



## Europass Curriculum Vitae

### Informazioni Personali

Cognome / Nome **Zanetti Mariachiara**

### Esperienze lavorative

Date Dal 1/1/2012 al 1 ottobre 2015 Direttore del Dipartimento di Ingegneria dell'Ambiente, del Territorio e delle Infrastrutture (DIATI) del Politecnico di Torino.  
 Dal 1/10/2008 al 31/12/2011 Direttore del Dipartimento di Ingegneria del Territorio, dell'Ambiente e delle Geotecnologie (DITAG) del Politecnico di Torino.  
 Dal 1 gennaio 2010 valutatore incaricato da Finpiemonte dei bandi Pmi, micro e MANUNET.  
 Dal 1/11/2006 Professore Ordinario di Ingegneria Sanitaria Ambientale presso il Politecnico di Torino  
 Dal 1/12/2002 Professore Associato di Ingegneria Sanitaria Ambientale presso il Politecnico di Torino  
 Dal 1/10/1996 Ricercatore in Ingegneria delle materie Prime  
 Maggio 1994 PhD in Ingegneria Chimica al Politecnico di Torino  
 Luglio 1989 Laurea in Ingegneria Mineraria al Politecnico di Torino

Occupazione e attività Professore Ordinario di Ingegneria Sanitaria Ambientale  
 Principali attività e responsabilità Sviluppo di ricerche applicate nell'ambito dell'ingegneria sanitaria ambientale mediante finanziamenti pubblici e privati. Organizzazione di gruppi di ricerca. Conferenze e lezioni nell'ambito di corsi di laurea e di dottorato su tematiche relative a metodi e tecnologie per la minimizzazione dell'impatto ambientale causato da attività antropiche. Conferenze e lezioni nell'ambito di corsi di Master post-laurea organizzati da Politecnico di Torino, Hydroaid, Università di Parma in Italia a Brasile.  
 E' autrice del Modulo di Ingegneria Ambientale presso l'Università Uninettuno.  
 E' autrice di più di 250 pubblicazioni di cui 90 su riviste con referee e 14 capitoli di libro.  
 Organizzazione e sviluppo attività di ricerca e amministrative del Dipartimento DITAG e del Dipartimento DIATI, Politecnico di Torino. Ottimizzazione dei processi. Redazione e approvazione bilancio economico.  
 Indirizzo datore di lavoro Politecnico Torino, DIATI, C.so Duca degli Abruzzi 24 10129 Torino, ITALY  
 Tipo di attività Università

### Abilità personali e competenze

Lingua madre Italiana

Altre lingue	Autovalutazione	Comprensione		Parlato		Scritto
		Ascolto	Lettura	Interazione	Produzione	
	<i>Livello Europeo (*)</i>					
<b>Lingua</b>	I	B2	C1	B2	B2	B1
<b>Lingua</b>	F	A2	B2	A1	A2	A1

Abilità organizzative e competenze	<p>Peer reviewer delle riviste Environmental Progress, Journal of Hazardous Materials, Waste Management, Resources Conservation &amp; Recycling, Desalination, Chemical Engineering, Environmental Engineering and Management, Environmental Science &amp; Pollution Research, Environmental Technology, Journal of Cleaner Production, Journal of Hazardous Materials.</p> <p>Membro Associato della Third World Organization for Women in Science</p> <p>Membro del Comitato Scientifico di RemTech Scientific</p> <p>Membro del Comitato Scientifico del Convegno Industrial and Hazardous Waste Management CRETE</p> <p>Membro del Comitato Scientifico CEST 2017 Congress</p> <p>Membro del Comitato Scientifico UDM 11th International Conference on Urban Drainage Modelling</p> <p>Membro del Comitato Scientifico WaterEnergyNexus 2018 International Conference</p> <p>Membro del Comitato Scientifico 4<sup>th</sup> Convegno Mater 2019 International Conference</p> <p>Membro del Comitato Scientifico CEST 2019 Congress</p> <p>Presidente Comitato Scientifico SIDISA 2021 Congress</p> <p>Membro dell' International Waste Working Group</p> <p>Membro del World Economic Forum</p> <p>Commissario Abilitazione ANVUR</p> <p>Membro del Comitato di Selezione SIR (MIUR)</p> <p>Valutatore del Programma Europeo TACIS EC</p> <p>Valutatore del Programma MIUR FAR (DM 593/2000)</p> <p>Valutatore del Programma Innovazione MAP PON PIA</p> <p>Valutatore dei Progetti di Ricerca MANUNET (FESR POR Regione Piemonte,FINPIEMONTE)</p> <p>Valutatore dei Progetti di Ricerca PMI (FESR POR Regione Piemonte,FINPIEMONTE) since 2010</p> <p>Valutatore dei Progetti di Ricerca (FESR POR Piedmont Region,FINPIEMONTE) since 2011</p> <p>Evaluator of MANUNET Research Projects (FESR POR Piedmont Region,FINPIEMONTE) since 2011</p>
Abilità tecniche e competenze	<p>Le abilità tecniche e le competenze sono relative agli ambiti seguenti:</p> <ul style="list-style-type: none"> <li>- Analisi del ciclo produttivo di una azienda per minimizzare i flussi inquinanti nell'ambiente mediante l'impiego di tecnologie dedicate per il trattamento e la riduzione alla fonte dell'inquinamento.</li> <li>- Tecnologie per il trattamento avanzato delle acque reflue.</li> <li>- Caratterizzazione e bonifica di siti contaminati.</li> <li>- Tecnologie per il trattamento e riciclo dei residui industriali.</li> <li>- Gestione delle acque per la minimizzazione dei consumi e dei costi di smaltimento.</li> <li>- Analisi dei costi e sistemi di gestione ambientali.</li> </ul>

## Informazioni aggiuntive

Nella mia attività lavorativa ho collaborato con le Aziende e gli Enti seguenti:

- IEA
- CNR
- Barricalla S.p.a.
- A.M.I.A.T.
- Regione Piemonte
- CSI Piemonte
- CFF Recycling (Derichembourg)
- Ecopneus
- Fondazione Eni Enrico Mattei
- GRUPPO MINERALI
- TEKSID S.p.a.
- SMAT
- AHLSTROM S.p.a.
- NETWORK EUROPEO: Foundry waste (EU-contract No. BRRT-CT97-5048)
- TRM S.p.a.
- PROVINCIA DI TORINO
- REGIONE PIEMONTE
- SIMPRO S.p.a
- CORCOS INDUSTRIALE S.p.A
- ARPA Piemonte
- AIMERI S.p.A.
- ITALGAS S.p.A.
- ACCIAIERIE BELTRAME
- CONTENTOTRADE
- VOMM
- ALENIA
- SODAI
- FIAT GROUP AUTOMOBILES
- CRF
- ENI
- ILVA
- IREN
- AIRU
- ENEL
- LAVAZZA
- PIAGGIO
- AIRU
- Comune di Torino
- Commissario Sito di Interesse Nazionale Ecolibarna
- Ministero Italiano dello Sviluppo Economico
- Ministero Italiano della Ricerca
- Ministero Italiano degli Esteri
- Scuola Internazionale Hydroaid

E' stata leader dei seguenti progetti di ricerca:

Progetti MIUR:

COFIN 2011 (2011-2013) "Life cycle risk analysis of recycled waste products in road pavements", Politecnico di Torino Unit Responsible

Progetti finanziati della Comunità Europea:

- BANDO RICERCA INDUSTRIALE 2006 (CIPE) 2007/10, Research Project DIGESTEDD ENERGY(1/10/2007 – 30/09/2010), "Ottimizzazione della digestione di biomasse ad opera di di microorganismi anaerobici", Coordinatore Progetto Università di Torino, Politecnico di Torino Responsabile Unità Operativa..

- POR-FESR 2007/13, Research Project SAFE FOOD CONTROL (1/10/2010 – 30/09/2013), "Development of innovative processes and techniques for production, conservation, transformation and valorization of Piedmont high-quality agricultural goods", Coordinatore Progetto Agroinnova – Università di Torino, Politecnico di Torino responsabile Unità Operativa.

- POR-FESR 2007/13, Research Project ECO FOOD CONTROL (1/10/2010 – 30/09/2013), "Ricerca & Innovazione per il, miglioramento della sostenibilità della filiera agroalimentare", Coordinatore Progetto Agroinnova, Politecnico di Torino Responsabile Unità Operativa.

- LIFE+, LIFE10ENV/IT/000390 Tyrec4Life (1/09/2011 – 31/08/2015), "Development of innovative techniques to improve the efficiency of the employment of crumb rubber from ELVs in road pavements", Coordinatore Progetto Provincia di Torino, Politecnico di Torino Responsabile Unità Operativa.

- WATSAM, FED 2011/279-318 (1/08/2012 – 31/07/2015), "water & sanitation sector through capacity building and partnership development with Italian water organizations", Coordinatore Progetto Hydroaid, Politecnico di Torino Responsabile Unità Operativa

GREEN FACTORY FOR COMPOSITES - GREEN FACTORY 4COMPO financed from MIUR - POR FESR 2014/2020, Coordinatore Progetto CRF, Politecnico di Torino DIATI Responsabile Unità Operativa.

- Renewable Energies for Water Treatment and Reuse in Mining Industries (REMIND, H2020-MSCA-RISE-2018 ) (1/12/2018 -30/11/2022)

- RECIPLAST financed from MIUR - POR FESR 2014/2020, Coordinatore Progetto Garbo, Politecnico di Torino DIATI Responsabile Unità Operativa

Progetti di ricerca finanziati da aziende private o pubbliche:

1. Research project funded by ENI S.p.A. concerning the "Optimization of experimental activities for algae growth", 2019.

2. Research project funded by ENI S.p.A. concerning the " Nannochloropsis inoculum alga preparation",2018.

3. Research project funded by ENI S.p.A.. concerning the "Evaluation of the consequences in terms of air quality of a cogenerative district heating system. Analysis of the following cities: Asti, Novara, Parma, Piacenza, Reggio Emilia e Vercelli", 2018.

4. Research project funded by SMAT S.p.A concerning the "Wastewater treatment plant: sludge management, modeling and struvite production", 2018.

5. Research project funded by Lavazza S.p.A. concerning the "Biomass characterization and methane potential evaluation" , 2018.

6. Research project funded by Iren S.p.A. concerning the "SALT – Salt tolerant plants for produced water management, 2018.

7. Research project funded by Iren S.p.A. concerning the "Evaluation of the consequences in terms of air quality of a cogenerative district heating system (in particular analysis of the Turin case study), 2017.

8. Research project funded by SMAT S.p.A concerning the "Analysis and implementation of a modelling system for the atmospheric dispersion of odorous effluents", 2017.
9. Research Project FCA – PoliTo 2017 "Circular economy for recovery and recycling of car materials", 2017.
10. Research Project FCA "Evaluation of paint sludge employment in bituminous mixtures", 2017.
11. Research project funded by ALENIA S.p.A. concerning the "Environmental impact evaluation", 2017.
12. Research project funded by Lavazza S.p.A. concerning the "Biomass characterization and methane potential evaluation", 2017.
13. Research project funded by Hydroaid concerning the "Teaching performance for the preparation of the contents of an e-learning course dedicated to the planning and management of water supply systems, 2016.
14. Research project funded by ILVA S.p.A. concerning the "Technical analysis of investments", 2015.
15. Research project funded by Mapei S.p.A. concerning the "Environmental impact evaluation of foaming agents", 2015.
16. Research project funded by ALENIA S.p.A. concerning the "Environmental impact evaluation", 2015.
17. Research project funded by Fenice S.p.A. concerning the "Optimization of the management of wastewaters coming from the FCA plant located in Verrone (BI)", 2015.
18. Research project funded by FIAT Group Automobiles concerning the "Life cycle assessment of vehicles", 2015.
19. Research project funded by SODAI S.p.A. concerning the "Research of the best operating condition for the treatment with ozone of wastewater containing ammonia", 2015.
20. Research project funded by SMAT S.p.A. concerning the "Optimization of anaerobic digestion of waste activated sludge from WWTPs using several kinds of pretreatments", 2012-2015.
21. Research project funded by SMAT S.p.A. concerning the "Monitoring of the presence of asbestos in drinking water samples", 2013-2015.
22. Research project funded by SMAT S.p.A. concerning the "Research of solutions for the improvement of the efficiency of the existing WWTP of Rosta, TO", 2015.
23. Research project funded by FIAT Group Automobiles concerning the "Assessment of the environmental compatibility of the employment of paint sludge from the Group plants in road pavements", 2013-2015.
24. Research project funded by Ecopneus Italia concerning the "Assessment of the environmental compatibility of the employment of crumb rubber from end-of-life tires in road pavements", 2012-2014.
25. Research project funded by Deloitte S.p.A. concerning the "Analysis of the remediation costs of Portovesme and San Gavino sites", 2012.
26. Research project funded by ECODECO S.p.A. concerning the "Risk analysis of Cavaglia landfill", 2011.
27. Research project funded by SKF Industrie S.p.A. concerning the "Improvement of the performances of the wastewater treatment plant located in Airasca (TO)", 2010.
28. Research project funded by Barricalla S.p.A. concerning the "Reuse of ashes from MSW incinerator as engineering material in landfills", 2010.
29. Research project funded by Italgas S.p.A. concerning the "Characterization and remediation of polluted sites", 2010.
30. Research project funded by FATA Group concerning the "Analysis of the existing data and characterization plan of the area in San Michele di Mondovì (CN) for the construction of the new combined cycle power cogeneration", 2010.
31. Research project with Prefetto di Alessandria concerning the "Characterization of the polluted site Ex-Ecolibarna located in Serravalle Scrivia (AL) and in situ pilot tests", 2007 and 2010
32. Research project funded by FIAT Group Automobiles concerning the "Possible fates and valorization opportunities of paint sludge from FIAT group plants", 2009-2010
33. Research project funded by Provincia di Torino concerning the "Performance assessment of the employment of crumb rubber from ELTs in asphalt pavements", 2008-2009.
34. Research project funded by ALENIA S.p.A. concerning the "Development of an environmental management system for North Caselle and South Caselle plants", 2009.
35. Research project funded by Sodai S.p.A. concerning the "Analysis of a liquid wastes treatment plant", 2009.
36. Research project funded by Farid S.p.A. concerning the "Analysis of the biogas production process from MSWOF", 2008.
37. Research project funded by CFF Recycling S.p.A. concerning the "Physical and chemical characterization and treatment design for the recovery of automobile shredder residues (ASR)", 2007-2008.

38. Research project funded by Ledoga S.p.A. concerning the "Analysis of the Ledoga production cycle", 2007.
39. Research project funded by Retrac S.R.L. concerning the "Physical and chemical analyses of rain samples coming from Volpiano plant", 2006 and 2008.
40. Research project funded by Comune di Torino concerning the "Application of the sanitary – environmental risk analysis procedure to artificial sports turf fields", 2006-2007.
41. Research project funded by SKF Industrie S.p.A. concerning "Treatments for the recovery of grinding scraps", 2006-2007.
42. Research project funded by Cartiere Ahlstrom concerning the "Chemical analysis of rain samples coming from Mathi Torinese plant", 2005-2006.
43. Research project funded by Acciaieria Beltrame concerning the "Physical and chemical characterization of waste products coming from the industrial process", 2005.
44. Research project funded by Aimeri concerning the "Analysis of groundwater and results comparison with the leachate characteristics of the Roasio landfill", 2005.
45. Research project funded by Provincia di Torino concerning the "IPPC application to industrial sites", 2005.
46. Research project funded by AMIAT S.p.A. concerning the "Evaluation of the efficiency of the biogas capitation system", 2005.
47. Research project funded by AMGA S.p.A. concerning the "Biogas energetic exploitation", 2005.
48. Research project funded by Acciaieria Beltrame S.p.A. concerning the "Evaluation of the gaseous emissions from a steel factory", 2005.
49. Research project funded by Studio Aglietto S.R.L. concerning the "Evaluation of solid – liquid adsorption coefficients for aromatic hydrocarbons and chlorinated hydrocarbons by means of batch tests", 2004.
50. Research project funded by ACSR S.p.A. concerning the "Risk analysis procedure applied to the Borgo San Dalmazzo landfill", 2004.
51. Research project funded by ARPA Piemonte concerning the "Characterization plan of the Fiat Avio polluted site", 2004.
52. Research project funded by Barricalla concerning the "Analysis of the leachate quality and quantity of the Barricalla landfill", 2004.
53. Research project funded by Corcos Industriale S.p.A. concerning the "Site characterization and preliminary project design for an environmental remediation process", 2003-2004.
54. Research project funded by TRM S.p.A. concerning the "Analysis of technical and environmental features of three sites for the construction of the new thermo-valorization plant", 2003.
55. Research project funded by Provincia di Torino concerning the "Characterization and recovery of waste products coming from the secondary smelt foundries located in Torino surroundings", 2002-2004.
56. Research project funded by Teksid concerning the "Characterization and recovery of waste products coming from the Crescentino plant", 2001.
57. Research project funded by Safond S.r.l. concerning the "Analysis of the Safond treatment cycle for the recovery of foundry sands", 2001.
58. Research project funded by Safond S.r.l. concerning the "Analysis of the Gemco treatment", 2000.

#### Brevetti

Patent (Application number 05111307.4, filed 01/03/2006) concerning the "Process and plant for the treatment of run-down batteries"

Patent (Application number 102015000031447, filed 7/07/2015) concerning the "Process for the production of a modified binder by the use of paint sludge".

Patent (Application number 102016000093129, filed 15/09/2016) concerning the "Enhanced ozonation of wastewater containing high loads of ammonia nitrogen".

## Attività Didattica

### Laurea e Laurea Magistrale

Dal 2018 : Teacher in charge in the Ms. D. course of Oil and mining contaminations in soil and groundwater (in English) – Politecnico di Torino  
Dal 2016: Teacher in charge in the Ms. D. course of Applied Environmental Engineering (in English) – Politecnico di Torino  
2015/16 Teacher in charge in the Ms. D. course of Complementi di Ingegneria Sanitaria Ambientale – Politecnico di Torino  
2008/17: Teacher in charge in the Ms.D. course of Reclamation of Polluted Sites (in English) – Politecnico di Torino  
2003/04 – 2011/12: Teacher in charge in the Bc.D. course of Tecnologie Ambientali dei Siti Produttivi – Politecnico di Torino  
2004/05 – 2010/11: Teacher in charge in the Ms.D. course of Ingegneria Sanitaria Ambientale – Politecnico di Torino  
2004/05 – 2007/08: Teacher in charge in the Ms.D. course of Tecniche di Bonifica dei Siti Contaminati – Politecnico di Torino  
2004/05 – 2010/11: Teacher in charge in the Ms.D. course of Ingegneria Sanitaria Ambientale – Politecnico di Torino  
2002/03 – 2003/04: Teacher in charge in the Bc.D. course of Dinamica degli Inquinanti – Politecnico di Torino  
2001/02 – 2002/03: Teacher in charge in the Bc.D. course of Fondamenti di Ingegneria Sanitaria Ambientale – Politecnico di Torino

### Master Post Laurea

2017/18: Teacher in charge assignment in the course “Environmental impact of products and manufacturing processes” (Master “New technologies and processes for hybrid materials finalized to automotive mechanical and electronical applications” organized as part of the project GreenFactory4Compo).  
2017/18: Teacher in charge in the course of permanent learning INPS VALORE PA 2017 “Evaluation of the environmental compatibility” in Italian (Ambiente e tutela del Territorio – Valutazione della Compatibilità Ambientale).  
2016/17: Teacher in charge in the course of permanent learning INPS VALORE PA 2016 “Environmental investigation and biological risk for workers in Italian (Ambiente e tutela del Territorio – L’indagine ambientale e il rischio biologico nell’ambiente di lavoro).  
2011/12: Teacher in charge in the post Ms.D. course of Ottimizzazione degli Impianti di Depurazione – Politecnico di Torino  
2002/03 – 2012/13: Teacher in the European post Ms.D. course in Environmental Engineering (COREP – Politecnico di Torino, in Italian)  
2003/04 - 2008/09: Teacher in the post Ms.D. course in Management and Governance of the Integrated Water Service Cycle (Hydroaid, in English)  
2008/09: Teacher in the post Ms.D. course in Supply System for Drinking Water, Irrigation and Sanitation (Hydroaid, in English), Brasilia  
2003/04: Teacher in the post Ms.D. course in Science and Technology for the Sustainable Development in Contaminated Sites (Università di Parma, in Italian)  
2006: Teacher and Organizer of the Risk Analysis Course for Arpa Piemonte.

### Relazioni Internazionali

2008/09: Teacher in the post Ms.D. course in Supply System for Drinking Water, Irrigation and Sanitation (Hydroaid, in English), Brasilia

Visite Istituzionali in Cina, Sud Africa, Egitto, Corea, Cile, Etiopia, Bali, USA

12 ottobre 2020