina in Chianti (SI).

- Mention in the Award 2011 "Planet Water" of the Italian Forum on Water Saving and Conservation with the Project "Sustainable Water Management for the new Kerakoll Research and Development Center at Sassuolo".
- Award of Excellence in the 2012 "Eco-efficient Tuscany" Award for the project "Multistage Constructed Wetland treatment for the winery Val delle Rose, Cecchi & F., (Grosseto - Italy).
- **Chair of the IWA (International Water Association) Specialist Group on Wetland Systems for Water Pollution Control since 2012 to 2016.**
- **Vice-president of the Global Wetland Technology association since 2012.**
- Mention in the AWARD for "SUSTAINABLE DEVELOPMENT" 2017 for the "Water park of Gorla Maggiore with a constructed wetland for the treatment of combined sewer overflow discharged in the Olona river" (Sustainable Development Foundation + Ecomondo).
- **Chair of the IWA (International Water Association) Task Group on Nature Based Solutions for Water and Sanitation since 2018 onwards.**
- **International Water Association Fellow** since August 2020.

International publications scientific
reviewer

Water Science & Technology; Water Science and Technology: Water Supply; Water Research; Desalination Journal; Journal of Environmental Quality; Water, Air & Soil Pollution; Journal of Hazardous Materials; Journal of Environmental Management; Journal of Environmental Engineering and Science; Environmental Monitoring and Assessment; Frontiers of Environmental Science & Engineering; CLEAN - Soil, Air, Water; Hydrobiology; Polish Journal of Environmental Studies; Science of the Total Environment; Environmental Science and Pollution Research; Bioresource Technology; Environmental Technology; Oceanologia; Environmental Engineering Science; Chemosphere; Ecological Economics.

Associate Editor for Water Science & Technology (IWA) since 2010. Academic Editor for Water (MDPI) since 2012. Editor for Journal of Ecological Engineering since 2013. Associate Editor for Water Research & Development since 2013. Editor for the Circular Economy and Sustainability journal (Springer) since 2020.

CERTIFICATION:

In compliance with the Italian legislative Decree no. 196 dated 30/06/2003, I hereby authorize the use and process of my personal details contained in this document (*Autorizzo il trattamento dei miei dati personali, ai sensi del D.lgs. 196 del 30 giugno 2003*).

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.


Date: 07/09/2020

ANNEX 1 – Detailed list of teachings/lectures

1. Teaching of Chemistry and Lab (A015) at the State Industrial Institute "Antonio Meucci" in Florence in quality of alternate temporary, in December 1991.
2. Teaching of Industrial Chemistry (A017) at the 'ITIS "Tullio Buzzi" in Prato in quality of alternate temporary, from January 1992 until the conclusion of the school year.
3. Teaching in professional training course for Environmental Operators, organized by the Province of Lucca in collaboration with "Environment and Labour Tuscany" Florence on: "Chemical Pollution of the air system and the water system."
4. Teaching in the course of vocational training for young graduates to "Technical management installations treatment air-water", organized by ENAIP (ACLI National Vocational Education) of Florence, on: "parameters, indicators and indexes of quality of a 'chemical pollution in' environment. "
5. Teaching in professional training course for Environmental Technicians, organized by the Province of Florence in collaboration with the "Environment and Labour Tuscany" Florence on: "Chemical Pollution of the air system and the water system."
6. Lecturing on the topic "Chemical indicators in the system water and air in the system" in the course "Expert in Environmental Impact Assessment" organized by Elea spa in a City of Castello (PG) for young graduates.
7. Lecturing on the topic "A description and applicability of the main techniques of natural purification with particular reference to the constructed wetlands" in the course in "Design of Bioclimatic 'Architecture", AA 1995/96, 3rd cycle, organized by University of Florence (Faculty of Agriculture - Architecture - Law - Engineering - Medicine - Natural Sciences Physics and Mathematics).
8. Lecturing on the topic "Water treatment" during "Intervention techniques for the recovery, restoration and maintenance of ancient villages and rural sites of Pistoia mountains", organized by Confartigianato of Pistoia San Marcello Pistoiese (PT).
9. Lecturing on the topic "The current state of 'application of the law 175/88" in the course for trade union leaders, organized by CGIL Toscana and ALT, February 6, 1997, Impuneta (FI).
10. Teaching on theme "Constructed wetlands for wastewater treatment and post treatment: a possible strategy for the future" in "The Wet school '97: a course on WWF Mediterranean Wetlands and Freshwater" organized by WWF International Mediterranean Programme, 26 May 1997 Natural Parc des Aiguamolls de l' of Empord, Girona, Spain.
11. Lecturing on the topic "Design elements of clearing natural" in the course for graduates in "Naturalistic Engineering", organized by the Province of Florence, June 5, 1997, Borgo S. Lorenzo (FI).
12. Lecturing on the topic "A description and applicability of the main techniques of natural purification with particular reference to the constructed wetlands" in the course in "Design of Bioclimatic 'Architecture", AA 1997/98, 5th cycle, organized by University of Florence (Faculty of Agriculture - Architecture - Law - Engineering - Medicine - Natural Sciences Physics and Mathematics), Florence, January 1998.
13. Teaching on issues "Case Study: l 'experience MAS Pistoia" and "Analysis production types selected companies: identifying critical stages and risk factors in the chemical" in-depth seminar "Survey on companies to significant risk of class C , sectoral analysis and survey methodologies in the area for trade union leaders, organized by ARPAT and ALT, 29 to 30 January 1998 FI.
14. Lecturing on the topic "The control laboratory" in the training course for staff aqueduct, at the Consortium UNDERSTANDING, organized by CISPTEL Tuscany Training SCRL, February 1998.
15. Lecturing on the topic "The chemistry of the waters" in the course of training for "Operators environmental control", at the Labour Empoli, organized by the Province of Florence - LIFE Center, February 1998.
16. Lecturing on the topic "The methods of investigation of the risk industries in light of recent changes to the law" in the course for trade union leaders, organized by CGIL Toscana and ALT, May 19, 1998, Pistoia.
17. Lecturing on the topic "Experiences of application of constructed wetlands and methods of sizing", Course 1997-98 High Environmental Engineering, Faculty of Engineering of, of University of Genoa, in May 1998.
18. Teaching on "Techniques of natural purification" in the course in "Design of Bioclimatic 'Architecture", AA 1998/99, 6th cycle, organized by the University of Florence (Faculty of Agriculture - Architecture - Law - Engineering - Medicine - Natural Sciences Physics and Mathematics), Florence, January 1999.
19. Teaching on "Techniques of natural purification" at ITIS G. Galilei Livorno (Project Gorgona Island), February 1999.
20. Teaching on "Techniques of natural purification" during the national "bio-architecture", organized by National Institute of Bio-architecture at the University of Florence University of (of Faculty of Biology), Florence, March 1999.
21. Lecturing on the topic "The chemistry of the waters" in the course of training for "Control Operators of 'environment and safety in the workplace", at the Labour Empoli, organized by the Province of Florence - LIFE Center, March 1999.
22. Lecturing on topics "The chemistry of the waters" and "purification" in the Training Course "Environmental Education in the Chianti" 1998/99 for teachers of Middle School G. da Verrazzano - Greve in Chianti (FI), April 1999.
23. Teaching on "Techniques of natural purification" during the national "bio-architecture", organized by ANAB (National Association of Bio-ecological Architecture), Milan, May 1999.
24. Teaching on "natural water purification systems" during the national ADAPT EBC2 cod. 1073 / A2 / REG, organized by Scientific Technological Park of Terni and Meta Consulting Spa, Terni, in July 1999.
25. Teaching on "Phytoremediation: sizing and costs" in the Seminar "Criteria for the purification of waste water in small of Communities and their reuse in the light of Legislative Decree no. 152/99", organized by a University of Florence, Department of Animal Biology and Genetics, in collaboration with ARPAT, Florence, September 1999.
26. Teaching and collaboration in the design and coordination of the teachers for the specialization course of 300 hours for graduates "Treatment wetland systems", in National Parks Project Tuscany cod. POM 970 034 / I / 3, organized by the Province of Arezzo, National Park Authority Casentino Forests, Mount Falterona and Campigna, Tuscan Archipelago National Park Authority and the Province of Livorno, training center of Poppi, November-December 1999.
27. Teaching on "Techniques of natural purification" in the course in "Design of Bioclimatic 'Architecture", AA 1999/00, 7th cycle, organized by the University of Florence (Faculty of Agriculture - Architecture - Law - Engineering - Medicine - Natural Sciences Physics and Mathematics), Florence, March 2000.

28. Teaching and collaboration in the design for the course "The natural purification which method of waste disposal in rural environments", Project CIPE in class VA Agrotecnico, organized by National Institute of Technical and Vocational Education "Leopold II", Rispesca (Gr), April 2000.
29. during "phytoremediation systems", organized by the Federation of Scientific and Technical Associations (FAST), Milan, May 2000.
30. Teaching on "Techniques of natural purification" during the national "bio-architecture", organized by ANAB-IBN (National Association of Bio-ecological Architecture), Milan, May 2000.
31. Tutoring for the practical stage "Phytoremediation" in the National Parks Project Tuscany cod. POM 970 034 / I / 3, organized by the Province of Arezzo, National Park Authority Casentino Forests, Monte Falterona and Campigna National Park Authority of 'Tuscan Archipelago and Province of Livorno, Arezzo Services Sr I, from June to September the year 2000.
32. Lecturing on the topic "The project cycle of 'water' in the course of 100 hours for " Technicians in sustainable building practices", organized by ANAB Ecosviluppo Sardinia, Cagliari, September 2000.
33. Lecturing on the topic " constructed wetlands systems " in the course in "Design of Bioclimatic 'Architecture", 2000/01, 1st cycle, organized by a University of Florence University, Chamber of Engineers and of Architects the Province of Livorno, Livorno, in March 2001.
34. Teaching in a specialization course of 100 hours "Technicians for the protection of green plants", organized by the Province of Arezzo, training center of Poppi, in March 2001.
35. Teaching on "natural purification techniques" during FSE promoted by the Province of Pistoia for the development of technical skills maintenance environment and path network, organized by Cooperative Samarkand Srl, Fucecchio (FI), May 2001.
36. Lecturing in the seminar "Technologies of natural purification for the protection and rehabilitation of aquatic ecosystems", organized by WWF and CIRF Marche, Fermo (AP), June 2001.
37. Lecturing in the course ESF "Technical design and construction of bio-ecological properties", organized by Association Unioncasa, Milan, June 2001.
38. Lecturing in the seminar "Technologies of natural purification for the protection and rehabilitation of aquatic ecosystems", organized by WWF and CIRF Marche, Fermo (AP), June 2001.
39. Co-Thesis in Business - Technology of production cycles - "The purification of waste water: the case of constructed wetlands". Candidate: Scarcelli Saverio. Faculty of Economics of 'of Universita' degli Studi di Firenze, in June 2001.
40. Lecturing on the topic "Designing the cycle of 'water' in basic national course in bio-architecture ", organized by ANAB-IBN (National Association of Bio-ecological Architecture), Milan, September 2001.
41. Lecturing on the topic "Experiences and results of operation of plants for phytoremediation " during "Design and management of constructed wetland systems and impoundment of urban wastewater for agricultural reuse - Integrated Program training for the Management of Water and of 'Environment', organized by MURST and CSEI- Catania, Catania, October 2001.
42. Lecturing on the topic "The appropriate treatment of domestic sewage" in the course of internal staff training in 2001, organized by ARPAT - Dip. Prov. Arezzo, Arezzo, in December 2001.
43. Lecturing on the topic "Air pollution" during training GAV for the City of Empoli - Ass. Cultural Bridge, Empoli, in February 2002.
44. Lecturing on the topic "Techniques of natural purification" during National Ecological Design Course, organized by INBAR (National Institute Bioarchitettura) and Association of Architects of Elba, Portoferraio (LI), March 2002.
45. Teaching in the specialization course on "Technologies of natural purification", organized by CIRF, Passignano (PG), May 2002.
46. Co-Thesis in Architecture Dott.sa Silvia Brandano on "Settlement residential bioedilizio Castelnuovo Berardenga ", University of Florence, Faculty of Architecture, Department of Process and Methods of building production, in July 2002.
47. Teaching in the specialization Course SFE "Environmentally friendly technologies for the natural purification of the waters" on "natural purification in practice: an outline of the criteria and methods of sizing", organized by CIPAT Veneto and CIRF, Marghera (VE), November 2002.
48. Lecturing on the topic "Techniques of natural purification" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Alexandria, December 2002.
49. Lecturing on the topic "Techniques of natural purification" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Arezzo, in January 2003.
50. Lecturing on the topic "Techniques of natural purification" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura) and the Building Fund, Siena, in February 2003.
51. Lecturing on the topic "Techniques of natural purification and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura) and the City of Rome, Rome, February 2003.
52. Lecturing on the topic "Sustainable management and the natural purification of the waters" in the course of Science Degree of 'Architecture, Technology Laboratory of the' Architecture, University of University of Florence, in March 2003.
53. Lecturing on the topic "Redevelopment of river basins to improve water quality of: ecosystems filter, buffer strips, constructed wetlands; methodologies, of property, examples" in training course "from ecological engineering to river restoration: principles, examples and application on the territory ", organized by CIRF (Italian River Restoration Centre), Mestre, in April 2003.
54. Carrying out activities of teaching and scientific coordination of the training course "New environmentally friendly technologies for the treatment of waste water" with the theme "Constructed wetlands: the different existing technologies, processes in play, the role of plants. Applications and hints on the criteria and methods of sizing. The novelty in a European and international level", organized by CIRF (Italian River Restoration Centre), Dozza, May 2003.
55. Carrying out activities of a teaching and scientific coordination of the international course of specialization "Phytoremediation: applications and perspectives" with the theme "Experiences of constructed wetlands with landfill leachate", organized by CIRF (Italian River Restoration Centre), Dozza, May 2003.
56. Conducting activities of teaching and participation in the Scientific Committee of the II National School on "Natural treatments of wastewater" with the theme "Application and purification performance of natural systems purification: case studies of national and international", organized by SCI (Italian Chemical Society), ANDIS (National Association of Sanitary and Environmental Engineering), Scientific Pole of University of Florence (Department of Chemistry), Florence, July 2003.
57. Lecturing on the topic "Techniques of natural purification and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura) and Chamber of Architects of Turin, Turin, April 2004.
58. Lecturing on the topic "The project SWAMP for the environmentally sound management of water in tourist facilities: from 'Charterhouse hotel to the refuge"

- abetina real "in the national park of Tuscan Emilian Apennines" during POM 2004 of University of Catania - Faculty of of Agricultural Engineering, May 2004.
59. Lecturing on the topic "Redevelopment of river basins to improve water quality of: ecosystems filter, buffer strips, constructed wetlands; methodologies, of property, examples "in training "From ecological engineering to river restoration: principles, examples and application on the territory ", organized by CIRF (Italian River Restoration Centre), Mestre, in June 2004.
 60. Lecturing on the topic "Techniques of natural purification and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura) and Building School of Genoa, Genoa, June 2004.
 61. Lecturing on the topic "Techniques of natural purification and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Calenzano (Florence), in October 2004.
 62. Lecturing on the topic "Techniques of natural purification and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura) and Chamber of Architects of Milan, Milan, December 2004.
 63. Lecturing on the topic "Techniques of natural purification and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura) and Association of Architects of Ancona, Osimo (Ancona), February 2005.
 64. Carrying out activities of a teaching and scientific coordination of the training course "New environmentally friendly technologies for the treatment of waste water" with the theme "Constructed wetlands: the different existing technologies, processes in play, the role of plants. Applications and hints on the criteria and methods of sizing. The novelty in a European and international level ", organized by CIRF (Italian River Restoration Centre), Rome, February 2005.
 65. Lecturing on the topic "Redevelopment of river basins to improve water quality of: ecosystems filter, buffer strips, constructed wetlands; methodologies, of property, examples "in training "From ecological engineering to river restoration: principles, examples and application on the territory ", organized by CIRF (Italian River Restoration Centre), Padova, May 2005.
 66. Carrying out activities in a teaching master "Mibar. - MASTER INTERNATIONAL BIOARCHITECTURE "on" The recovery of water and constructed wetlands ", organized by INBAR and Universus in 'scope of the National Operational Programme" Scientific Research, Technological Development, Higher Education "2000-2006 - Notice n. 4391 of 31 July 2001 - Axis 3 - Training Measure III.4 / A "Training and Higher Education", Bari, June 2005.
 67. Lecturing on the topic "Technical training on constructed wetlands design and operations" funded by the World Bank at the National Research Center of Turkey (TUBITAK), Istanbul, June 2005.
 68. Carrying out activities of a teaching and scientific coordination of the training course "New environmentally friendly technologies for the treatment of waste water" with the theme "Constructed wetlands: the different existing technologies, processes in play, the role of plants. Applications and hints on the criteria and methods of sizing. The novelty in a European and international level ", organized by CIRF (Italian River Restoration Centre), Naples, September 2005.
 69. Lecturing on the topic "Techniques of natural purification and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura) and Agabat, Barletta (Bari), October 2005.
 70. Carrying out activities in a teaching course AMBER "Environmental Practitioner" with the theme "Pollution and water purification", organized by Performa (Confcommercio Tuscany), Empoli, in October 2005.
 71. Lecturing in Web Based Training "Efficient Management of Wastewater Treatment and Reuse ITS in the Mediterranean Countries", EU project EMWATER, November 2005.
 72. Lecturing in courses organized in 'scope of the project EU "Zer0-m" with the theme "Constructed Wetlands for wastewater treatment: the course "Train the trainers" Hanover + pilot courses in Turkey, Tunisia, Egypt, Morocco, 2004-2008.
 73. Lecturing on the topic "Water pollution. Reducing water consumption and environmental burdens "in the training course" The sustainable building - the regional guidelines "by 's National Institute of Bio-architecture (INBAR), Florence, April 2006.
 74. Lecturing on the topic "Water pollution. Reducing water consumption and environmental burdens "in the training course" The sustainable building - the regional guidelines "by 's National Institute of Bio-architecture (INBAR), Quarata (Pistoia), May 2006.
 75. Lecturing on the topic "Water systems and saving drinking water, constructed wetlands and lagoons" during BIO TREND, organized by South Eurobic Tuscany Spa, Torrita di Siena (Siena), September 2006.
 76. Lecturing on the topic "Phytoremediation and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Calenzano (Florence), in October 2006.
 77. Lecturing on the topic "sustainable water cycle, constructed wetlands" during basic training on Bioarchitettura edited by the 'Cultural Association of Slate and' INBAR, Pistoia, in February 2007.
 78. Lecturing on the topic "Sustainable management of the water cycle and methods of natural purification" in the Master's Degree in Bioclimatic Architecture and Technological Innovation for the 'Environment, organized by Florence University, Center ABITA, March 2007 .
 79. Lecturing on the topic "sustainable water cycle, constructed wetlands" during "training program and awareness on regional guidelines on sustainable building" by INBAR, Piombino (LI), March 2007.
 80. Lecturing on the topic "sustainable water cycle, constructed wetlands" on the Master course "Designing environmentally sustainable green building" by 'Building contractors school of the Province of Savona, Savona, in May 2007.
 81. Lecturing on the topic "Phytoremediation and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Calenzano (FI), December 2007.
 82. Lecturing on the topic "Sustainable management of the water cycle, natural purification methods and design of bio-pools" in the Master's Degree in Bioclimatic Architecture and Technological Innovation for the Environment, organized by the University of Florence, Centro ABITA, January 2008.
 83. Lecturing on the topic "Sustainable management of the water cycle and methods of natural purification" in the Master's Degree in "Land and Sustainable Architecture", organized by the Faculty 'of Architecture and Society of Milan Polytechnic, in January 2008.
 84. Lecturing on the topic "Sustainable management of the water cycle and applications to phytoremediation" in the seminar "Constructed wetlands for the treatment and reuse of wastewater of small and medium settlements", "organized by Centre for Studies in Applied Economics at ' Engineering and Universit of University of Catania - Department of Agricultural Engineering, Catania, in March 2008.
 85. Lecturing on the topic "Phytoremediation and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Calenzano (FI), November 2008.
 86. Lecturing on the topic "Sustainable management of the water cycle, natural purification methods and design of bio-pools" in the Master's Degree in

- Bioclimatic Architecture and Technological Innovation for the Environment, organized by the University of Florence, Centro ABITA, January 2009.
87. Carrying out activities in a teaching master "II MASTER INTERNATIONAL BIOARCHITECTURE" on "Sustainable water management and constructed wetlands", organized by Unversus and Puglia Region, POR Puglia 2007-2013 OB. 1 Convergenza- 2007IT051PO005 European Social Fund, approved by Decision C (2007) 5767 of 21/11/2007, Bari, in April 2009.
 88. Lecturing on the topic "Phytoremediation – Design Aspects " in the course "Specialization in constructed wetland systems of irrigation water" (code: 2008GR0039) of the Province of Grosseto, in May 2009.
 89. Lecturing on the topic "Phytoremediation and sustainable management of water" during National Architecture Eco-Compatible, organized by Bioarchitettura Marche and Chamber of Architects of the Province of Pesaro and Urbino, Pesaro, in May 2009.
 90. Lecturing on the topic "Ecosanitation and Sustainable Water Management" in the European Joint Master in Management & Engineering of Environment and Energy (ME3 - Erasmus Mundus), organized by Ecole des Mines de Nantes, Nantes, June 2009.
 91. Lecturing on the topic "Phytoremediation and sustainable water management" over "BioArKIT - Technologies and tools for the 'eco-buildings and the professional profile of Qualified Technician bioedile for the design and realization of constructions", organized by School of Industrial Technologies, Florence, September 2009.
 92. Lecturing on the topic "Phytoremediation and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Prato (PO), October 2009.
 93. Lecturing on the topic "Phytoremediation and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Calenzano (FI), November 2009.
 94. Lecturing on the topic "Phytoremediation and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Rimini, November 2009.
 95. Lecturing on the topic "Sustainable management of the water cycle and methods of natural purification" in the Master's Degree in Bioclimatic Architecture and Technological Innovation for the 'Environment, organized by a University of Florence University, Center ABITA, January 2010 .
 96. Lecturing on the topic "Phytoremediation and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Prato (PO), March 2010.
 97. Lecturing on the topic "Phytoremediation and sustainable management of water" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Brindisi (BR), March 2010.
 98. Teaching on the topic "Ecosanitation and Sustainable Water Management" in the European Joint Master in Management & Engineering of Environment and Energy (ME3 - Erasmus Mundus), organized by Ecole des Mines de Nantes, Nantes, May 2010.
 99. Lecturing on the topic "removal processes and techniques of sizing constructed wetlands plants" it course "TECNIFORM", organized by CIHEAMIAM.B. Mediterranean Agronomic Institute of Bari, Valenzano (BA), June 2010.
 100. Lecturing on the topic "Phytoremediation and sustainable water management" over "ECOstruendo - Methods and techniques for bio-architecture ", organized by the School of Industrial Technology, Florence, July 2010.
 101. Lecturing on the topic topic "water cycle and sustainable water management" during National Ecological Design, organized by INBAR (National Institute Bioarchitettura), Florence, January 2011.
 102. Adjunct Professor to form 12 h on the theme "Sustainable management of the water cycle and methods of natural purification" in the Master's Degree in Bioclimatic Architecture and Technological Innovation for the 'Environment, organized by a University of Florence University, Center ABITA - Faculty of Architecture, March 2011.
 103. Teaching on the topic "Ecosanitation and Sustainable Water Management" in 'Joint European Master in Management & Engineering of Environment and Energy (ME3 - Erasmus Mundus), organized by Ecole des Mines de Nantes, Nantes, April 2011.
 104. Conducting activities of teaching (courses 2011POO154 and 2011POO155) on "Water systems: constructed wetlands restoration and water recycling" in the course "parameters and tools for a sustainable design" - Project Soprane CUP 41904 - POR OB, 2FSE 2007-2013 Province of Prato, in September 2011.
 105. Carrying out activities in a teaching training course on 'use of constructed wetland systems for the treatment and reuse of wastewater, organized by CSEI Catania and the Sicilian Region, in November 2011.
 106. Lecturing in the cycle of informative workshops "Water and rules" organized by the project Life + WATACLIC with interventions on "water crisis, interaction water cycle and climate change, cycles biogeochemical, managing urban water cycle and presentation of possible local solutions to solve the global problem " - events held in 2011 and 2012: Milan, Benevento, Verona, Alberobello, Catania, Florence, Bologna, Turin, L'Aquila, Modena, Rome.
 107. Lecturing on the topic "Sustainable management of the water cycle and methods of natural purification" in the Master's Degree in Bioclimatic Architecture and Technological Innovation for the 'Environment, organized by a University of Florence University, Center ABITA, January 2012 .
 108. Teaching on the topic "Ecosanitation and Sustainable Water Management" in 'Joint European Master in Management & Engineering of Environment and Energy (ME3 - Erasmus Mundus), organized by Ecole des Mines de Nantes, Nantes, April 2012.
 109. Lecturing on the topic "Sustainable management of the water cycle and methods of natural purification" in the Master's Degree in Bioclimatic Architecture and Technological Innovation for the 'Environment, organized by a University of Florence University, Center ABITA, January 2013 .
 110. Lecturing on the topic "Quality of a 'water and recovery capacity a self-purifying courses d 'water and land "in the" C bear training on river restoration ", organized by the Regional Park d she d el Valle Lambro - Lombardy Region and CIRF, February 2013.
 111. Teaching on the topic "Ecosanitation and Sustainable Water Management" in 'Joint European Master in Management & Engineering of Environment and Energy (ME3 - Erasmus Mundus), organized by Ecole des Mines de Nantes, Nantes, April 2013.
 112. Teaching on "Good practices and technical guidelines for the sustainable management of water" in the Training Course "Sustainable water management in the existing legislation framework "organized by the Ecofin Consulting Services and High Treviso, Montebelluna (TV), March 2014.
 113. Teaching on the topic "Water strategies" in the 'Joint European Master in Management & Engineering of Environment and Energy (PM3E - Erasmus Mundus), organized by Ecole des Mines de Nantes, Nantes, March 2014.
 114. Lecturing on the topic "Sustainable and appropriate technologies for the resources valorisation in wastewater sector "in the IV International Summer School "Appropriate technologies for the valorisation of resources in the sanitation sector in developing development countries ", CeTamb Lab, Univ. of studies of Brescia, Brescia, June 2014.

115. Lecturing on the topic "natural purification systems: state of the art international " in the seminar "The water cycle : d to the potable water treatment "Chamber of Chemists of Tuscany and Association of Chartered Chemists of Tuscany, Florence, November 2014.
116. Lecturing on the topic "Water and Wastewater as a Resource ", Kent State University Florence Spring 2015 Lecture Series, Kent State University, Florence, February 2015.
117. Teaching in the Master's Degree in "green building and energy efficiency - AA 2013-2014 on the themes" The green: green roofs and beneficial microclimate-environment ", and "The Green: water use and design. Phytoremediation "Monteponi-Iglesias (CA), AUSI Consortium, March 2015.
118. Teaching in Training Program "Technologies and Business Development in Natural Wastewater Treatment Systems ", organized by Nawatech Cewas and South Asia, Pune, India, in April 2015.
119. Teaching on the topic "Water strategies" in the 'Joint European Master in Management & Engineering of Environment and Energy (PM3E - Erasmus Mundus), organized by Ecole des Mines de Nantes, Nantes, May 2015.
120. 18/3/16: 1h lecture at IOPAN for the KNOW first academic year students and IOPAN employees entitled: "Fate of persistent organic pollutants in the environment and their transfer to polar regions"
121. 19/3/16: 1h lecture at Gdansk Technical University course held by Prof. Hanna Obarska entitled: "Integration of ecosystem services in urbanized areas: natural systems for sustainable water management and sanitation"
122. 23/3/16: 2h lecture at Gdańska Infrastruktura Wodociągowo-Kanalizacyjna for GIWK employees entitled: "Natural systems for sustainable water management and sanitation"
123. 11/4/16: 1h lecture at GTU, organised by GTU and IOPAN for the employees and students of both the institutes entitled: ""Anthropogenic impact on the biogeochemical cycles and the nexus with sustainable water management and resource recovery oriented sanitation"
124. 23/4/16: 3h lecture at GTU course held by Prof. Magdalena Gajewska: "Fate of persistent organic pollutants in the environment and their transfer to polar regions" and "Natural systems for sustainable water management and sanitation"
125. Teaching on the topic "Water strategies" in the 'Joint European Master in Management & Engineering of Environment and Energy (PM3E - Erasmus Mundus), organized by Ecole des Mines de Nantes, Nantes, June 2016.
126. Teaching on the topic "Sustainable water management and nature based treatment systems" in II Level Master in Bioclimatic Architecture and Technological Innovation for the Environment, organized by University of Florence, Centro ABITA, March 2017.
127. Teaching on the topic "Water strategies" in the 'Joint European Master in Management & Engineering of Environment and Energy (PM3E - Erasmus Mundus), organized by IMT Atlantique (Ecole des Mines de Nantes), Nantes, April 2017.
128. Teaching in the course GIAN "Green water infrastructure II – innovative and sustainable wastewater management" organised by IIT Roorkee and Iridra at Indian Institute of Technology Roorkee, India, June 2017.
129. Lecturing on the topic "Constructed Wetland Training" organised by Asian Development Bank at ADB Residence Mission, Phnom Penh, Cambodia, December 2017.
130. Teaching on the topic "Water strategies" in the 'Joint European Master in Management & Engineering of Environment and Energy (PM3E - Erasmus Mundus), organized by IMT Atlantique (Ecole des Mines de Nantes), Nantes, February 2018.
131. Lecturing on the topic "Treatment wetlands", in 'International Seminar on Engineered Treatment Wetlands Technology", organized by International S&T Cooperation Center for Urban Alternative Water Resources Development - AWR Environmental Research Institute, Yixing, China, July 2018.
132. Lecturing on the topic "Nature Based Solutions: from phytoremediation to treatment wetlands " for ERM Italia SpA, in the course ENI ECU "Environmental Training", Milan, November 2018.
133. Lecturing on the topic "Water strategies" in the 'Joint European Master in Management & Engineering of Environment and Energy (PM3E - Erasmus Mundus), organized by IMT Atlantique (Ecole des Mines de Nantes), Nantes, February 2019.
134. Lecturing on the topic "Treatment wetlands", in International Forum on "Blue sky and Green water and Engineered Treatment Wetland Technology: Theory, Design and Applications", organized by Shenzhen Wenke Landscape Co., Shenzhen, China, May 2019.
135. Lecturing on the topic "Nature Based Solution for Water and Sanitation: main typologies and applications – Green Infrastructures and Sustainable Urban Drainage" in the course "Digital water management and water-related agroecosystem services: geostatistics, hydroinformatics and groundwater flow numerical modelling", organized by Scuola Superiore Sant'Anna. Pisa, September 2019.
136. Lecturing on the topic "Water strategies" in the 'Joint European Master in Management & Engineering of Environment and Energy (PM3E - Erasmus Mundus), organized by IMT Atlantique (Ecole des Mines de Nantes), Nantes, March 2020.
137. Lecturing on the topic "Urban NBS" nel corso online "Nature Based Solutions for Water and Land Management, organized by Cranfield University, UK, May 2020.
138. Lecturing on the topics "Sustainable water management and Nature-Based Solutions (NBS)" and "Innovative NBS solutions" in the online technical course organised by Iridra for the NAWAMED project partners, July 2020.