

Curriculum Vitae

A. Personal Data

Name: Stefano Mambretti
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Nationality: Italian
Date of Birth: [REDACTED]
Marital Status: [REDACTED]
Position: **Associate Professor** in Hydraulic Engineering at Politecnico di Milano since March 2007 (part-time since November 2013);
Member of the **Board of the Directors** at Wessex Institute of Technology since January 2011
Winner of the competition for **Full Professor** at Unicamp (Brasil) on May 17th 2013. I decided not to accept the offer.
Freelance consultant since November 2013.
Consultant of the Milan **Order of Engineers** (Italy) and member of the Technical Commission for the Environment.
Technical Judge in the regional “Tribunale delle Acque Pubbliche” (specific court to judge in the matter of rivers) since 2008.

B. Education

November 1984 – July 1991	Civil Engineer, specialized in Hydraulics. Winner of “Premio Nosedà” as best graduated in Hydraulic Engineering of the year at Politecnico di Milano.
September 1991 – March 1992	HR Wallingford Ltd (United Kingdom) with TECHWARE European grant. I worked in the river section, learning physical modeling techniques.
March 1992 – February 1995	Dottorato di Ricerca (PhD) in Hydraulic Engineering. Principal subjects/Occupational skills covered I studied urban hydrology models and especially overland flow models; in the PhD thesis I proposed a new formula for the concentration time evaluation, subsequently quoted in scientific papers and in the Italian Manual for the sewer system design. In the same field I worked for the European Projects SPRINT 098 (and the extension SP098/3) and INNOVATION 10340. At the same time I also worked as private consultant.
Biennium 1996/1997	Post-Doc I continued the research started during my thesis. I wrote a number of papers and I collaborated in the courses in University. At the same time I also worked as private consultant.

Languages:

Italian (native), English (fluent), Portuguese (good).

C. Previous position and mobility

Work experience

1999 to present	Politecnico di Milano Associate Professor in Hydraulic Engineering (1999 – March 2007, Assistant Professor).
November 1997 – March 1999	Comune di Legnano (Legnano Municipality) Deputy Chief Engineer in the public works section.

Visits

February 2011 – May 2011	Wessex Institute of Technology (UK) Visiting Professor
July 2012 – July 2013	Universidade Estadual de Campinas (Brasil) Visiting Professor

D. Professional activities and achievements

Private Consulting

Urban Water (water supply networks and sewerage)

Consultant / designer for water supply network: Town of Albavilla (Como) (October 2003) and Town of Valbrona (Como) (June 2005)

Designer for ATM S.p.A. (urban transport in Milano) for three pumping stations positioned inside the underground lines.

Designer for sewer system networks: Town of Fabbrico (Reggio Emilia) (September 1997). Town of Tavolara (Olbia) (preliminary study in December 2003, complete design in July 2005). Town of Guastalla (Reggio Emilia) (July 2005). Town of Pandino (Cremona), Town of Gradella (Cremona) (December 2005), Town of Gorla Minore (September 2008).

Consultant for ASIL (treatment plant consortium in Merone – Como) for the discharges from combined sewer overflow into the Lambro and Bevera rivers.

Consulting for **Metropolitana Milanese** S.p.A. (Manager of the water supply in Milano) for the design of the rehabilitation of the pumping stations, since February 2012 to March 2018. In the period I gave advice on water supply and sewer system modelling and optimization, and I cooperated in:

- the design of one pumping stations, with water treatment (value of the contract: 15 million Euros; delivered March 2015);
- the design of a storage tank to limit the floods due to Seveso river;
- the rehabilitation of 23 chamber of pumps for wells;
- the automatization of the water supply network;
- the trenchless rehabilitation of sewer and water supply network pipes.

Consultant for the **Pan American Health Organization** (OPAS, Latin American regional agency of the World Health Organization, WHO) for the study of the improvement of aqueduct systems in small urban centers and rural areas (2019-2020).

Technical consultant for the A2A tender - Municipal water supply networks in the province of Brescia - J + S Agent, awarded in October 2020.

In the scientific committee (together with Prof. Ricciardi, Prof. Bosurgi, Prof. Cascone, Prof. Melluso) of the Temporary Grouping for the ANAS - AQ tender support PFTE Lot 1 Sicily (2-year framework contract) - Attorney PINI SWISS ITA, awarded in July 2020.

Consultant for the company J + S for the MILANO SERRAVALLE contract - A51 East ring road - A52 North ring road of Milan, September 2020.

Consultant for the temporary grouping for the BRIANZACQUE contract - Integration of sewer plans, J + S Agent, October 2020.

Designer for SIF Italia for the solution of the pollution of the “Basiglio lake” by the Milan 3 District, March 2022.

Environmental Hydraulics (rivers and debris flow)

Consultant for Ferrovie Nord Milano (North Railways) for a number of hydrologic and hydraulic studies related to bridges of Saronno – Seregno railway (October 2002), Lura river (October 2003), Arno river (October 2003). Trobbia river (March 2004), Seveso river (April 2004) and Lanza river (December 2004). Consultant for the Seveso river again in 2009.

Consultant for the Municipalities for risk analysis and hazard mitigation in two natural catchments: Supine river (April 2005) and Val Gola catchment (June 2006).

Consultant for Pro – Iter for two dimensional river analysis of the Adda River (December 2004).

Consultant for the Public Prosecutor for environmental crimes from Procura di Lodi (2007), Procura di Teramo (2009) and Procura di Lodi again (2010).

Consultant for the **Italian Ministry of Foreign Affairs** for the development of a project in **Pakistan** (2013).

Consultant for Ferrovie Nord Milano for the study of the hydraulic works required for an initial erosion close to the bridge on the Mella river (March 2016)

Consultant for **Regione Siciliana within the Recovery Plan (PNRR)** at the Department of Water and Waste (up to July 2022) and **Regione Piemonte** (from July to December 2022)– national selection from the Public Administration.

Waterhammer

Consultant for Ionics for waterhammer in the **treatment plant of Kuwait City**. I carried out numerical analysis (October 2002) and tests on plant (September 2004).

Consultant for Belleli Energy for waterhammer in the movement terminal of petroliferous products in Djibouti (October 2004).

Consultant for General Electrics for waterhammer in desalination plants in **Algeria**: dimensioning of an air chamber in Tonic Emballage (January 2005) and analysis of Reverse Osmosis plant (April 2005). Analysis of the Kouba, Garidi e Telemly plants (November 2005). Analysis of the Hama plant (February 2006). Field tests have also been carried out.

Consultant for SGI / Sering for waterhammer in the pumping stations in Tanzania (2006) and Dukon, **Iraq** (October 2007)

Consultant for General Electrics for waterhammer in desalination plants in **Dubai** (March 2008), Tunisia (September 2008) and Iraq (June 2010).

Consultant for Alpina S.p.A. for a water supply plant in Kenya (January 2015); for a hydropower plant in Calabria (Italy) (March 2015); for two hydropower plants in the North of Italy (October 2016).

Trenchless rehabilitation of pipelines

I participated as a lecturer, in all the seminars organized by DWA and IATT held in Milan, as well as various seminars in Italy for the various Orders of Engineers.

I regularly participate in the work of the IATT CIPP Commission.

In February 2017 I visited the RelineEurope construction companies in Germany and NordiTube in Belgium, as well as the SBKS certified test laboratory in Germany.

I participated in the drafting of the specifications - type for relining with CIPP methodologies of MM SpA (a company for which I have been a permanent design consultant since 2012); I also participated in the writing of the criteria for the tenders on the same topic.

I am a member of the Scientific Committee of the 2019 international conference, held in Florence in September 2019.

I wrote, together with the Mr. Tani, manager in MM, a short manual on CIPP methodologies.

Winner of the tender announced by BrianzAcque for the rehabilitation of a sewage collector in the city of Seregno. Designers, in addition to the writer, the company J + S and the Valdemarin project company; performer of the work: Rotech.

Winner of the tender, first lot (Concorezzo, Monza, Nova Milanese and Villasanta), banned by BrianzAcque for the rehabilitation of sewage collectors. Designers, in addition to the writer, the CSD company and the Valdemarin project company; performer of the work: Rotech.

I am scientific manager of the contract, entrusted to the Politecnico di Milano by IATT, for the preparation of price lists for the main technologies for the renewal of trenchless pipelines (2018 - 2021).

LIST OF PUBLICATIONS

1. REFEREED SCIENTIFIC JOURNAL ARTICLES

1.A Publications on ISI Journals

1. F. Previdi, M. Lovera, S. Mambretti: *Identification of the rainfall-runoff relationship in urban drainage networks* Control Engineering Practice 7, pagg. 1489-1504, Elsevier, 1999
2. A. Bianchi, S. Mambretti, P. Pianta *Practical Formulas for the Dimensioning of Air – Valves* ASCE Journal of Hydraulic Engineering, Vol. 133, Issue 10, October 2007, pp. 1177 – 1180
3. S. Mambretti, E. Larcan, D. De Wrachien *1D modelling of dam – break surges with floating debris* Biosystems Engineering, Vol. 100(2), June 2008, pp. 297-308
4. S. Mambretti, E. Larcan, D. De Wrachien *Theoretical and experimental analysis of debris flow: rheology and two – phase modelling* Irrigation and Drainage, Vol. 57, n. 5, pp. 555-570, December 2008
5. S. Mambretti, E. Orsi, S. Gagliardi, R. Stover *The behaviour of Energy Recovery devices in unsteady flow conditions and application in the modelling of the Hamma desalination plant* Desalination, Vol. 238, pp. 233-245, April 2009
6. S. Albizzati Mantegazza, A. Gallina, S. Mambretti, C. Lewis *River Quality: A Comparison Of The Normative Criteria And Dynamic Modelling Methods Of Evaluating CSO*. Urban Water Journal, Vol. 7, No. 3, pp. 211-216, June 2010
7. D. De Wrachien, S. Mambretti, B. Schultz *Flood Management and Risk Assessment in Flood-prone Areas: Measures and Solutions* Irrigation and Drainage, first published online: 23 Jul 2010, DOI: 10.1002/ird.557; Vol. 60, Issue 2, April 2011, pp. 229-240.
8. J. Garrido, I. Requena, S. Mambretti *Semantic model for flood management* Journal of Hydroinformatics, Vol. 14, No. 4, October 2012, pp. 918-936
9. M. Riva, S. Mambretti, S. Chaynikov, P. Ackerer, O. Fasunwon, A. Guadagnini *A new general analytical solution for infiltration structures design*, ASCE Journal of Hydraulic Engineering Vol. 139, No. 6, June 2013, pp. 637-644
10. D. De Wrachien, G. Lorenzini, S. Mambretti *Water particle kinematics quantum approach: a challenge for sprinkler irrigation systems* Irrigation and Drainage, first published on-line on March 31st, DOI: 10.1002/ird.1724; Vol. 162, Issue 2, April 2013, pp. 156-160
11. G. Becciu, S. Mambretti, P.S. Martins *Evolutionary optimization for water losses recognition in water supply networks* European Journal of Environmental and Civil Engineering, pages 976-999, Published online: 13 Dec 2014.
12. F. Fuselli, S. Huber, S. Mambretti *Environmental aspects of trenchless pipe rehabilitation methods* Urban Water Journal, Volume 19 Issue 8, Published online 14 Jun 2022, DOI <https://doi.org/10.1080/1573062X.2022.2087531>

1.B Publications on non-ISI Journals

1. G. Becciu, S. Mambretti, A. Paoletti: *Risk Design of Urban Drainage Networks on the Basis of Experimental Data*, Excerpta Vol. 11, 1997
2. A. Bianchi, S. Mambretti: *Le idrovalvole di scarico rapido per l'attenuazione delle sovrappressioni di colpo d'ariete*, L'Acqua n. 6, novembre – dicembre 2000.
3. E. Larcan, S. Mambretti: *Aspetti di metodo nella modellazione di fenomeni alluvionali nei territori di pianura*. Territorio. N. 25/2003, ed. Franco Angeli
4. E. Larcan, S. Mambretti: *Il caso del Po nell'area mantovana: pericolosità di una rotta arginale*. Territorio. N. 25/2003, ed. Franco Angeli

5. S. Mambretti, A. Paraboschi: *Indicatori di prestazione per la valutazione delle reti idriche in riabilitazione e gestione*. Servizi a rete. N. 6: Novembre – dicembre 2003.
6. I. Capodiferro, S. Mambretti, R. Rosso, M.C. Rulli *Analisi degli effetti di un potenziale cambiamento climatico sulla fognatura del centro storico di Genova*. L'Acqua n. 1, gennaio – febbraio 2005
7. S. Mambretti, D.C. Borsani, D. Bagioli, G. Bardazza *Rischio idraulico e pianificazione urbanistica: il caso del Comune di Milano*. Territorio, n. 1, 2005
8. S. Mambretti *Valutazione della magnitudo di colate detritiche in funzione del tempo di ritorno nel bacino di Val Gola (BG)*. GEAM – Geoingegneria Ambientale e Mineraria, Anno XLIV, n. 1, aprile 2007, pp. 15 – 24
9. S. Mambretti, E. Larcen, D. De Wrachien *Debris flow and dam – break surges: experimental analysis and two – phase modelling*. Quaderni di idronomia Montana, vol. 27. pp 447 – 462, 2007
10. S. Mambretti, E. Larcen, D. De Wrachien *Dam-break shock waves with floating debris experimental analysis and two-phase modelling* Journal of Agricultural Engineering, Vol. XXXIX, N. 2, June 2008, pp. 7-17
11. A. Bianchi, S. Mambretti, P. Pianta *Una formula pratica per il dimensionamento di valvole di sfiato* L'Acqua, n. 3, maggio-giugno 2008, pp. 15-20
12. P. Filippini, V. Garattini, S. Mambretti, M. Petrella *Scavi in alveo: un rischio idraulico* Protecta, N. 11, 2010, pp. 70-73
13. D. De Wrachien, S. Mambretti *Assessment of debris flow magnitude in small catchments of the Lombardy Alps: the Val Gola case study* Agricultural Sciences, Vol.2, No.1, pp. 9-15 (2011) doi:10.4236/as.2011.21002.
14. P. Filippini, S. Mambretti, M. Petrella *Unauthorized mining in rivers: hydraulic hazard and Italian laws* Int. Jou. of Safety and Security Engineering, Vol. 1(2), June 2011, pp. 193-209
15. D. De Wrachien, S. Mambretti *Mathematical models for flood hazard assessment* Int. Jou. of Safety and Security Engineering, Vol. 1(4) December 2011, pp. 353-362
16. D. De Wrachien, S. Mambretti *Defence Measures In Flood Risk Assessment: A Case Study* Int. J. of Safety and Security Eng., Vol. 2, No. 2 (2012) pp. 105–117
17. D. De Wrachien, G. Lorenzini, S. Mambretti *Water droplet trajectories in a sprinkler spray flow: the classic versus quantum and single versus multi-droplet pictures* Int. J. Comp. Meth. and Exp. Meas., Vol. 1, No. 2, 2013, pp. 164–172
18. D. De Wrachien, G. Lorenzini, S. Mambretti, M. Medici *Water droplet analysis: the classical and quantum hydrodynamic framework* Agricultural Engineering, Year XXXVIII, N. 3, 2013, pp. 111–122
19. C. Achille, D. De Wrachien, F. Fassi, S. Mambretti *Assessment of debris flow deposition areas: empirical methods, laboratory tests and application to a case study* Int. J. of Safety and Security Eng., Vol. 3, No. 2 (2013) pp. 88-104
20. D. De Wrachien, G. Lorenzini, S. Mambretti, M. Medici *Water droplets analysis: the classical and quantum hydrodynamic frameworks* Agricultural Engineering, ISSN 0554-5587, n. 3, 2013, pp. 111-122
21. H.A. Qari, I. Jomoah, S. Mambretti *Flood management in highly developed areas: problems and proposed solutions*. Journal of American Science 2014;10(3) pp. 6-15
22. S. Mambretti, E. Orsi *Optimization of pumping stations in complex water supply networks through evolutionary computation methods* Journal of American Water Works Association, February 2016.
23. D. De Wrachien, S. Mambretti *Irrigation and Drainage Systems in Flood-prone Areas: The Role of Mathematical Models* Austin Journal of Irrigation 2015; 1(1): pp. 1-4.
24. G. Becciu, S. Mambretti, U. Sanfilippo, M. Brown, F. Marelli, A. Salvatore *Curve di possibilità pluviometrica di Milano 1971 – 2012 e cambiamenti climatici* Servizi a Rete, n. 2, March-April 2016, pp. 41-46

25. S. Mambretti *Nuovi paradigmi dell'ingegneria nel clima che cambia* La Cooperazione Italiana Informa, AICS, November 2016, pp. 32-33
26. C. Carrettini, S. Mambretti *Ottimizzare i sistemi acquedottistici* Servizi a Rete, n. 6, November-December 2016, pp. 51-54
27. F. Campanale, C. Chiesa, M. Ghia, S. Mambretti *Automazione ed ottimizzazione del sistema acquedottistico di Milano* Servizi a Rete, n. 5, September-October 2017, pp. 19-22
28. G. Becciu, M. Ghia, S. Mambretti *A century of works on river Seveso: from unregulated development to basin reclamation* International Journal of Environmental Impacts Volume 1 (2018), Issue 4 pp. 461 – 472, Paper DOI 10.2495/EI-V1-N4-461-472
29. G. Becciu, S. Mambretti, G. Masera, U. Sanfilippo, M. Tadi *Management of water and wastewater under the framework of the IMM: the case of the favela Rocinha* International Journal of Sustainable Development and Planning, Vol. 15, No. 1 (2020) pp. 81–94
30. F. Evangelista, S. Hernandez, S. Mambretti, D. Parola *Wave Celerity In Hydraulic Transients Computation For CIPP-Rehabilitated Pipes* International Journal of Computational Methods and Experimental Measurements, Vol. 8, No. 4 (2020) pp. 326–340, ISSN: 2046-0546, DOI: 10.2495/CMEM-V8-N4-326-340
31. M. Lobo Marchioni, A. Raimondi, U. Sanfilippo, J. Sansalone, S. Mambretti, G. Becciu *Modeling of particulate matter fate on urban highway stormwater control systems* International Journal of Computational Methods and Experimental Measurements, Vol. 9, No. 1 (2021) pp. 1-13, ISSN: 2046-0554, DOI: 10.2495/CMEM-V9-N1-1-13

2. REFEREED CONFERENCE REPORTS PUBLISHED IN PROCEEDINGS

2.A International Conferences

1. S. Mambretti, P. Mignosa, A. Paoletti: *Merate catchment*, Workshop on experimental catchments in Italy, Maratea, May 1993.
2. S. Mambretti, A. Paoletti: *A New Approach in Overland Flow Simulation in Urban Catchment*, 7th International Conference on Urban Storm Drainage, Hannover, September 1996
3. A. Paoletti, S. Mambretti, U. Sanfilippo, M. Brown: *The EU – SPRINT 098 Baggio Experimental Pilot Study for CSO Volume and Frequency Reduction*, Novatech - 3rd International Conference on Innovative Technologies in Urban Storm Drainage, Lyon, France, 4 - 6 May 1998
4. G. Becciu, S. Mambretti: *Artificial Neural Networks for Rainfall – Runoff Modelling in Urban Catchments*, Fourth International Conference on Developments in Urban Drainage Modelling – UDM '98, 21-24th September, Imperial College, London
5. F. Previdi, M. Lovera, S. Mambretti: *Identification of urban drainage network rainfall–runoff black–box models*, Proceedings of the 1998 IEEE International Conference on Control Applications, Trieste, 1–4th September 1998.
6. D. Borsani, E. Larcán, S. Mambretti, E. Orsi: *Pressure Fluctuation on Structures: Experimental Data Analysis*, 3rd International Conference on Advances in Fluid Mechanics, Montreal, Canada, 24 – 26 May 2000.
7. E. Orsi, D. Borsani, L. Carmine, S. Mambretti: *Dual System of Water Distribution: Hypothesis for Milan IV* International Conference “Water Supply and Water Quality” – Krakow, Poland, 11 – 13 Sept. 2000.
8. D. Borsani, E. Larcán, S. Mambretti, E. Orsi: *Hydraulic Jump at a Positive Step: Statistics of Pressure Fluctuations* XXIX IAHR Congress, Beijing, China, 17 – 21 Sept. 2001.
9. D. Borsani, S. Mambretti, E. Orsi: *Performance Indicators for Water Supply Networks: a Real Case Study* Water Resources Management 2001: International Conference on Water Resources Management 24 – 26 September 2001, Halkidiki, Greece

10. D. Borsani, E. Larcán, S. Mambretti, E. Orsi: *Real Scale Investigation of Interaction between a Supercritical Flow and a Bottom Sill. 1: Physical Aspects and Time-Averaged Pressures on Sill*. Fluid Structure Interactions 2001, Halkidiki, Greece, 26 – 28 September 2001
11. D. Borsani, E. Larcán, S. Mambretti, E. Orsi: *Real Scale Investigation of Interaction between a Supercritical Flow and a Bottom Sill. 2: Statistical Analysis of Pressure Fluctuations on Sill*. Fluid Structure Interactions 2001, Halkidiki, Greece, 26 – 28 September 2001
12. D. Berzi, S. Mambretti: *Mathematical modelling and experimental tests of unsteady flow of non – newtonian fluids*. Debris – Flow Hazards Mitigation: Mechanics, Prediction, and Assessment, 10 – 12 September 2003, Davos, Svizzera.
13. D. Berzi, A. Colucci, S. Mambretti: *Sustainable development and risk. 2. Flood hazard and vulnerability assessment. Methodological proposal and application*. First International Conference on Sustainable Planning and Development, 1 – 3 September 2003, Skiathos, Grecia.
14. D. Bagioli, E. Larcán, S. Mambretti *Flooding Hazards in Northern Italy – Two Cases Studies*. Second International Conference on Sustainable Planning and Development, Bologna, 12 – 14 September 2005
15. E. Larcán, S. Mambretti, M. Pulecchi *A procedure for the evaluation of debris flow stratification*. Int. Conf. on Debris flow 2006, 7 – 9 June 2006, Rhodes, Grecia
16. S. Mambretti, D. De Wrachien, E. Larcán *Debris flow and dam – break flooding waves: dynamic rheology and modelling*, 36th International symposium, Actual Tasks on Agricultural Engineering, 11 – 15 February 2008, Opatija, Croatia, pp. 13 – 34
17. S. Mambretti, E. Larcán, D. De Wrachien *Debris flow and dam – break flooding waves: calibration and comparison with experimental tests*, 36th International symposium, Actual Tasks on Agricultural Engineering, 11 – 15 February 2008, Opatija, Croatia, pp. 35 – 46
18. D. De Wrachien, S. Mambretti *Dam – break shock waves: A two – phase model for mature and immature debris flow* Second International Conference on Debris Flow, 18 – 20 June 2008, pp. 183-196, The New Forest, United Kingdom
19. D. De Wrachien, S. Mambretti *Dam break with floating debris: a 1D, two-phase model for mature and immature flow propagation* International Conference on Agricultural Engineering and Industry Exhibition, 23 – 25 June 2008, Hersonissos, Crete, Greece
20. D. De Wrachien, S. Mambretti, A. Sole *Risk Analysis and Vulnerability Assessment in Flood Protection and River Basin Management* International Conference on Flood Recovery Innovation and Response, pp. 3-16, 2 – 3 July 2008, Institute of Civil Engineers, London, United Kingdom
21. S. Mambretti, D. De Wrachien, A. Sole *Flood – risk assessment and hazard mitigation measures: Case studies and lessons learnt in Italy* International Conference on Flood Recovery Innovation and Response, pp. 17-26, 2 – 3 July 2008, Institute of Civil Engineers, London, United Kingdom
22. D. De Wrachien, S. Mambretti *Debris and hyper-concentrated flows: overview and perspective* 37th International symposium, Actual Tasks on Agricultural Engineering, pp. 23-33, 10 – 13 February 2009, Opatija, Croatia
23. D. De Wrachien, S. Mambretti *Dam-break wave routing: a 2D, two-phase model for mature and immature debris and hyper-concentrated flows* 38th International symposium, Actual Tasks on Agricultural Engineering, pp. 11-25, 22 – 26 February 2009, Opatija, Croatia
24. D. De Wrachien, S. Mambretti, C. Deangeli *Mechanical and fluid-dynamic behaviour of debris and hyper-concentrated flows: overview and challenges*, Third International Conference on Debris Flow, pp. 3-16, 24 – 26 May 2010, Milan, Italy
25. D. De Wrachien, S. Mambretti, A. Sole *Mathematical models in flood management: overview and challenges* Second International Conference on Flood Recovery Innovation and Response, pp. 61-72, 26 – 28 May 2010, Milan, Italy

26. D. De Wrachien, V. Garattini, S. Mambretti *Mathematical models for flood management: efficiency and reliability* XVII World Congress of the International Commission of Agricultural Engineering (CIGR), Québec City, Canada, 13 – 17 June 2010
27. D. De Wrachien, S. Mambretti *Assessment of Debris Flow Magnitude in Small Catchments of the Lombardy Alps: The Val Gola Case Study* International Conference on Agricultural Engineering, Clemond-Ferrand, France, 6-8 September 2010
28. D. De Wrachien, R. Garcia-Martinez, S. Mambretti *Mathematical Models for Flood and Debris Flow Routines* 39th International Symposium on Actual Tasks on Agricultural Engineering, Opatija, Croatia, 22-25 February 2011
29. S. Mambretti *Optimization of the pumping station of Milano water supply network with Genetic Algorithms* 3rd International Conference on Energy and Sustainability, Alicante, Spain, pp. 185-194, 11 - 13 April 2011
30. S. Mambretti *Waterhammer effects in case of air release* Fluid Structure Interaction 2011, Orlando, USA, pp. 145-156, 9 – 11 May 2011
31. D. De Wrachien, R. Garcia-Martinez, S. Mambretti *Flood risk management in flat coastal areas: mathematical models and case studies*. 25th ICID European Regional Conference, 16-20 May 2011 Groningen, the Netherlands
32. J. Garrido, I. Requena, S. Mambretti *Building brief ontologies. A case study for floods management*. International Conference on Knowledge Engineering and Ontology Development, KEOD 2011, Paris, France, 26-29 October 2011.
33. D. De Wrachien, G. Lorenzini, S. Mambretti *Water droplet trajectories in an irrigation spray: the classical and quantum mechanical pictures* 40th International symposium, Actual Tasks on Agricultural Engineering, pp. 85-96, 21 – 24 February 2012, Opatija, Croatia
34. S. Mambretti, E. Orsi *Genetic Algorithms for Leak Detection in Water Supply Networks*. 1st International Conference on Urban Water, 25-27 April, 2012, New Forest, UK
35. S. Mambretti, U. Sanfilippo *Influence of rainfall patterns on the efficiency of first flush storage tanks*. 1st International Conference on Urban Water, 25-27 April, 2012, New Forest, UK
36. C. Achille, D. De Wrachien, F. Fassi, S. Mambretti *Empirical methods for the estimation of debris flow deposition areas* Fourth International Conference on Debris Flow, pp. 3-14, 29 – 31 May 2012, Dubrovnik, Croatia
37. D. De Wrachien, J. Garrido, S. Mambretti, I. Requena *Ontology for flood management: a proposal* Third International Conference on Flood Recovery Innovation and Response, pp. 3-14, 30 May – 1 June 2012, Dubrovnik, Croatia
38. D. De Wrachien, G. Lorenzini, S. Mambretti *Classical and quantum mechanical analysis of water droplet ballistics in sprinkler irrigation systems* Int. Conf. on Agricultural Engineering, CIGR-AgEng 2012, Valencia Conference Centre, July 8-12, 2012
39. D. De Wrachien, G. Lorenzini, S. Mambretti *Water Droplet Ballistics in a Sprinkler Spray Flow: The Classic and Quantum Dynamic Frameworks for a Single and Many-Particle Systems* 41st International Symposium on Actual Tasks on Agricultural Engineering, Opatija, Croatia, 19-22 February 2013
40. S. Mambretti, P.S. Martins, R.L. Moraes *Evolutionary Computation Techniques to Assess Losses in Water Supply Networks* 7th International Conference on Sustainable Water Resources Management, 21 – 23 May, 2013, New Forest, UK
41. D. De Wrachien, G. Lorenzini, S. Mambretti *Modelling Jet Flow in Sprinkler Irrigation Systems: Classical and Bohmian Water Droplet Trajectories* 42nd International Symposium on Actual Tasks on Agricultural Engineering, Opatija, Croatia, 25-28 February 2014
42. G. Becciu, C. Lewis, S. Mambretti, U. Sanfilippo *Design Rainfalls in a Climate Changing World* 2nd International Conference on Urban Water, 27-29 May, 2014, The Algarve, Portugal

43. G. Becciu, S. Mambretti, P. S. Martins, R. L. Moraes *Dealing with Uncertainties in Losses Assessment in Water Supply Networks. Preliminary results.* 2nd International Conference on Urban Water, 27-29 May, 2014, The Algarve, Portugal
44. D. De Wrachien, G. Lorenzini, S. Mambretti, M. Medici *Fluid dynamics of sprinkler spray flow: classic and quantum trajectories* 44th International Symposium on Actual Tasks on Agricultural Engineering, Opatija, Croatia, 23-26 February 2016
45. D. De Wrachien, S. Mambretti, E. Orsi *Optimization of pump operations in a complex water supply network: New Genetic Algorithm frameworks* 3rd International Conference on Urban Water, 27-29 June, 2016, Venice, Italy (*re-published on the International Journal on Sustainable Development and Planning, Vol. 12, n. 1, 2017, WIT Press, pp. 79-88*)
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